azbil

No. CP-SP-1323E

# Network Instrumentation Module Digital Input/Pulse Input Module NX-DX1/DX2

# User's Manual

# of Functions

**Thank you for purchasing the NX-DX1/DX2.**

**This manual contains information for ensuring the correct use of the NX-DX1/DX2. It also provides necessary information for installation, maintenance, and troubleshooting.**

**This manual should be read by those who design and maintain equipment that uses the NX-DX1/DX2. Be sure to keep this manual nearby for handy reference.**

Yamatake Corporation

**NOTICE**

Be sure that the user receives this manual before the product is used.

Copying or duplicating this user's manual in part or in whole is forbidden. The information and specifications in this manual are subject to change without notice.

Considerable effort has been made to ensure that this manual is free from inaccuracies and omissions. If you should find an error or omission, please contact Yamatake Corporation.

In no event is Yamatake Corporation liable to anyone for any indirect, special or consequential damages as a result of using this product.

# Conventions Used in This Manual

■ To prevent injury to the operator and others, and to prevent property damage, the following types of safety precautions are indicated:

| | |
|---|---|
| ⚠ **WARNING** | Warnings are indicated when mishandling this product might result in death or serious injury. |
| ⚠ **CAUTION** | Cautions are indicated when mishandling this product might result in minor injury to the user, or only physical damage to the product. |

■ In describing the product, this manual uses the icons and conventions listed below.


Use caution when handling the product.


The indicated action is prohibited.


Be sure to follow the indicated instructions.

⚠ **Handling Precautions:**

Handling Precautions indicate items that the user should pay attention to when handling the NX-DX1/DX2.

**Note:** Notes indicate information that might benefit the user.


This indicates the item or page that the user is requested to refer to.

[1], [2], [3]: Numbers within parentheses indicate steps in a sequence or parts of an explanation.

# Safety Precautions

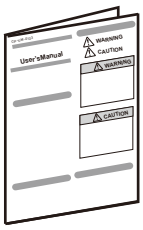
| ⚠WARNING | |
|---|---|
|  | Before removing, mounting, or wiring the NX-DX1/DX2, be sure to turn off the power to the module and all connected devices. Failure to do so might cause electric shock. |
|  | Be sure to check that the NX-DX1/DX2 has been correctly wired before turning on the power. Incorrect wiring of the module can damage it or lead to hazardous conditions. |

| ⚠CAUTION | |
|---|---|
|  | To lock or unlock the DIN rail locking tab, use a tool such as a screwdriver. |
|  | Do not disassemble the NX-DX1/DX2. Doing so might cause electric shock or device failure. |
|  | Do not block the ventilation holes. Doing so might cause fire or device failure. |
|  | Do not allow wire clippings, metal shavings, water, etc. to enter the case of this device. They can cause fire or device failure. |
|  | Do not touch electrically charged parts such as the power supply terminals. Doing so may result in an electric shock. |
|  | Before wiring the NX-DX1/DX2, be sure to disconnect the power.<br>Failure to do so might cause device failure. |
|  | Wire the NX-DX1/DX2 in compliance with established standards, using the specified power source and recognized installation methods. Failure to do so could result in electric shock, fire, or malfunction. |
|  | Make sure that there are no loose connections.<br>Loose connections might generate heat or cause faulty operation. |
|  | Ensure that the total power consumption of all linked modules does not exceed 100 W.<br>Otherwise fire or faulty operation could occur. |
|  | Do not supply power to the linked modules from multiple power sources. Doing so could result in fire or malfunction. |
|  | Do not use unused terminals on the NX-DX1/DX2 as relay terminals. Doing so might cause electric shock, fire or device failure. |
|  | Do not short the output section. Doing so might cause device failure. |
|  | Firmly tighten the terminal screws to the torque listed in the specifications. Insufficient tightening might cause fire. |
|  | If there is a risk of a power surge caused by lightning, use a surge protector to prevent possible fire or failure of the device. |
|  | Use this device within the operating ranges given in the specifications (for temperature, humidity, voltage, vibration, shock, mounting direction, atmosphere, etc.). Otherwise, fire or device failure could result. |

| ⚠ CAUTION | |
|---|---|
| ❗ | The NX-DX1/DX2 does not operate for about 10 seconds after the power has been turned ON, depending on the settings. Be careful if the output from the module is used as an interlock signal. |
| ❗ | When discarding the NX-DX1/DX2, dispose of it as industrial waste, following local regulations. |

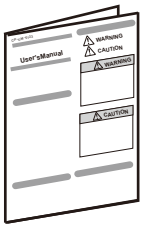
# The Role of This Manual

A total of 10 different manuals are available for the NX Network Instrumentation Module. Read them as necessary for your specific requirements. If a manual you require is not available, contact Yamatake Corporation or its dealer. Alternatively, you can download the necessary manuals from “http://www.azbil.com”.



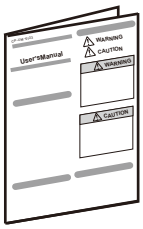

**NX-D15/25/35 Controller Module User's Manual for Installation**
**Manual No. CP-UM-5561JE**

This manual is supplied with the NX-D15/25/35.
Personnel in charge of design and/or manufacture of a system using the NX-D15/25/35 should thoroughly read this manual. It describes safety precautions, installation, wiring, and primary specifications.



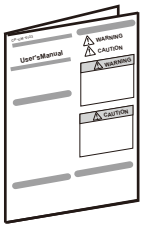

**NX-CB1 Communication Box User’s Manual for Installation**
**Manual No. CP-UM-5558JE**

This manual is supplied with the NX-CB1.
Personnel in charge of design and/or manufacture of a system using the NX-CB1 should read this manual thoroughly. It describes safety precautions, installation, wiring, and primary specifications.



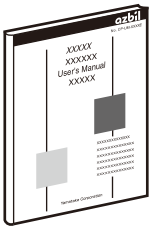

**Instrument Network Module**
**NX-DX1/DX2 for Installation** **Manual No. CP-UM-5560JE**

This manual is supplied with the NX-DX1/DX2.
Personnel in charge of design and/or manufacture of a system using the NX-DX1/DX2 should read this manual thoroughly. It describes safety precautions, installation, wiring, and primary specifications.



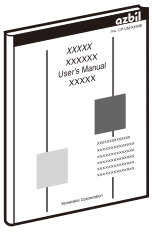

**Instrument Network Module Supervisor Module**
**NX-S11/12/21 User's Manual for Installation**
**Manual No. CP-UM-5557JE**

This manual is supplied with the NX-S11/12/21.
Personnel in charge of design and/or manufacture of a system using the NX-S11/12/21 should thoroughly read this manual. It describes safety precautions, installation, wiring, and primary specifications.



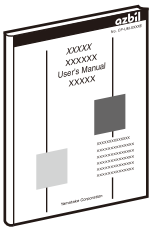

**Instrument Network Module**
**NX-D15/25 Controller Module User's Manual for Installation**
**Manual No. CP-SP-1308E**

Personnel who are using the NX-D15/25 for the first time or who are in charge of hardware design and/or maintenance of a control panel containing the NX-D15/25 should read this manual thoroughly.
This manual describes the hardware, surveys the NX-D15/25 and other products used with it, explains installation, wiring, and troubleshooting, and gives hardware specifications.



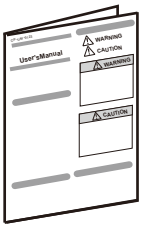
**Network Instrumentation Module**
**Digital Input/Pulse Input Module**
**NX-DX1/DX2** **Manual No. CP-SP-1323E**

This manual.
Personnel who are using the NX-DX1/DX2 for the first time or who are in charge of hardware design and/or maintenance of a control panel containing the NX-DX1/DX2 should read this manual thoroughly. This manual describes the hardware, surveys the NX-DX1/DX2 and other products used with it, explains installation, wiring, and troubleshooting, and gives hardware specifications.



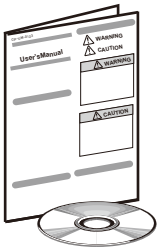
**Instrument Network Module Supervisor Module**
**NX-S11/12/21** **Manual No. CP-SP-1324E**

Personnel who are using the NX-S11/12/21 for the first time or who are in charge of hardware design and/or maintenance of a control panel containing the NX-S11/12/21 should read this manual thoroughly.
This manual describes the hardware, surveys the NX-S11/12/21 and other products used with it, explains installation, wiring, and troubleshooting, and gives hardware specifications.



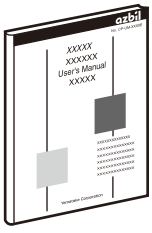
**Network Instrumentation Module**
**User's Manual Network Design Version** **Manual No. CP-SP-1313E**

Personnel who are in charge of design of a network using the Network Instrumentation Module should read this manual thoroughly.
It describes how to design a network and gives examples.



**Network Instrumentation Module**
**Smart Loader Package SLP-NX Installation Guide**
**Manual No. CP-UM-5559JE**

This manual is supplied with the SLP-NX Smart Loader Package and describes installation of the software on a personal computer.



**Network Instrumentation Module**
**Smart Loader Package SLP-NX User's Manual**
**Manual No. CP-UM-5636E**

This manual is included in the SLP-NX Smart Loader Package as a PDF file.
Personnel in charge of design or configuration of a system using the Network Instrumentation Module should read this manual thoroughly.
The manual describes the software used to configure the Network Instrumentation Module using a personal computer. It also describes installation of the software on a personal computer, operation of the personal computer, various functions, and setup procedures.

# Organization of This User's Manual

This manual is organized as follows:

**Chapter 1. OVERVIEW**

Overview, features, model selection guide, and part names and functions.

**Chapter 2. INSTALLATION**

Operating environment and installation procedures.

**Chapter 3. WIRING**

Wiring procedures and precautions, and connection examples.

**Chapter 4. FUNCTIONS**

Functions necessary for use of the NX-DX1/DX2 for control.

**Chapter 5. OPERATION AND GENERAL FUNCTIONS**

Setup of the most commonly used functions.

**Chapter 6. CPL COMMUNICATIONS FUNCTION**

Communication with a host unit, such as a personal computer or PLC, using Yamatake's standard CPL communication and RS-485.

**Chapter 7. MODBUS COMMUNICATIONS FUNCTION**

Communication with a host unit, such as a personal computer or PLC, using MODBUS and RS-485.

**Chapter 8. MODBUS/TCP COMMUNICATIONS FUNCTION**

Communication with a host unit, such as a personal computer or PLC, using MODBUS/TCP and Ethernet.

**Chapter 9. LIST OF COMMUNICATION DATA**

A list of communication data in the memory of the NX-DX1/DX2.

**Chapter 10. LIST OF PARAMETER SETTINGS**

A list of parameter settings.

**Chapter 11. TROUBLESHOOTING**

What to do in case of a problem.

**Chapter 12. MAINTENANCE, INSPECTION, AND DISPOSAL**

Maintenance, inspection, and disposal.

**Chapter 13. SPECIFICATIONS**

General specifications, performance specifications, external dimensions, and optional parts.

**Appendices**

An explanation of standard bit numbers.

# Contents

## Chapter 4. FUNCTIONS

## Chapter 5. OPERATION AND GENERAL FUNCTIONS



## Chapter 6. CPL COMMUNICATIONS FUNCTION

## Chapter 7. MODBUS COMMUNICATIONS FUNCTION



## Chapter 8. MODBUS/TCP COMMUNICATIONS FUNCTION



## Chapter 9. LIST OF COMMUNICATION DATA

## Chapter 10. LIST OF PARAMETER SETTINGS

## Chapter 11. TROUBLESHOOTING

## Chapter 12. MAINTENANCE/INSPECTION AND DISPOSAL



## Chapter 13. SPECIFICATIONS



## Appendices

# Chapter 1. OVERVIEW

## 1 - 1 Overview and Features

### ■ Overview

The Instrumentation Network Module uses Ethernet as standard to achieve distributed instrumentation and high-speed communication, and reduce the required wiring and engineering. This gives customers the value of improved environments, quality and productivity.
Sixteen decimal input points are possible in the Digital Input Module NX-DX1 and Pulse Input Module NX-DX2. In the NX-DX2, it is possible to input 5 kHz pulse signals.

### ■ Features

#### ● Higher communication speed

- Ethernet equipped as standard
  Each module is equipped with an Ethernet communication function.
  When modules are connected or distributed, the use of a daisy chain connection method greatly reduces the required wiring.
  Each module is also equipped with an RS-485 communication function.
  High-speed communication is possible to devices such as host systems, programmable logic controllers (PLCs) and display devices.
  The system can be upgraded to the Yamatake Monitor and Control System.
- Delivers a true distributed layout
  When connected by Ethernet, the system can be used with a distributed layout that has no functional differences from a connected layout.
- Communication redundancy
  Two communication configurations are available for the Ethernet network: non-ring and ring.

#### ● Hardware

- Compact and highly functional
  The body is an ultra-compact 30×100×104 mm.
- Simple assembly
  The three-part structure consists of a base, main body and terminal block. For ease of operation, installation and removal can be performed without using any tools.
- Connected operation and distributed layout
  The input and output signals between modules can be linked. Also, modules used in a distributed layout can be linked in the same way as during connected use.
- Stand-alone operation is possible
  Power, control and communication are integrated into a single unit. This enables efficient use even for applications with low number of channels, and it also saves space.

#### ● Digital input/pulse input function

- The NX-DX2 is an Instrument Network Module NX Pulse Input Module that comes equipped with Ethernet.
- High speed pulse input of a maximum of 5 kHz is possible.

#### ● Engineering tools

The SLP-NX Smart Loader Package (sold separately) is available.
The Ethernet connection enables simultaneous connection to multiple modules.
This provides centralized management, setting and monitoring, which contributes to reduced engineering requirements.

# 1 - 2 Model Selection Table

## ■ Digital input/pulse input module

| Basic model No. | Type | Ring connection | Wiring Method | Channels | Option | Addition | Description |
|---|---|---|---|---|---|---|---|
| NK— | | | | | | | Instrumentation Network Module |
| | DX1 | | | | | | Digital input (+common / – common shared) |
| | DX2 | | | | | | Pulse input (+common / – common shared) *1 |
| | | N | | | | | Non-ring communication |
| | | R | | | | | Ring communication |
| | | | T | | | | Screw terminal device |
| | | | | 16 | | | 16 ch |
| | | | | | 0 | | None |
| | | | | | | 0 | None |
| | | | | | | D | Inspection certificate |

*1: 1 to 8 ch = 5 kHz compatible, 9 to 16 ch = 100 Hz compatible

## ■ Communication box

| Basic model No. | Type | Ring connection 1 | Ring connection 2 | Ports | Option | Addition | Description |
|---|---|---|---|---|---|---|---|
| NK— | | | | | | | Instrumentation Network Module |
| | CB1 | | | | | | 4-port switching hub |
| | | N | | | | | Chain (side connector) non-ring connection communications |
| | | R | | | | | Chain (side connector) ring connection communications |
| | | | N | | | | Inter-chain (front port) non-ring connection communications |
| | | | R | | | | Inter-chain (front port) connection communications |
| | | | | 04 | | | 4-ports |
| | | | | | 0 | | RJ-45 |
| | | | | | | 0 | None |
| | | | | | | D | Inspection certificate |

## ■ Communication adapters and, terminal adapters

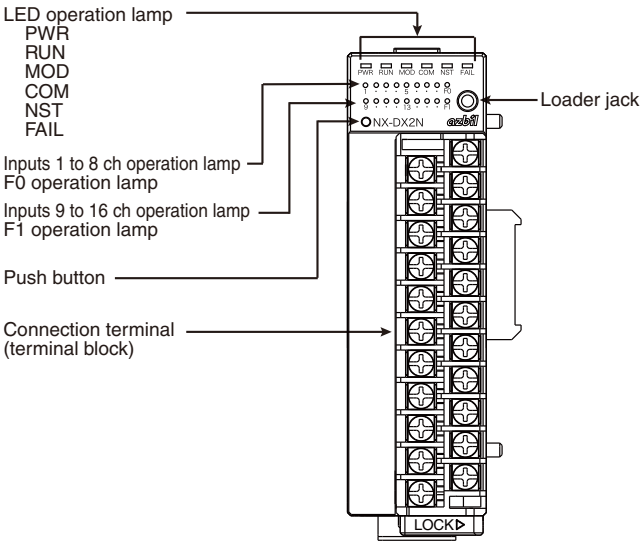
| Basic model No. | Type | Option 1 | Option 2 | Option 3 | Option 4 | Addition | Description |
|---|---|---|---|---|---|---|---|
| NK— | | | | | | | Instrumentation Network Module |
| *1 | CL1 | | | | | | Communication adaptor for left side |
| *1 | CR1 | | | | | | Communication adaptor for right side |
| *1 | TL1 | | | | | | Terminal adaptor / chain connection (side connector) for left-side connection / ring communication |
| *1 | TR1 | | | | | | Terminal adaptor / chain connection (side connector) for right-side connection / ring communication |
| | | 0 | | | | | None |
| | | | 0 | | | | None |
| | | | | 00 | | | None |
| | | | | | 0 | | None |
| | | | | | | 0 | None |
| | | | | | | D | Inspection certificate |

*1: A view from the front after attaching to the sides.

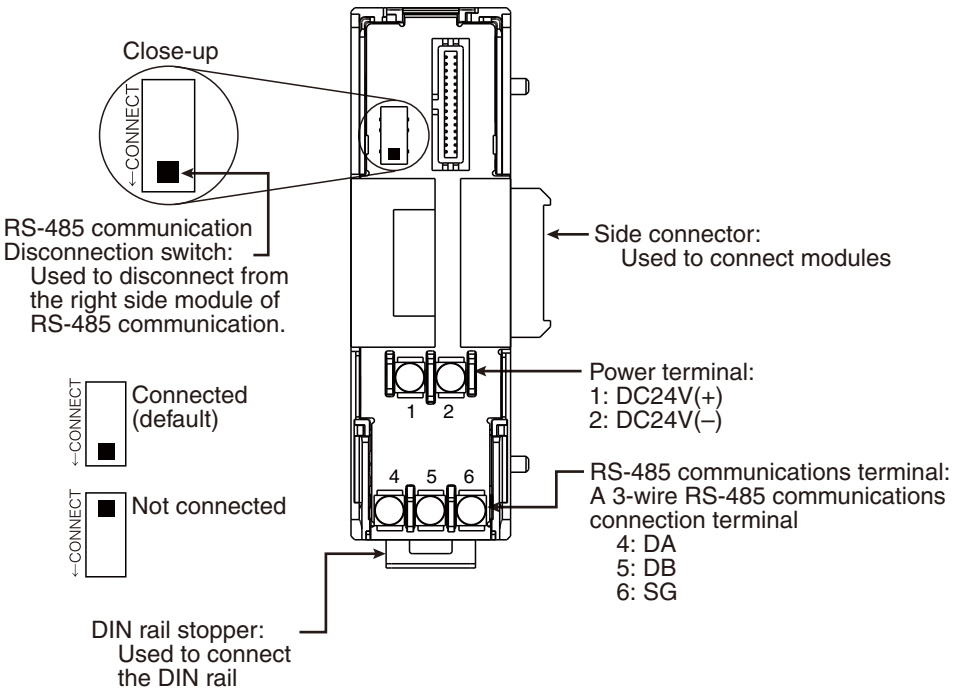
# 1 - 3 Names and Functions of Part

## ■ Digital/pulse input module

### ● Main body

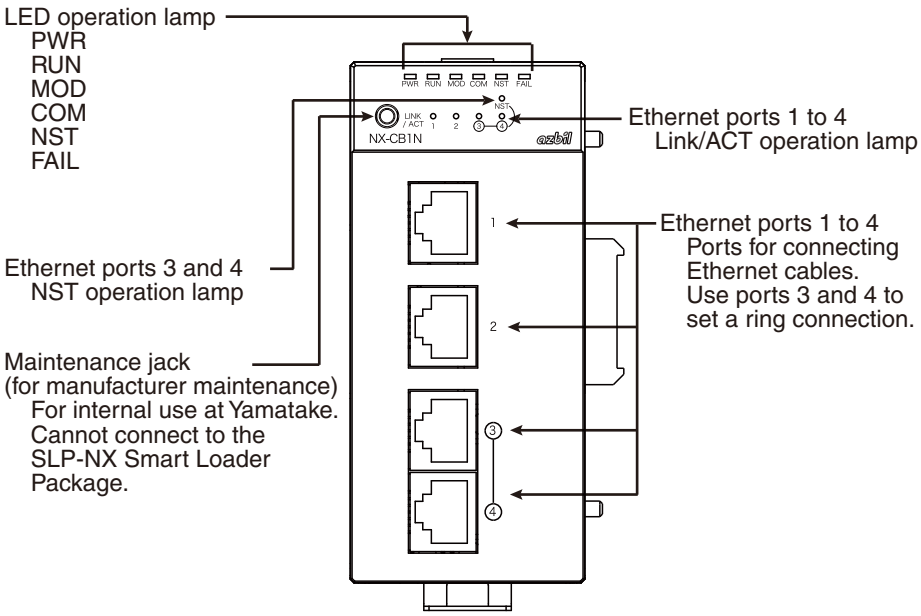



### ● Base

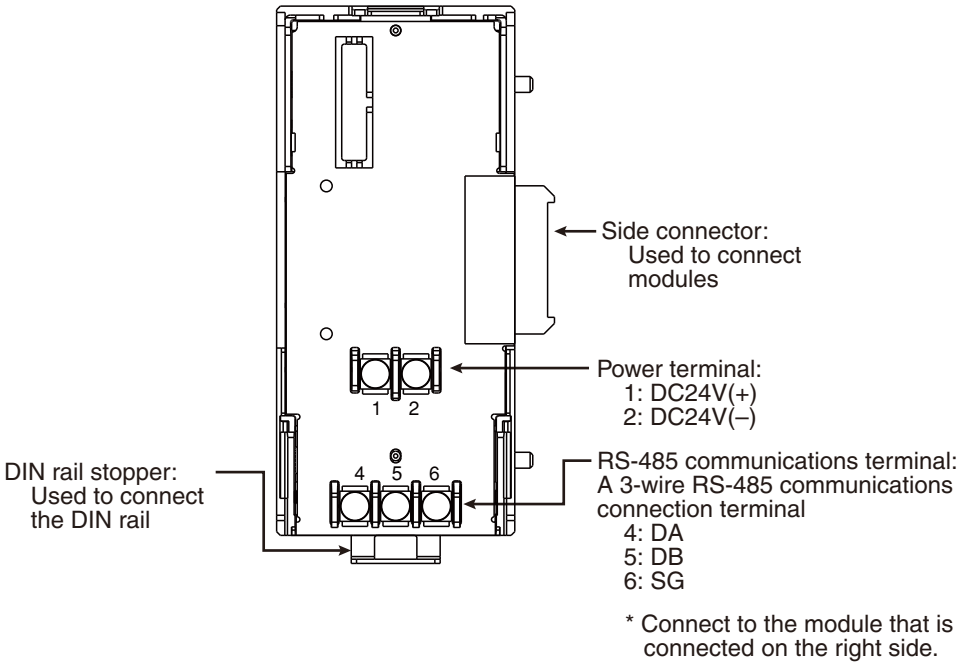


## ■ Communication box

### ● Main body



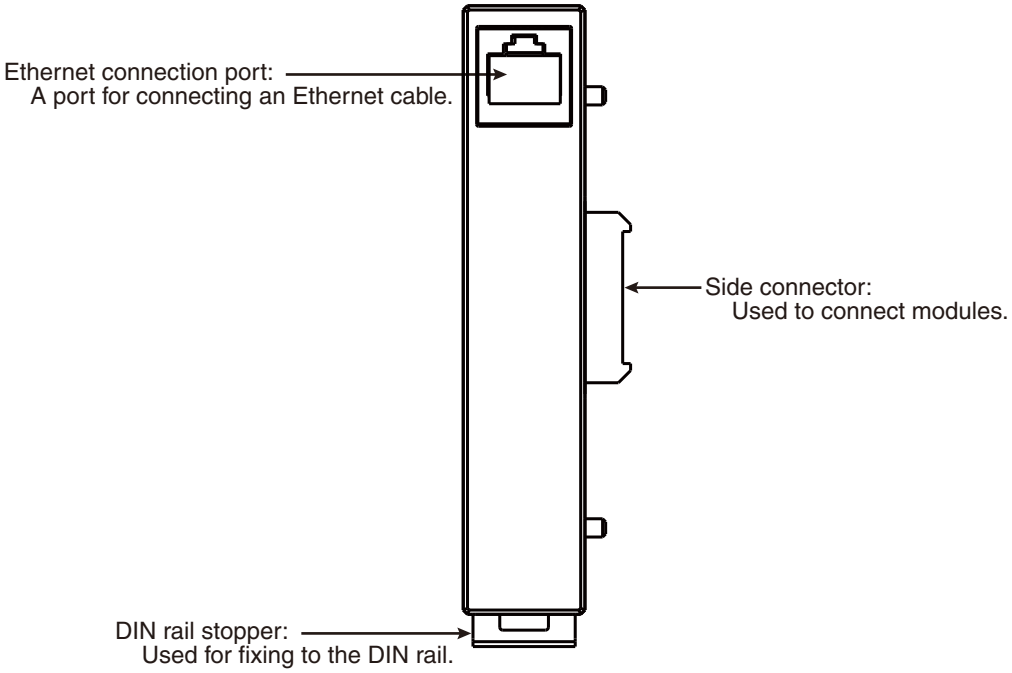

### ● Base



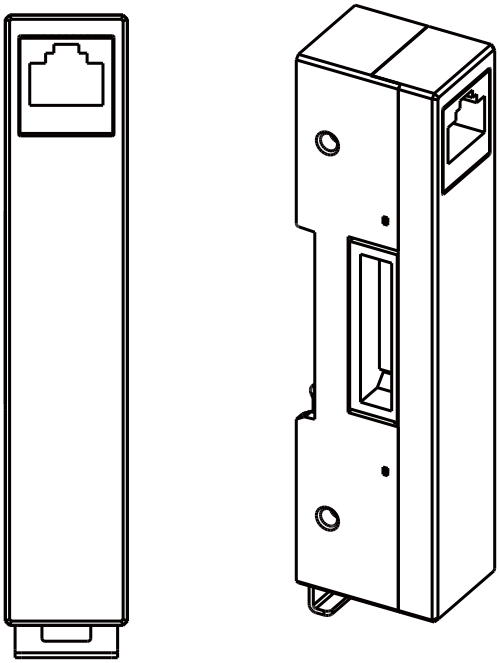

* Connect to the module that is connected on the right side.

## ■ Communication adapter

### ● For left connection

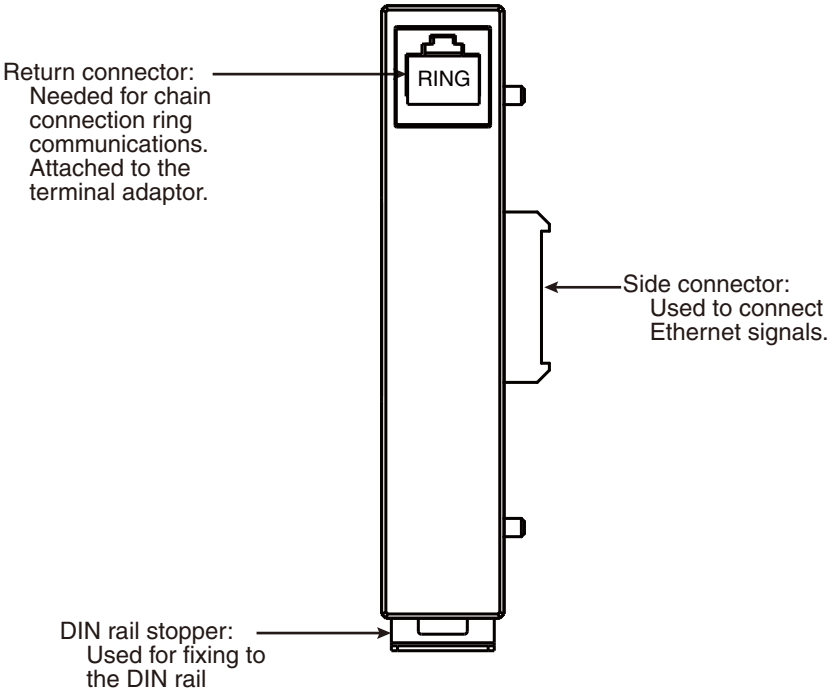



### ● For right connection

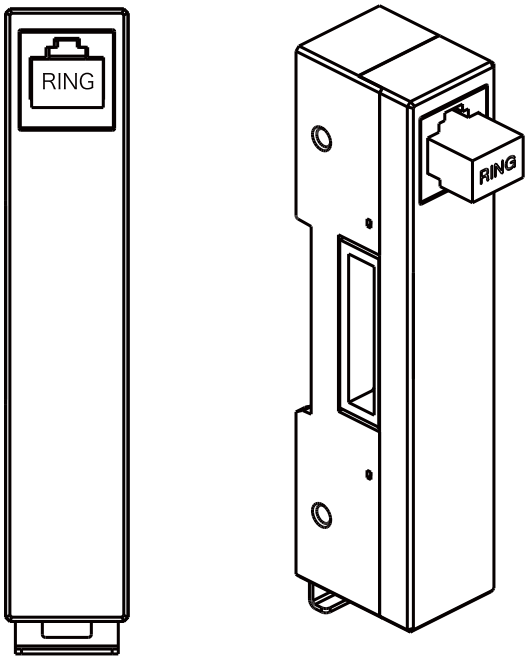


## ■ Terminal adapter

### ● For left connection



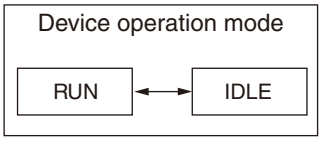

### ● For right connection



# 1 - 4 Operation Modes

## ■ Device operation mode

The transition of device operation modes is shown below.




RUN : Module active (all functions)

IDLE : Module control has stopped

* Loader and host communication are running.
* Chattering removal and direct/reverse processing are active while idle.
* Pulse input processing, estimate processing, and instant value computation processing are active while idle
* The output of events while idle is turned off.

### Note

- The system transitions to idle mode if a serious fault or AL88 (base EEPROM error) occurs.
- The system transitions to idle mode while parameters are being written from SLP-NX.
- For information on operations such as host communication, refer to,
  ☞ Communication actions for each status type.

# Chapter 2. INSTALLATION

**⚠WARNING**

Before removing, mounting, or wiring the NX-D15/25, be sure to turn off the power to the module and all connected devices. Failure to do so might cause electric shock.

**⚠CAUTION**

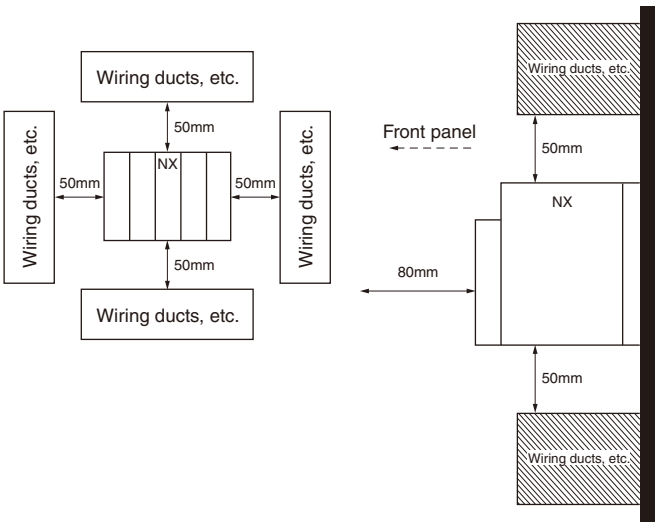
Use this device within the operating ranges given in the specifications (for temperature, humidity, voltage, vibration, shock, mounting direction, atmosphere, etc.). Otherwise, fire or device failure could result.

Do not block the ventilation holes. Doing so might cause fire or device failure.

Do not allow wire clippings, metal shavings, water, etc. to enter the case of this device. They can cause fire or device failure.

## ■ Installation location

During installation, leave a clearance of at least 50 mm above and below, 50 mm on the right and left, and 80 mm from the front of the unit for air intake, removal, wiring, and maintenance.
When mounted, the module should be at least 100 mm away from another module or other device.
Do not mount the module above heat-generating equipment like a power generator.




- Do not install in the following locations:
- Places with a high or low temperature or high or low humidity outside the specification range
- Places with sulfide gas or other corrosive gases
- Places exposed to dust or oily smoke
- Places exposed to direct sunlight, wind or rain
- Places exposed to mechanical vibration or shocks outside the specification range
- Near high voltage lines, welding machines or other sources of electrical noise
- Within 15 meters of a high voltage ignition device, such as a boiler
- Places with strong magnetic fields
- Places with flammable liquid or gas
- Outdoors
- I/O common mode voltage: In a place where the voltage between major areas is no less than 30 Vrms, 42.4 V peak, or DC 60 V

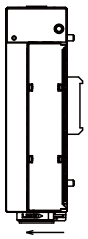
## ■ Terminal block installation and removal

### [!] Handling Precautions

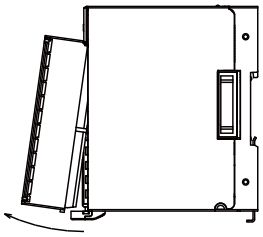
- Do not remove the terminal block other than for work, such as:
  - When wiring before installing the unit
  - During maintenance

#### ● Removal method

[1] Slide the lock lever of the terminal block to the left to unlock the terminal block.

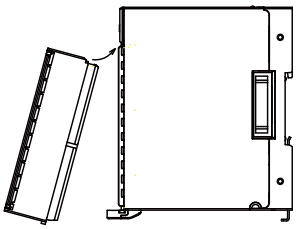


[2] Remove the terminal block by pulling it out towards you from the lower side.

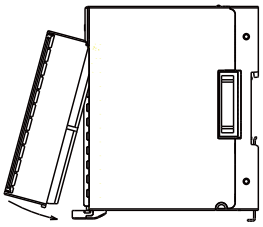


#### ● Installation method

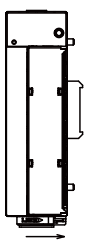
[1] Tilt the terminal block and insert the upper side of the terminal block into the groove in the case.



[2] Install so that the lower side of the terminal block is pushed in.



[3] Slide the lock lever of the terminal block to the right to lock the terminal block.



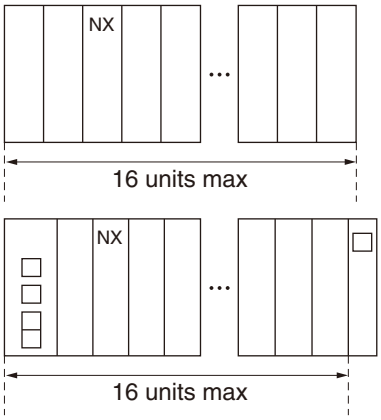
## ■ Module connection

This module can be connected to other modules with the left and right connectors on the base.
Connect the modules before installing them on the DIN rail. Connecting the modules connects the power and communication of each module, reducing the amount of wiring that is required. With RS-485 communication, the connection with the right side module can be disconnected with the RS-485 cutoff switch on the base.

Up to 16 modules can be linked.
In a distributed layout, if the horizontal length is too long, or if more than 16 modules are connected, divide the modules into two or more groups.

### ! Handling Precautions

- The following are not included in the number of linked modules.
- Communication adapter
- Terminal adapter

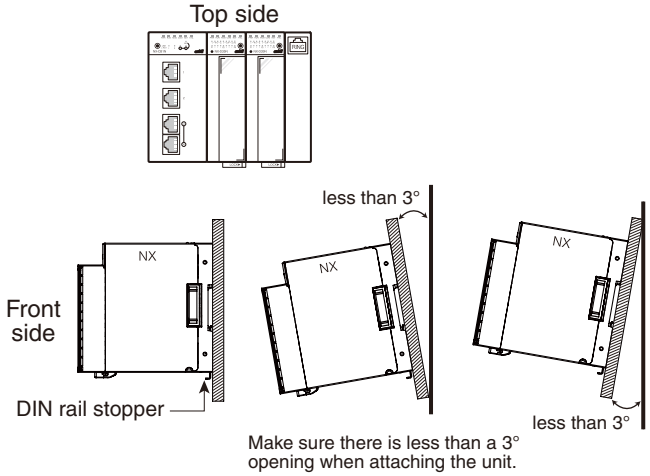



## ■ Installation method

Use the unit while it is installed on a DIN rail.
After fixing the DIN rail, pull out an ample amount of the DIN rail stopper and then attach the base to the rail. Next, push in the DIN rail stopper in the upper direction until it clicks.

### ! Handling Precautions

- Link this unit before installing it on a DIN rail.
- Install the unit with the DIN rail stopper under the vertical surface.



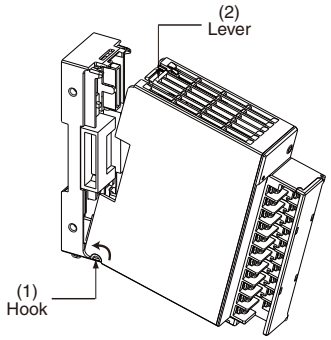
## ■ Installing the main body to the base

### ! Handling Precautions

- Use the base and main body from the same package together as a pair.
- First attach the hook on the lower side of the main body to the base. Failure to do so might cause damage.

[1] Attach the hook on the lower side of the main body to the base.

[2] Insert the upper side of the main body until the lever clicks.




To remove, pull the upper side lever towards yourself while pressing it.

# Chapter 3. WIRING

## 3 - 1 Wiring Precautions

| ⚠WARNING | |
|---|---|
| ❗ | Before removing, mounting, or wiring the NX-DX1/DX2, be sure to turn off the power to the module and all connected devices. Failure to do so might cause electric shock. |
| ❗ | Be sure to check that the NX-DX1/DX2 has been correctly wired before turning on the power. Incorrect wiring of the module can damage it or lead to hazardous conditions. |

| ⚠CAUTION | |
|---|---|
| 🚫 | Do not disassemble the NX-DX1/DX2. Doing so might cause electric shock or device failure. |
| ❗ | Do not allow wire clippings, metal shavings, water, etc. to enter the case of this device. They can cause fire or device failure. |
| 🚫 | Do not touch electrically charged parts such as the power terminals.<br>Doing so might cause electric shock or device failure. |
| ❗ | Before wiring the NX-DX1/DX2, be sure to disconnect the power. Failure to do so might cause device failure. |
| ❗ | Wire the NX-DX1/DX2 in compliance with established standards, using the specified power source and recognized installation methods. Failure to do so could result in fire, electric shock, or malfunction. |
| ❗ | Make sure that there are no loose connections.<br>Loose connections might generate heat or cause faulty operation. |
| 🚫 | Do not use unused unit terminals as relay terminals.<br>This might cause electric shock, fire, or faulty operation. |
| 🚫 | Do not short-circuit the outputs.<br>Doing so might cause the unit to malfunction. |
| ❗ | Firmly tighten the terminal screws to the torque listed in the specifications. Insufficient tightening might cause fire. |
| ❗ | If there is a risk of a power surge caused by lightning, use a surge protector to prevent possible fire or failure of the device. |

## ■ Wiring precautions

- Make sure that the wiring follows regulations for indoor wiring and technical standards for electrical equipment.
- Do not install wiring outdoors. Doing so might cause electric shock.
- When connecting wires to the power terminals, use crimp terminals with insulating sleeves.
- Before wiring the unit, verify the device's model No. and terminal Nos. written on the wiring diagram on the side of the main body.
- Use M3 crimp-type terminal lugs for wiring to a screw-type terminal block.
- Pay special attention so that no crimp type terminal lugs make contact with adjacent terminals.
- Leave a distance of at least 60 cm between I/O lead wires and communications lead wires or power lead wires. Also, do not pass these lead wires through the same conduit or wiring duct.
- When connecting in parallel to another device, check the requirements of the other device carefully before performing instrumentation.
- To ensure stability, the unit is designed so that after the power is turned ON, there is no output for about 10 seconds.
- When the wiring is completed, check that there are no wiring mistakes before turning the power ON.

# 3 - 2 Recommended Cables

- Use a JCS 4364 low power instrument cable or equivalent for inputs and outputs. (Generally called twisted shielded cable for instrumentation use.)

(Reference) Example of used cables

| Function | Cable | Dimensions | Length *1 | Comments |
|---|---|---|---|---|
| Power | CVV, IV | 1.25mm$^2$ | 30 m or less | |
| DI | CVV, IV, KPEV, IPEV, IPEV-S, KPEV-S, MVVS | 0.5 to 1.25mm$^2$ | 100 m or less | *2 |
| EV | CVV, IV, KPEV, IPEV, IPEV-S, KPEV-S, MVVS | 0.9 to 1.25mm$^2$ | 100 m or less | *2 |
| Ethernet | UTP cable (4P)<br>Cat 5e or higher (straight)<br>(both ends ANSI/TIA/EIA-568-B) | — | *3 | |
| RS-485 | IPEV-S 2P *, KPEV-S 2P *<br>CVV-S 3C, MVVS 3C | 0.9mm$^2$<br>1.25mm$^2$ | 500 m or less | * Use DA and DB as a pair. We recommend SG at one end or both ends for the remaining pair. |

*1 Does not factor in the impact of external noise

*2 In an environment with excessive noise, use shielded wire.

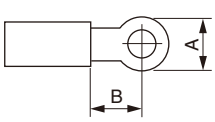
*3 Refer to Chapter 2 “Configuration of Ethernet Communications” in Network Instrumentation Module User’s Manual Network Design Version, CP-SP-1313E.

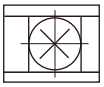
# 3 - 3 Terminal Connections

| ⚠ CAUTION | |
|---|---|
| ❗ | Firmly tighten the terminal screws to the torque listed in the specifications. Insufficient tightening might cause fire. |
| ⃠ | Do not use unused terminals on the NX-D15/25 as relay terminals. Doing so might cause electric shock, fire or device failure. |
| ⃠ | Do not short the output section. Doing so might cause device failure. |

The following describes the connections of the unit terminals.

For wiring of the unit, use a crimp type terminal lug that is suitable for the M3 screw.



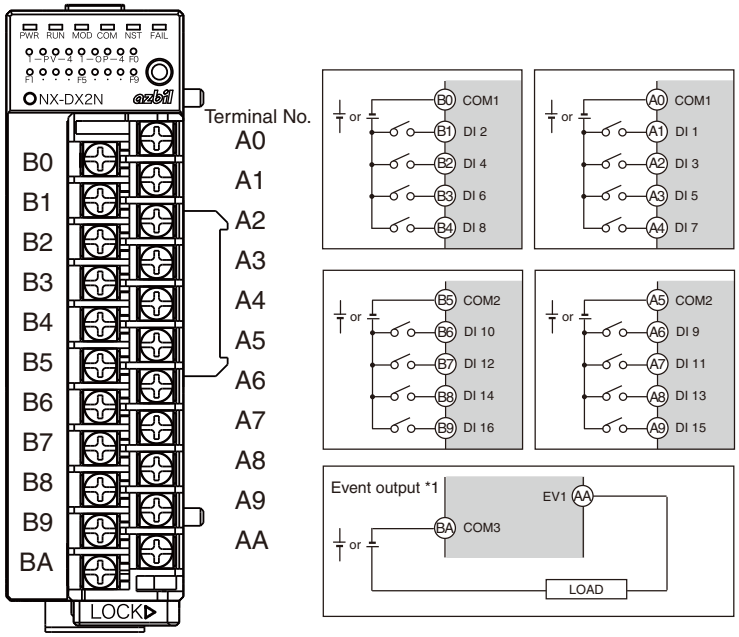



| Applicable screw side | A | B | Recommended crimp-type terminal lugs (reference) |
|---|---|---|---|
| M3 | 5.8 mm or less | 5.5 mm or less | JST Mfg. Co., Ltd.<br>Vinyl insulated round terminal<br>V1.25 - MS3 |

## ! Handling Precautions

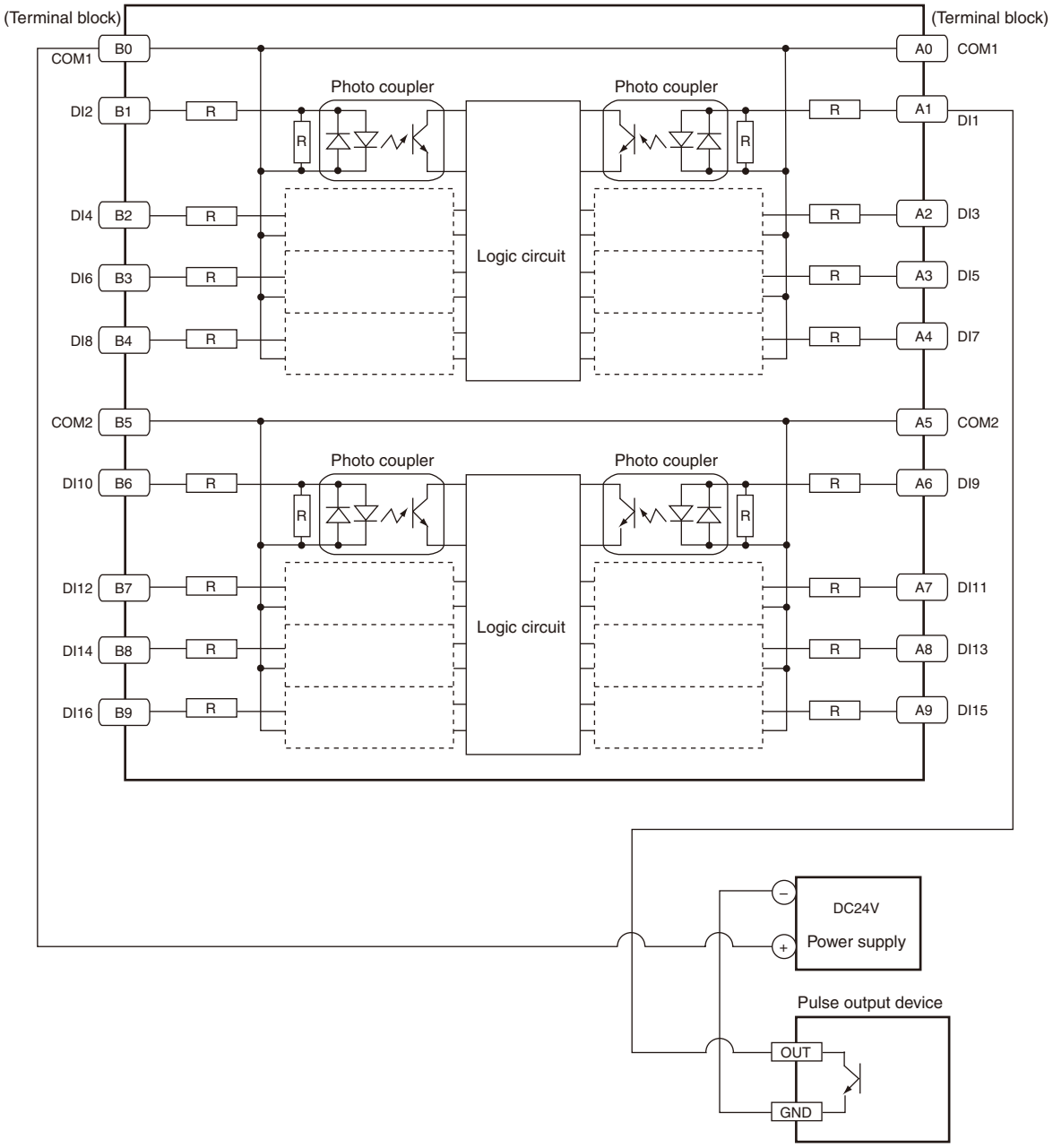
- When installing this unit in a place where the vibration or shock is large, always use an appropriate round crimp type terminal lug to avoid loose terminal connections.
- Pay special attention so that no crimp type terminal lugs make contact with adjacent terminals.
- The tightening torque of the terminal screw must be 0.5 to 0.7 N•m or less.
- Connect up to two terminals per terminal screw by aligning crimp-type terminal lugs back-to-back.

# 3 - 4 Terminal Wiring Diagram

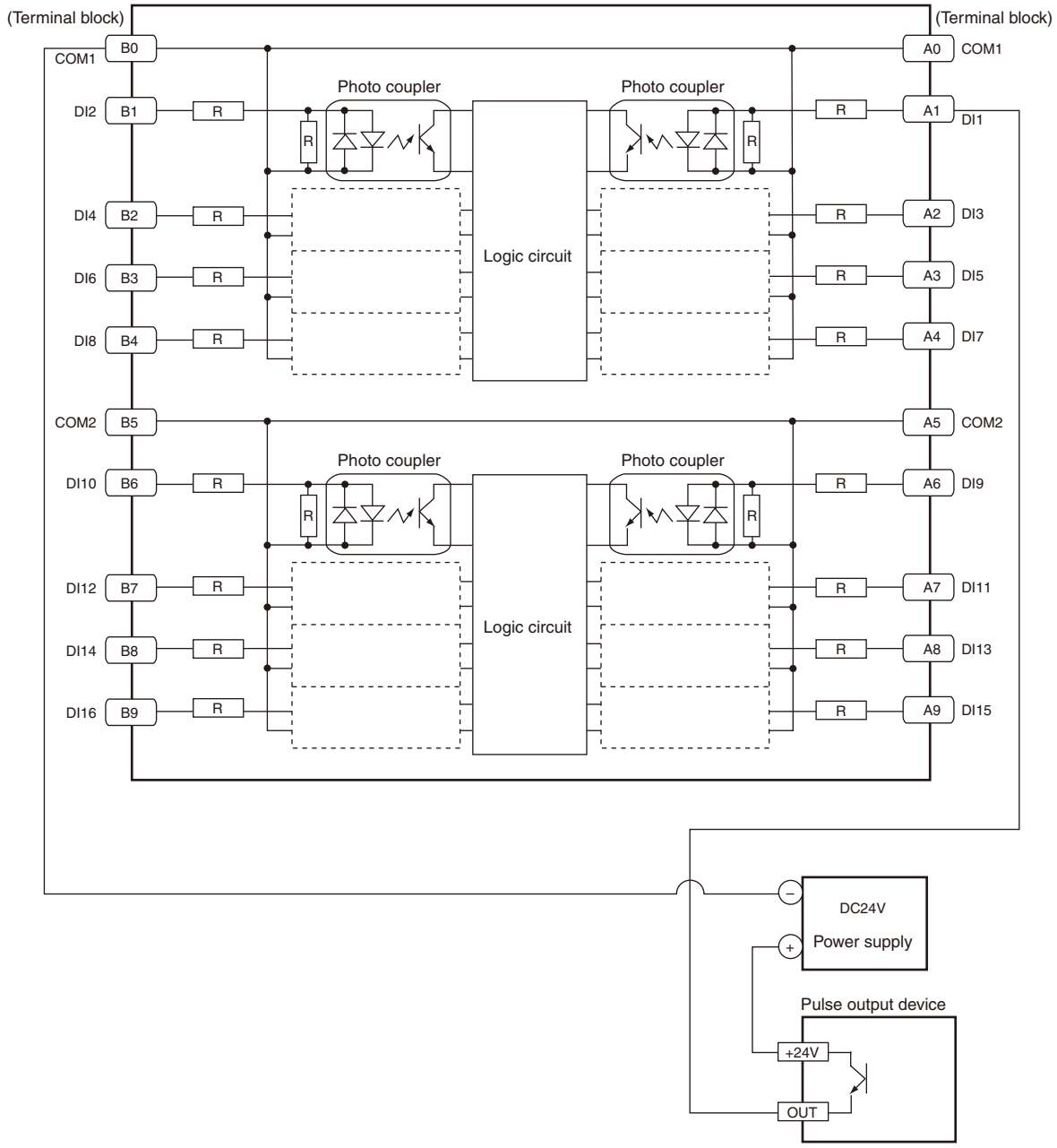



*1: Event output = NX-DX2 only.
*2: A0, B0 are connected internally as COM1, with A5, B5 as COM2.
*3: Wiring is the same for both digital and pulse inputs.

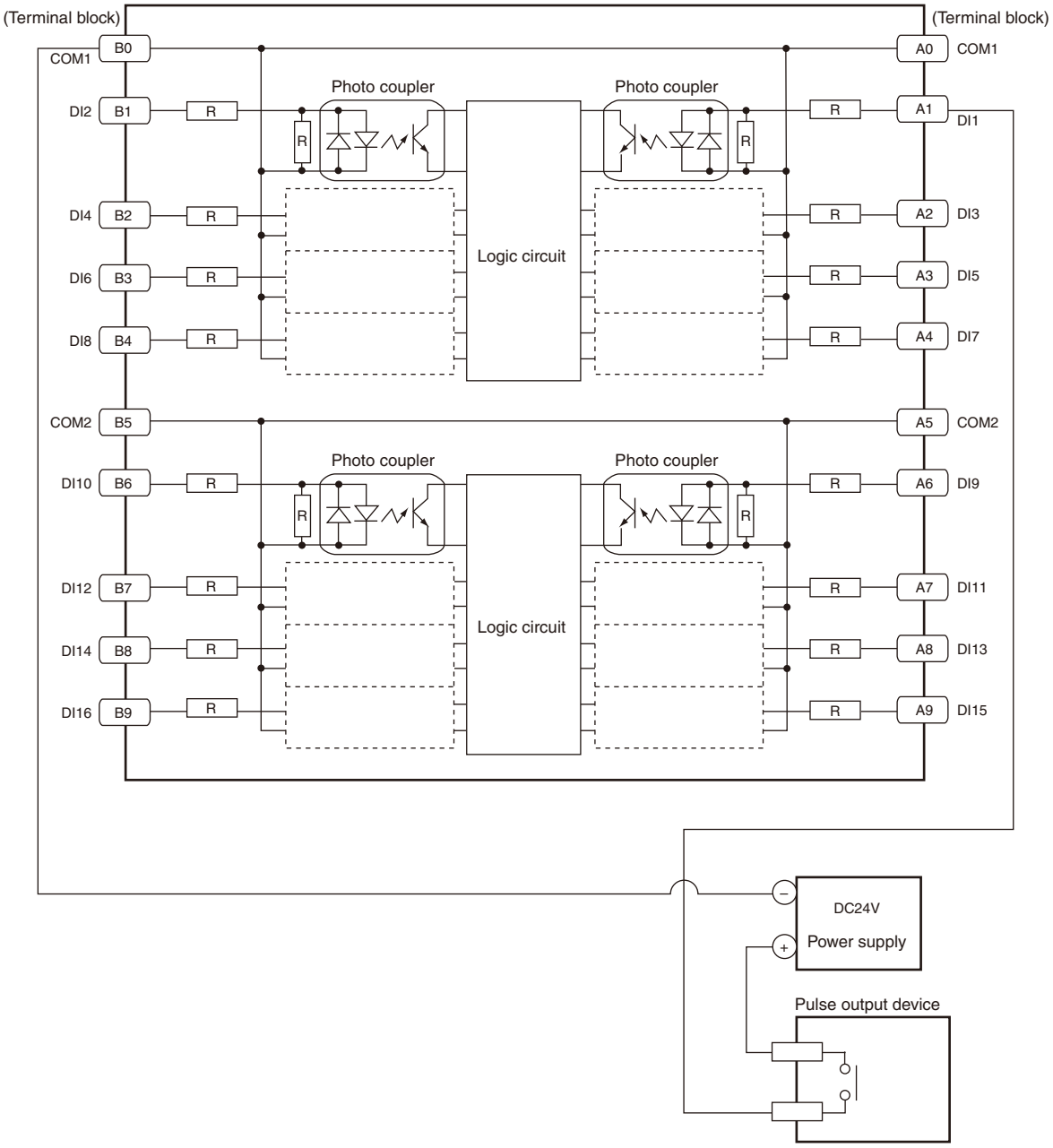
## ● Example of wiring for sink output-type digital output/pulse output devices



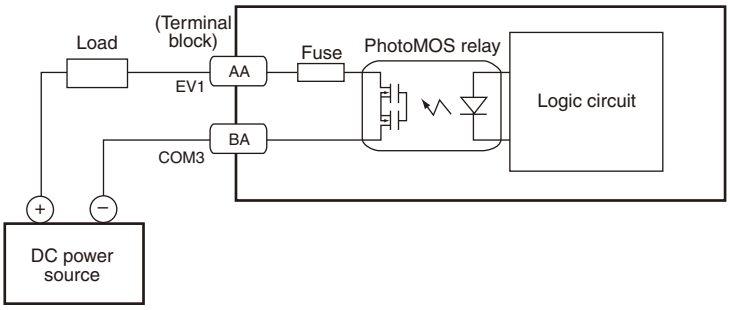
## ● Example of wiring for source output-type digital output/pulse output devices



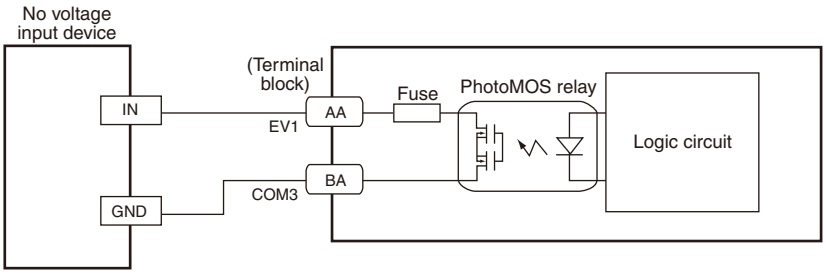
## ● Example of wiring for contact output-type digital output/pulse output devices



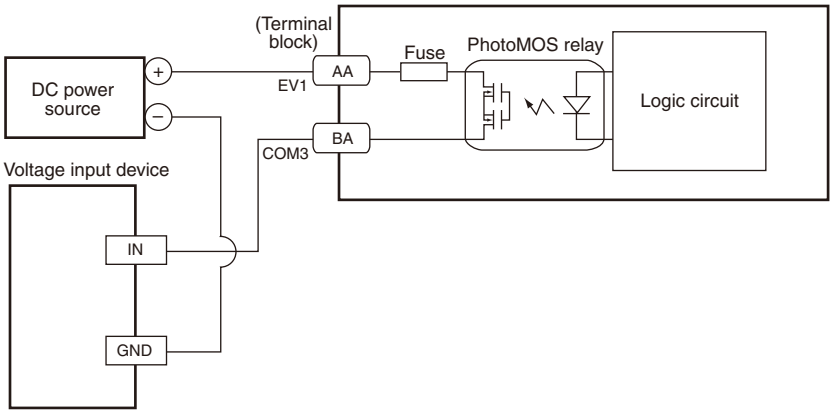
● **Example of wiring for event output (for general loads)**




● **Example of wiring for event output (for no voltage input (open collector))**




● **Example of wiring for event output (for voltage input devices)**



# 3 - 5 Power Connections

## ■ Power supply connections

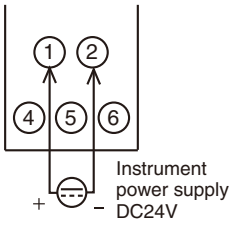
**⚠WARNING**

Before installing, removing or wiring the unit, be sure to turn OFF the power of the unit and any connected devices.
Failure to do so might cause electric shock.

**⚠CAUTION**

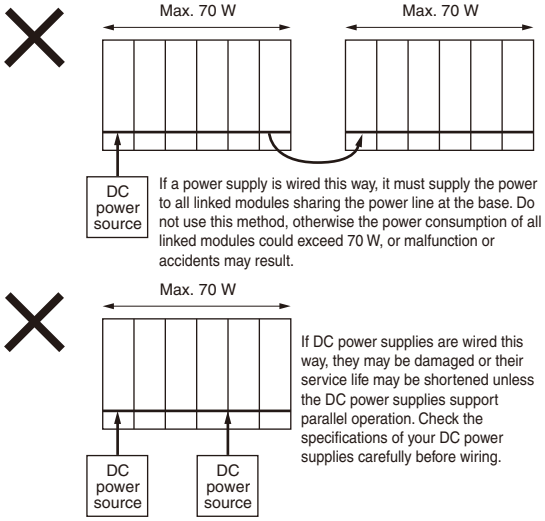
Do not allow the total power consumption of all linked modules to exceed 70 W.
Excessive wattage can result in fire or malfunction.

Connect the power terminal as shown below.




### Handling Precautions

- The power supply is connected between the connected modules.
- Supply power to one of the connected modules.
- Select a power supply that satisfies in full the total power consumption of the connected modules.



## ■ Noise countermeasures

Provide a power supply from a single-phase instrument power supply to minimize the effects of noise.
If the power supply generates noise, add an insulation transformer, and use a line filter.
(Yamatake Corporation Line Filter Model No.: 81446364-001)
Use a CR filter for quick-rising noises such as impulse noise.
(Yamatake Corporation CR Filter Model No.: 81446365-001)

### [!] Handling Precautions

- After introducing noise-reduction measures, do not bundle the primary and secondary coils of the insulation transformer together, or put them into the same conduit or duct.

## ■ Power supply design

The required power supply capacity for a module varies depending on the module configuration.
For this reason, the required power supply capacity must be calculated and verified.
The procedures for power supply design are described below.

[1] Calculate the integrated power consumption for the modules being used.

[2] Determine the required power capacity, taking into consideration factors such as inrush current and derating.

The design of power supply is described below.

### ● How to calculate the power consumption

Modules are connected to the instrument power supply (24 Vdc) via side connector.
The power consumption of each module is shown in the table below.
Calculate the total power consumption from the number of modules to be be used.

| Module | Type (model No.) | Power consumption (W) | Power ON inrush current | Comments |
|---|---|---|---|---|
| Controller module | D15, D25 | 4 W or less | 20 A or less | Under operating conditions |
| Digital/pulse input module | DX1, DX2 | 4 W or less | 20 A or less | Under operating conditions |
| Supervisor module | S11, S12, S21 | 4 W or less | 12 A or less | Under operating conditions |
| Communication box | CB1 | 4 W or less | 10 A or less | Under operating conditions |
| Communication adapter | CL1, CR1 | — | — | Power supply not required |
| Terminal adapter | TL1, TR1 | — | — | Power supply not required |

### ● How to select the required power supply capacity

Calculate the required power from the table above, perform derating according to the ambi ent temperature or the load factor, and then select the power supply.

### [!] Handling Precautions

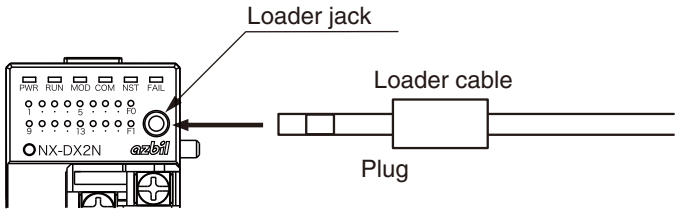
- Select a power supply that has a capacity to accommodate the power ON inrush current (under operating conditions).
  If derating according to the load reduction factor or ambient temperature is not performed, the service life of the power supply may be shortened.
  For details, contact the manufacturer of your power supply.

# 3 - 6 Ethernet Communication Connections

For information on Ethernet communication connections, refer to,

☞ 1-3 “Explanation of Module Features”, Chapter 2, “Configuration of Ethernet Communications” in Network Instrumentation Module User’s Manual Network Design Version, CP-SP-1313E.

# 3 - 7 Loader Cable Connections




## Handling Precautions

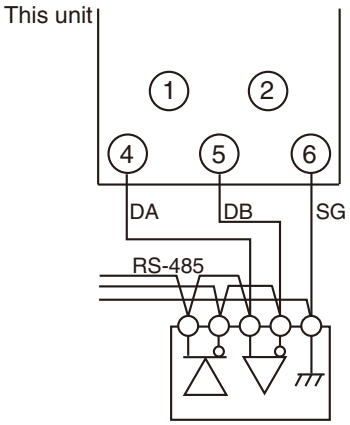
- Only USB loader cables can be used.
- Firmly insert the plug into the loader jack.
- When removing or inserting the loader cable, hold the plug. Do not pull the cable.
- Do not apply force to the loader cable or plug in any direction while the cable is connected.
  Doing so might damage the loader cable or loader jack, or affect the functionality or performance.

## Note

- For information about connecting loader cables, refer to,
  ☞ 2-5 “Configuration With Other Devices” in Network Instrumentation Module User’s Manual Network Design Version, CP-SP-1313E.

# 3 - 8 RS-485 Communication Connections

Connect CPL and MODBUS RS-485 communication as shown below.



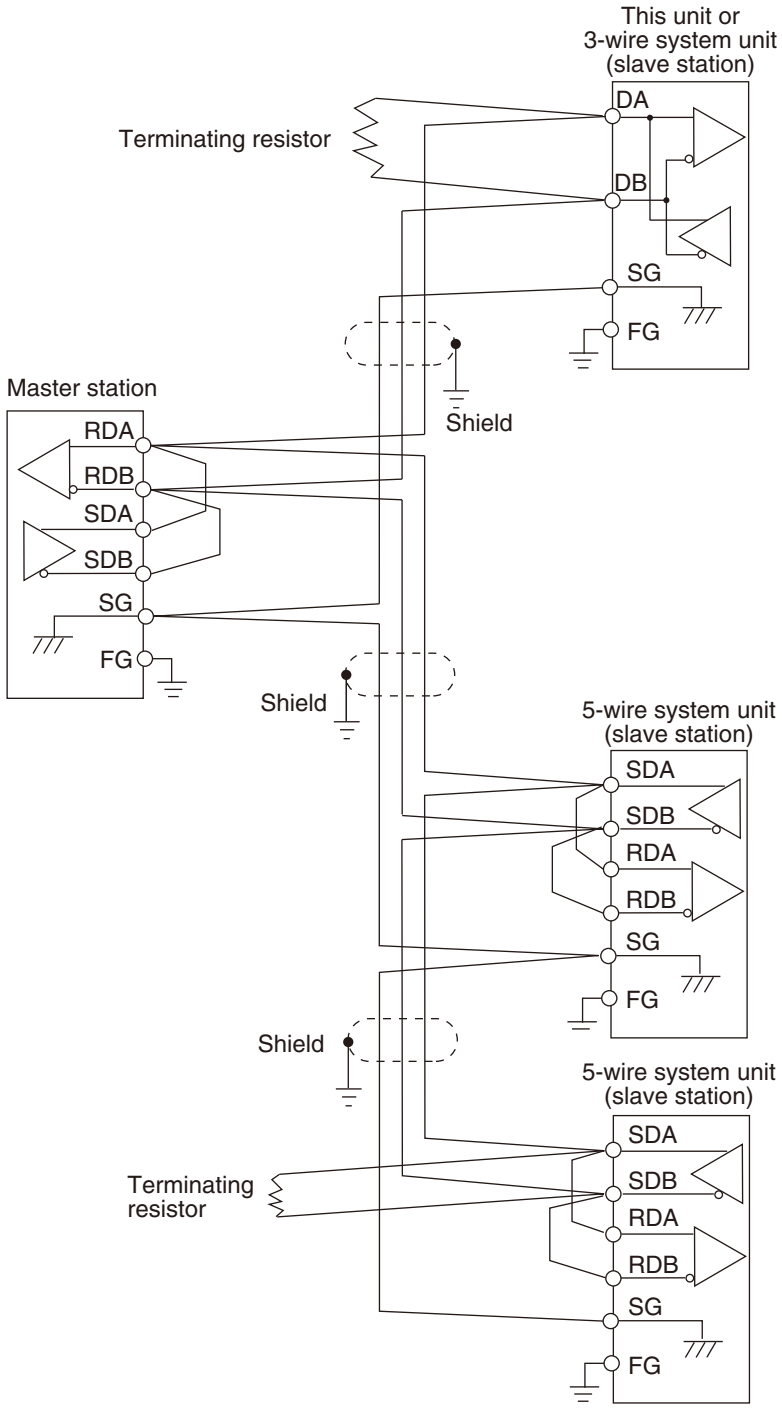

## Handling Precautions

- Attach a 0.5 W or greater terminating resistor of 150 Ω ±5% at each end of the communications lines.
  If any devices prohibit the attachment of terminating resistors in the same line, set up the connection in accordance with that device.
- Be sure to connect the SG terminals to each other. Failure to do so might cause unstable communications.
- Use a twisted pair cable as the communication wires.

## Note

- When setting up RS-485 communication connections, also refer to,
  ☞ Chapter 3 “Configuration of Serial Communications” in Network Instrumentation Module User’s Manual Network Design Version, CP-SP-1313E.

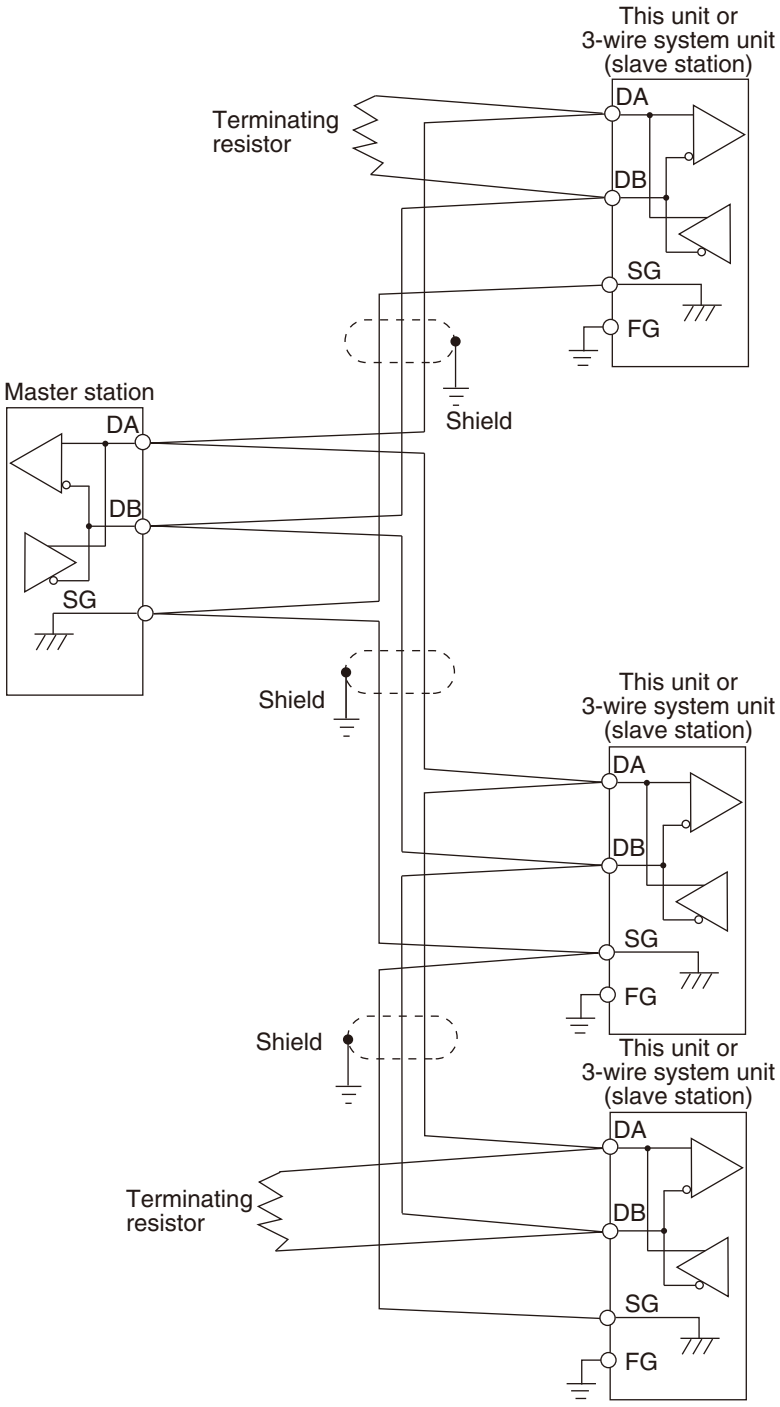
● **Combining with 5-wire system units**




## ! Handling Precautions

- If units for which the connection of a terminating resistor is prohibited (Yamatake SDC15/25/26/35/36 or DMC10) are on the same transmission line, do not connect a terminating resistor to the external or communication line of the NX-DX1/DX2.

● **3-wire system**




## ! Handling Precautions

- If units for which the connection of a terminating resistor is prohibited (Yamatake SDC15/25/26/35/36 or DMC10) are on the same transmission line, do not connect a terminating resistor to the external or communication line of the NX-DX1/DX2.

# 3 - 9 Noise Generation Sources and Noise Suppression

The following are typical noise generation sources:

1. Relays and contacts
2. Solenoid coils and solenoid valves
3. Power lines (especially those AC 90 V or higher)
4. Inductive loads
5. Motor commutators
6. Phase angle control SCR
7. Radio communication equipment
8. Welding machinery
9. High-voltage ignition devices

Effective measures for noise suppression are described below.

1. A CR filter is effective for quick-rising noises such as impulse noise.
   Recommended CR filter:
   Yamatake Corporation Model No.: 81446365-001
2. A varistor is effective for noises with high crest values.
   Recommended varistor:
   Yamatake Corporation Model No.: 81446366-001(for 100 V)
   81446367-001(for 200 V)

### Handling Precautions

- Take great care when using a varistor because the varistor short-circuits when faulty.

# 3 - 10 I/O Isolation

The solid line indicates isolation from the rest of the circuit.

| | |
|---|---|
| Power source (including side connectors) *1 | |
| Logic circuit | |
| Loader jack | |
| RS-485 communications, side connector Ethernet communications *1 | |
| Displayed portions (LED, switch, etc.) | |
| Side connector ring communication *1 | |

*1: The power, ring communication, RS-485 communication, and Ethernet communication are insulated and connected to the side connector.

*2: NX-DX2 only.

*3: The NX-DX1 does not support pulse input function.

# Chapter 4. FUNCTIONS

## 4 - 1 Overview of Functions

The Digital Input Module NX-DX1 (hereafter referred to as the NX-DX1) can measure a maximum of 16 digital signal ON/OFF statuses.
The Pulse Input Module NX-DX2 (hereafter referred to as the NX-DX2) can count (estimate) pulse signals sent from flow meters and power output meters, and convert the flow and power output. The NX-DX2 can measure a maximum of 16 pulse signals and channels 1 to 8 can switch the high-speed pulse counter (max. 5 kHz) and low-speed counter (max. 100 Hz). Ch 9 to 16 are dedicated to low-speed pulses (max. 100 Hz).

### ■ List of functions

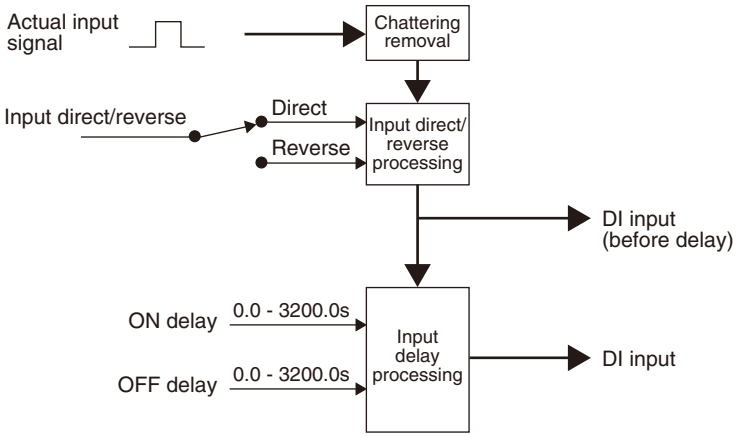
A list of NX-DX1/DX2 functions is shown below.

| Type | Function | Item | NX-DX1 | NX-DX2 |
|---|---|---|---|---|
| Setting | Input processing | Digital input setting | ○ | ○ |
| | | Pulse input setting | | ○ |
| | Output processing | Event output setting | | ○ |
| | Pulse processing | Estimate calculation function | | ○ |
| | | Instant value calculation function | | ○ |
| | Other | Start delay at power ON | ○ | ○ |
| | | User-defined bit | ○ | ○ |
| | | User-defined number | ○ | ○ |
| | | UF LED | ○ | ○ |
| | | Inter-module data transfer function | ○ | ○ |
| | | Reception monitoring function | ○ | ○ |
| Operation | Operation display | LED and push button | ○ | ○ |
| | Estimate processing | Operating instructions | | ○ |
| | Instant value processing | Operating instructions | | ○ |

## ■ Input function block for the Digital Input Module NX-DX1

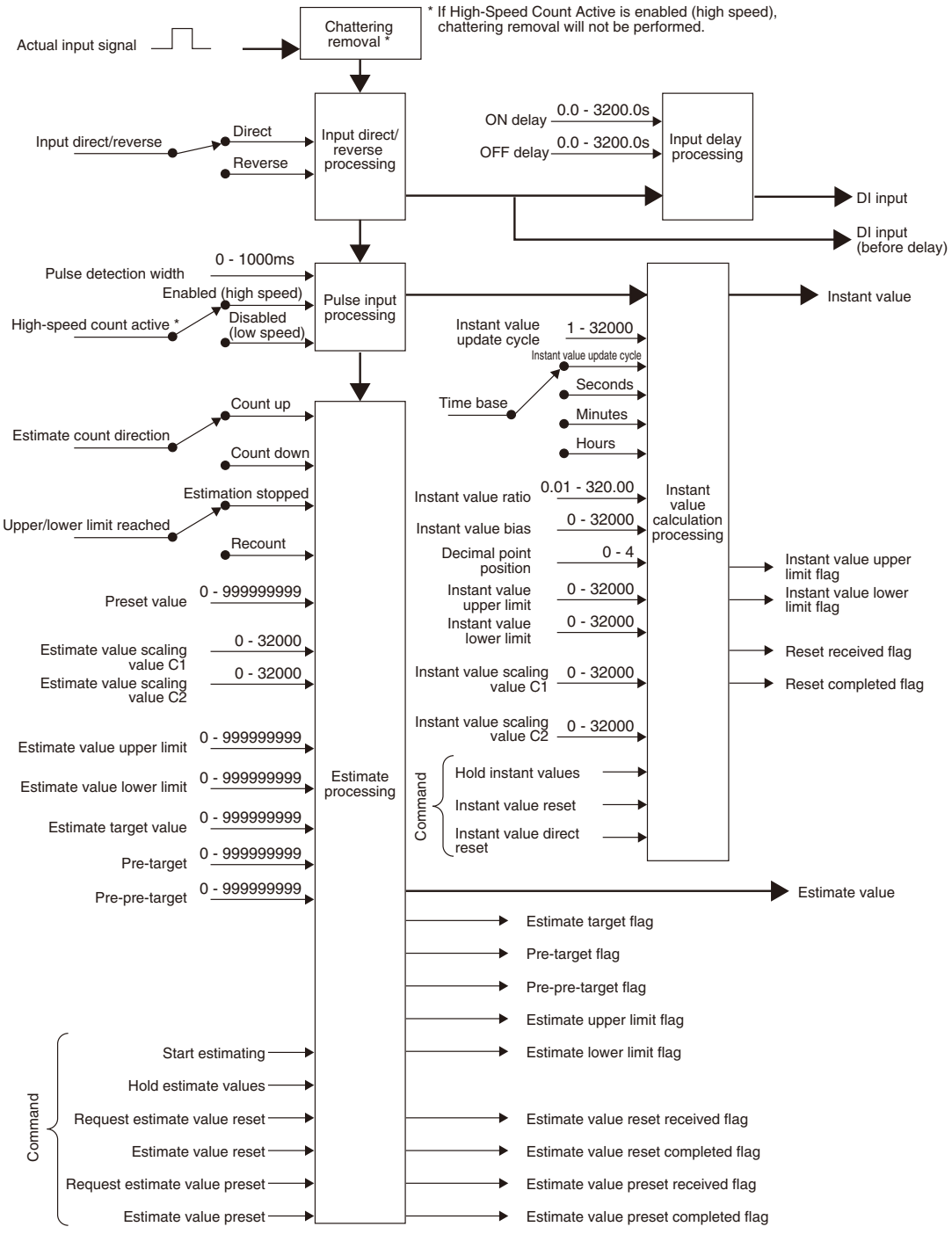
The NX-DX1 is made up of three function blocks: chattering removal, input direct/reverse processing, and input delay processing. Parameters and control commands can be configured, and each parameter can be monitored using the loader (SLP-NX) or host communication.

The NX-DX1 input function block is shown below.



## ■ Input function block for the Pulse Input Module NX-DX2

The NX-DX2 is made up of six function blocks: chattering removal, input direct/reverse processing, input delay processing, pulse input processing, estimate processing, and instant value computation processing.
Chattering removal, input direct/reverse processing, and input delay processing are the same as the functions on the NX-DX1. However, chattering removal cannot be performed for channels on the NX-DX2 for which High-Speed Count Active has been enabled (high speed).
Parameters and control commands can be configured, and each parameter can be monitored using the loader (SLP-NX) or host communication.
The NX-DX2 input function block is shown below.



## ■ Chattering removal

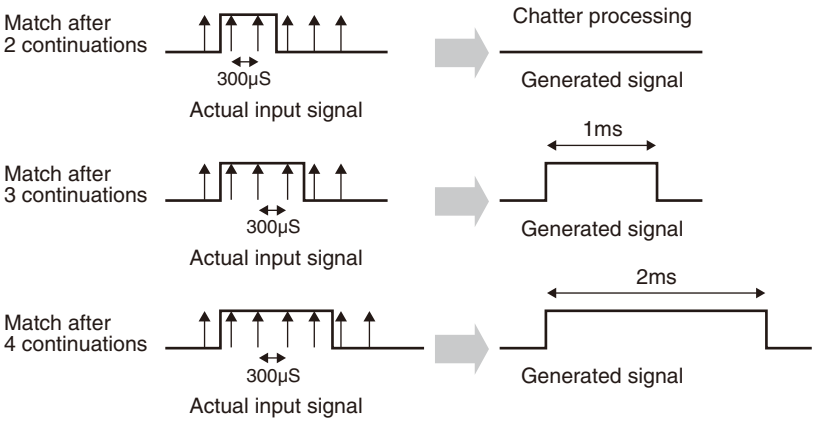
The chattering removal function is a function that removes chattering using contact point signals.
This function is the same in both the NX-DX1 and the NX-DX2.
There are no setting items for this function.

### ! Handling Precautions

- In the NX-DX2, this function is not valid for channels for which High-Speed Count Active has been enabled (high speed).

| Module type | Input channel | Chattering processing |
|---|---|---|
| NX-DX1 | Digital input channel | Available |
| NX-DX2 | Low-speed pulse input channel | Available |
| | High-speed pulse input channel | Disable |

The chattering removal function is a function that treats input signals with a pulse width of less than approximately 600µs as chattering signals, generates data in units of 1 ms with chattering removed, and uses that data as the actual terminal input.
Actual input signals are monitored every 300µs. If the values match after three continuations, they are determined to be 1 ms ON or OFF signals. If they do not match, the previous input status is maintained.




### ! Handling Precautions

- To remove signals with a pulse width of 1 ms or more
  Use the ON delay function in digital input processing.
  Use the pulse detection width setting function in pulse estimate processing.

## ■ Saving estimate values when power is suspended

The NX-DX2 saves estimate values in nonvolatile memory.
Even if there is a power outage, you can save any estimate values that were taken up until approximately one second before the outage occurred.

### ! Handling Precautions

- This function is only applicable to the NX-DX2.

# 4 - 2 Digital Input Settings

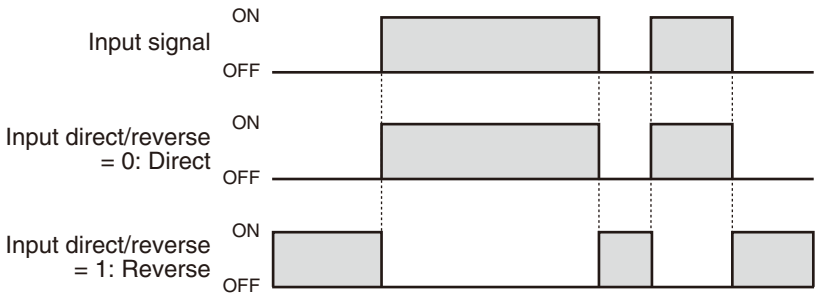
The input signal ON/OFF status is determined based on the digital input setting.
Input inversion and ON delay/OFF delay processing can be set up per input channel.

## ■ Configuration data items

| Folder name | Bank name | Item name | Setting | Initial value | User level |
|---|---|---|---|---|---|
| Input/output | DI input | Input direct/reverse | 0: Direct<br>1: Reverse | 0 | Simple |
| | | ON delay | 0.0 to 3200.0 s | 0.0 | Standard |
| | | OFF delay | 0.0 to 3200.0 s | 0.0 | Multi-function |

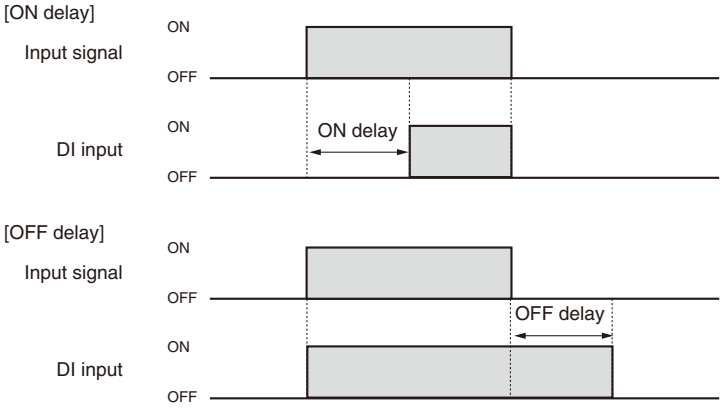
## ■ Input direct/reverse

Configure this setting to either use the input signal as is or invert it and then use it.



## ■ ON delay and OFF delay

After input direct/reverse processing, you can perform ON delay or OFF delay processing.
ON delay is a function that disables ON signals that do not come on after a fixed period. It is used for chattering removal in digital inputs and for disabling short interval warning input signals.
OFF delay is a function that disables OFF signals that do not come on after a fixed period. It is used when making an exact reading of digital signals in communications.
The delay period can be set to between 0 and 3200.0 seconds. If it is set to 0 seconds, delay processing is deactivated.

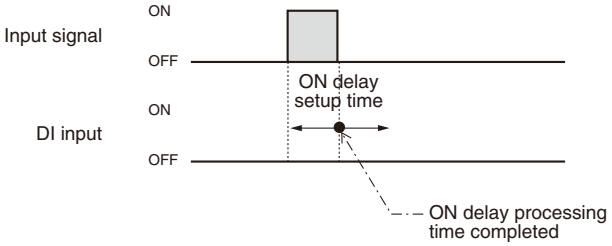



### Handling Precautions

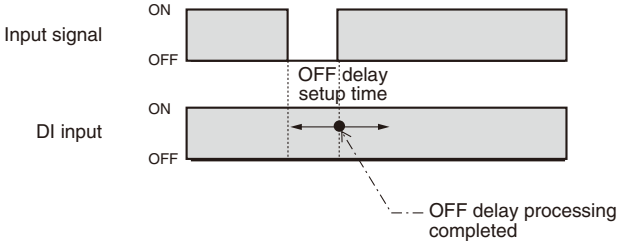
- Do not use ON delay or OFF delay signals to input pulse estimate processing or instant value computation processing. The signal after input direct/reverse processing can be used.

### Note

- [When the input signal is OFF during ON delay]
  The ON delay time has not finished so the resulting DI input remains OFF. Even if the OFF delay has been set, the DI input remains OFF. Therefore, it will not operate.




- [When the input signal is ON during OFF delay]
  The OFF delay time has not finished so the resulting DI input remains ON. Even if the ON delay has been set, the DI input remains ON. Therefore, it will not operate.



# 4 - 3 Pulse Input Settings

Set up the input channels for NX-DX2 pulse input.
High-speed or low-speed pulse processing can be selected for NX-DX2 channels 1 to 8. Channels 9 to 16 are fixed at low-speed pulse. If you are using low-speed pulse, set the pulse signal detection width.

### Handling Precautions

- This function is only applicable to the NX-DX2.

## ■ Configuration data items

| Folder name | Bank name | Item name | Setting | Initial value | User level |
|---|---|---|---|---|---|
| Pulse input | Pulse input | High-speed count active | 0: Inactive<br>1: Active | Ch.1 to 8: 1<br>Ch. 9 to 16:<br>(cannot be set) | Simple<br>Standard<br>Multi-function |
| | | Pulse detection width | 0 to 1000 ms | 0 | |

## ■ High-speed count active

Set the pulse input signal for channels 1 to 8 to use either a high-speed pulse or low-speed pulse.
If this is set to enabled (high speed), a maximum of 5 kHz pulses can be counted.
If this is set to disabled (low speed), a maximum of 100 Hz pulses can be counted.

### Handling Precautions

- The high-speed count active settings can only be changed for channels 1 to 8.
- When set to enabled (high speed), the chattering removal function is deactivated.
- When inputting a low-speed pulse signal (max. 100 Hz), if you set High-Speed Count Active to 1: Enabled (high speed), high-precision signal detection processing will be performed. This might cause incorrect detection (chattering signal count).

## ■ Pulse detection width

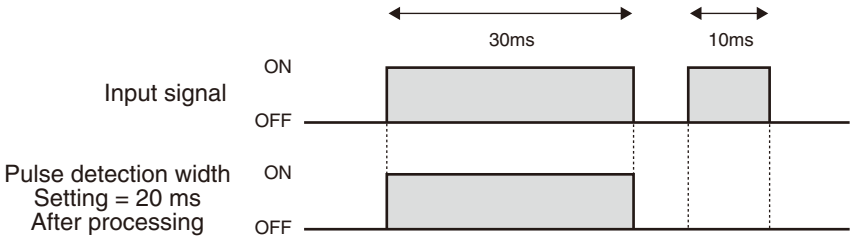
Set for low-speed input channels (channels 1 to 8 are High-Speed Count Active [0: Disabled]).
If a pulse signal, for which chattering removal processing and input direct/reverse processing has been performed, continues with an ON status that is higher than the set detection width (ON time), it will be detected as one pulse.
If the pulse detection width is set to [0 (ms)], this function is disabled.

### ! Handling Precautions

- This function is not valid for channels for which High-Speed Count Active has been enabled (high speed).
- When processing, the pulse detection width setting might be ±15% and there might be some variation in the minutes for the chattering removal function.
  Perform a test run adjustment first to confirm that the settings are in accordance with your objectives.

### ● Example settings

The example below is for a pulse detection width of 20 ms.



# 4 - 4 Event Detection Settings

Set the conditions for outputting to the event output terminal.

### Handling Precautions

- This function is only applicable to the NX-DX2.

## ■ Configuration data items

| Folder name | Bank name | Item name | Setting | Initial value | User level |
|---|---|---|---|---|---|
| Input/output | EV output | Output type | 1024 to 2047: Standard bit | 1024: Always 0 (Off) | Simple<br>Standard<br>Multi-function |

## ■ Output type

Set the information to be assigned to the event output.
Settings are configured using standard bit codes from the standard bit function.

### Note

- For standard bit codes, refer to,
  ☞ Appendix 1 Standard Bit Codes.

# 4 - 5 Estimate Calculation Function

This section explains the estimate calculation function settings for pulse inputs.

## Handling Precautions

- This function is only applicable to the NX-DX2.
- Do not use in ON delay or OFF delay processing signals for estimate processing. The signal after input direct/reverse processing can be used.

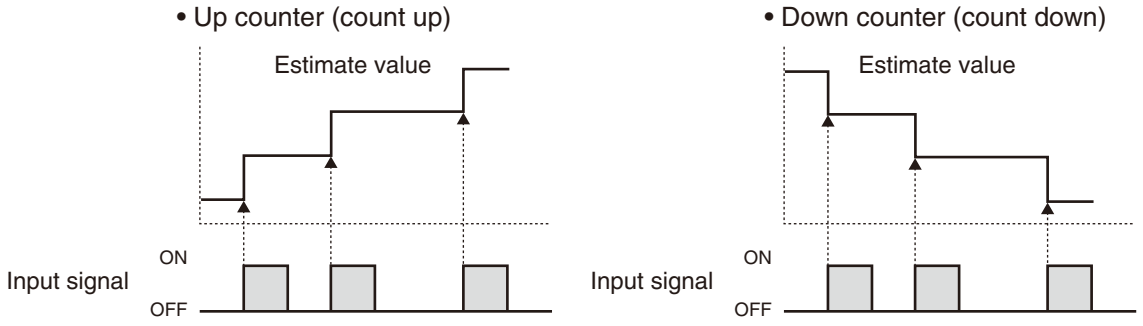
## ■ Configuration data items

The following settings can be used in estimate calculations for each channel:

| Folder name | Bank name | Item name | Setting | Initial value | User level |
|---|---|---|---|---|---|
| Pulse input | Pulse Estimate value | Estimate count direction | 0: Count up<br>1: Count down | 0 | Simple<br>Standard<br>Multi-function |
| | | Action when the estimate value upper or lower limits are reached | 0: Stop at the estimate upper limit (lower limit)<br>1: Recount from the estimate lower limit (upper limit)<br>Recount | 1 | |
| | | Estimate value scaling value (C1) | 1 to 32000 | 1 | |
| | | Estimate value scaling value (C2) | 1 to 32000 | 1 | |
| | | Estimate target value | 0 to 1073741823 | 999999999 | |
| | | Pre-target | 0 to 1073741823 | 0 | |
| | | Pre-pre-target | 0 to 1073741823 | 0 | |
| | | Estimate value upper limit | 0 to 1073741823 | 999999999 | |
| | | Estimate value lower limit | 0 to 1073741823 | 0 | |
| | | Preset value | 0 to 1073741823 | 0 | |

## ■ Estimate count direction

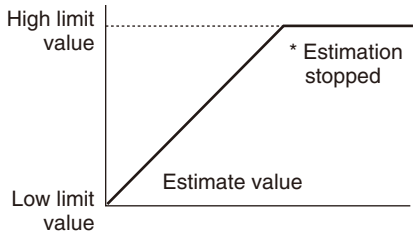
Specify whether to use the up counter or down counter for the estimate value.



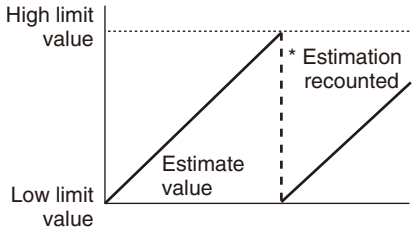
## ■ Action when upper and lower estimate value limits are reached

If the estimate value after scaling reaches the estimate upper limit (when counting up) or the estimate lower limit (when counting down), set whether to stop estimate processing, or return to the estimate lower limit (when counting up) or estimate lower limit (when counting down) and continue.

• Stop (when counting up)




• Recount (when counting up)




### Note

- When the estimate lower value=0 and the estimate upper value=9999 in a recount,

  the process will be 0, 1, 2 … 9998, 9999, 0, 1, 2 … when counting up, and 9999, 9998 … 2, 1, 0, 9999, 9998 … when counting down.

### Handling Precautions

- If the stop option has been selected, and data exceeding the upper limit is added when adding estimates, the data that exceeds the upper limit is discarded.

## ■ Estimate value scaling value (C1 and C2)

Counts the number of ON signals as one cycle (50 ms), for pulse signals for which direct/reverse processing has been performed using the input direct/reverse processing function, and converts that to a single cycle industry unit based on estimate scaling values (C1 and C2).
Estimate values are calculated by adding this single cycle estimate value to the previous estimate value each cycle (when counting up), or deducting it (when counting down).

Estimate value = estimate value up until the previous cycle + current cycle estimate values*1

*1: Current cycle estimate values = the number of pulses in the current sampling cycle × C1/C2

[Data specifications]

- Data size: 1 word
- Data range: 1 to 32,000

## ■ Estimate target value

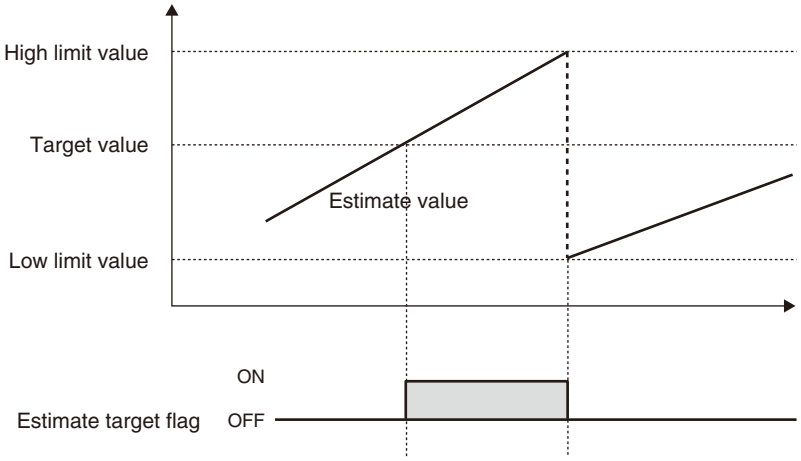
You can set a target value for the estimate value. When the estimate value matches the target value, it is confirmed using an estimate target flag.

[Data specifications]

- The target value to be set is the industry unit value.
- Data size: 2 words
- Data model: integer with no encoding
- Data range: 0 to 1073741823

When the estimate value matches the estimate target value, the estimate target flag comes on and continues to stay on as long as the two values match.
This is reflected in the estimate target flag on the monitor (pulse estimate target management).

[Example of a count up estimate count direction]



## ■ Pre-target and pre-pre-target

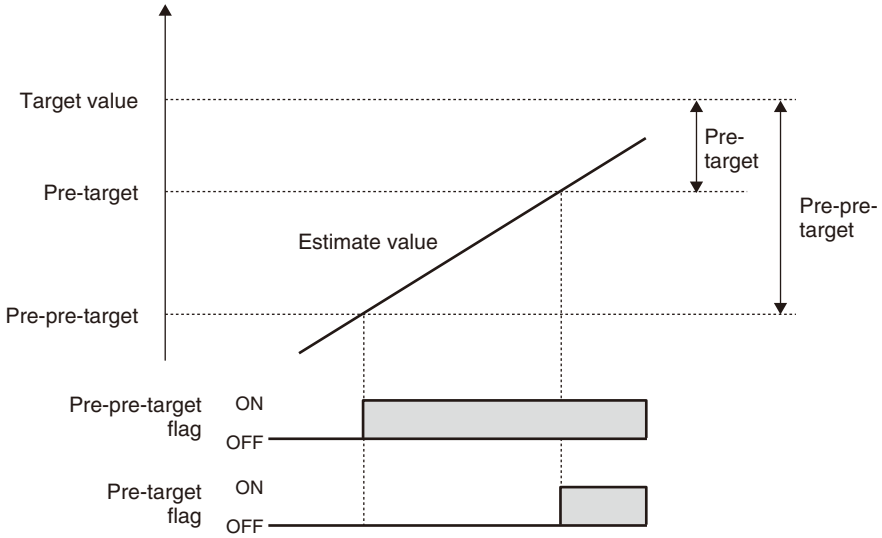
You can confirm that the estimate target is close to matching (pre-target and pre-pre-target) by setting a pre-target and pre-pre-target.
The pre-target and pre-pre-target are specified using a variation from the target value.

[Data specifications]

- The variation from the target value is specified using industry unit values.
- Data size: 2 words
- Data model: integer with no encoding
- Data range: 0 to 1073741823

When the pre-target and pre-pre-target reach the estimate value, the pre-target flag and pre-pre-target flag come on and continue to stay on as long as the values match.
This is reflected in the pre-target flag and pre-pre-target flag on the monitor (pulse estimate target management).

[Example of a count up estimate count direction]



## ■ Estimate upper limit and estimate lower limit

The estimate upper and lower limits are set using industry unit values.

### Note

- You can handle estimate data that only uses the lower word of the estimate value and has a data size of one word by setting the upper limit and lower limit range to 0 to 65535.

[Actions when counting up]

- The estimate upper limit flag comes on when the estimate value matches the estimate upper limit. It continues to stay on as long as the upper limit is being reached.
- When the estimate value is reset or recounted, it is returned to the estimate lower limit.

This is reflected in the estimate upper limit flag on the monitor (pulse estimate target management).

[Actions when counting down]

- The estimate lower limit flag comes on when the estimate value matches the estimate lower limit. It continues to stay on as long as the lower limit is being reached.
- When the estimate value is reset or recounted, it is returned to the estimate upper limit.

This is reflected in the estimate lower limit flag on the monitor (pulse estimate target management).

[Data specifications]

- Estimate upper limit and lower limit values are industry unit values.
- Data size: 2 words
- Data model: integer with no encoding
- Data range: 0 to 1073741823

### Handling Precautions

- If the estimate value exceeds the estimate value lower limit to upper limit, the estimate value changes to the estimate upper limit value if the estimate upper limit is exceeded, or to the estimate lower limit if the value is lower than the estimate lower limit, and estimate processing proceeds according to the action settings for when the estimate upper and lower limits are reached.
- Make sure that the estimate upper limit value is set to a higher number than the estimate lower limit value.
  If the estimate upper limit value is not higher than the estimate lower limit value, estimate processing is not performed.

## ■ Preset value

You can reset the estimate value to any number through an estimate value preset request using a control command, or by presetting the estimate value.
In the preset value, set the data that you want to reset and then issue reset instructions using a control command.

[Data specifications]

- Specify in industry units.
- Data size: 2 words
- Data model: integer with no encoding
- Data range: 0 to 1073741823

### Handling Precautions

- If the preset is performed using a preset value that exceeds the estimate value upper limit or lower limit, the estimate value changes to the estimate upper limit value if the estimate upper limit is exceeded, or to the estimate lower limit value if the value is lower than the estimate lower limit, and estimate processing proceeds according to the action settings for when the estimate upper and lower limits are reached.

# 4 - 6 Instant Value Calculation Function

The NX-DX2 can calculate instant values, such as flow rates, from received pulse signals.

### Handling Precautions

- This function is only applicable to the NX-DX2.

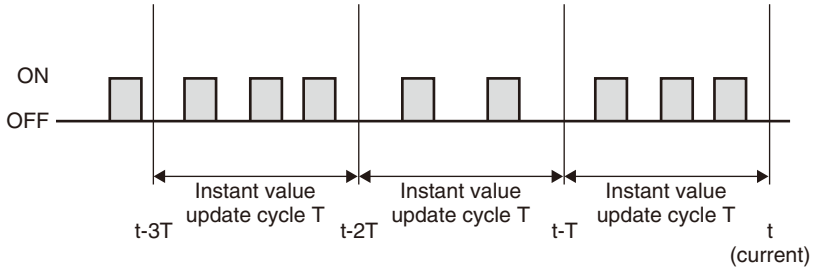
## ■ Configuration data items

The following settings can be used in instant value calculations for each channel:

| Folder name | Bank name | Item name | Setting | Initial value | User level |
|---|---|---|---|---|---|
| Pulse input | Pulse Instant value | Instant value update cycle | 1 - 32000 (×100 ms) | 1 | Simple Standard Multi-function |
| | | Decimal point position | 0: No decimal point<br>1: 1 digit after the decimal point<br>2: 2 digits after the decimal point<br>3: 3 digits after the decimal point<br>4: 4 digits after the decimal point | 0 | |
| | | Timebase | 0: Instant value update cycle<br>1: seconds<br>2: minutes<br>3: hours | 0 | |
| | | Instant value scaling value (C1) | 1 to 32000 | 1 | |
| | | Instant value scaling value (C2) | 1 to 32000 | 1 | |
| | | Instant value upper limit | 0 to 32000U | 32000 | |
| | | Instant value lower limit | 0 to 32000U | 0 | |
| | | Instant value ratio | 0.01 to 32000U | 1.00 | |
| | | Instant value bias | 0 to 32000U | 0 | |
| | | Instant value filter | 0.00 to 120.00 | 0.00 | |

## ■ Instant value update cycle

The NX-DX2 instant value calculation outputs instant values (industry units) from the number of pulses counted in the instant value update cycle, scaling factors (C1 and C2), and time bases (instant value update cycles, seconds, minutes, and hours). Instant values are updated every instant value update cycle.




## ■ Decimal point position

Set the digit after the decimal point for the parameter (for each channel).

- Instant value calculation results * Monitor (pulse instant value)
- Instant value upper limit setting
- Instant value lower limit setting
- Instant value bias setting

## ■ Time base, instant value scaling (C1 and C2), instant value ratio, and instant value bias

The instant value calculation is performed using the formula below.

Instant value =
Number of pulses in the instant value update cycle × (C1/C2) × N*1 × ratio + bias

*1: N is time base, and:
the time base is [0: instant value update cycle]: N=1
When the time base is [1: sec] : N=1/instant value update cycle
When the time base is [2: min]: N=1/instant value update cycle/60
When the time base is [3: hrs] : N=1/instant value update cycle/3600

## ■ Instant value filters

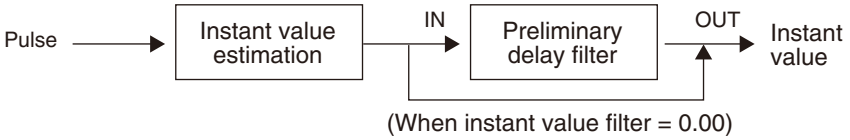
You can apply a preliminary delay filter to an instant value.The formula is shown below.

OUT = OUT_1 + (IN − OUT_1)/(T/Ts+1)

IN : Input to filter (instant value 1)
OUT : Current filter calculation output
OUT_1 : Previous filter calculation output
T : Instant value filter(s)
Ts : Instant value update cycle (×100 ms)

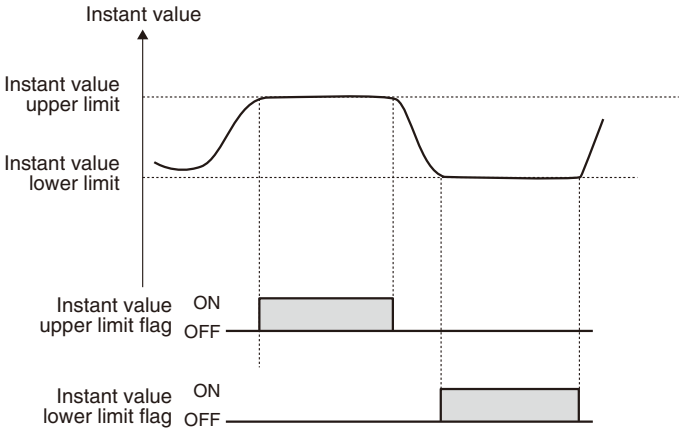
### Note

- The first calculation immediately after powering on stops the filter function.
- If the instant value filter=0.00 sec, this function is disabled.




## ■ Instant value upper limit and instant value lower limit

You can perform an upper and lower limit check as event processing for instant values for each channel that is calculated.
This is reflected in the instant value lower limit flag on the monitor (pulse instant value management).




### Note

- For instant values that exceed the instant value upper limit, or fall below the instant value lower limit, the instant value is limited by the instant value upper limit or instant value lower limit.

# 4 - 7 Start Delay at Power ON

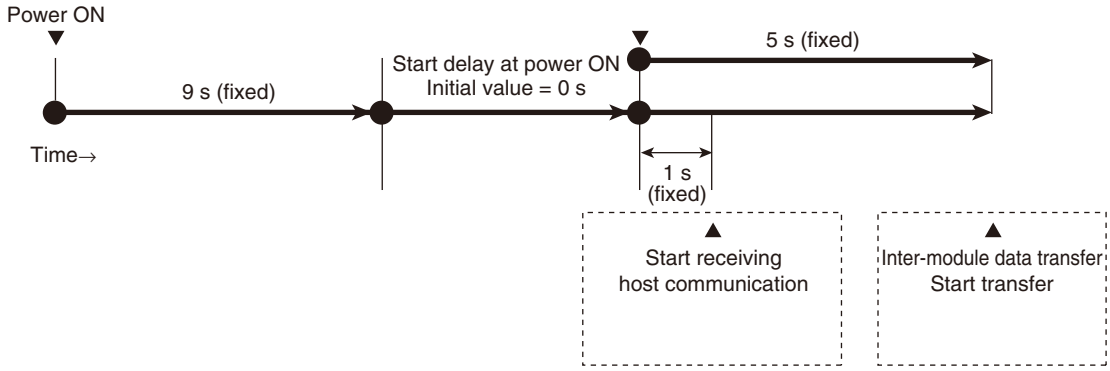
The time between powering on and the start of operations can be delayed for a maximum of 60 seconds.
Operations start after the traditional product launch time (9 seconds) and the time specified in this setting have passed.
The traditional product launch time cannot be shortened.
The initial setting is “0 sec."

## ■ Bank and settings data items

| Folder name | Bank name | Item name | Setting | Initial value | User level |
|---|---|---|---|---|---|
| Basic | Setup | Start delay at power ON | 0-60 s | 0 | Standard<br>Multi-function |

### Note

The launch status will be as shown below.
During a Start Delay at Power On, the LED under the LED operation lamp blinks slowly.




### Handling Precautions

- During a Start Delay at Power On, operations have not started so processing of input signals is not performed.
- Use the Start Delay at Power On to wait for partner devices to start when communicating with other modules.

# 4 - 8 User-Defined Bits

User-defined bits are ON/OFF data that can be read and written from host communication and loader communication. There are 32 bits.

## ■ Example

In the example, user-defined bit 1 is set to on and that status is output in the EV output.

1. In the output type for the EV output, set user-defined bit 1.
   In the output type for the EV output, configure the settings as shown below.

| Folder name | Bank name | Item name | Setting | Initial value | User level |
|---|---|---|---|---|---|
| Input/output | EV output | Output type | 1408: User defined bit | 1 | Simple<br>Standard<br>Multi-function |

2. Change the value of user-defined bit 1 from host communications.
   Under user-defined bits, write 0 (OFF) or 1 (ON) in the data address for user-defined bit 1.

## 🕮 Note

- User-defined bits are also used in the inter-module data transfer function.

# 4 - 9 User-Defined Numbers

User-defined numbers are numerical value data that can be read and written from host communication and loader communication. There are 16 numbers.

# 4 - 10 UF LED

You can set the off/lit/flashing condition settings for the two LED operation lamps (F0-F1) using the UF LED function.
When the bit condition selected in Conditions for Lighting becomes 1, the lamp is lit or flashes, depending on what was selected in the Lighting Status.

## ■ Bank and settings data items

The settings below can be configured for LED operation lamps F0-F1.

| LED name | Color | Folder name | Bank name | Item name | Setting | Initial value | User level |
|---|---|---|---|---|---|---|---|
| F0 | Red | Other | UF LED setting | Conditions for lighting | 1024 to 2047: Standard bit code | 1792 (Representative of all alarms) | Standard Multi-function |
| | | | UF LED settings | Lighting status | 0: Lit<br>1: Lit<br>2: Lit (reverse video)<br>3: Fast blink<br>4: Fast blink (conditional reverse video)<br>5: Slow blink<br>6: Slow blink (conditional reverse video) | 3 (Fast blink) | |
| F1 | Green | Other | UF LED settings | Conditions for lighting | 1024 to 2047 (Same as F0) | 1968 (Parameter error) | |
| | | | UF LED settings | Lighting status | 0 to 6 (Same as F0) | 3 (Fast blink) | |

## ■ Lighting status

0: Off — Always off
1: Lit — Lit when Conditions for lighting is set to on
2: Lit — Lit when Conditions for lighting is set to off
3: Fast blink — Blinks fast when Conditions for lighting is set to on
4: Fast blink (conditional reverse video) — Blinks fast when Conditions for lighting is set to off
5: Slow blink — Blinks slow when Conditions for lighting is set to on
6: Slow blink (conditional reverse video) — Blinks slow when Conditions for lighting is set to off

### ! Handling Precautions

- When assigning lighting conditions with a signal that has a short DI input status (pulse signal ON or OFF) time, the lamp might not light up.

# 4 - 11 Inter-Module Data Forwarding Function

### Handling Precautions

- Inter-module data transfer settings are configured from the loader. Inter-module data transfer function settings cannot be written or read from host communication.

The inter-module data transfer function refers to the exchange of data between modules by setting parameters in the modules.

## ■ Bank and settings data items

The data below can be communicated using the inter-module data transfer function.

| Folder name | Bank name | Parameter name | Number | Bit |
|---|---|---|---|---|
| Input/output | EV output | Output type | – | ○ |
| Other | UF LED settings | Conditions for lighting | – | ○ |

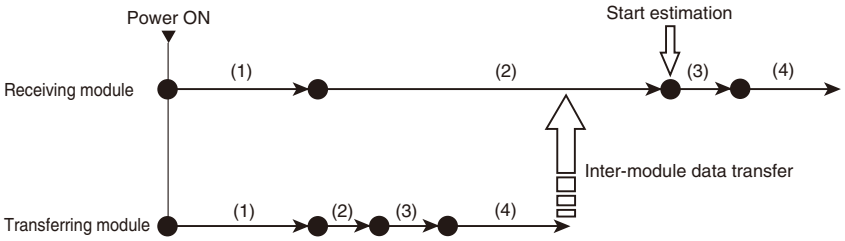
### Handling Precautions

- Precaution when using the module performing the inter-module data transfer function, on other instruments
  Always clear the parameters. (Parameters are cleared on the loader screen.)
- If the inter-module data transfer function has been set up using the loader, the settings are loaded on the side that is sending the data and the side that is being sent. If you want to prevent the module that configured the inter-module data transfer function from being used for any other purpose, clear the inter-module data transfer function settings

  If any settings remain, the following occurrences might arise.
  * If there are partners : The inter-module data transfer function might run unintentionally and values might be loaded to other modules.
  * If there are no partners: There might be communication to confirm connections with non-existent partners and the performance of normal communications might deteriorate.
- Do not distribute project files, for which the inter-module data transfer function has been performed, to other projects for which the inter-module data transfer function is not being performed. Inter-module data transfer function settings that are not visible from the loader settings window might be written, and unintended inter-module data transfer function operations might be performed.
- In the inter-module data transfer function, even if normal operations cannot be performed due to the status of a partner module, the module will continue to run.

- When turning on the power, if you want to start computation after data has been received on the receiving module, set the Start delay at power ON setting parameter on the receiving module so that it is seven seconds higher than that Start delay at power ON setting parameter on the sending module. If you do not do this, computation will start before the data is received.
  *For example, take particular care if you are sending and receiving data between two modules.

  Also, investigate the power design and startup operations thoroughly and provide sufficient support.




(1) Startup: 9 seconds (fixed)
(2) Start delay at power ON: 0 seconds (initial value) *1
(3) Start receiving host communication wait time: 1 second (fixed)
(4) Start inter-module data transfer function transmission wait time: 5 seconds (fixed)

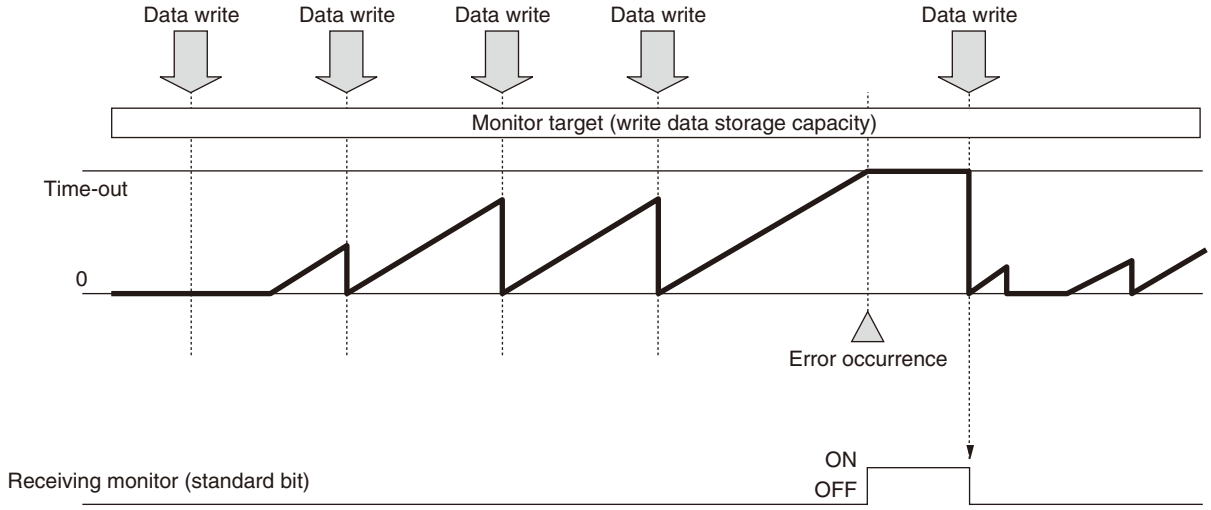
*1: After setup time passes, estimation will begin.

## Note

- For information required for the design of the inter-module data transfer function, refer to,
  ☞ * Chapter 5 “Function for Transmitting Data Between Modules" in Network Instrumentation Module User’s Manual Network Design Version, CP-SP-1313E.
- For information on how to set up the inter-module data transfer function from the loader, refer to,
  ☞ * 6-3 “Editing Parameters" in Network Instrumentation Module Smart Loader Package SLP-NX User’s Manual, CP-UM-5636E.

# 4 - 12 Reception Monitoring

This function monitors whether user-defined bits and user-defined numbers are being written correctly in the communications.




## ■ Bank and settings data items

The possible settings for reception monitoring 1 to 16 are shown below.

| Folder name | Bank name | Item name | Setting | Initial value | User level |
|---|---|---|---|---|---|
| Functions | Reception monitoring | Address | Addresses for which write monitoring is performed<br>*Any of user-defined numbers 1 to 16<br>*Any of user-defined bits 1 to 32 | 0: Not used | Standard<br>Multi-function |
| | | Timeout | Timeout period (s) | 180 | |
| | | Mode | 0: Without reception monitoring<br>1: With reception monitoring | 0 | |

- Set the user-defined bits or user-defined numbers for which you want to monitor the writing, and set the time until a warning is generated.
  * Monitored addresses are user-defined numbers 1 to 16 or user-defined bits 1 to 32.
- If a reception error occurs, the standard bits (a representation of 1920 to 1935 and 1 to 16 of 1979) are turned on.

### Note

- For information required for the design of the inter-module data transfer function, refer to,

  ☞ * Chapter 5 “Function for Transmitting Data Between Modules” in Network Instrumentation Module User’s Manual Network Design Version, CP-SP-1313E.

# Chapter 5. OPERATION AND GENERAL FUNCTIONS

## 5 - 1 Operation Display

The front panel of the main body has LED displays and push buttons.
There are two types of LED flashing, fast blink (0.2 s cycles) and slow blink (1.4 s cycles).

### ■ PWR, RUN, MOD, COM, NST, FAIL

The lighting patterns and descriptions of the top LEDs are shown in the following table.

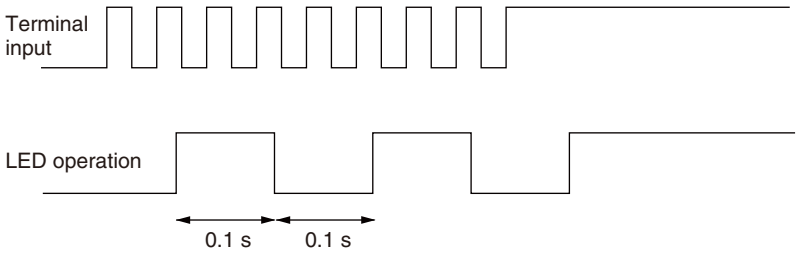
| LED name | Color | Lighting pattern | Description |
|---|---|---|---|
| PWR | Green | Lit | Power ON (energized) |
| | | Off | Power OFF (not energized) |
| Run | Green | Lit | Run mode (Standard operation mode) |
| | | Slow blink | Idle mode (Standard operation mode) |
| | | Lit | Operation status other than the above |
| MOD | Orange | Fast blink | Writing parameters from the loader |
| | | Lit | Normal operation mode |
| COM | Green | Lit | Receiving local Ethernet packets |
| | | Lit | Not receiving local Ethernet packets |
| NST | Orange | Lit | Chain connection is non-ring communication |
| | | Fast blink | Status of chain connection is ring disconnected (the ring has been disconnected somewhere) |
| | | Slow blink | Status of chain connection is ring disconnected (the ring with your node or a neighboring node has been disconnected) |
| | | Off | The chain connection is ring communication normal |
| FAIL | Red | Lit | Hard Failure |
| | | Slow blink | Soft Failure |
| | | Off | No error |

### ■ 1 to 16

The lighting patterns and descriptions of middle LEDs 1 to 16 are shown in the following table.

| LED name | Color | Lighting pattern | Description |
|---|---|---|---|
| 1 to 16 | Green | Lit | When inputs 1 to 16 are on |
| | | Fast blink | When inputs 1 to 16 are cycling through ON/OFF * |
| | | Off | When inputs 1 to 16 are OFF |

* The input status is not displayed directly. If there are multiple ON/OFFs within 100 ms as a result of software processing, the LED blinks. The diagram below shows the relationship between terminal input and LED actions.



## ■ F0 to 1

The lighting conditions and lighting patterns can be set for normal lighting for the F0 LED at the mid-right and the F1 LED at the bottom-right.
In the initial setting, the alarm status is displayed.

| LED name | Color | Folder name | Bank name | Item name | Setting | Initial value |
|---|---|---|---|---|---|---|
| F0 | Red | Other | UF LED settings | Conditions for lighting | 1024 to 2047: Standard bit code | 1792 (Representative of all alarms) |
| | | | UF LED settings | Lighting status | 0: Off<br>1: Lit<br>2: Lit (reverse video)<br>3: Fast blink<br>4: Fast blink (conditional reverse video)<br>5: Slow blink<br>6: Slow blink (conditional reverse video) | 3 (Fast blink) |
| F1 | Green | Other | UF LED settings | Conditions for lighting | 1024 to 2047 (Same as F0) | 1968 (Parameter error) |
| | | | UF LED settings | Lighting status | 0 to 6 (Same as F0) | 3 (Fast blink) |

## ■ Display when power is turned ON

When the power is turned ON, the LEDs light as shown in the following table. This is different from the operation displays.
The LEDs then transition to the operation displays.

| Order | LED lighting status (○: Lit, —: Off, ◊: Flashing, ✻: Depends on the status) | | | | | | | | Status/process |
|---|---|---|---|---|---|---|---|---|---|
| | Top LED | | | | | | Middle LEDs | Bottom LED | |
| | PWR | RUN | MOD | COM | NST | FAIL | 1 to 8 F0 | 9 to 16 F1 | |
| 1 | — | — | — | — | — | — | — | — | Power OFF |
| 2 | ○ | ○ | ○ | ○ | ○ | ○ | — | — | Immediately after power ON |
| 3 | ○ | — | — | — | — | — | ○ | — | LED lighting test (0.5 sec.) |
| 4 | ○ | — | — | — | — | — | — | ○ | LED lighting test (0.5 sec.) |
| 5 | ○ | — | — | — | — | — | — | — | Waiting for stable EEPROM reading |
| 6 | ○ | ✻ | ✻ | ✻ | ✻ | ✻ | ◊ | ◊ | Operation start |
| 7 | ○ | ✻ | ✻ | ✻ | ✻ | ✻ | ✻ | ✻ | Operation display |

## ■ LED lighting pattern under special conditions

| LED lighting status (○: Lit, —: Off, ◇: Slow blink, ♦: Fast blink, ✻: Depends on the status) | | | | | | | | Status or process |
|---|---|---|---|---|---|---|---|---|
| Top LED | | | | | | Middle LED | Bottom LED | |
| PWR | RUN | MOD | COM | NST | FAIL | 1 to 8 F0 | 9 to 16 F1 | |
| ○ | ◇ | ◇ | ◇ | ◇ | ◇ | ✻ | ✻ | Wink function<br>If specified with the SLP-NX. |
| ○ | ◇ | ◇ | ✻ | ✻ | ○ | ✻ | ✻ | Base EEPROM read write error (AL87)<br>Communications failed between the main body and base, or the base has fatal damage.<br>Turn the power OFF and ON. If the error recurs, replace the module. |
| ○ | ◇ | ◇ | ✻ | ✻ | ◇ | ✻ | ✻ | Base EEPROM incompatibility<br>The connected base is not supported.<br>Turn the power OFF and ON. If the error recurs, recover the base EEPROM using the push button. If it is still not recovered, replace the module. |
| ○ | ♦ | ♦ | ♦ | ♦ | ♦ | ✻ | ✻ | Wrong module insertion<br>The model No. of the main body and that of the base do not match.<br>Make sure that the inserted module has the correct model No., and then turn the power OFF and ON.<br>If the error recurs, recover the base EEPROM using the push button. |
| | | | | | | | | Ethernet congestion<br>Ethernet congestion occurs in the network.<br>If congestion continues, check for wrong connections in the network. |
| ○ | ◇ | ◇ | ✻ | ✻ | — | ✻ | ✻ | Base EEPROM error (AL88)<br>The main body parameters and base parameters do not match.<br>Turn the power OFF and ON. If the error recurs, recover the base EEPROM using the push button. |

## ■ Push button functions

The base EEPROM can be recovered using the push button.

| Order | LED lighting status (○: Lit, –: Off, ◇: Slow blink, ◆: Fast blink, ∗: Depends on the status) | | | | | | | | Status or process |
|---|---|---|---|---|---|---|---|---|---|
| | Top LED | | | | | | Middle LED | Bottom LED | |
| | PWR | RUN | MOD | COM | NST | FAIL | 1 to 8 F0 | 9 to 16 F1 | |
| 1 | ○ | ∗ | ∗ | ∗ | ∗ | ∗ | ∗ | ∗ | Normal operation in progress |
| | | | | | | | | | ↓ (Press the push button) |
| 2 | ○ | – | – | – | – | – | ∗ | ∗ | Top LEDs all off |
| | | | | | | | | | ↓ (2 seconds elapsed) |
| 3 | ○ | ○ | ○ | ○ | ○ | ○ | ∗ | ∗ | Top LEDs all lit |
| | | | | | | | | | ↓ (Release the push button) |
| 4 | ○ | ∗ | ∗ | ∗ | ∗ | ∗ | ∗ | ∗ | Normal operation in progress |

Base EEPROM recovery is used to eliminate a mismatch between the main body and the base when there is a wrong module insertion, a base EEPROM error or base EEPROM incompatibility.

# 5 - 2 Estimate Processing

To change the control command or parameters, use the loader (SLP-NX) or host communication.
This chapter explains control commands and related flags.

### Note

- For information regarding parameters, refer to,
  ☞ "Chapter 9 LIST OF COMMUNICATION DATA" and "Chapter 10 LIST OF PARAMETER SETTINGS".

### Handling Precautions

- The estimate processing function is only applicable to the NX-DX2.

## ■ List of Control Commands

The commands for controlling the estimate value calculation function for each channel are shown below.

| Control command | Setting | Action | Related flags |
|---|---|---|---|
| Start estimating | 0: Stop estimating<br>1: Estimating | Starts estimating<br>Does not automatically turn OFF after turning ON turned on. | None |
| Hold estimate values | 0: Normal operation<br>1: Holding | Fixes estimate values<br>During holding, estimate processing is still performed in the background.<br>When it is turned OFF, the estimate values from the estimate process are restored.<br>There is no auto OFF after estimating is turned on. | None |
| Estimate value reset request | 0: No reset request<br>1: Reset estimate value | Resets the estimate values<br>Does not automatically turn OFF after turning ON | • Estimate value reset received flag<br>• Estimate value reset completed flag |
| Estimate value reset | 0: No reset request<br>1: Resets estimate values | Resets the estimate values<br>After turning ON, automatically turns OFF after the reset is complete. | None |
| Estimate value preset request | 0: No preset request<br>1: Preset estimate value | Presets the estimate values<br>Does not automatically turn OFF after turning ON | • Estimate value preset received flag<br>• Estimate value preset completed flag |
| Estimate value preset | 0: No preset request<br>1: Presets estimate values | Presets the estimate values<br>After turning ON, automatically turns OFF after the preset is complete. | None |

## ■ Starting estimates

Start estimates by changing to the ON status (1).
This is available for each channel.
The initial value is [1: Estimating].

## ■ Holding estimate values

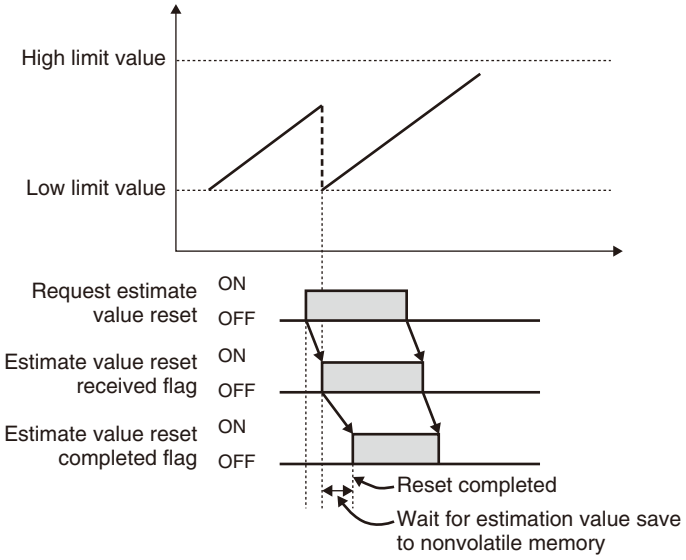
Stop estimate value data updates by changing to the ON status (1).
This is available for each channel.
Estimate processing continues in the module during holding. As soon as holding is canceled, values are updated to the current estimate values, including the estimate values during holding.

## ■ Estimate value reset request and estimate value reset

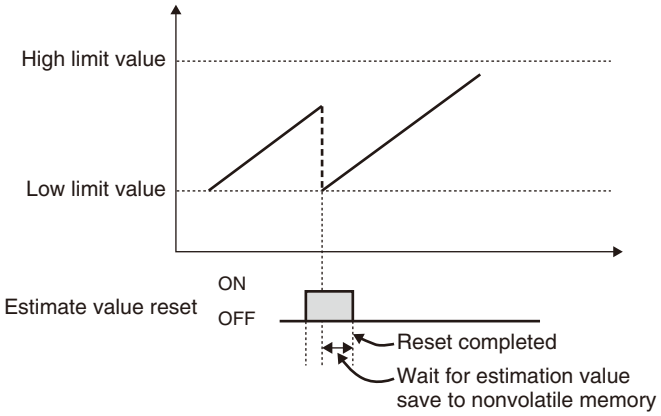
You can reset estimate values by changing to the ON status (1).
This is available for each channel.
If the estimate count direction is count up, estimate values are reset to the lower limit.
If the estimate count direction is count down, estimate values are reset to the upper limit.

Use the estimate value reset request when a handshake is required, such as when receiving a request to reset with a host communication device, or concluding a reset.
The estimate reset is automatically turned off once the ON status (1) is written from the host communication device and the reset process has been completed on the module side.

[Estimate value reset request operation] ∗For count up




[Estimate value reset operation] ∗For count up

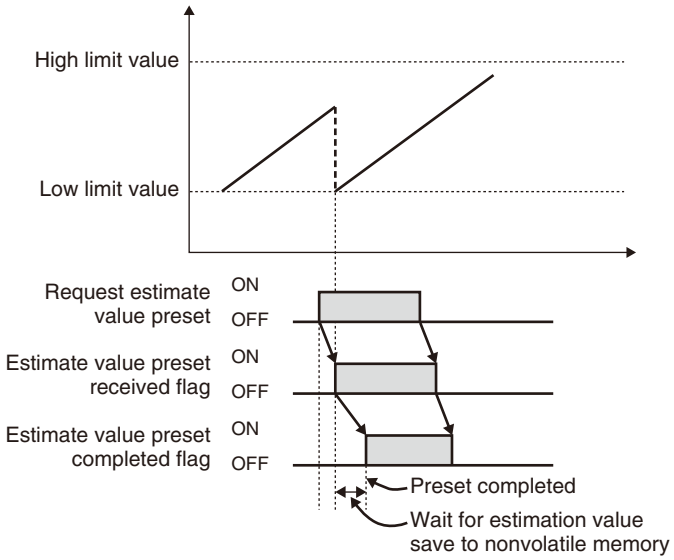


## ■ Estimate value preset request and estimate value preset

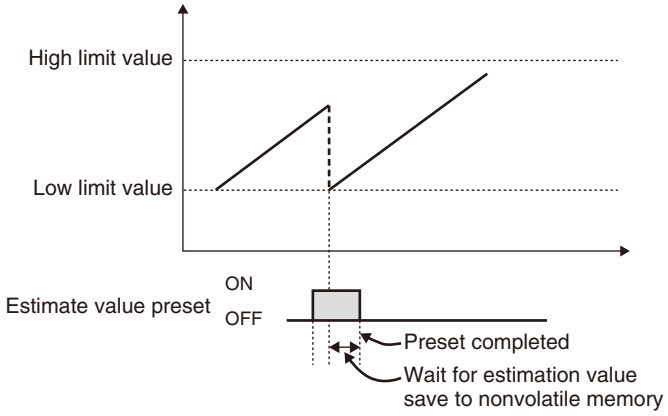
You can preset estimate values by changing to the ON status (1).
This is available for each channel.
Configure preset value settings for each channel in advance in the preset values in the parameter pulse estimate value bank.

Use the estimate value preset request when a handshake is required, such as when receiving a request to preset with a host communication device, or concluding a preset.
The estimate preset is automatically turned off once the ON status (1) is written from the host communication device and the preset process has been completed on the module side.

[Estimate value preset request operation] ∗For count up




[Estimate value preset operation] ∗For count up



# 5 - 3 Instant Value Processing

To change the control command or parameters, use the loader (SLP-NX) or host communication.
This chapter explains control commands and related flags.

### Note

- For information regarding parameters, refer to,
  ☞ "Chapter 9 LIST OF COMMUNICATION DATA" and "Chapter 10 LIST OF PARAMETER SETTINGS".

### Handling Precautions

- The instant value processing function is only applicable to the NX-DX2.

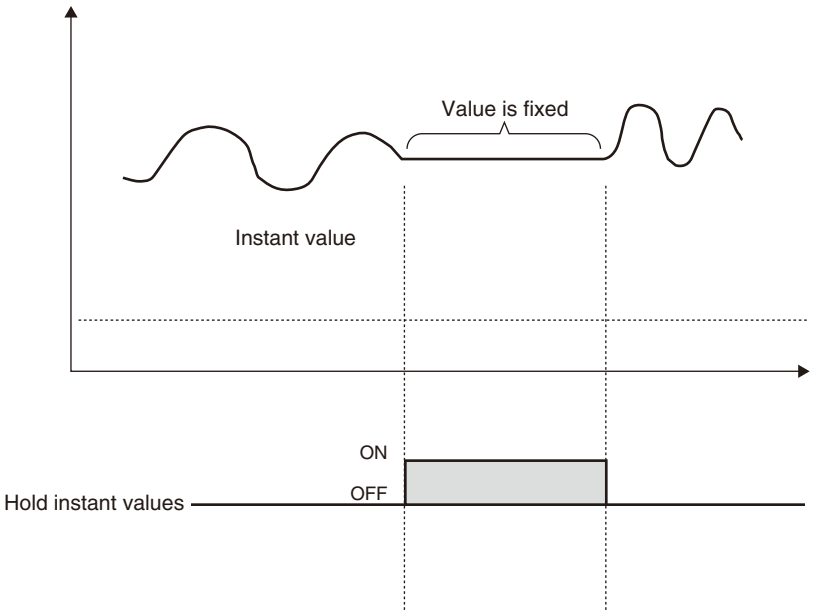
## ■ List of Control Commands

The commands for controlling the instant value calculation function for each channel are shown below.

| Control command | Setting | Action | Related flags |
|---|---|---|---|
| Hold instant values | 0: Normal operation<br>1: Holding | Fixes instant values | None |
| Instant value reset request | 0: No reset request<br>1: Resets instant values | Resets the instant values | • Instant value reset received flag<br>• Instant value reset complete flag |
| Instant value reset | 0: No reset request<br>1: Reset instant value | Resets the instant values | None |

## ■ Holding instant values

Stop instant value data updates by changing to the ON status (1).
This is available for each channel.

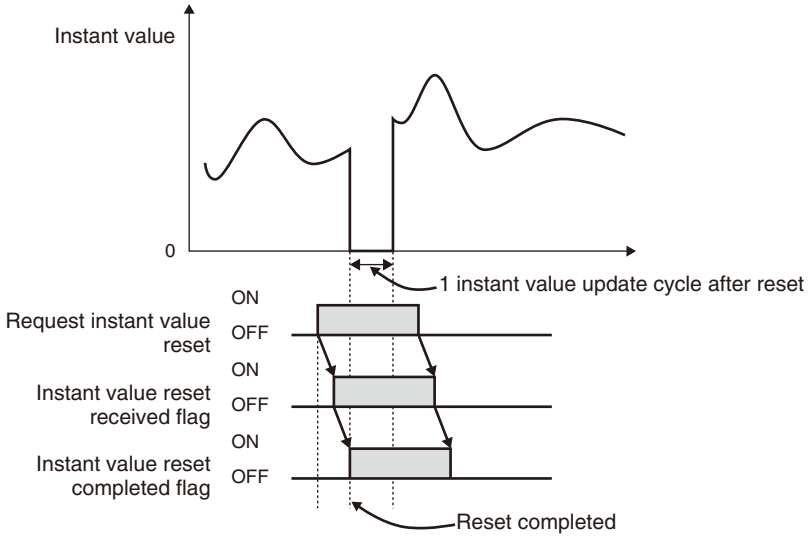


## ■ Instant value reset request and instant value reset

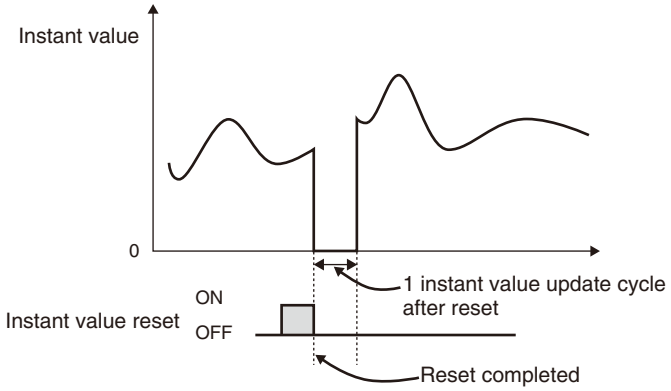
Reset instant value data by changing to the ON status (1).
This is available for each channel.
Fix instant values at 0 during the reset by running an instant value reset.

Use the instant value reset request when a handshake is required, such as when receiving a request to reset with a host communication device, or concluding a reset.
The instant value reset is automatically turned off once the ON status (1) is written from the host communication device and the reset process has been completed on the module side.

[Instant value reset request operation]




[Instant value reset operation]



# Chapter 6. CPL COMMUNICATIONS FUNCTION

## 6 - 1 Outline of Communication

Communication with a PC, PLC or other host devices is available using a user-configured program that uses RS-485 communication.
CPL communication (Controller Peripheral Link: Yamatake Corporation's host communication protocol) or MODBUS communication can be selected as the communication protocol.
This chapter describes the CPL communications.

### ■ Features

The features of the unit's communication function are as follows:

- Up to 31 units can be connected to a single master station that functions as a host device.
- When the communication specifications of the host device conform to the RS-232C interface, the communication converter CMC10L (sold separately) is required.
  The CMC10L allows conversion between RS-232C and RS-485.
- Almost all of the unit parameters can be communicated.
  For details on the communication data, refer to,
  ☞ Chapter 9 LIST OF COMMUNICATION DATA.
- Random access commands are available.
  Two or more parameters at separated addresses can be read or written by a single command.

### ■ Setup

The following setup is required for performing the CPL communications.

| Item name | Contents of setup | Initial value |
|---|---|---|
| Communications type | 0: CPL<br>1: MODBUS ACSII<br>2: MODBUS RTU | 0 |
| Station address | 0: Do not communicate<br>1 to 127 | 127 |
| Transmission speed | 0: 4800 bps<br>1: 9600 bps<br>2: 19200 bps<br>3: 38400 bps<br>4: 57600 bps<br>5: 115200 bps | 2 |
| Data format (data length) | 0: 7 bits<br>1: 8 bits | 1 |
| Data format (parity) | 0: Even parity<br>1: Odd parity<br>2: No parity | 0 |
| Data format (stop bits) | 0: 1 bit<br>1: 2 bits | 0 |
| Minimum response time | 1 to 250 ms | 3 |

#### 🕮 Handling Precautions

- If you use the Yamatake CMC10L as an RS-485 converter, set the minimum response time to 3 ms or longer.
  The maximum transmission speed supported by the CMC10L is 38400 bps.
- If there is an error in the settings for RS-485 communication conditions (transmission speed or data format (data length, parity, or stop bits)) an AL33 is generated.
  In this happens, perform the write operation again or turn the power off and back on.

## ■ Communication procedure

The communication procedure is as follows:

[1] The instruction message is sent from the host device (master station) to one unit (slave station).

[2] The slave station receives the instruction message, and performs read or write processing according to the content of the message.

[3] The slave station sends a message corresponding to the processing content as a response message.

[4] The master station receives the response message.

### Handling Precautions

- Two or more protocols cannot be used together on a single RS-485 transmission line (such as CPL, MODBUS ASCII, and MODBUS RTU).

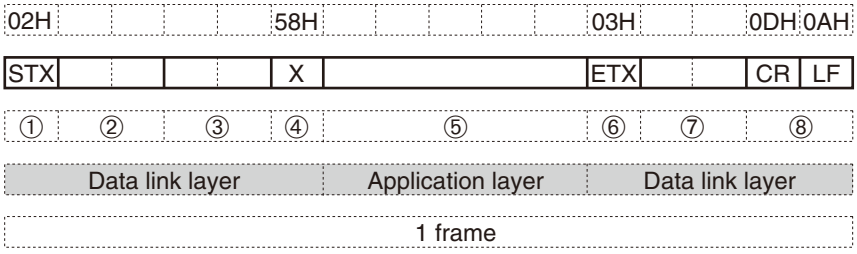
# 6 - 2 Message Structure

## ■ Message structure

The following shows the message structure.
Messages are broadly classified into two layers: the data link layer and the application layer.

- Data link layer
  This layer contains the basic information required for communication. For example, the destination of the communication message and the check information of the message.
- Application layer
  Data is read and written in this layer. The content of the layer varies according to the purpose of the message.

Messages comprise parts (1) to (9) as shown in the figure below.
The command (details sent from the master station) and the response (details returned from the slave station) are stored in the application layer.




① STX (start of message)
② Station address
③ Sub-address
④ Device code
⑤ Instruction message = command, response message = response
⑥ ETX (end of command/response)
⑦ Checksum
⑧ Delimiter (end of message)

## ■ Data link layer

### ● Overview of the data link layer

The data link layer is of a fixed length. The position of each data item and the number of its characters are already decided. Note, however, that the data positions of the data link layer from ETX onwards shift according to the number of characters in the application layer.

### ● Response start conditions

- The device sends the response message only when all the message components in the data link layer of the instruction message are correct. If even one of these is incorrect, no response messages are sent, and the device waits for a new message.

### ● List of data link layer data definitions

The following list shows the definitions for data in the data link layer:

| Data name | Character code | Number of characters | Meaning of data |
|---|---|---|---|
| STX | 02H | 1 | Start of message |
| Station address | 0 to 7FH are expressed as hexadecimal character codes | 2 | Identification of device to communicate with sub-address |
| Sub-adress | “00” (30H, 30H) | 2 | No function |
| Device code | “X” (58H) or “x” (78H) | 1 | Device type |
| ETX | 03H | 1 | Application layer end position |
| Checksum | 00H to FFH are expressed as two-digit hexadecimal character codes | 2 | Checksum of message |
| Delimiter | CR(0DH), LF(0AH) | 2 | End of message |

## ● Description of data items

- STX (02H)
  When STX is received, the unit judges this to be the start of the send message. It follows that if a delimiter has not been received previously, the unit judges that a message start STX has been received. The purpose of this is to enable recovery of the unit's response at the next message from the master station in the event that noise, for example, causes a message error.
- Station address
  Of the messages received, the unit creates response messages only when station addresses are the same. Station addresses in the messages are expressed as two hexadecimal characters.
  The unit returns the same station address as that of the received message. However, when the station address is set to "00" (30H 30H), the unit does not respond even if the station addresses match.
- Sub-address
  Two hexadecimal characters can be used, from "00" (30H 30H) to "FF" (46H 46H). The unit returns the same sub-address as that of the received message.
- Device code
  "X" (58H) or "x" (78H) can be used. This code is determined for each device series, and other codes cannot be selected. The unit returns the same device code as that of the received message. These can be used to identify the messages, for example by using "X" (58H) as the initial value and "x" (78H) in resend messages.
- ETX
  ETX indicates the end of the application layer.
- Checksum
  This value is for checking whether or not some abnormality (e.g. noise) causes the message content to change during communications.
- How to calculate a checksum

  [1] Add the character codes in the message from STX through ETX in single byte units.

  [2] Take two's complement of the low-order one byte of the addition result.

  [3] Convert the obtained two's complement to a two-byte ASCII code.

  The following is a sample checksum calculation for a sample message:
  [Message example]
  STX : 02H
  "0" : 30H (first byte of the station address)
  "1" : 31H (second byte of the station address)
  "0" : 30H (first byte of the sub-address)
  "0" : 30H (second byte of the sub-address)
  "X" : 58H (device code)
  "R" : 52H (first byte of the command)
  "D" : 44H (second byte of the command)
  (omitted)
  ETX : 03H

[1] Add the character codes in the message from STX through ETX in single byte units. The adding calculation in single byte units is as follows:
02H + 30H + 31H + 30H + 30H + 58H + 52H + 44H +... + 03H
The result of this calculation is 376H.

[2] The low-order one byte of the addition result 376H is 76H. The two's complement of 76H is 8AH.

[3] Convert the obtained 8AH to a two-byte ASCII code. The result is:
"8" : 38H
"A": 41H
The two bytes "8" (38H) and "A" (41H) are the checksum.

- Delimiter (CR/LF)
  This indicates the end of the message. Immediately after LF is received, the unit enters a state allowed to process the received message.

## ■ Application layer

The table below shows the configuration of the application layer.

| Item | Details |
|---|---|
| Command | "RS" (decimal format continuous address data read) |
| | "WS" (decimal format continuous address data write) |
| | "RD" (hexadecimal format continuous address data read) |
| | "WD" (hexadecimal format continuous address data write) |
| | "RU" (hexadecimal format random address data read) |
| | "WU" (hexadecimal format random address data write) |
| Data delimiter | RS, WS command: "," (comma)<br>Other commands: None |
| Word address | RS, WS command: Numeric value in decimal notation and "W", such as "501W".<br>Other commands: Numeric value in hexadecimal notation, such as "01F5". |
| Read count | RS, WS command: Numeric value in decimal notation, such as "1".<br>Other commands: Numeric value in hexadecimal notation, such as "0001". |
| Numerical value to be written | RS, WS command: Numeric value in decimal notation, such as "100".<br>Other commands: Numeric value in hexadecimal notation, such as "0064". |

The number of data records accessible by a single instruction message and response message cycle is as follows:

| Command | RAM | EEPROM |
|---|---|---|
| RD | 28 | 28 |
| WD | 28 | 28 |
| RU | 28 | 28 |
| WU | 16 | 16 |
| RS | 16 | 16 |
| WS | 16 | 16 |

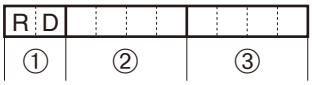
# 6 - 3 Description of Commands

## ■ Fixed length continuous data read command (RD command)

Data in the continuous data addresses is read in hexadecimal format.

### ● Instruction message

Specifies the start data address and the number of data records. The structure of the application layer in the instruction message is as follows:

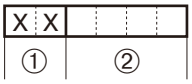



① Command
② Start data address
③ Number of data records

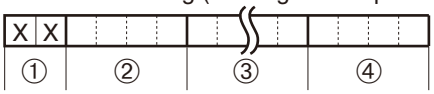
### ● Response message

The structure of the application layer in the response message is as follows:

● Nomal end or Warning (reading of single data item)




● Nomal end or Warning (reading of multiple data items)




● Abnomal end


① End code
② Data (1st item)
③ Data (2nd and following item)
④ Data (final item)

The end code is entered at XX.
For details of the codes, refer to,
☞ 6-6 List of Termination Codes.

## 🕮 Note

- For details on hexadecimal number notation, refer to,
  ☞ ■ Hexadecimals in 6-5 Numeric Representation in the Application Layer.
- When a warning occurs, the corresponding data address is read as 0000H.

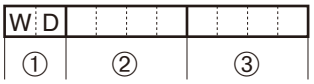
## ■ Fixed length continuous data write command (WD command)

Data is written to continuous data address data in hexadecimal format.

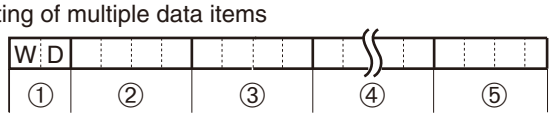
### ● Instruction message

Specifies the start data address and at least one data record. The structure of the application layer in the instruction message is as follows:

● Writing of single data item




● Writing of multiple data items




① Command
② Start data address
③ Data (1st item)
④ Data (2nd and following items)
⑤ Data (final item)

### ● Response message

The structure of the application layer in the response message is as follows:

● Normal end or Warning


● Abnormal end


① End code

The end code is entered at XX.
For details of the codes, refer to,
☞ 6-6 List of Termination Codes.

## 🕮 Note

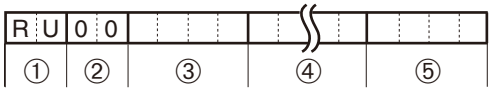
- For details on hexadecimal number notation, refer to,
  ☞ ■ Hexadecimals in 6-5 Numeric Representation in the Application Layer.
- If a warning occurs, data is not written to that data address.

## ■ Fixed length random data read command (RU command)

Data in random (non-continuous) data addresses is read in hexadecimal format.

### ● Instruction message

Specifies at least one data record. The structure of the application layer in the instruction message is as follows:

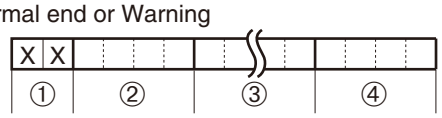



① Command
② Sub-command, fixed to “00”
③ Data address (1st item)
④ Data address (2nd and following items)
⑤ Data address (final item)

### ● Response message

The structure of the application layer in the response message is as follows:

● Normal end or Warning




● Abnormal end


① End code
② Data (1st item)
③ Data (2nd and following items)
④ Data (final item)

The end code is entered at XX.
For details of the codes, refer to,
☞ 6-6 List of Termination Codes.

### 🕮 Note

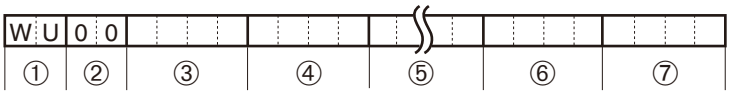
- For details on hexadecimal number notation, refer to,
  ☞ ■ Hexadecimals in 6-5 Numeric Representation in the Application Layer.
- When a warning occurs, the corresponding data address is read as 0000H.

## ■ Fixed length random data write command (WU command)

Writing is performed in a hexadecimal format to data in random (non-continuous) data addresses.

### ● Instruction message

Groups data addresses and data, and specifies at least one group. The structure of the application layer in the instruction message is as follows:




① Command
② Sub-command, fixed to “00”
③ Data address (1st group)
④ Write data (1st group)
⑤ Data address, write data (2nd and following groups)
⑥ Data address (final group)
⑦ Write data (final group)

### ● Response message

The structure of the application layer in the response message is as follows:

● Normal end or Warning


● Abnormal end


(1) End code

The end code is entered at XX.
For details of the codes, refer to,
☞ 6-6 List of Termination Codes.

## 🕮 Note

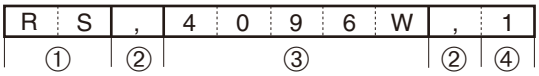
- For details on hexadecimal number notation, refer to,
  ☞ ■ Hexadecimals in 6-5 Numeric Representation in the Application Layer.
- If a warning occurs, data is not written to that data address.

## ■ Continuous data read command (RS command)

Data in continuous data addresses is read in decimal format.

### ● Instruction message

Specifies the start data address and the number of data records. The structure of the application layer in the instruction message is as follows:

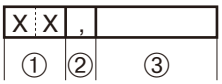



① Command
② Data delimiter
③ Start data address (“W” is needed)
④ Number of data records

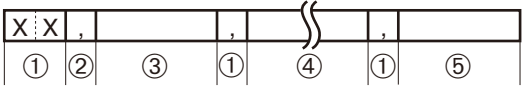
### ● Response message

The structure of the application layer in the response message is as follows:

● Normal end or Warning (reading of single data item)




● Abnormal end (reading of multiple data items)




● Abnormal end


① End code
② Data delimiter
③ Data (1st item)
④ Data (2nd and following items)
⑤ Data (final item)

The end code is entered at XX.
For details of the codes, refer to,
☞ 6-6 List of Termination Codes.

### 🕮 Note

- For details on decimal number notation, refer to,
  ☞ ■ Decimals in 6-5 Numeric Representation in the Application Layer.
- When a warning occurs, the corresponding data address is read as 0000H.

## ■ Continuous data write command (WS command)

Writing is performed in a decimal format to data in continuous data addresses.

### ● Instruction message

Specifies the start address and at least one data record. The structure of the application layer in the instruction message is as follows:

| W | S | , | 4 | 0 | 9 | 6 | W | , | 1 | , | 6 | 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ① | | ② | ③ | | | | | ② | ④ | ② | ⑤ | |

① Command
② Data delimiter
③ Start data address (“W” is needed)
④ Data (1st item)
⑤ Data (2nd item)

### ● Response message

The structure of the application layer in the response message is as follows:

● Normal end or Warning

| X | X |
|---|---|
| ① | |

● Abnormal end

| X | X |
|---|---|
| ① | |

① End code

The end code is entered at XX.
For details of the codes, refer to,
☞ 6-6 List of Termination Codes.

## 🕮 Note

- For details on decimal number notation, refer to,
  ☞ ■ Decimals in 6-5 Numeric Representation in the Application Layer.
- If a warning occurs, data is not written to that data address.

# 6 - 4 Definition of Data Addresses

● **RAM and EEPROM areas of data addresses**

Data addresses are categorized as follows:

| Data address hexadecimal | Data address decimal | Name | Remarks |
|---|---|---|---|
| 100 to FFF | 256 to 4095 | EEPROM access data address | The write command accesses both the RAM area and EEPROM area, but the read command accesses the RAM area only . Since data is written to the EEPROM, the data does not change even after the power is turned off and back on again. |
| 1000 to 4FFF | 4096 to 20479 | RAM access data address | The write and read commands access both the RAM area and EEPROM area. Since data is not written to the EEPROM, the data returns to the previous one stored in the EEPROM after the power is turned off and back on again. |
| 5000 to 8FFF | 20480 to 36863 | EEPROM access data address | The write command accesses both the RAM area and EEPROM area, but the read command accesses the RAM area only . Since data is written to the EEPROM, the data does not change even after the power is turned off and back on again. |

## Handling Precautions

- The number of EEPROM erase/write cycles is limited.
  Accordingly, it is recommended that very frequently written parameters be written to RAM, which does not have a limitation on cycles.
  However, note that the data written to the RAM area is overwritten with the EEPROM area data when the power is turned ON.

● **Write data range**

If the write value exceeds the range determined by parameters, writing is not performed and an abnormal termination code is returned.

● **Write conditions**

An abnormal termination code is also returned when writing is not possible due to the conditions.

● **Undefined address read**

When an undefined address is read, the end code does not result in an abnormality or warning when the data is 0.

# 6 - 5 Numeric Representation in the Application Layer

The numeric values in the application layer include the data address, number of data records and data values, and use hexadecimal or decimal notation depending on the command. This notation method is shared by both the instruction message and the response message.

## ■ Hexadecimals

The hexadecimal specifications are shown in the table below.
If the message does not match the specifications, the unit does not process the instruction message and instead returns an error response.

| Item | Specification | Example of specification mismatch |
|---|---|---|
| Supported commands | RD WD RU WU | RS command (hexadecimal is not allowed)<br>WS command (hexadecimal is not allowed) |
| Available characters | 0 (30H) to 9 (39H)<br>A (41H) to F (46H) | 1 2 3 a (a is not allowed)<br>– 1 2 3 (– is not allowed)<br>␣ 1 2 3 (Space is not allowed) |
| Number of characters | 4 | 1 2 3 (3 characters)<br>0 1 2 3 4 (5 characters) |
| Expressble numeric values | 8000H to 7FFFH (data with symbols)<br>0000H to FFFFH (data without symbols) | |
| Examples of normal character strings | 0 0 0 0<br>1 2 A B<br>0 1 2 3<br>F F F F | |

## ■ Decimals

The decimal specifications are shown in the table below.
In the data address, a capital letter “W” (57H) is added immediately after the decimal.
If the specifications are not satisfied, the unit does not process the instruction message and instead returns an error response.

| Item | Specification | Example of specification mismatch |
|---|---|---|
| Supported commands | RS Ws | RD command (decimal is not allowed)<br>WD command (decimal is not allowed) |
| Available characters | 0 (30H) to 9 (39H)<br>-(2DH) | 1 2 3 A (A is not allowed)<br>+ 1 2 3 (+ is not allowed)<br>␣ 1 2 3 (Space is not allowed) |
| Delimiter characters | ,(2CH)<br>Delimiter characters are used between numeric values | |
| Number of characters | 1 to 5 (positive numbers)<br>2 to 6 (negative numbers)<br>1 (Numeric value 0) | 0 characters (Nothing between delimiter characters)<br>1 2 3 4 5 6 (6-character positive number) |
| Expressible numeric values | –32768 to +32767 (data with symbols)<br>0 to 65535 (data without symbols) | |
| Positive number notation | Starts with 1 (31H) to 9 (39H) | 0 1 (Not allowed to start with 0) |
| Negative number notation | Starts with -(2DH), the second character is 1 (31H) to 9 (39H) | – 0 1 (0 is not allowed for the second character) |
| Numeric value 0 notation | 0 | – 0 (_ is not allowed)<br>0 0 (Anything other than 1 character is not allowed) |
| Examples of normal character strings | 1<br>3 2 7 6 7<br>– 1 2<br>– 3 2 7 6 8 | |

# 6 - 6 List of End Codes

The result of the application layer process for the instruction message can be understood from the end code of the response message.
Results other than “normal” are in two levels. An “error” occurs when nothing is processed, and a “warning” occurs when there is a possibility that some kind of processing will be performed.

## ■ End code of the read command

| End code | Meaning | Unit processing |
|---|---|---|
| 00 (Normal) | Normal termination | Returns a read value |
| 99 (Error) | Undefined command | Returns only the end code (does not add data) |
| 10 (Error) | Parameter error * | Returns only the end code (does not add data) |
| 40 (Error) | No. of data records error | Returns only the end code (does not add data) |
| 21 (Warning) | Data address error | Returns the data of the corresponding data address as a 0 value |
| 22 (Warning) | Data range error | Returns the read value of the corresponding data address as 8000 or 7FFF in hexadecimal format, or –32768 or +32767 in decimal format. |
| 23 (Warning) | Not allowed depending on the instrument conditions | Returns the data of the corresponding data address as a 0 value |

*. The parameter errors are the following errors.
- Violation of the numeric representation
- Violation of the instruction message format

## ■ End code of the write command

| End code | Meaning | Unit processing |
|---|---|---|
| 00 (Normal) | Normal termination | Writes all data |
| 99 (Error) | Undefined command | Does not write any data |
| 10 (Error) | Parameter error * | Does not write any data |
| 40 (Error) | No. of data records error | Does not write any data |
| 21 (Warning) | Data address error | Does not write the corresponding data address |
| 22 (Warning) | Data range error | Does not write the corresponding data address |
| 23 (Warning) | Not allowed depending on the instrument conditions | Does not write the corresponding data address |

*. The parameter errors are the following errors.
- Violation of the numeric representation
- Violation of the instruction message format
- Addition of excess data to the end of the frame

# 6 - 7 Send/Receive Timing

## ■ Timing specifications for instruction and response messages

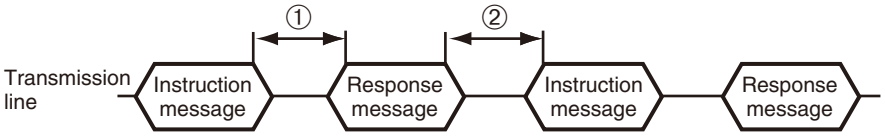
The cautions below are required with regard to the timing to transmit an instruction message from the master station and a response message from the slave station.

### ● Response monitor time

The maximum response time from the end of the instruction message transmission by the master station until when the master station receives a response message from the slave station is two seconds (① in the figure below).
So, the response monitor time should be set to two seconds.
Generally, when a response time-out occurs, the instruction message is resent.

### ● Transmission start time

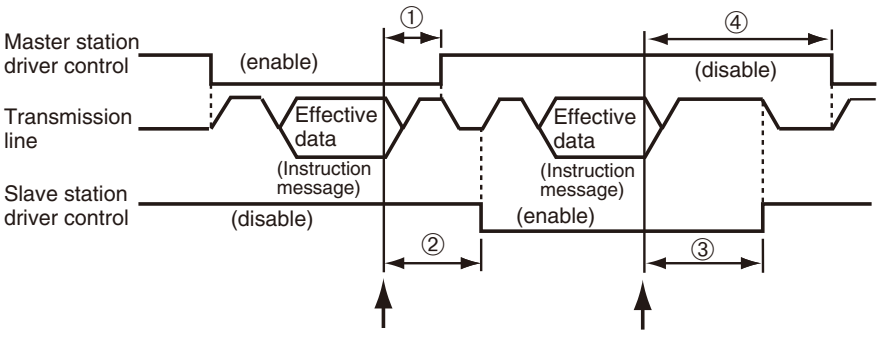
A wait time of 10 ms is required before the master station starts to transmit the next instruction message (to the same slave station or a different slave station) after the end of receiving response message (② in the figure below).




① End of master station transmission – Transmission start time of slave station = Max. 2000 ms
② End of slave station transmission – Transmission start time of master station = Min. 10 ms

## ■ RS-485 driver control timing specifications

When the transmission/reception on the RS-485 3-wire system is directly controlled by the master station, care should be paid to the following timing:




① End of master station transmission – Driver disable time = Max. 500 µs
② End of slave station reception – Driver enable time = Minimum response time
③ End of slave station transmission – Driver disable time = Max. 10 ms
④ End of master station reception – Driver enable time = Min. 10 ms

# Chapter 7. MODBUS COMMUNICATIONS FUNCTION

## 7 - 1 Overview of Communication

Communication with a PC, PLC or other host device is available using a user-configured program that uses RS-485 communication.
CPL communication (Controller Peripheral Link: Yamatake Corporation's host communication protocol) or MODBUS communication can be selected as the communication protocol. This chapter describes MODBUS communication.

### ■ Features

The features of the unit's communication function are as follows:

- Up to 31 units can be connected to a single master station as a host device.
- When the communication specifications of the host device conform to the RS-232C interface, the communication converter CMC10L (sold separately) is required.
  The CMC10L allows conversion between RS-232C and RS-485.
- Almost all of the unit parameters can be communicated.
  For details on the communication parameters, refer to,
  ☞ Chapter 9 LIST OF COMMUNICATION DATA.

### ! Handling Precautions

- In MODBUS communications, the communication address (parameter) for the module that is set in the host device may be reduced by 1 in a communication message during transmission.
  Example: If the communication address (parameter) is set to 1001 in the host device, it will be 1000 in a communication message during transmission.
  The module sends/receives a message to/from the communication address (parameter) that is specified in the communication message.
  Be sure to understand the specifications of the host device before using the module.

## ■ Setup

The following setup is required for performing the MODBUS communications.

| Item name | Contents of setup | Initial value |
|---|---|---|
| Communications type | 0: CPL<br>1: MODBUS ACSII<br>2: MODBUS RTU | 0 |
| Station address | 0: Does not communicate<br>1 to 127 | 127 |
| Transmission speed | 0: 4800 bps<br>1: 9600 bps<br>2: 19200 bps<br>3: 38400 bps<br>4: 57600 bps<br>5: 115200 bps | 2 |
| Data format (Data length) | 0: 7 bits<br>1: 8 bits | 1 |
| Data format (Parity) | 0: Even parity<br>1: Odd parity<br>2: No parity | 0 |
| Data format (Stop bit) | 0: 1 bit<br>1: 2 bits | 0 |
| Minimum response time | 1 to 250 ms | 3 |

- When the communications type is set to MODBUS RTU, the operation is fixed to 8-bit data regardless of the data format (data length) setting.

### ⚠ Handling Precautions

- The setup cannot be performed via RS-485 communications.
- If you use the Yamatake CMC10L as an RS-232C/RS-485 converter, set the minimum response time to 3 ms or longer.
  The maximum transmission speed supported by the CMC10L is 38400 bps.

## ■ Communication procedure

The communication procedure is as follows:

[1] The instruction message is sent from the host device (master station) to one unit (slave station).

[2] The slave station receives the instruction message, and performs read or write processing according to the content of the message.

[3] The slave station sends a message corresponding to the processing content as a response message.

[4] The master station receives the response message.

### ⚠ Handling Precautions

- Two or more protocols cannot be used together on a single RS-485 transmission line (such as CPL, MODBUS ASCII, and MODBUS RTU).

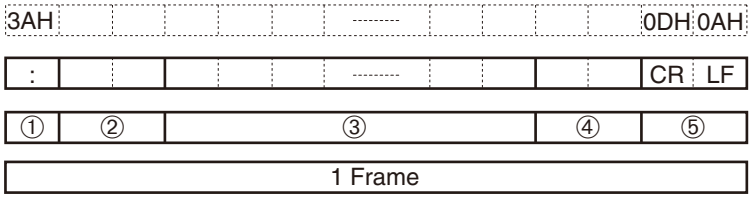
# 7 - 2 Message Structure

## ■ Message structure

The following shows the message structure.

### ● MODBUS ACSII

Messages other than the start code and end code all use hexadecimal ASCII codes.
MODBUS ASCII messages comprise parts ① to ⑤ as shown below.
The command (details sent from the master station) and the response (details returned from the slave station) are stored in part ③.
One box below represents one character.




① Start code (1 byte)
② Station address (2 bytes)
③ Send message, response message
④ Check code (LRC) (2 bytes)
⑤ End code (2 bytes)

- Start code
  The start code is a colon (3AH).
  When the start code is received, the unit judges this to be the start of the send message. It follows that if an end code has not been received previously, the unit judges that a start code for the start of the message has been received. The purpose of this is to enable recovery of the unit's response at the next message from the master station in the event that noise, for example, causes a message error.
- Station address
  Of the messages received, the unit creates response messages only when station addresses are the same. Station addresses in the messages are expressed as two hexadecimal characters.
  However, when the station address is set to "00" (30H 30H), the unit does not respond even if the station addresses match.
  The unit returns the same station address as that of the received message.
- Check code (LRC)
  This value is for checking whether or not some abnormality (e.g. noise) causes the message content to change during communications. The check code is expressed as two hexadecimal characters. The procedure for calculating the check code is as follows.
  [1] Add from the start of the station address to immediately before the check code. Be sure that the added value is not the ASCII character value of the send message, but rather the one-byte binary data that is converted from the two ASCII characters.
  [2] Take the two's complement of the addition result.
  [3] Convert the low-order one byte of the addition result to the two characters that express the hexadecimal.

- End code (CR/LF)
  This indicates the end of the message. Immediately after LF is received, the unit enters a state allowed to process the received message.

## Note

- The following is an example of the check code (LRC) calculation.
  [Message example]
  : : 3AH (start of message)
  '0' : 30H (first byte of the station address)
  'A' : 41H (second byte of the station address)
  '0' : 30H (first byte of the read command)
  '3' : 33H (second byte of the read command)
  '0' : 30H (first byte of the start data address)
  '3' : 33H (second byte of the start data address)
  'E' : 45H (third byte of the start data address)
  '9' : 39H (fourth byte of the start data address)
  '0' : 30H (first byte of the read count)
  '0' : 30H (second byte of the read count)
  '0' : 30H (third byte of the read count)
  '2' : 32H (fourth byte of the read count)

[1] Add from the first byte of the station address to immediately before the check code. The adding calculation is as follows:
0AH + 03H + 03H + E9H + 00H + 02H
The result of this calculation is FBH.

[2] The low-order one byte of the addition result FBH is unchanged at FBH. The two's complement of FBH is 05H.

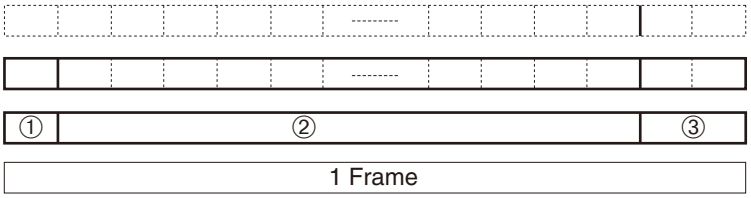
[3] Convert the obtained 05H to a two-byte ASCII code. The result is:

'0' : 30H
'5' : 35H

The two bytes '0' (30H) and '5' (35H) are the two-byte check code.

## ● MODBUS RTU

All messages use binary data.
MODBUS RTU messages comprise parts ① to ③ as shown below.
The command (details sent from the master station) and the response (details returned from the slave station) are stored in part ②.
All messages use binary data. (One box below represents one byte.)




① Station address (1 byte)
② Send message, response message
③ Check code (2 bytes)

- Station address
  Of the messages received, the unit creates response messages only when station addresses are the same. Station addresses in the messages are one byte. However, when the station address is set to "0", the unit does not respond even if the station addresses match. The unit returns the same station address as that of the received message.
- Check code (CRC)
  This value is for checking whether or not some abnormality (e.g. noise) causes the message content to change during communications. The check code is two bytes.

The procedure for calculating the check code (CRC) is as follows.
The part from the start of the station address in the message to immediately before the check code is the subject of the calculation. The binary data of the message is used unchanged in the calculation. The check code is 16-bit data, and can be calculated with the C language function get_crc16() as shown below. In the message, the low-order one byte is first, and the high-order one byte is last. This order is the reverse of the other 16-bit data.

[Explanation] Calculate the CRC 16 bits
[Argument 1] Character string length (number of bytes)
[Argument 2] Pointer for start of character string
[Function value] Calculation result

```
unsigned short get_crc16(signed int len, const unsigned char *p)
{
   unsigned short crc16;
   unsigned short next;
   unsigned short carry;
   signed int i;
   crc16 = 0xffff;

   while (len > 0)
   {
   next = (unsigned short)*p;
   crc16 ^= next;
   for (i = 0; i < 8; i++)
   {
   carry = crc16 & 0x0001;
   crc16 >>= 1;
   if (carry != 0)
   {
   crc16 ^= 0xa001;
   }
   }
   p++;
   len--;
   }

   return crc16;
}
```

- One frame end judgment
  The message end (one frame end) is judged when the time in which a character has not been received exceeds the time specified for the transmission speed. One frame end is judged when the next character is not received before the time-outs shown below.
  However, note that there is a variation of ±1 ms in the time-outs shown in the table below.

| Set transmission speed (bps) | Time-out transmission speed (bps) |
|---|---|
| 4800 | 9 ms or longer |
| 9600 | 5 ms or longer |
| 19200 | 3 ms or longer |
| 38400 | 2 ms or longer |
| 57600 | 2 ms or longer |
| 115200 | 2 ms or longer |

## ■ Command types

The command (send message) types supported by this unit are as follows:

| Command type | Details | | Conformance class |
|---|---|---|---|
| | ASCII | RTU | |
| Multiple data item read | “03” (2 bytes) | 03H (1 byte) | class 0 |
| Multiple data item write | “10” (2 bytes) | 10H (1 byte) | class 0 |
| One data item write | “06” (2 bytes) | 06H (1 byte) | class 1 Note: |

Note: This unit does not support class 1 commands other than one data item write.

## ■ Exception codes

When a response message error occurs, the following exception codes are added after the function code.

| Error type | Exception code | | Details |
|---|---|---|---|
| | ASCII | RTU | |
| Invalid function | “01” (2 bytes) | 01H (1 byte) | Function code not supported code by the unit |
| Invalid data address | “02” (2 bytes) | 02H (1 byte) | Includes data addresses that cannot be read or written |
| Invalid data | “03” (2 bytes) | 03H (1 byte) | Errors other than the above |

## ■ No. of data records

The number of data records that can be read or written in a one frame message is as follows:

| Command type (Function Code) | No. of data records | | | |
|---|---|---|---|---|
| | ASCII | | RTU | |
| | RAM | EEPROM | RAM | EEPROM |
| Read multiple data items (03) | 1 to 16 items | 1 to 16 items | 1 to 32 items | 1 to 32 items |
| Write multiple data items (10) | 1 to 16 items | 1 to 16 items | 1 to 32 items | 1 to 32 items |
| Write one data item (06) | 1 item | 1 item | 1 item | 1 item |

### 🕮 Note

- For details regarding MODBUS communication specifications, refer to,
  ☞ “Modicon Modbus Protocol Reference Guide (PI-MBUS-300 Rev.J)” MODICON, Inc.
  ☞ “OPEN MODBUS/TCP SPECIFICATION (Release 1.0)” Schneider Electric.

# 7 - 3 Description of Commands

## ■ Multiple data item read command (03H)

Data in the continuous data addresses is read in hexadecimal format.

### ● Instruction message

Specifies the start data address and the number of data records. The structure of the instruction message is as follows:

MODBUS ASCII

| 3AH | 30H | 41H | 30H | 33H | 30H | 33H | 45H | 39H | 30H | 30H | 30H | 32H | 30H | 35H | 0DH | 0AH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| : | 0 | A | 0 | 3 | 0 | 3 | E | 9 | 0 | 0 | 0 | 2 | 0 | 5 | CR | LF |
| ① | ② | | ③ | | ④ | | | | ⑤ | | | | ⑥ | | ⑦ | |

① Start code
② Station address
③ Function code
④ Start data address
⑤ No. of data records
⑥ Check code (LRC)
⑦ End code

MODBUS RTU

| 0AH | 03H | 03H | E9H | 00H | 02H | 14H | C0H |
|---|---|---|---|---|---|---|---|
| ① | ② | ③ | | ④ | | ⑤ | |

① Station address
② Function code
③ Start data address
④ No. of data records
⑤ Check code (CRC)

### ● Response message

The structure of the response message is as follows:

MODBUS ASCII

• Normal example

| 3AH | 30H | 41H | 30H | 33H | 30H | 34H | 30H | 33H | 30H | 31H | 30H | 30H | 30H | 33H | 45H | 38H | 0DH | 0AH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| : | 0 | A | 0 | 3 | 0 | 4 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 3 | E | 8 | CR | LF |
| ① | ② | | ③ | | ④ | | ⑤ | | | | ⑥ | | | | ⑦ | | ⑧ | |

① Start code
② Station address
③ Function code
④ No. of data records ×2
⑤ Read data 1
⑥ Read data 2
⑦ Check code (LRC)
⑧ End code

• Error example

| 3AH | 30H | 41H | 38H | 34H | 30H | 31H | 37H | 31H | 0DH | 0AH |
|---|---|---|---|---|---|---|---|---|---|---|
| : | 0 | A | 8 | 4 | 0 | 1 | 7 | 1 | CR | LF |
| ① | ② | | ③ | | ④ | | ⑤ | | ⑥ | |

① Start code
② Station address
③ Function code (When an error occurs, 1 is set for the MSB of the send message's function code. In this example, a response of 84 is given for the undefined 04.)
④ Exception code ☞ (P. 7-6)
⑤ Check code (LRC)
⑥ End code

MODBUS RTU

• Normal example

| 0AH | 03H | 04H | 03H | 01H | 00H | 03H | 51H | 76H |
|---|---|---|---|---|---|---|---|---|
| ① | ② | ③ | ④ | | ⑤ | | ⑥ | |

① Station address
② Function code
③ Read count ×2 (number of bytes)
④ Read data 1
⑤ Read data 2
⑥ Check code (CRC)

• Error example

| 0AH | 84H | 01H | F3H | 02H |
|---|---|---|---|---|
| ① | ② | ③ | ④ | |

① Station address
② Function code (When an error occurs, 1 is set for the MSB for the send message function code. In this example, a response of 84 is given for the undefined 04.)
③ Exception code ☞ (P. 7-6)
④ Check code (CRC)

## ■ Multiple data item write command (10H)

Data is written to continuous data address data in hexadecimal format.

### ● Instruction message

Specifies the start address, number of data records, and at least one data record.
The structure of the instruction message is as follows:
Example: The 01A0H and 0E53H values are written in two continuous data addresses from 05DDH.

MODBUS ASCII

| 3AH | 30H | 31H | 31H | 30H | 30H | 35H | 44H | 44H | 30H | 30H | 30H | 32H | 30H | 34H |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| : | 0 | 1 | 1 | 0 | 0 | 5 | D | D | 0 | 0 | 0 | 2 | 0 | 4 |
| ① | ② | | ③ | | ④ | | | | ⑤ | | | | ⑥ | |

| 30H | 31H | 41H | 30H | 30H | 45H | 35H | 33H | 30H | 35H | 0DH | 0AH |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 1 | A | 0 | 0 | E | 5 | 3 | 0 | 5 | CR | LF |
| ⑦ | | | | ⑧ | | | | ⑨ | | ⑩ | |

① Start code
② Station address
③ Function code
④ Write start data address 1
⑤ No. of write data records
⑥ No. of write data records ×2
⑦ Write data 1
⑧ Write data 2
⑨ Check code (LRC)
⑩ End code

MODBUS RTU

| 01H | 10H | 05H | DDH | 00H | 02H | 04H | 01H | A0H | 0EH | 53H | 45H | B9H |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | | (4) | | (5) | (6) | | (7) | | (8) | |

① Station address
② Function code
③ Write start data address
④ No. of write data records
⑤ No. of write data records ×2
⑥ Write data 1
⑦ Write data 2
⑧ Check code (CRC)

● **Response message**

The structure of the response message is as follows:

MODBUS ASCII

| 3AH | 30H | 31H | 31H | 30H | 30H | 35H | 44H | 44H | 30H | 30H | 30H | 32H | 30H | 42H | 0DH | 0AH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| : | 0 | 1 | 1 | 0 | 0 | 5 | D | D | 0 | 0 | 0 | 2 | 0 | B | CR | LF |
| ① | ② | | ③ | | ④ | | | | ⑤ | | | | ⑥ | | ⑦ | |

① Start code
② Station address
③ Function code
④ Write start data address 1
⑤ No. of write data records
⑥ Check code (LRC)
⑦ End code

MODBUS RTU

| 01H | 10H | 05H | DDH | 00H | 02H | D1H | 3EH |
|---|---|---|---|---|---|---|---|
| ① | ② | ③ | | ④ | | ⑤ | |

① Station address
② Function code
③ Write start data address
④ No. of write data records
⑤ Check code (CRC)

## Note

- The response message when an error occurs is the same as when an error occurs for the multiple data item read command.

## ■ One data item write command (06H)

Writing is performed in a hexadecimal format to data for which there is only one data address.

### ● Send message

Specifies the data address and the data. The structure of the instruction message is as follows:
Example: The 01A0H value is written in the 05DDH data address.

MODBUS ASCII

| 3AH | 30H | 31H | 30H | 36H | 30H | 35H | 44H | 44H | 30H | 31H | 41H | 30H | 37H | 36H | 0DH | 0AH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| : | 0 | 1 | 0 | 6 | 0 | 5 | D | D | 0 | 1 | A | 0 | 7 | 6 | CR | LF |
| ① | ② | | ③ | | ④ | | | | ⑤ | | | | ⑥ | | ⑦ | |

① Start code
② Station address
③ Function code
④ Data address
⑤ Write data
⑥ Check code (LRC)
⑦ End code

MODBUS RTU

| 01H | 06H | 05H | DDH | 01H | A0H | 18H | D4H |
|---|---|---|---|---|---|---|---|
| ① | ② | ③ | | ④ | | ⑤ | |

① Station address
② Function code
③ Data address
④ Write data
⑤ Check code (CRC)

### ● Response message

The normal response message is the same as the send message.

### Note

- The response message when an error occurs is the same as when an error occurs for the multiple data item read command.

# 7 - 4 Numeric Representation

The numeric values include the data address, number of data records and data values, and all use the hexadecimal notation. The numeric representation varies depending on whether the communications type is MODBUS ASCII or MODBUS RTU. This notation methods is shared by both the instruction message and the response message.

## ■ ASCII hexadecimals

The ASCII hexadecimal specifications are shown in the table below.
If the message dose not match the specifications, the unit does not process the instruction message and instead returns an error response.

| Item | Specification | Example of specification mismatch |
|---|---|---|
| Available characters | 0 (30H) to 9 (39H)<br>A (41H) to F (46H) | [1][2][3][a] (a is not allowed)<br>[−][1][2][3] (− is not allowed)<br>[ ][1][2][3] (Space is not allowed) |
| Number of characters | 4 or 2 | [1][2][3] (3 characters)<br>[0][1][2][3][4] (5 characters) |
| Expressible numeric values (4 characters) | 8000H to 7FFFH (data with symbols)<br>0000H to FFFFH (data without symbols) | |
| Expressible numeric values (2 characters) | 00H to FFH (data without symbols) | |
| Examples of normal character strings | [0][0][0][0]<br>[1][2][A][B]<br>[0][1][2][3]<br>[F][F][F][F]<br>[0][1]<br>[1][0] | |

## ■ RTU hexadecimals

The RTU hexadecimal specifications are shown in the table below.
If the message dose not match the specifications, the unit does not process the instruction message and instead returns an error response.

| Item | Specification | Example of specification mismatch |
|---|---|---|
| Available characters | 00H to FFH (all) | |
| Number of characters | 2 or 1 | [00H][01H][02H] (3 characters) |
| Expressible numeric values (2 characters) | 8000H to 7FFFH (data with symbols)<br>0000H to FFFFH (data without symbols) | |
| Expressible numeric values (1 characters) | 00H to FFH (data without symbols) | |
| Examples of normal character strings | [00H][00H]<br>[12H][ABH]<br>[01H][23H]<br>[FFH][FFH]<br>[10H]<br>[04H] | |

# 7 - 5 Specifications Shared with CPL Communications Function

## ■ Definition of data addresses

☞ 6-4, Definition of Data Addresses.

## ■ RS-485 driver control timing specifications

☞ 6-7, Send/Receive Timing.

# Chapter 8. MODBUS/TCP COMMUNICATIONS FUNCTION

## 8 - 1 Overview of Communication

This unit can communicate with host devices in MODBUS TCP protocol that conforms to Ethernet TCP/IP.

### ■ Features

The features of the unit's communication function are as follows:

- When an Ethernet interface communication adapter (1 port) or communication box (4 ports) is mounted on the right or left (communication box is left only) of a connected unit and an Ethernet cable is connected, all modules in the connected block can be accessed.
- The host device can perform communication via Ethernet when the unit's IP address is specified.
- Almost all of the unit parameters can be communicated.
  For details on communication parameters, refer to,
  ☞ Chapter 9 LIST OF COMMUNICATION DATA.

#### ! Handling Precautions

- In MODBUS communications, the communication address (parameter) for the module that is set in the host device may be reduced by 1 in a communication message during transmission.
  Example: If the communication address (parameter) is set to 1001 in the host device, it will be 1000 in a communication message during transmission.
  The module sends/receives a message to/from the communication address (parameter) that is specified in the communication message. Be sure to understand the specifications of the host device before using the module.

### ■ Setup

The following setup is required for performing the MODBUS TCP communications with the unit.

| Item | Initial value |
|---|---|
| IP address | 192.168.255.254 |
| Net mask | 255.255.255.0 |
| Default gateway | None |

- The net mask and default gateway can be set for each chain by selecting "All" in the actual module configuration screen of the SLP-NX (sold separately).
- The port number used by MODBUS TCP is 502, but this can be changed as required.

## ■ Communication procedure

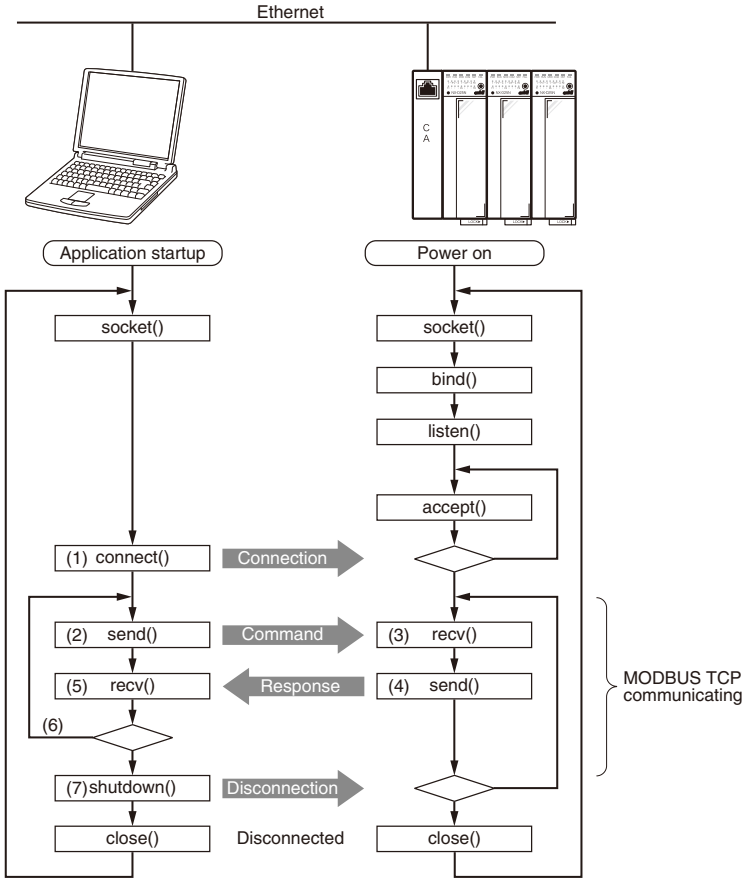
In MODBUS/TCP, perform communication using the TCP/IP socket interface. TCP/IP socket interfaces are used differently on different host devices. The method explained below is applicable for use on standard computers.

[1] A TCP/IP socket connection is established from the host device (master station) to one unit (slave station).
[2] An instruction message is sent from the master station to the slave station.
[3] The slave station receives the instruction message and performs read/write processing based on the content of the message.
[4] The slave station sends a response message in response to the processing details.
[5] The master station receives the response message.
[6] If MODBUS/TCP communication is being continued, return to [2].
[7] If MODBUS/TCP communication is being terminated, the master station sends a TCP/IP socket connection termination request to the slave station.

### ! Handling Precautions

- This unit can support up to two TCP connections for MODBUS TCP (one connection when using RS-485 communication).
  For details, refer to,
  ☞ Chapter 4 “Network Function Design” in Network Instrumentation Module User’s Manual Network Design Version, CP-SP-1313E.

## ■ Communication procedure for standard TCP/IP sockets

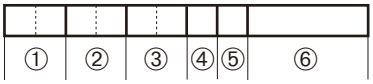


# 8 - 2 Message Structure

## ■ Message structure

A TCP/IP frame is used. The MODBUS TCP message is expressed in the TCP data section.

### ● MODBUS TCP




| | |
|---|---|
| ① Transaction Identifier (2 bytes) | No special definition |
| ② Protocol Identifier (2 bytes) | 0000H when the protocol is MODBUS. |
| ③ Length (2 bytes) | Expresses the number of bytes in (4) to (6). |
| ④ Unit Identifier (1byte) | Specify FFH or 00H. |
| ⑤ Function (1 byte) | Specify a function code. |
| ⑥ Data (n bytes) | A data string that depends on the function code. |

### ● Data details

- Transaction Identifier
  Contains the same value as the request - response pair.
  The communication master station can use the Transaction Identifier to recognize that a response is the pair of a request.
- Protocol Identifier
  For MODBUS protocol, specify 0000H.
- Length
  Expresses the data length, from Unit Identifier to Data, as the number of bytes.
- Unit Identifier
  Specify FFH or 00H.
- Function
  Specify a function code.
- Data
  This is the communication data.

### ● Frame detection method

A TCP frame is detected as one MODBUS TCP frame.

### ● Used port

The TCP port number used by MODBUS TCP is No. 502. (Can be changed.)

### ● Function code

Supports Function Codes 3(03H), 16(10H) and (06H).

## ■ Exception codes

When a response message error occurs, the following exception codes are added after the function code.

| Error type | Exception code | Description |
|---|---|---|
| Invalid function code | “01” (2 bytes) | Function code not supported code by the unit |
| Invalid data address | “02” (2 bytes) | Including data addresses that cannot be read or written |
| Invalid data | “03” (2 bytes) | Errors other than the above |
| Busy | “06” (2 bytes) | Status where the unit cannot process. Resend. |

## ■ No. of data records

The number of data records that can be read or written in a one frame message are shown below.

| Command type (Function code) | No. of data records | |
|---|---|---|
| | RAM | EEPROM |
| Multiple data item read (03H) | 1 to 64 items | 1 to 64 items |
| Multiple data item write (10H) | 1 to 32 items | 1 to 32 items |
| One data item write (06H) | 1 item | 1 item |

### 🕮 Note

- For details regarding MODBUS communication specifications, refer to,
  ☞ “Modicon Modbus Protocol Reference Guide (PI-MBUS-300 Rev. J)” MODICON, Inc.
  ☞ “OPEN MODBUS/TCP SPECIFICATION (Release 1.0)” Schneider Electric.

# 8 - 3 Description of Commands

## ■ Application section

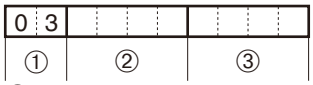
The following data descriptions


are single byte hex descriptions (left side is the upper nibble)

## ■ Read holding registers (FC=03H)

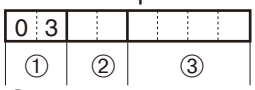
### ● One data item

• Request



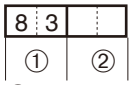

① Function code (Read Holding Registers)
② Start data address
③ Number of data records (=1)

• Normal response




① Function code (Read Holding Registers)
② Number of bytes (=2)
③ Read data

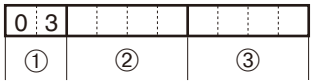
• Abnormal response




① Error code (Read Holding Registers)
② Exception code (=01H/02H/03H/06H)

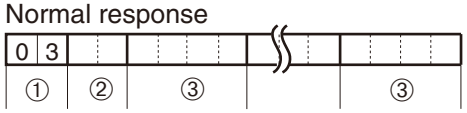
### ● Multiple data items

• Request



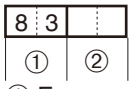

① Function code (Read Holding Registers)
② Start data address
③ Number of data records

• Normal response




① Function code (Read Holding Registers)
② Number of bytes
③ Read data (data items continue for the number of read items)

• Abnormal response

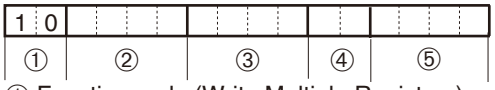



① Error code (Read Holding Registers)
② Exception code (=01/02/03/06)

## ■ Write multiple registers (FC=10H)

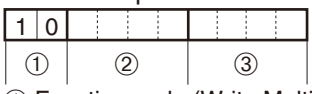
### ● One data item

• Request



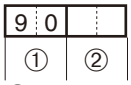

① Function code (Write Multiple Registers)
② Start data address
③ Number of data records (=1)
④ Number of bytes (= number of data records x 2)
⑤ Write data

• Normal response




① Function code (Write Multiple Registers)
② Start data address
③ Number of data records (=1)

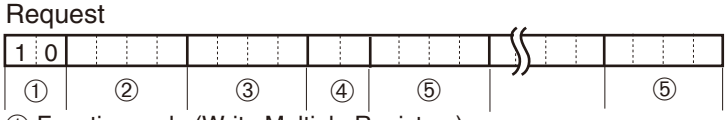
• Abnormal response




① Error code (Write Multiple Registers)
② Exception code (=01H/02H/03H/06H)

### ● Multiple data items

• Request

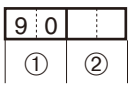



① Function code (Write Multiple Registers)
② Start data address
③ Number of data records
④ Number of bytes (= number of data records x 2)
⑤ Write data

• Normal response


① Function code (Write Multiple Registers)
② Start data address
③ Number of data records

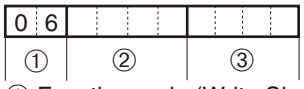
• Abnormal response




① Error code (Write Multiple Registers)
② Exception code (=01H/02H/03H/06H)

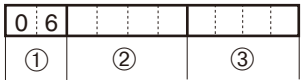
## ■ Write single Register (FC=06H)

• Request



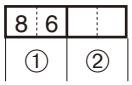

① Function code (Write Single Register)
② Write address
③ Write data

• Normal response




① Function code (Write Single Register)
② Write address
③ Write data (echo back)

• Abnormal response




① Error code (Write Single Register)
② Exception code (=01H/02H/03H/06H)

# Chapter 9. LIST OF COMMUNICATION DATA

## Description of list

### RAM and EEPROM Read/Write

No symbol : Possible
× : Not possible

#### ! Handling Precautions

- When reading the EEPROM address, data in the RAM is read in the same manner as the reading of the RAM address.
- Even there is no symbol, reading or writing might not be possible depending on the conditions.

### Decimal point information

– : No decimal point
1 to 2 : Number of digits after the decimal point (original communication data is multiplied by 10 or 100)
PULSE : Determined by the settings for “decimal point position” 1 to 16 in the pulse instant value bank.

### MODBUS communications

#### ! Handling Precautions

- In MODBUS communications, the communication address (parameter) for the module that is set in the host device may be reduced by 1 in a communication message during transmission.
  Example: If the communication address (parameter) is set to 1001 in the host device, it will be 1000 in a communication message during transmission.
- The module sends/receives a message to/from the communication address (parameter) that is specified in the communication message. Be sure to understand the specifications of the host device before using the module.

### Bitmap allocation

For some data (bit: ON/OFF), bitmaps will be grouped by data type within 16-bit data.

## Monitor/Monitor

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Monitor | Alarm | 1 | Alarm information 1 | 10288 | 2830 | 26672 | 6830 | | × | | × | – | • Alarm information 1 (See P. 9-43) |
| Monitor | Alarm | 1 | Alarm information 2 | 10289 | 2831 | 26673 | 6831 | | × | | × | – | • Alarm information 2 (See P. 9-43) |
| Monitor | Alarm | 1 | Alarm information 3 | 10290 | 2832 | 26674 | 6832 | | × | | × | – | • Alarm information 3 (See P. 9-43) |
| Monitor | Alarm | 1 | Alarm information 4 | 10291 | 2833 | 26675 | 6833 | | × | | × | – | • Alarm information 4 (See P. 9-43) |
| Monitor | Monitor (DI Input) | 1 | DI input 1 to 16 | 10832 | 2A50 | 27216 | 6A50 | | × | | × | – | • DI input 1 to 16 (See P.9-44 ) |
| Monitor | Monitor (DI Input) | 1 | Reserved for system use | 10833 | 2A51 | 27217 | 6A51 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 1 | DI input (before input delay) | 10834 | 2A52 | 27218 | 6A52 | | × | | × | – | • DI input (before delay) 1 to 16 (See P. 9-44) |
| Monitor | Monitor (DI Input) | 1 | Reserved for system use | 10835 | 2A53 | 27219 | 6A53 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 1 | DI input | 10848 | 2A60 | 27232 | 6A60 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 1 | DI input (before input delay) | 10849 | 2A61 | 27233 | 6A61 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 2 | DI input | 10852 | 2A64 | 27236 | 6A64 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 2 | DI input (before input delay) | 10853 | 2A65 | 27237 | 6A65 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 3 | DI input | 10856 | 2A68 | 27240 | 6A68 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 3 | DI input (before input delay) | 10857 | 2A69 | 27241 | 6A69 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 4 | DI input | 10860 | 2A6C | 27244 | 6A6C | | × | | × | – | |
| Monitor | Monitor (DI Input) | 4 | DI input (before input delay) | 10861 | 2A6D | 27245 | 6A6D | | × | | × | – | |
| Monitor | Monitor (DI Input) | 5 | DI input | 10864 | 2A70 | 27248 | 6A70 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 5 | DI input (before input delay) | 10865 | 2A71 | 27249 | 6A71 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 6 | DI input | 10868 | 2A74 | 27252 | 6A74 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 6 | DI input (before input delay) | 10869 | 2A75 | 27253 | 6A75 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 7 | DI input | 10872 | 2A78 | 27256 | 6A78 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 7 | DI input (before input delay) | 10873 | 2A79 | 27257 | 6A79 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 8 | DI input | 10876 | 2A7C | 27260 | 6A7C | | × | | × | – | |
| Monitor | Monitor (DI Input) | 8 | DI input (before input delay) | 10877 | 2A7D | 27261 | 6A7D | | × | | × | – | |
| Monitor | Monitor (DI Input) | 9 | DI input | 10880 | 2A80 | 27264 | 6A80 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 9 | DI input (before input delay) | 10881 | 2A81 | 27265 | 6A81 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 10 | DI input | 10884 | 2A84 | 27268 | 6A84 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 10 | DI input (before input delay) | 10885 | 2A85 | 27269 | 6A85 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 11 | DI input | 10888 | 2A88 | 27272 | 6A88 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 11 | DI input (before input delay) | 10889 | 2A89 | 27273 | 6A89 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 12 | DI input | 10892 | 2A8C | 27276 | 6A8C | | × | | × | – | |
| Monitor | Monitor (DI Input) | 12 | DI input (before input delay) | 10893 | 2A8D | 27277 | 6A8D | | × | | × | – | |
| Monitor | Monitor (DI Input) | 13 | DI input | 10896 | 2A90 | 27280 | 6A90 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 13 | DI input (before input delay) | 10897 | 2A91 | 27281 | 6A91 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 14 | DI input | 10900 | 2A94 | 27284 | 6A94 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 14 | DI input (before input delay) | 10901 | 2A95 | 27285 | 6A95 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 15 | DI input | 10904 | 2A98 | 27288 | 6A98 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 15 | DI input (before input delay) | 10905 | 2A99 | 27289 | 6A99 | | × | | × | – | |
| Monitor | Monitor (DI Input) | 16 | DI input | 10908 | 2A9C | 27292 | 6A9C | | × | | × | – | |
| Monitor | Monitor (DI Input) | 16 | DI input (before input delay) | 10909 | 2A9D | 27293 | 6A9D | | × | | × | – | |
| Monitor | Monitor (EV Output) | 1 | EV output | 10496 | 2900 | 26880 | 6900 | | × | | × | – | |

## Monitor/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Monitor | Monitor (Pulse Estimate Value) | 1 | Estimate value (L) | 11360 | 2C60 | 27744 | 6C60 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 1 | Estimate value (H) | 11361 | 2C61 | 27745 | 6C61 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 1 | Estimate value before reset (L) | 11362 | 2C62 | 27746 | 6C62 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 1 | Estimate value before reset (H) | 11363 | 2C63 | 27747 | 6C63 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 1 | Estimate value before preset (L) | 11364 | 2C64 | 27748 | 6C64 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 1 | Estimate value before preset (H) | 11365 | 2C65 | 27749 | 6C65 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 1 | Estimate value reset received flag | 11367 | 2C67 | 27751 | 6C67 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 1 | Estimate value reset completed flag | 11368 | 2C68 | 27752 | 6C68 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 1 | Estimate value preset received flag | 11369 | 2C69 | 27753 | 6C69 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 1 | Estimate value preset completed flag | 11370 | 2C6A | 27754 | 6C6A | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 2 | Estimate value (L) | 11376 | 2C70 | 27760 | 6C70 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 2 | Estimate value (H) | 11377 | 2C71 | 27761 | 6C71 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 2 | Estimate value before reset (L) | 11378 | 2C72 | 27762 | 6C72 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 2 | Estimate value before reset (H) | 11379 | 2C73 | 27763 | 6C73 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 2 | Estimate value before preset (L) | 11380 | 2C74 | 27764 | 6C74 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 2 | Estimate value before preset (H) | 11381 | 2C75 | 27765 | 6C75 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 2 | Estimate value reset received flag | 11383 | 2C77 | 27767 | 6C77 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 2 | Estimate value reset completed flag | 11384 | 2C78 | 27768 | 6C78 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 2 | Estimate value preset received flag | 11385 | 2C79 | 27769 | 6C79 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 2 | Estimate value preset completed flag | 11386 | 2C7A | 27770 | 6C7A | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 3 | Estimate value (L) | 11392 | 2C80 | 27776 | 6C80 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 3 | Estimate value (H) | 11393 | 2C81 | 27777 | 6C81 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 3 | Estimate value before reset (L) | 11394 | 2C82 | 27778 | 6C82 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 3 | Estimate value before reset (H) | 11395 | 2C83 | 27779 | 6C83 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 3 | Estimate value before preset (L) | 11396 | 2C84 | 27780 | 6C84 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 3 | Estimate value before preset (H) | 11397 | 2C85 | 27781 | 6C85 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 3 | Estimate value reset received flag | 11399 | 2C87 | 27783 | 6C87 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 3 | Estimate value reset completed flag | 11400 | 2C88 | 27784 | 6C88 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 3 | Estimate value preset received flag | 11401 | 2C89 | 27785 | 6C89 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 3 | Estimate value preset completed flag | 11402 | 2C8A | 27786 | 6C8A | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 4 | Estimate value (L) | 11408 | 2C90 | 27792 | 6C90 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 4 | Estimate value (H) | 11409 | 2C91 | 27793 | 6C91 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 4 | Estimate value before reset (L) | 11410 | 2C92 | 27794 | 6C92 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 4 | Estimate value before reset (H) | 11411 | 2C93 | 27795 | 6C93 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 4 | Estimate value before preset (L) | 11412 | 2C94 | 27796 | 6C94 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 4 | Estimate value before preset (H) | 11413 | 2C95 | 27797 | 6C95 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 4 | Estimate value reset received flag | 11415 | 2C97 | 27799 | 6C97 | | × | | × | – | |

## Monitor/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Monitor | Monitor (Pulse Estimate Value) | 4 | Estimate value reset completed flag | 11416 | 2C98 | 27800 | 6C98 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 4 | Estimate value preset received flag | 11417 | 2C99 | 27801 | 6C99 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 4 | Estimate value preset completed flag | 11418 | 2C9A | 27802 | 6C9A | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 5 | Estimate value (L) | 11424 | 2CA0 | 27808 | 6CA0 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 5 | Estimate value (H) | 11425 | 2CA1 | 27809 | 6CA1 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 5 | Estimate value before reset (L) | 11426 | 2CA2 | 27810 | 6CA2 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 5 | Estimate value before reset (H) | 11427 | 2CA3 | 27811 | 6CA3 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 5 | Estimate value before preset (L) | 11428 | 2CA4 | 27812 | 6CA4 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 5 | Estimate value before preset (H) | 11429 | 2CA5 | 27813 | 6CA5 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 5 | Estimate value reset received flag | 11431 | 2CA7 | 27815 | 6CA7 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 5 | Estimate value reset completed flag | 11432 | 2CA8 | 27816 | 6CA8 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 5 | Estimate value preset received flag | 11433 | 2CA9 | 27817 | 6CA9 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 5 | Estimate value preset completed flag | 11434 | 2CAA | 27818 | 6CAA | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 6 | Estimate value (L) | 11440 | 2CB0 | 27824 | 6CB0 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 6 | Estimate value (H) | 11441 | 2CB1 | 27825 | 6CB1 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 6 | Estimate value before reset (L) | 11442 | 2CB2 | 27826 | 6CB2 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 6 | Estimate value before reset (H) | 11443 | 2CB3 | 27827 | 6CB3 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 6 | Estimate value before preset (L) | 11444 | 2CB4 | 27828 | 6CB4 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 6 | Estimate value before preset (H) | 11445 | 2CB5 | 27829 | 6CB5 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 6 | Estimate value reset received flag | 11447 | 2CB7 | 27831 | 6CB7 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 6 | Estimate value reset completed flag | 11448 | 2CB8 | 27832 | 6CB8 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 6 | Estimate value preset received flag | 11449 | 2CB9 | 27833 | 6CB9 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 6 | Estimate value preset completed flag | 11450 | 2CBA | 27834 | 6CBA | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 7 | Estimate value (L) | 11456 | 2CC0 | 27840 | 6CC0 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 7 | Estimate value (H) | 11457 | 2CC1 | 27841 | 6CC1 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 7 | Estimate value before reset (L) | 11458 | 2CC2 | 27842 | 6CC2 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 7 | Estimate value before reset (H) | 11459 | 2CC3 | 27843 | 6CC3 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 7 | Estimate value before preset (L) | 11460 | 2CC4 | 27844 | 6CC4 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 7 | Estimate value before preset (H) | 11461 | 2CC5 | 27845 | 6CC5 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 7 | Estimate value reset received flag | 11463 | 2CC7 | 27847 | 6CC7 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 7 | Estimate value reset completed flag | 11464 | 2CC8 | 27848 | 6CC8 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 7 | Estimate value preset received flag | 11465 | 2CC9 | 27849 | 6CC9 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 7 | Estimate value preset completed flag | 11466 | 2CCA | 27850 | 6CCA | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 8 | Estimate value (L) | 11472 | 2CD0 | 27856 | 6CD0 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 8 | Estimate value (H) | 11473 | 2CD1 | 27857 | 6CD1 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 8 | Estimate value before reset (L) | 11474 | 2CD2 | 27858 | 6CD2 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 8 | Estimate value before reset (H) | 11475 | 2CD3 | 27859 | 6CD3 | | × | | × | – | |

## Monitor/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Monitor | Monitor (Pulse Estimate Value) | 8 | Estimate value before preset (L) | 11476 | 2CD4 | 27860 | 6CD4 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 8 | Estimate value before preset (H) | 11477 | 2CD5 | 27861 | 6CD5 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 8 | Estimate value reset received flag | 11479 | 2CD7 | 27863 | 6CD7 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 8 | Estimate value reset completed flag | 11480 | 2CD8 | 27864 | 6CD8 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 8 | Estimate value preset received flag | 11481 | 2CD9 | 27865 | 6CD9 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 8 | Estimate value preset completed flag | 11482 | 2CDA | 27866 | 6CDA | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 9 | Estimate value (L) | 11488 | 2CE0 | 27872 | 6CE0 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 9 | Estimate value (H) | 11489 | 2CE1 | 27873 | 6CE1 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 9 | Estimate value before reset (L) | 11490 | 2CE2 | 27874 | 6CE2 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 9 | Estimate value before reset (H) | 11491 | 2CE3 | 27875 | 6CE3 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 9 | Estimate value before preset (L) | 11492 | 2CE4 | 27876 | 6CE4 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 9 | Estimate value before preset (H) | 11493 | 2CE5 | 27877 | 6CE5 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 9 | Estimate value reset received flag | 11495 | 2CE7 | 27879 | 6CE7 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 9 | Estimate value reset completed flag | 11496 | 2CE8 | 27880 | 6CE8 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 9 | Estimate value preset received flag | 11497 | 2CE9 | 27881 | 6CE9 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 9 | Estimate value preset completed flag | 11498 | 2CEA | 27882 | 6CEA | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 10 | Estimate value (L) | 11504 | 2CF0 | 27888 | 6CF0 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 10 | Estimate value (H) | 11505 | 2CF1 | 27889 | 6CF1 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 10 | Estimate value before reset (L) | 11506 | 2CF2 | 27890 | 6CF2 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 10 | Estimate value before reset (H) | 11507 | 2CF3 | 27891 | 6CF3 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 10 | Estimate value before preset (L) | 11508 | 2CF4 | 27892 | 6CF4 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 10 | Estimate value before preset (H) | 11509 | 2CF5 | 27893 | 6CF5 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 10 | Estimate value reset received flag | 11511 | 2CF7 | 27895 | 6CF7 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 10 | Estimate value reset completed flag | 11512 | 2CF8 | 27896 | 6CF8 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 10 | Estimate value preset received flag | 11513 | 2CF9 | 27897 | 6CF9 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 10 | Estimate value preset completed flag | 11514 | 2CFA | 27898 | 6CFA | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 11 | Estimate value (L) | 11520 | 2D00 | 27904 | 6D00 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 11 | Estimate value (H) | 11521 | 2D01 | 27905 | 6D01 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 11 | Estimate value before reset (L) | 11522 | 2D02 | 27906 | 6D02 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 11 | Estimate value before reset (H) | 11523 | 2D03 | 27907 | 6D03 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 11 | Estimate value before preset (L) | 11524 | 2D04 | 27908 | 6D04 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 11 | Estimate value before preset (H) | 11525 | 2D05 | 27909 | 6D05 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 11 | Estimate value reset received flag | 11527 | 2D07 | 27911 | 6D07 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 11 | Estimate value reset completed flag | 11528 | 2D08 | 27912 | 6D08 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 11 | Estimate value preset received flag | 11529 | 2D09 | 27913 | 6D09 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 11 | Estimate value preset completed flag | 11530 | 2D0A | 27914 | 6D0A | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 12 | Estimate value (L) | 11536 | 2D10 | 27920 | 6D10 | | × | | × | – | |

## Monitor/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Monitor | Monitor (Pulse Estimate Value) | 12 | Estimate value (H) | 11537 | 2D11 | 27921 | 6D11 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 12 | Estimate value before reset (L) | 11538 | 2D12 | 27922 | 6D12 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 12 | Estimate value before reset (H) | 11539 | 2D13 | 27923 | 6D13 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 12 | Estimate value before preset (L) | 11540 | 2D14 | 27924 | 6D14 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 12 | Estimate value before preset (H) | 11541 | 2D15 | 27925 | 6D15 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 12 | Estimate value reset received flag | 11543 | 2D17 | 27927 | 6D17 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 12 | Estimate value reset completed flag | 11544 | 2D18 | 27928 | 6D18 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 12 | Estimate value preset received flag | 11545 | 2D19 | 27929 | 6D19 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 12 | Estimate value preset completed flag | 11546 | 2D1A | 27930 | 6D1A | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 13 | Estimate value (L) | 11552 | 2D20 | 27936 | 6D20 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 13 | Estimate value (H) | 11553 | 2D21 | 27937 | 6D21 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 13 | Estimate value before reset (L) | 11554 | 2D22 | 27938 | 6D22 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 13 | Estimate value before reset (H) | 11555 | 2D23 | 27939 | 6D23 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 13 | Estimate value before preset (L) | 11556 | 2D24 | 27940 | 6D24 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 13 | Estimate value before preset (H) | 11557 | 2D25 | 27941 | 6D25 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 13 | Estimate value reset received flag | 11559 | 2D27 | 27943 | 6D27 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 13 | Estimate value reset completed flag | 11560 | 2D28 | 27944 | 6D28 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 13 | Estimate value preset received flag | 11561 | 2D29 | 27945 | 6D29 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 13 | Estimate value preset completed flag | 11562 | 2D2A | 27946 | 6D2A | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 14 | Estimate value (L) | 11568 | 2D30 | 27952 | 6D30 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 14 | Estimate value (H) | 11569 | 2D31 | 27953 | 6D31 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 14 | Estimate value before reset (L) | 11570 | 2D32 | 27954 | 6D32 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 14 | Estimate value before reset (H) | 11571 | 2D33 | 27955 | 6D33 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 14 | Estimate value before preset (L) | 11572 | 2D34 | 27956 | 6D34 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 14 | Estimate value before preset (H) | 11573 | 2D35 | 27957 | 6D35 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 14 | Estimate value reset received flag | 11575 | 2D37 | 27959 | 6D37 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 14 | Estimate value reset completed flag | 11576 | 2D38 | 27960 | 6D38 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 14 | Estimate value preset received flag | 11577 | 2D39 | 27961 | 6D39 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 14 | Estimate value preset completed flag | 11578 | 2D3A | 27962 | 6D3A | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 15 | Estimate value (L) | 11584 | 2D40 | 27968 | 6D40 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 15 | Estimate value (H) | 11585 | 2D41 | 27969 | 6D41 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 15 | Estimate value before reset (L) | 11586 | 2D42 | 27970 | 6D42 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 15 | Estimate value before reset (H) | 11587 | 2D43 | 27971 | 6D43 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 15 | Estimate value before preset (L) | 11588 | 2D44 | 27972 | 6D44 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 15 | Estimate value before preset (H) | 11589 | 2D45 | 27973 | 6D45 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 15 | Estimate value reset received flag | 11591 | 2D47 | 27975 | 6D47 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 15 | Estimate value reset completed flag | 11592 | 2D48 | 27976 | 6D48 | | × | | × | – | |

## Monitor/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Monitor | Monitor (Pulse Estimate Value) | 15 | Estimate value preset received flag | 11593 | 2D49 | 27977 | 6D49 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 15 | Estimate value preset completed flag | 11594 | 2D4A | 27978 | 6D4A | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 16 | Estimate value (L) | 11600 | 2D50 | 27984 | 6D50 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 16 | Estimate value (H) | 11601 | 2D51 | 27985 | 6D51 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 16 | Estimate value before reset (L) | 11602 | 2D52 | 27986 | 6D52 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 16 | Estimate value before reset (H) | 11603 | 2D53 | 27987 | 6D53 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 16 | Estimate value before preset (L) | 11604 | 2D54 | 27988 | 6D54 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 16 | Estimate value before preset (H) | 11605 | 2D55 | 27989 | 6D55 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 16 | Estimate value reset received flag | 11607 | 2D57 | 27991 | 6D57 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 16 | Estimate value reset completed flag | 11608 | 2D58 | 27992 | 6D58 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 16 | Estimate value preset received flag | 11609 | 2D59 | 27993 | 6D59 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Value) | 16 | Estimate value preset completed flag | 11610 | 2D5A | 27994 | 6D5A | | × | | × | – | |

## Monitor/Pulse Instant Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Monitor | Monitor (Pulse Instant Value) | 1 | Instant value | 11888 | 2E70 | 28272 | 6E70 | | × | | × | PULSE | |
| Monitor | Monitor (Pulse Instant Value) | 1 | Instant value upper limit flag | 11889 | 2E71 | 28273 | 6E71 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 1 | Instant value lower limit flag | 11890 | 2E72 | 28274 | 6E72 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 1 | Instant value reset received flag | 11891 | 2E73 | 28275 | 6E73 | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 1 | Instant value reset completed flag | 11892 | 2E74 | 28276 | 6E74 | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 2 | Instant value | 11896 | 2E78 | 28280 | 6E78 | | × | | × | PULSE | |
| Monitor | Monitor (Pulse Instant Value) | 2 | Instant value upper limit flag | 11897 | 2E79 | 28281 | 6E79 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 2 | Instant value lower limit flag | 11898 | 2E7A | 28282 | 6E7A | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 2 | Instant value reset received flag | 11899 | 2E7B | 28283 | 6E7B | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 2 | Instant value reset completed flag | 11900 | 2E7C | 28284 | 6E7C | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 3 | Instant value | 11904 | 2E80 | 28288 | 6E80 | | × | | × | PULSE | |
| Monitor | Monitor (Pulse Instant Value) | 3 | Instant value upper limit flag | 11905 | 2E81 | 28289 | 6E81 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 3 | Instant value lower limit flag | 11906 | 2E82 | 28290 | 6E82 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 3 | Instant value reset received flag | 11907 | 2E83 | 28291 | 6E83 | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 3 | Instant value reset completed flag | 11908 | 2E84 | 28292 | 6E84 | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 4 | Instant value | 11912 | 2E88 | 28296 | 6E88 | | × | | × | PULSE | |
| Monitor | Monitor (Pulse Instant Value) | 4 | Instant value upper limit flag | 11913 | 2E89 | 28297 | 6E89 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 4 | Instant value lower limit flag | 11914 | 2E8A | 28298 | 6E8A | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 4 | Instant value reset received flag | 11915 | 2E8B | 28299 | 6E8B | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 4 | Instant value reset completed flag | 11916 | 2E8C | 28300 | 6E8C | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 5 | Instant value | 11920 | 2E90 | 28304 | 6E90 | | × | | × | PULSE | |
| Monitor | Monitor (Pulse Instant Value) | 5 | Instant value upper limit flag | 11921 | 2E91 | 28305 | 6E91 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 5 | Instant value lower limit flag | 11922 | 2E92 | 28306 | 6E92 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 5 | Instant value reset received flag | 11923 | 2E93 | 28307 | 6E93 | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 5 | Instant value reset completed flag | 11924 | 2E94 | 28308 | 6E94 | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 6 | Instant value | 11928 | 2E98 | 28312 | 6E98 | | × | | × | PULSE | |
| Monitor | Monitor (Pulse Instant Value) | 6 | Instant value upper limit flag | 11929 | 2E99 | 28313 | 6E99 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 6 | Instant value lower limit flag | 11930 | 2E9A | 28314 | 6E9A | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 6 | Instant value reset received flag | 11931 | 2E9B | 28315 | 6E9B | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 6 | Instant value reset completed flag | 11932 | 2E9C | 28316 | 6E9C | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 7 | Instant value | 11936 | 2EA0 | 28320 | 6EA0 | | × | | × | PULSE | |
| Monitor | Monitor (Pulse Instant Value) | 7 | Instant value upper limit flag | 11937 | 2EA1 | 28321 | 6EA1 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 7 | Instant value lower limit flag | 11938 | 2EA2 | 28322 | 6EA2 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 7 | Instant value reset received flag | 11939 | 2EA3 | 28323 | 6EA3 | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 7 | Instant value reset completed flag | 11940 | 2EA4 | 28324 | 6EA4 | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 8 | Instant value | 11944 | 2EA8 | 28328 | 6EA8 | | × | | × | PULSE | |
| Monitor | Monitor (Pulse Instant Value) | 8 | Instant value upper limit flag | 11945 | 2EA9 | 28329 | 6EA9 | | × | | × | - | |

## Monitor/Pulse Instant Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Monitor | Monitor (Pulse Instant Value) | 8 | Instant value lower limit flag | 11946 | 2EAA | 28330 | 6EAA | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 8 | Instant value reset received flag | 11947 | 2EAB | 28331 | 6EAB | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 8 | Instant value reset completed flag | 11948 | 2EAC | 28332 | 6EAC | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 9 | Instant value | 11952 | 2EB0 | 28336 | 6EB0 | | × | | × | PULSE | |
| Monitor | Monitor (Pulse Instant Value) | 9 | Instant value upper limit flag | 11953 | 2EB1 | 28337 | 6EB1 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 9 | Instant value lower limit flag | 11954 | 2EB2 | 28338 | 6EB2 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 9 | Instant value reset received flag | 11955 | 2EB3 | 28339 | 6EB3 | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 9 | Instant value reset completed flag | 11956 | 2EB4 | 28340 | 6EB4 | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 10 | Instant value | 11960 | 2EB8 | 28344 | 6EB8 | | × | | × | PULSE | |
| Monitor | Monitor (Pulse Instant Value) | 10 | Instant value upper limit flag | 11961 | 2EB9 | 28345 | 6EB9 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 10 | Instant value lower limit flag | 11962 | 2EBA | 28346 | 6EBA | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 10 | Instant value reset received flag | 11963 | 2EBB | 28347 | 6EBB | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 10 | Instant value reset completed flag | 11964 | 2EBC | 28348 | 6EBC | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 11 | Instant value | 11968 | 2EC0 | 28352 | 6EC0 | | × | | × | PULSE | |
| Monitor | Monitor (Pulse Instant Value) | 11 | Instant value upper limit flag | 11969 | 2EC1 | 28353 | 6EC1 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 11 | Instant value lower limit flag | 11970 | 2EC2 | 28354 | 6EC2 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 11 | Instant value reset received flag | 11971 | 2EC3 | 28355 | 6EC3 | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 11 | Instant value reset completed flag | 11972 | 2EC4 | 28356 | 6EC4 | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 12 | Instant value | 11976 | 2EC8 | 28360 | 6EC8 | | × | | × | PULSE | |
| Monitor | Monitor (Pulse Instant Value) | 12 | Instant value upper limit flag | 11977 | 2EC9 | 28361 | 6EC9 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 12 | Instant value lower limit flag | 11978 | 2ECA | 28362 | 6ECA | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 12 | Instant value reset received flag | 11979 | 2ECB | 28363 | 6ECB | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 12 | Instant value reset completed flag | 11980 | 2ECC | 28364 | 6ECC | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 13 | Instant value | 11984 | 2ED0 | 28368 | 6ED0 | | × | | × | PULSE | |
| Monitor | Monitor (Pulse Instant Value) | 13 | Instant value upper limit flag | 11985 | 2ED1 | 28369 | 6ED1 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 13 | Instant value lower limit flag | 11986 | 2ED2 | 28370 | 6ED2 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 13 | Instant value reset received flag | 11987 | 2ED3 | 28371 | 6ED3 | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 13 | Instant value reset completed flag | 11988 | 2ED4 | 28372 | 6ED4 | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 14 | Instant value | 11992 | 2ED8 | 28376 | 6ED8 | | × | | × | PULSE | |
| Monitor | Monitor (Pulse Instant Value) | 14 | Instant value upper limit flag | 11993 | 2ED9 | 28377 | 6ED9 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 14 | Instant value lower limit flag | 11994 | 2EDA | 28378 | 6EDA | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 14 | Instant value reset received flag | 11995 | 2EDB | 28379 | 6EDB | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 14 | Instant value reset completed flag | 11996 | 2EDC | 28380 | 6EDC | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 15 | Instant value | 12000 | 2EE0 | 28384 | 6EE0 | | × | | × | PULSE | |
| Monitor | Monitor (Pulse Instant Value) | 15 | Instant value upper limit flag | 12001 | 2EE1 | 28385 | 6EE1 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 15 | Instant value lower limit flag | 12002 | 2EE2 | 28386 | 6EE2 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 15 | Instant value reset received flag | 12003 | 2EE3 | 28387 | 6EE3 | | × | | × | – | |

## Monitor/Pulse Instant Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Monitor | Monitor (Pulse Instant Value) | 15 | Instant value reset completed flag | 12004 | 2EE4 | 28388 | 6EE4 | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 16 | Instant value | 12008 | 2EE8 | 28392 | 6EE8 | | × | | × | PULSE | |
| Monitor | Monitor (Pulse Instant Value) | 16 | Instant value upper limit flag | 12009 | 2EE9 | 28393 | 6EE9 | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 16 | Instant value lower limit flag | 12010 | 2EEA | 28394 | 6EEA | | × | | × | - | |
| Monitor | Monitor (Pulse Instant Value) | 16 | Instant value reset received flag | 12011 | 2EEB | 28395 | 6EEB | | × | | × | – | |
| Monitor | Monitor (Pulse Instant Value) | 16 | Instant value reset completed flag | 12012 | 2EEC | 28396 | 6EEC | | × | | × | – | |

## Monitor/Pulse Count Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Monitor | Monitor (Pulse Count Value) | 1 | Estimate count value (L) | 11232 | 2BE0 | 27616 | 6BE0 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 1 | Estimate count value (H) | 11233 | 2BE1 | 27617 | 6BE1 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 1 | Instant count value (L) | 11234 | 2BE2 | 27618 | 6BE2 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 1 | Instant count value (H) | 11235 | 2BE3 | 27619 | 6BE3 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 2 | Estimate count value (L) | 11240 | 2BE8 | 27624 | 6BE8 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 2 | Estimate count value (H) | 11241 | 2BE9 | 27625 | 6BE9 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 2 | Instant count value (L) | 11242 | 2BEA | 27626 | 6BEA | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 2 | Instant count value (H) | 11243 | 2BEB | 27627 | 6BEB | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 3 | Estimate count value (L) | 11248 | 2BF0 | 27632 | 6BF0 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 3 | Estimate count value (H) | 11249 | 2BF1 | 27633 | 6BF1 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 3 | Instant count value (L) | 11250 | 2BF2 | 27634 | 6BF2 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 3 | Instant count value (H) | 11251 | 2BF3 | 27635 | 6BF3 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 4 | Estimate count value (L) | 11256 | 2BF8 | 27640 | 6BF8 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 4 | Estimate count value (H) | 11257 | 2BF9 | 27641 | 6BF9 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 4 | Instant count value (L) | 11258 | 2BFA | 27642 | 6BFA | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 4 | Instant count value (H) | 11259 | 2BFB | 27643 | 6BFB | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 5 | Estimate count value (L) | 11264 | 2C00 | 27648 | 6C00 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 5 | Estimate count value (H) | 11265 | 2C01 | 27649 | 6C01 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 5 | Instant count value (L) | 11266 | 2C02 | 27650 | 6C02 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 5 | Instant count value (H) | 11267 | 2C03 | 27651 | 6C03 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 6 | Estimate count value (L) | 11272 | 2C08 | 27656 | 6C08 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 6 | Estimate count value (H) | 11273 | 2C09 | 27657 | 6C09 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 6 | Instant count value (L) | 11274 | 2C0A | 27658 | 6C0A | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 6 | Instant count value (H) | 11275 | 2C0B | 27659 | 6C0B | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 7 | Estimate count value (L) | 11280 | 2C10 | 27664 | 6C10 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 7 | Estimate count value (H) | 11281 | 2C11 | 27665 | 6C11 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 7 | Instant count value (L) | 11282 | 2C12 | 27666 | 6C12 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 7 | Instant count value (H) | 11283 | 2C13 | 27667 | 6C13 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 8 | Estimate count value (L) | 11288 | 2C18 | 27672 | 6C18 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 8 | Estimate count value (H) | 11289 | 2C19 | 27673 | 6C19 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 8 | Instant count value (L) | 11290 | 2C1A | 27674 | 6C1A | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 8 | Instant count value (H) | 11291 | 2C1B | 27675 | 6C1B | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 9 | Estimate count value (L) | 11296 | 2C20 | 27680 | 6C20 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 9 | Estimate count value (H) | 11297 | 2C21 | 27681 | 6C21 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 9 | Instant count value (L) | 11298 | 2C22 | 27682 | 6C22 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 9 | Instant count value (H) | 11299 | 2C23 | 27683 | 6C23 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 10 | Estimate count value (L) | 11304 | 2C28 | 27688 | 6C28 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 10 | Estimate count value (H) | 11305 | 2C29 | 27689 | 6C29 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 10 | Instant count value (L) | 11306 | 2C2A | 27690 | 6C2A | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 10 | Instant count value (H) | 11307 | 2C2B | 27691 | 6C2B | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 11 | Estimate count value (L) | 11312 | 2C30 | 27696 | 6C30 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 11 | Estimate count value (H) | 11313 | 2C31 | 27697 | 6C31 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 11 | Instant count value (L) | 11314 | 2C32 | 27698 | 6C32 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 11 | Instant count value (H) | 11315 | 2C33 | 27699 | 6C33 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 12 | Estimate count value (L) | 11320 | 2C38 | 27704 | 6C38 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 12 | Estimate count value (H) | 11321 | 2C39 | 27705 | 6C39 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 12 | Instant count value (L) | 11322 | 2C3A | 27706 | 6C3A | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 12 | Instant count value (H) | 11323 | 2C3B | 27707 | 6C3B | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 13 | Estimate count value (L) | 11328 | 2C40 | 27712 | 6C40 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 13 | Estimate count value (H) | 11329 | 2C41 | 27713 | 6C41 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 13 | Instant count value (L) | 11330 | 2C42 | 27714 | 6C42 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 13 | Instant count value (H) | 11331 | 2C43 | 27715 | 6C43 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 14 | Estimate count value (L) | 11336 | 2C48 | 27720 | 6C48 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 14 | Estimate count value (H) | 11337 | 2C49 | 27721 | 6C49 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 14 | Instant count value (L) | 11338 | 2C4A | 27722 | 6C4A | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 14 | Instant count value (H) | 11339 | 2C4B | 27723 | 6C4B | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 15 | Estimate count value (L) | 11344 | 2C50 | 27728 | 6C50 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 15 | Estimate count value (H) | 11345 | 2C51 | 27729 | 6C51 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 15 | Instant count value (L) | 11346 | 2C52 | 27730 | 6C52 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 15 | Instant count value (H) | 11347 | 2C53 | 27731 | 6C53 | | × | | × | – | |

## Monitor/Pulse Count Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Monitor | Monitor (Pulse Count Value) | 16 | Estimate count value (L) | 11352 | 2C58 | 27736 | 6C58 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 16 | Estimate count value (H) | 11353 | 2C59 | 27737 | 6C59 | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 16 | Instant count value (L) | 11354 | 2C5A | 27738 | 6C5A | | × | | × | – | |
| Monitor | Monitor (Pulse Count Value) | 16 | Instant count value (H) | 11355 | 2C5B | 27739 | 6C5B | | × | | × | – | |

## Monitor/Pulse Estimate Target Management

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Monitor | Monitor (Pulse Estimate Target Management) | 1 | Estimate target flag | 11616 | 2D60 | 28000 | 6D60 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 1 | Pre-target flag | 11617 | 2D61 | 28001 | 6D61 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 1 | Pre-pre-target flag | 11618 | 2D62 | 28002 | 6D62 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 1 | Estimate upper limit flag | 11619 | 2D63 | 28003 | 6D63 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 1 | Estimate lower limit flag | 11620 | 2D64 | 28004 | 6D64 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 2 | Estimate target flag | 11624 | 2D68 | 28008 | 6D68 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 2 | Pre-target flag | 11625 | 2D69 | 28009 | 6D69 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 2 | Pre-pre-target flag | 11626 | 2D6A | 28010 | 6D6A | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 2 | Estimate upper limit flag | 11627 | 2D6B | 28011 | 6D6B | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 2 | Estimate lower limit flag | 11628 | 2D6C | 28012 | 6D6C | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 3 | Estimate target flag | 11632 | 2D70 | 28016 | 6D70 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 3 | Pre-target flag | 11633 | 2D71 | 28017 | 6D71 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 3 | Pre-pre-target flag | 11634 | 2D72 | 28018 | 6D72 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 3 | Estimate upper limit flag | 11635 | 2D73 | 28019 | 6D73 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 3 | Estimate lower limit flag | 11636 | 2D74 | 28020 | 6D74 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 4 | Estimate target flag | 11640 | 2D78 | 28024 | 6D78 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 4 | Pre-target flag | 11641 | 2D79 | 28025 | 6D79 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 4 | Pre-pre-target flag | 11642 | 2D7A | 28026 | 6D7A | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 4 | Estimate upper limit flag | 11643 | 2D7B | 28027 | 6D7B | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 4 | Estimate lower limit flag | 11644 | 2D7C | 28028 | 6D7C | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 5 | Estimate target flag | 11648 | 2D80 | 28032 | 6D80 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 5 | Pre-target flag | 11649 | 2D81 | 28033 | 6D81 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 5 | Pre-pre-target flag | 11650 | 2D82 | 28034 | 6D82 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 5 | Estimate upper limit flag | 11651 | 2D83 | 28035 | 6D83 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 5 | Estimate lower limit flag | 11652 | 2D84 | 28036 | 6D84 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 6 | Estimate target flag | 11656 | 2D88 | 28040 | 6D88 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 6 | Pre-target flag | 11657 | 2D89 | 28041 | 6D89 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 6 | Pre-pre-target flag | 11658 | 2D8A | 28042 | 6D8A | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 6 | Estimate upper limit flag | 11659 | 2D8B | 28043 | 6D8B | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 6 | Estimate lower limit flag | 11660 | 2D8C | 28044 | 6D8C | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 7 | Estimate target flag | 11664 | 2D90 | 28048 | 6D90 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 7 | Pre-target flag | 11665 | 2D91 | 28049 | 6D91 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 7 | Pre-pre-target flag | 11666 | 2D92 | 28050 | 6D92 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 7 | Estimate upper limit flag | 11667 | 2D93 | 28051 | 6D93 | | × | | × | – | |

## Monitor/Pulse Estimate Target Management

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Monitor | Monitor (Pulse Estimate Target Management) | 7 | Estimate lower limit flag | 11668 | 2D94 | 28052 | 6D94 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 8 | Estimate target flag | 11672 | 2D98 | 28056 | 6D98 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 8 | Pre-target flag | 11673 | 2D99 | 28057 | 6D99 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 8 | Pre-pre-target flag | 11674 | 2D9A | 28058 | 6D9A | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 8 | Estimate upper limit flag | 11675 | 2D9B | 28059 | 6D9B | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 8 | Estimate lower limit flag | 11676 | 2D9C | 28060 | 6D9C | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 9 | Estimate target flag | 11680 | 2DA0 | 28064 | 6DA0 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 9 | Pre-target flag | 11681 | 2DA1 | 28065 | 6DA1 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 9 | Pre-pre-target flag | 11682 | 2DA2 | 28066 | 6DA2 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 9 | Estimate upper limit flag | 11683 | 2DA3 | 28067 | 6DA3 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 9 | Estimate lower limit flag | 11684 | 2DA4 | 28068 | 6DA4 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 10 | Estimate target flag | 11688 | 2DA8 | 28072 | 6DA8 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 10 | Pre-target flag | 11689 | 2DA9 | 28073 | 6DA9 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 10 | Pre-pre-target flag | 11690 | 2DAA | 28074 | 6DAA | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 10 | Estimate upper limit flag | 11691 | 2DAB | 28075 | 6DAB | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 10 | Estimate lower limit flag | 11692 | 2DAC | 28076 | 6DAC | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 11 | Estimate target flag | 11696 | 2DB0 | 28080 | 6DB0 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 11 | Pre-target flag | 11697 | 2DB1 | 28081 | 6DB1 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 11 | Pre-pre-target flag | 11698 | 2DB2 | 28082 | 6DB2 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 11 | Estimate upper limit flag | 11699 | 2DB3 | 28083 | 6DB3 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 11 | Estimate lower limit flag | 11700 | 2DB4 | 28084 | 6DB4 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 12 | Estimate target flag | 11704 | 2DB8 | 28088 | 6DB8 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 12 | Pre-target flag | 11705 | 2DB9 | 28089 | 6DB9 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 12 | Pre-pre-target flag | 11706 | 2DBA | 28090 | 6DBA | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 12 | Estimate upper limit flag | 11707 | 2DBB | 28091 | 6DBB | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 12 | Estimate lower limit flag | 11708 | 2DBC | 28092 | 6DBC | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 13 | Estimate target flag | 11712 | 2DC0 | 28096 | 6DC0 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 13 | Pre-target flag | 11713 | 2DC1 | 28097 | 6DC1 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 13 | Pre-pre-target flag | 11714 | 2DC2 | 28098 | 6DC2 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 13 | Estimate upper limit flag | 11715 | 2DC3 | 28099 | 6DC3 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 13 | Estimate lower limit flag | 11716 | 2DC4 | 28100 | 6DC4 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 14 | Estimate target flag | 11720 | 2DC8 | 28104 | 6DC8 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 14 | Pre-target flag | 11721 | 2DC9 | 28105 | 6DC9 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 14 | Pre-pre-target flag | 11722 | 2DCA | 28106 | 6DCA | | × | | × | – | |

## Monitor/Pulse Estimate Target Management

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Monitor | Monitor (Pulse Estimate Target Management) | 14 | Estimate upper limit flag | 11723 | 2DCB | 28107 | 6DCB | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 14 | Estimate lower limit flag | 11724 | 2DCC | 28108 | 6DCC | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 15 | Estimate target flag | 11728 | 2DD0 | 28112 | 6DD0 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 15 | Pre-target flag | 11729 | 2DD1 | 28113 | 6DD1 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 15 | Pre-pre-target flag | 11730 | 2DD2 | 28114 | 6DD2 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 15 | Estimate upper limit flag | 11731 | 2DD3 | 28115 | 6DD3 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 15 | Estimate lower limit flag | 11732 | 2DD4 | 28116 | 6DD4 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 16 | Estimate target flag | 11736 | 2DD8 | 28120 | 6DD8 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 16 | Pre-target flag | 11737 | 2DD9 | 28121 | 6DD9 | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 16 | Pre-pre-target flag | 11738 | 2DDA | 28122 | 6DDA | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 16 | Estimate upper limit flag | 11739 | 2DDB | 28123 | 6DDB | | × | | × | – | |
| Monitor | Monitor (Pulse Estimate Target Management) | 16 | Estimate lower limit flag | 11740 | 2DDC | 28124 | 6DDC | | × | | × | – | |

## Monitor/Standard Bit

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Monitor | Bits: 1024 to 1151 | 1 | Always 0 (Off) | 17664 | 4500 | – | – | | × | × | × | – | |
| Monitor | Bits: 1024 to 1151 | 1 | Always 1 (On) | 17665 | 4501 | – | – | | × | × | × | – | |
| Monitor | Bits: 1152 to 1279 | 1 | DI1 input status | 17792 | 4580 | – | – | | × | × | × | – | |
| Monitor | Bits: 1152 to 1279 | 1 | DI2 input status | 17793 | 4581 | – | – | | × | × | × | – | |
| Monitor | Bits: 1152 to 1279 | 1 | DI3 input status | 17794 | 4582 | – | – | | × | × | × | – | |
| Monitor | Bits: 1152 to 1279 | 1 | DI4 input status | 17795 | 4583 | – | – | | × | × | × | – | |
| Monitor | Bits: 1152 to 1279 | 1 | DI5 input status | 17796 | 4584 | – | – | | × | × | × | – | |
| Monitor | Bits: 1152 to 1279 | 1 | DI6 input status | 17797 | 4585 | – | – | | × | × | × | – | |
| Monitor | Bits: 1152 to 1279 | 1 | DI7 input status | 17798 | 4586 | – | – | | × | × | × | – | |
| Monitor | Bits: 1152 to 1279 | 1 | DI8 input status | 17799 | 4587 | – | – | | × | × | × | – | |
| Monitor | Bits: 1152 to 1279 | 1 | DI9 input status | 17800 | 4588 | – | – | | × | × | × | – | |
| Monitor | Bits: 1152 to 1279 | 1 | DI10 input status | 17801 | 4589 | – | – | | × | × | × | – | |
| Monitor | Bits: 1152 to 1279 | 1 | DI11 input status | 17802 | 458A | – | – | | × | × | × | – | |
| Monitor | Bits: 1152 to 1279 | 1 | DI12 input status | 17803 | 458B | – | – | | × | × | × | – | |
| Monitor | Bits: 1152 to 1279 | 1 | DI13 input status | 17804 | 458 | – | – | | × | × | × | – | |
| Monitor | Bits: 1152 to 1279 | 1 | DI14 input status | 17805 | 458D | – | – | | × | × | × | – | |
| Monitor | Bits: 1152 to 1279 | 1 | DI15 input status | 17806 | 458D | – | – | | × | × | × | – | |
| Monitor | Bits: 1152 to 1279 | 1 | DI16 input status | 17807 | 458F | – | – | | × | × | × | – | |
| Monitor | Bits: 1280 to 1407 | 1 | EV1 output status | 17924 | 4604 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 1 | 18048 | 4680 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 2 | 18049 | 4681 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 3 | 18050 | 4682 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 4 | 18051 | 4683 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 5 | 18052 | 4684 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 6 | 18053 | 4685 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 7 | 18054 | 4686 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 8 | 18055 | 4687 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 9 | 18056 | 4688 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 10 | 18057 | 4689 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 11 | 18058 | 468A | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 12 | 18059 | 468B | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 13 | 18060 | 468C | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 14 | 18061 | 468D | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 15 | 18062 | 468E | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 16 | 18063 | 468F | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 17 | 18064 | 4690 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 18 | 18065 | 4691 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 19 | 18066 | 4692 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 20 | 18067 | 4693 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 21 | 18068 | 4694 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 22 | 18069 | 4695 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 23 | 18070 | 4696 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 24 | 18071 | 4697 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 25 | 18072 | 4698 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 26 | 18073 | 4699 | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 27 | 18074 | 469A | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 28 | 18075 | 469B | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 29 | 18076 | 469C | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 30 | 18077 | 469D | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 31 | 18078 | 469E | – | – | | × | × | × | – | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 32 | 18079 | 469F | – | – | | × | × | × | – | |
| Monitor | Bits: 1536 to 1663 | 1 | RS-485 communication status (normal transmission of 1 frame) | 18185 | 4709 | – | – | | × | × | × | – | |
| Monitor | Bits: 1792 to 1919 | 1 | Representative of all alarms (OR for all displayed alarms) | 18432 | 4800 | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 1 | 18560 | 4880 | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 2 | 18561 | 4881 | – | – | | × | × | × | – | |

## Monitor/Standard Bit

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 3 | 18562 | 4882 | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 4 | 18563 | 4883 | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 5 | 18564 | 4884 | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 6 | 18565 | 4885 | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 7 | 18566 | 4886 | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 8 | 18567 | 4887 | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 9 | 18568 | 4888 | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 10 | 18569 | 4889 | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 11 | 18570 | 488A | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 12 | 18571 | 488A | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 13 | 18572 | 488C | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 14 | 18573 | 488D | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 15 | 18574 | 488E | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 16 | 18575 | 488F | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | Parameter error (AL94/AL97) | 18608 | 48B0 | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | Adjustment data error (AL95/AL98) | 18609 | 48B1 | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | EEPROM not initialized (AL83) | 18610 | 48B2 | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | ROM error (AL99) | 18612 | 48B4 | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | EEPROM RW error (AL86) | 18614 | 48B6 | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitors 1-16 (AL31) | 18619 | 48BB | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | Transmission time-out between modules (AL32) | 18620 | 48BC | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | Writing to EEPROM | 18621 | 48BD | – | – | | × | × | × | – | |
| Monitor | Bits: 1920 to 2047 | 1 | RS-485 settings error (AL33) | 18623 | 48BF | – | – | | × | × | × | – | |

## Monitor/User-Defined Bit

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Monitor | User-Defined Bit | 1 | User-defined bits 1 to 16 | 10080 | 2760 | 26464 | 6760 | | | | | – | • User-defined bits 1 to 16 (See P. 9-45) |
| Monitor | User-Defined Bit | 1 | User-defined bit 1 | 10081 | 2761 | 26465 | 6761 | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 2 | 10082 | 2762 | 26466 | 6762 | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 3 | 10083 | 2763 | 26467 | 6763 | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 4 | 10084 | 2764 | 26468 | 6764 | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 5 | 10085 | 2765 | 26469 | 6765 | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 6 | 10086 | 2766 | 26470 | 6766 | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 7 | 10087 | 2767 | 26471 | 6767 | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 8 | 10088 | 2768 | 26472 | 6768 | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 9 | 10089 | 2769 | 26473 | 6769 | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 10 | 10090 | 276A | 26474 | 676A | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 11 | 10091 | 276B | 26475 | 676B | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 12 | 10092 | 276C | 26476 | 676C | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 13 | 10093 | 276D | 26477 | 676D | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 14 | 10094 | 276E | 26478 | 676E | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 15 | 10095 | 276F | 26479 | 676F | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 16 | 10096 | 2770 | 26480 | 6770 | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bits 17 to 32 | 10097 | 2771 | 26481 | 6771 | | | | | – | • User-defined bits 17 to 32 (See P. 9-45) |
| Monitor | User-Defined Bit | 1 | User-defined bit 17 | 10098 | 2772 | 26482 | 6772 | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 18 | 10099 | 2773 | 26483 | 6773 | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 19 | 10100 | 2774 | 26484 | 6774 | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 20 | 10101 | 2775 | 26485 | 6775 | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 21 | 10102 | 2776 | 26486 | 6776 | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 22 | 10103 | 2777 | 26487 | 6777 | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 23 | 10104 | 2778 | 26488 | 6778 | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 24 | 10105 | 2779 | 26489 | 6779 | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 25 | 10106 | 277A | 26490 | 677A | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 26 | 10107 | 277B | 26491 | 677B | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 27 | 10108 | 277C | 26492 | 677C | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 28 | 10109 | 277D | 26493 | 677D | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 29 | 10110 | 277E | 26494 | 677E | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 30 | 10111 | 277F | 26495 | 677F | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 31 | 10112 | 2780 | 26496 | 6780 | | | | | – | |
| Monitor | User-Defined Bit | 1 | User-defined bit 32 | 10113 | 2781 | 26497 | 6781 | | | | | – | |

## Monitor/User-Defined Number

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Monitor | User-Defined Number | 1 | User-defined number 1 | 12224 | 2FC0 | 28608 | 6FC0 | | | | | – | |
| Monitor | User-Defined Number | 1 | User-defined number 2 | 12225 | 2FC1 | 28609 | 6FC1 | | | | | – | |
| Monitor | User-Defined Number | 1 | User-defined number 3 | 12226 | 2FC2 | 28610 | 6FC2 | | | | | – | |
| Monitor | User-Defined Number | 1 | User-defined number 4 | 12227 | 2FC3 | 28611 | 6FC3 | | | | | – | |
| Monitor | User-Defined Number | 1 | User-defined number 5 | 12228 | 2FC4 | 28612 | 6FC4 | | | | | – | |
| Monitor | User-Defined Number | 1 | User-defined number 6 | 12229 | 2FC5 | 28613 | 6FC5 | | | | | – | |
| Monitor | User-Defined Number | 1 | User-defined number 7 | 12230 | 2FC6 | 28614 | 6FC6 | | | | | – | |
| Monitor | User-Defined Number | 1 | User-defined number 8 | 12231 | 2FC7 | 28615 | 6FC7 | | | | | – | |
| Monitor | User-Defined Number | 1 | User-defined number 9 | 12232 | 2FC8 | 28616 | 6FC8 | | | | | – | |
| Monitor | User-Defined Number | 1 | User-defined number 10 | 12233 | 2FC9 | 28617 | 6FC9 | | | | | – | |
| Monitor | User-Defined Number | 1 | User-defined number 11 | 12234 | 2FCA | 28618 | 6FCA | | | | | – | |
| Monitor | User-Defined Number | 1 | User-defined number 12 | 12235 | 2FCB | 28619 | 6FCB | | | | | – | |
| Monitor | User-Defined Number | 1 | User-defined number 13 | 12236 | 2FCC | 28620 | 6FCC | | | | | – | |
| Monitor | User-Defined Number | 1 | User-defined number 14 | 12237 | 2FCD | 28621 | 6FCD | | | | | – | |
| Monitor | User-Defined Number | 1 | User-defined number 15 | 12238 | 2FCE | 28622 | 6FCE | | | | | – | |
| Monitor | User-Defined Number | 1 | User-defined number 16 | 12239 | 2FCF | 28623 | 6FCF | | | | | – | |

## Command/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Commands | Command (Pulse Estimate Value) | 1 | Start estimating | 9024 | 2340 | 25408 | 6340 | | | | | – | |
| Commands | Command (Pulse Estimate Value) | 1 | Hold estimate values | 9025 | 2341 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 1 | Request estimate value reset | 9026 | 2342 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 1 | Reset estimate values | 9027 | 2343 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 1 | Request estimate value preset | 9028 | 2344 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 1 | Preset estimate values | 9029 | 2345 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 2 | Start estimating | 9040 | 2350 | 25424 | 6350 | | | | | – | |
| Commands | Command (Pulse Estimate Value) | 2 | Hold estimate values | 9041 | 2351 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 2 | Request estimate value reset | 9042 | 2352 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 2 | Reset estimate values | 9043 | 2353 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 2 | Request estimate value preset | 9044 | 2354 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 2 | Preset estimate values | 9045 | 2355 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 3 | Start estimating | 9056 | 2360 | 25440 | 6360 | | | | | – | |
| Commands | Command (Pulse Estimate Value) | 3 | Hold estimate values | 9057 | 2361 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 3 | Request estimate value reset | 9058 | 2362 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 3 | Reset estimate values | 9059 | 2363 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 3 | Request estimate value preset | 9060 | 2364 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 3 | Preset estimate values | 9061 | 2365 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 4 | Start estimating | 9072 | 2370 | 25456 | 6370 | | | | | – | |
| Commands | Command (Pulse Estimate Value) | 4 | Hold estimate values | 9073 | 2371 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 4 | Request estimate value reset | 9074 | 2372 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 4 | Reset estimate values | 9075 | 2373 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 4 | Request estimate value preset | 9076 | 2374 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 4 | Preset estimate values | 9077 | 2375 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 5 | Start estimating | 9088 | 2380 | 25472 | 6380 | | | | | – | |
| Commands | Command (Pulse Estimate Value) | 5 | Hold estimate values | 9089 | 2381 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 5 | Request estimate value reset | 9090 | 2382 | – | – | | | × | × | – | |

## Command/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Commands | Command (Pulse Estimate Value) | 5 | Reset estimate values | 9091 | 2383 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 5 | Request estimate value preset | 9092 | 2384 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 5 | Preset estimate values | 9093 | 2385 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 6 | Start estimating | 9104 | 2390 | 25488 | 6390 | | | | | – | |
| Commands | Command (Pulse Estimate Value) | 6 | Hold estimate values | 9105 | 2391 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 6 | Request estimate value reset | 9106 | 2392 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 6 | Reset estimate values | 9107 | 2393 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 6 | Request estimate value preset | 9108 | 2394 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 6 | Preset estimate values | 9109 | 2395 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 7 | Start estimating | 9120 | 23A0 | 25504 | 63A0 | | | | | – | |
| Commands | Command (Pulse Estimate Value) | 7 | Hold estimate values | 9121 | 23A1 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 7 | Request estimate value reset | 9122 | 23A2 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 7 | Reset estimate values | 9123 | 23A3 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 7 | Request estimate value preset | 9124 | 23A4 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 7 | Preset estimate values | 9125 | 23A5 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 8 | Start estimating | 9136 | 23B0 | 25520 | 63B0 | | | | | – | |
| Commands | Command (Pulse Estimate Value) | 8 | Hold estimate values | 9137 | 23B1 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 8 | Request estimate value reset | 9138 | 23B2 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 8 | Reset estimate values | 9139 | 23B3 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 8 | Request estimate value preset | 9140 | 23B4 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 8 | Preset estimate values | 9141 | 23B5 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 9 | Start estimating | 9152 | 23C0 | 25536 | 63C0 | | | | | – | |
| Commands | Command (Pulse Estimate Value) | 9 | Hold estimate values | 9153 | 23C1 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 9 | Request estimate value reset | 9154 | 23C2 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 9 | Reset estimate values | 9155 | 23C3 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 9 | Request estimate value preset | 9156 | 23C4 | – | – | | | × | × | – | |

## Command/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Commands | Command (Pulse Estimate Value) | 9 | Preset estimate values | 9157 | 23C5 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 10 | Start estimating | 9168 | 23D0 | 25552 | 63D0 | | | | | – | |
| Commands | Command (Pulse Estimate Value) | 10 | Hold estimate values | 9169 | 23D1 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 10 | Request estimate value reset | 9170 | 23D2 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 10 | Reset estimate values | 9171 | 23D3 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 10 | Request estimate value preset | 9172 | 23D4 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 10 | Preset estimate values | 9173 | 23D5 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 11 | Start estimating | 9184 | 23E0 | 25568 | 63E0 | | | | | – | |
| Commands | Command (Pulse Estimate Value) | 11 | Hold estimate values | 9185 | 23E1 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 11 | Request estimate value reset | 9186 | 23E2 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 11 | Reset estimate values | 9187 | 23E3 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 11 | Request estimate value preset | 9188 | 23E4 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 11 | Preset estimate values | 9189 | 23E5 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 12 | Start estimating | 9200 | 23F0 | 25584 | 63F0 | | | | | – | |
| Commands | Command (Pulse Estimate Value) | 12 | Hold estimate values | 9201 | 23F1 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 12 | Request estimate value reset | 9202 | 23F2 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 12 | Reset estimate values | 9203 | 23F3 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 12 | Request estimate value preset | 9204 | 23F4 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 12 | Preset estimate values | 9205 | 23F5 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 13 | Start estimating | 9216 | 2400 | 25600 | 6400 | | | | | – | |
| Commands | Command (Pulse Estimate Value) | 13 | Hold estimate values | 9217 | 2401 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 13 | Request estimate value reset | 9218 | 2402 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 13 | Reset estimate values | 9219 | 2403 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 13 | Request estimate value preset | 9220 | 2404 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 13 | Preset estimate values | 9221 | 2405 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 14 | Start estimating | 9232 | 2410 | 25616 | 6410 | | | | | – | |

## Command/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Commands | Command (Pulse Estimate Value) | 14 | Hold estimate values | 9233 | 2411 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 14 | Request estimate value reset | 9234 | 2412 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 14 | Reset estimate values | 9235 | 2413 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 14 | Request estimate value preset | 9236 | 2414 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 14 | Preset estimate values | 9237 | 2415 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 15 | Start estimating | 9248 | 2420 | 25632 | 6420 | | | | | – | |
| Commands | Command (Pulse Estimate Value) | 15 | Hold estimate values | 9249 | 2421 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 15 | Request estimate value reset | 9250 | 2422 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 15 | Reset estimate values | 9251 | 2423 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 15 | Request estimate value preset | 9252 | 2424 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 15 | Preset estimate values | 9253 | 2425 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 16 | Start estimating | 9264 | 2430 | 25648 | 6430 | | | | | – | |
| Commands | Command (Pulse Estimate Value) | 16 | Hold estimate values | 9265 | 2431 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 16 | Request estimate value reset | 9266 | 2432 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 16 | Reset estimate values | 9267 | 2433 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Estimate Value) | 16 | Request estimate value preset | 9268 | 2434 | – | – | | | × | × | – | |
| Commands | Command (Pulse Estimate Value) | 16 | Preset estimate values | 9269 | 2435 | – | – | | | × | × | – | When finished, automatically becomes 0 |

## Command/Pulse Instant Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Commands | Command (Pulse Instant Value) | 1 | Hold instant values | 9280 | 2440 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 1 | Request instant value reset | 9281 | 2441 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 1 | Reset instant values | 9282 | 2442 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Instant Value) | 2 | Hold instant values | 9288 | 2448 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 2 | Request instant value reset | 9289 | 2449 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 2 | Reset instant values | 9290 | 244A | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Instant Value) | 3 | Hold instant values | 9296 | 2450 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 3 | Request instant value reset | 9297 | 2451 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 3 | Reset instant values | 9298 | 2452 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Instant Value) | 4 | Hold instant values | 9304 | 2458 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 4 | Request instant value reset | 9305 | 2459 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 4 | Reset instant values | 9306 | 245A | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Instant Value) | 5 | Hold instant values | 9312 | 2460 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 5 | Request instant value reset | 9313 | 2461 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 5 | Reset instant values | 9314 | 2462 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Instant Value) | 6 | Hold instant values | 9320 | 2468 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 6 | Request instant value reset | 9321 | 2469 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 6 | Reset instant values | 9322 | 246A | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Instant Value) | 7 | Hold instant values | 9328 | 2470 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 7 | Request instant value reset | 9329 | 2471 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 7 | Reset instant values | 9330 | 2472 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Instant Value) | 8 | Hold instant values | 9336 | 2478 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 8 | Request instant value reset | 9337 | 2479 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 8 | Reset instant values | 9338 | 247A | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Instant Value) | 9 | Hold instant values | 9344 | 2480 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 9 | Request instant value reset | 9345 | 2481 | – | – | | | × | × | – | |

## Command/Pulse Instant Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Commands | Command (Pulse Instant Value) | 9 | Reset instant values | 9346 | 2482 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Instant Value) | 10 | Hold instant values | 9352 | 2488 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 10 | Request instant value reset | 9353 | 2489 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 10 | Reset instant values | 9354 | 248A | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Instant Value) | 11 | Hold instant values | 9360 | 2490 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 11 | Request instant value reset | 9361 | 2491 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 11 | Reset instant values | 9362 | 2492 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Instant Value) | 12 | Hold instant values | 9368 | 2498 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 12 | Request instant value reset | 9369 | 2499 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 12 | Reset instant values | 9370 | 249A | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Instant Value) | 13 | Hold instant values | 9376 | 24A0 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 13 | Request instant value reset | 9377 | 24A1 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 13 | Reset instant values | 9378 | 24A2 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Instant Value) | 14 | Hold instant values | 9384 | 24A8 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 14 | Request instant value reset | 9385 | 24A9 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 14 | Reset instant values | 9386 | 24AA | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Instant Value) | 15 | Hold instant values | 9392 | 24B0 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 15 | Request instant value reset | 9393 | 24B1 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 15 | Reset instant values | 9394 | 24B2 | – | – | | | × | × | – | When finished, automatically becomes 0 |
| Commands | Command (Pulse Instant Value) | 16 | Hold instant values | 9400 | 24B8 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 16 | Request instant value reset | 9401 | 24B9 | – | – | | | × | × | – | |
| Commands | Command (Pulse Instant Value) | 16 | Reset instant values | 9402 | 24BA | – | – | | | × | × | – | When finished, automatically becomes 0 |

## Communications/Ethernet Communications

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Communications | Ethernet Communications | 1 | MAC address 1 | – | – | 800 | 0320 | × | × | | × | – | |
| Communications | Ethernet Communications | 1 | MAC address 2 | – | – | 801 | 0321 | × | × | | × | – | |
| Communications | Ethernet Communications | 1 | MAC address 3 | – | – | 802 | 0322 | × | × | | × | – | |
| Communications | Ethernet Communications | 1 | MAC address 4 | – | – | 803 | 0323 | × | × | | × | – | |
| Communications | Ethernet Communications | 1 | MAC address 5 | – | – | 804 | 0324 | × | × | | × | – | |
| Communications | Ethernet Communications | 1 | MAC address 6 | – | – | 805 | 0325 | × | × | | × | – | |
| Communications | Ethernet Communications | 1 | IPv4 address 1 | – | – | 817 | 0331 | × | × | | | – | Changes in settings take effect after powering off and back on |
| Communications | Ethernet Communications | 1 | IPv4 address 2 | – | – | 818 | 0332 | × | × | | | – | Changes in settings take effect after powering off and back on |
| Communications | Ethernet Communications | 1 | IPv4 address 3 | – | – | 819 | 0333 | × | × | | | – | Changes in settings take effect after powering off and back on |
| Communications | Ethernet Communications | 1 | IPv4 address 4 | – | – | 820 | 0334 | × | × | | | – | Changes in settings take effect after powering off and back on |
| Communications | Ethernet Communications | 1 | IPv4 address net mask 1 | – | – | 821 | 0335 | × | × | | | – | Changes in settings take effect after powering off and back on |
| Communications | Ethernet Communications | 1 | IPv4 address net mask 2 | – | – | 822 | 0336 | × | × | | | – | Changes in settings take effect after powering off and back on |
| Communications | Ethernet Communications | 1 | IPv4 address net mask 3 | – | – | 823 | 0337 | × | × | | | – | Changes in settings take effect after powering off and back on |
| Communications | Ethernet Communications | 1 | IPv4 address net mask 4 | – | – | 824 | 0338 | × | × | | | – | Changes in settings take effect after powering off and back on |
| Communications | Ethernet Communications | 1 | IPv4 default gateway 1 | – | – | 825 | 0339 | × | × | | | – | Changes in settings take effect after powering off and back on |
| Communications | Ethernet Communications | 1 | IPv4 default gateway 2 | – | – | 826 | 033A | × | × | | | – | Changes in settings take effect after powering off and back on |
| Communications | Ethernet Communications | 1 | IPv4 default gateway 3 | – | – | 827 | 033B | × | × | | | – | Changes in settings take effect after powering off and back on |
| Communications | Ethernet Communications | 1 | IPv4 default gateway 4 | – | – | 828 | 033C | × | × | | | – | Changes in settings take effect after powering off and back on |
| Communications | Ethernet Communications | 1 | MODBUS/TCP port number | – | – | 830 | 033E | × | × | | | – | Changes in settings take effect after powering off and back on |

## Communications/RS-485 Communications

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Communications | RS-485 Communications | 1 | Communication type | 10240 | 2800 | 26624 | 6800 | | | | | – | |
| Communications | RS-485 Communications | 1 | Device address | 10241 | 2801 | 26625 | 6801 | | | | | – | |
| Communications | RS-485 Communications | 1 | Transmission speed | 10242 | 2802 | 26626 | 6802 | | | | | – | |
| Communications | RS-485 Communications | 1 | Data format (data length) | 10243 | 2803 | 26627 | 6803 | | | | | – | |
| Communications | RS-485 Communications | 1 | Data format (parity) | 10244 | 2804 | 26628 | 6804 | | | | | – | |
| Communications | RS-485 Communications | 1 | Data format (stop bits) | 10245 | 2805 | 26629 | 6805 | | | | | – | |
| Communications | RS-485 Communications | 1 | Minimum response time | 10246 | 2806 | 26630 | 6806 | | | | | – | |

## Basic/Setup

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Basic | Setup | 1 | Start delay at power ON | 8820 | 2274 | 25204 | 6274 | | | | | – | |
| Basic | Setup | 1 | Advanced function password 1 | 8828 | 227C | 25212 | 627C | | | | | – | |
| Basic | Setup | 1 | Advanced function password 2 | 8829 | 227D | 25213 | 627D | | | | | – | |
| Basic | Setup | 1 | Advanced function password 3 | 8830 | 227E | 25214 | 627E | | | | | – | |
| Basic | Setup | 1 | Advanced function password 4 | 8831 | 227F | 25215 | 627F | | | | | – | |
| Basic | Setup | 1 | Advanced function password 5 | 8832 | 2280 | 25216 | 6280 | | | | | – | |
| Basic | Setup | 1 | Advanced function password 6 | 8833 | 2281 | 25217 | 6281 | | | | | – | |
| Basic | Setup | 1 | Advanced function password 7 | 8834 | 2282 | 25218 | 6282 | | | | | – | |
| Basic | Setup | 1 | Advanced function password 8 | 8835 | 2283 | 25219 | 6283 | | | | | – | |
| Basic | Setup | 1 | Advanced function password 9 | 8836 | 2284 | 25220 | 6284 | | | | | – | |
| Basic | Setup | 1 | Advanced function password 10 | 8837 | 2285 | 25221 | 6285 | | | | | – | |
| Basic | Setup | 1 | Advanced function password 11 | 8838 | 2286 | 25222 | 6286 | | | | | – | |
| Basic | Setup | 1 | Advanced function password 12 | 8839 | 2287 | 25223 | 6287 | | | | | – | |
| Basic | Setup | 1 | Advanced function password 13 | 8840 | 2288 | 25224 | 6288 | | | | | – | |
| Basic | Setup | 1 | Advanced function password 14 | 8841 | 2289 | 25225 | 6289 | | | | | – | |
| Basic | Setup | 1 | Advanced function password 15 | 8842 | 228A | 25226 | 628A | | | | | – | |
| Basic | Setup | 1 | Advanced function password 16 | 8843 | 228B | 25227 | 628B | | | | | – | |

## Input/Output/DI Input

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Input-output | DI Input | 1 | Input direct/reverse | 4096 | 1000 | 20480 | 5000 | | | | | – | |
| Input-output | DI Input | 2 | Input direct/reverse | 4097 | 1001 | 20481 | 5001 | | | | | – | |
| Input-output | DI Input | 3 | Input direct/reverse | 4098 | 1002 | 20482 | 5002 | | | | | – | |
| Input-output | DI Input | 4 | Input direct/reverse | 4099 | 1003 | 20483 | 5003 | | | | | – | |
| Input-output | DI Input | 5 | Input direct/reverse | 4100 | 1004 | 20484 | 5004 | | | | | – | |
| Input-output | DI Input | 6 | Input direct/reverse | 4101 | 1005 | 20485 | 5005 | | | | | – | |
| Input-output | DI Input | 7 | Input direct/reverse | 4102 | 1006 | 20486 | 5006 | | | | | – | |
| Input-output | DI Input | 8 | Input direct/reverse | 4103 | 1007 | 20487 | 5007 | | | | | – | |
| Input-output | DI Input | 9 | Input direct/reverse | 4104 | 1008 | 20488 | 5008 | | | | | – | |
| Input-output | DI Input | 10 | Input direct/reverse | 4105 | 1009 | 20489 | 5009 | | | | | – | |
| Input-output | DI Input | 11 | Input direct/reverse | 4106 | 100A | 20490 | 500A | | | | | – | |
| Input-output | DI Input | 12 | Input direct/reverse | 4107 | 100B | 20491 | 500B | | | | | – | |
| Input-output | DI Input | 13 | Input direct/reverse | 4108 | 100C | 20492 | 500C | | | | | – | |
| Input-output | DI Input | 14 | Input direct/reverse | 4109 | 100D | 20493 | 500D | | | | | – | |
| Input-output | DI Input | 15 | Input direct/reverse | 4110 | 100E | 20494 | 500E | | | | | – | |
| Input-output | DI Input | 16 | Input direct/reverse | 4111 | 100F | 20495 | 500F | | | | | – | |
| Input-output | DI Input | 1 | ON delay | 4112 | 1010 | 20496 | 5010 | | | | | – | |
| Input-output | DI Input | 1 | OFF delay | 4113 | 1011 | 20497 | 5011 | | | | | – | |
| Input-output | DI Input | 2 | ON delay | 4120 | 1018 | 20504 | 5018 | | | | | – | |
| Input-output | DI Input | 2 | OFF delay | 4121 | 1019 | 20505 | 5019 | | | | | – | |
| Input-output | DI Input | 3 | ON delay | 4128 | 1020 | 20512 | 5020 | | | | | – | |
| Input-output | DI Input | 3 | OFF delay | 4129 | 1021 | 20513 | 5021 | | | | | – | |
| Input-output | DI Input | 4 | ON delay | 4136 | 1028 | 20520 | 5028 | | | | | – | |
| Input-output | DI Input | 4 | OFF delay | 4137 | 1029 | 20521 | 5029 | | | | | – | |
| Input-output | DI Input | 5 | ON delay | 4144 | 1030 | 20528 | 5030 | | | | | – | |
| Input-output | DI Input | 5 | OFF delay | 4145 | 1031 | 20529 | 5031 | | | | | – | |
| Input-output | DI Input | 6 | ON delay | 4152 | 1038 | 20536 | 5038 | | | | | – | |
| Input-output | DI Input | 6 | OFF delay | 4153 | 1039 | 20537 | 5039 | | | | | – | |
| Input-output | DI Input | 7 | ON delay | 4160 | 1040 | 20544 | 5040 | | | | | – | |
| Input-output | DI Input | 7 | OFF delay | 4161 | 1041 | 20545 | 5041 | | | | | – | |
| Input-output | DI Input | 8 | ON delay | 4168 | 1048 | 20552 | 5048 | | | | | – | |
| Input-output | DI Input | 8 | OFF delay | 4169 | 1049 | 20553 | 5049 | | | | | – | |
| Input-output | DI Input | 9 | ON delay | 4176 | 1050 | 20560 | 5050 | | | | | – | |
| Input-output | DI Input | 9 | OFF delay | 4177 | 1051 | 20561 | 5051 | | | | | – | |
| Input-output | DI Input | 10 | ON delay | 4184 | 1058 | 20568 | 5058 | | | | | – | |
| Input-output | DI Input | 10 | OFF delay | 4185 | 1059 | 20569 | 5059 | | | | | – | |
| Input-output | DI Input | 11 | ON delay | 4192 | 1060 | 20576 | 5060 | | | | | – | |
| Input-output | DI Input | 11 | OFF delay | 4193 | 1061 | 20577 | 5061 | | | | | – | |
| Input-output | DI Input | 12 | ON delay | 4200 | 1068 | 20584 | 5068 | | | | | – | |
| Input-output | DI Input | 12 | OFF delay | 4201 | 1069 | 20585 | 5069 | | | | | – | |
| Input-output | DI Input | 13 | ON delay | 4208 | 1070 | 20592 | 5070 | | | | | – | |
| Input-output | DI Input | 13 | OFF delay | 4209 | 1071 | 20593 | 5071 | | | | | – | |
| Input-output | DI Input | 14 | ON delay | 4216 | 1078 | 20600 | 5078 | | | | | – | |
| Input-output | DI Input | 14 | OFF delay | 4217 | 1079 | 20601 | 5079 | | | | | – | |
| Input-output | DI Input | 15 | ON delay | 4224 | 1080 | 20608 | 5080 | | | | | – | |
| Input-output | DI Input | 15 | OFF delay | 4225 | 1081 | 20609 | 5081 | | | | | – | |
| Input-output | DI Input | 16 | ON delay | 4232 | 1088 | 20616 | 5088 | | | | | – | |
| Input-output | DI Input | 16 | OFF delay | 4233 | 1089 | 20617 | 5089 | | | | | – | |

## Input/Output/EV Output

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Input-output | EV output | 1 | Output type | 9632 | 25A0 | 26016 | 65A0 | | | | | – | |

## Pulse Input/Pulse Input

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Pulse Input | Pulse Input | 1 | Pulse detection width | 7984 | 1F30 | 24368 | 5F30 | | | | | – | |
| Pulse input | Pulse input | 1 | High-speed count active | 7985 | 1F31 | 24369 | 5F31 | | | | | – | |
| Pulse Input | Pulse Input | 2 | Pulse detection width | 7988 | 1F34 | 24372 | 5F34 | | | | | – | |
| Pulse input | Pulse input | 2 | High-speed count active | 7989 | 1F35 | 24373 | 5F35 | | | | | – | |
| Pulse Input | Pulse Input | 3 | Pulse detection width | 7992 | 1F38 | 24376 | 5F38 | | | | | – | |
| Pulse input | Pulse input | 3 | High-speed count active | 7993 | 1F39 | 24377 | 5F39 | | | | | – | |
| Pulse Input | Pulse Input | 4 | Pulse detection width | 7996 | 1F3C | 24380 | 5F3C | | | | | – | |
| Pulse input | Pulse input | 4 | High-speed count active | 7997 | 1F3D | 24381 | 5F3D | | | | | – | |
| Pulse Input | Pulse Input | 5 | Pulse detection width | 8000 | 1F40 | 24384 | 5F40 | | | | | – | |
| Pulse input | Pulse input | 5 | High-speed count active | 8001 | 1F41 | 24385 | 5F41 | | | | | – | |
| Pulse Input | Pulse Input | 6 | Pulse detection width | 8004 | 1F44 | 24388 | 5F44 | | | | | – | |
| Pulse input | Pulse input | 6 | High-speed count active | 8005 | 1F45 | 24389 | 5F45 | | | | | – | |
| Pulse Input | Pulse Input | 7 | Pulse detection width | 8008 | 1F48 | 24392 | 5F48 | | | | | – | |
| Pulse input | Pulse input | 7 | High-speed count active | 8009 | 1F49 | 24393 | 5F49 | | | | | – | |
| Pulse Input | Pulse Input | 8 | Pulse detection width | 8012 | 1F4C | 24396 | 5F4C | | | | | – | |
| Pulse input | Pulse input | 8 | High-speed count active | 8013 | 1F4D | 24397 | 5F4D | | | | | – | |
| Pulse Input | Pulse Input | 9 | Pulse detection width | 8016 | 1F50 | 24400 | 5F50 | | | | | – | |
| Pulse Input | Pulse Input | 10 | Pulse detection width | 8020 | 1F54 | 24404 | 5F54 | | | | | – | |
| Pulse Input | Pulse Input | 11 | Pulse detection width | 8024 | 1F58 | 24408 | 5F58 | | | | | – | |
| Pulse Input | Pulse Input | 12 | Pulse detection width | 8028 | 1F5C | 24412 | 5F5C | | | | | – | |
| Pulse Input | Pulse Input | 13 | Pulse detection width | 8032 | 1F60 | 24416 | 5F60 | | | | | – | |
| Pulse Input | Pulse Input | 14 | Pulse detection width | 8036 | 1F64 | 24420 | 5F64 | | | | | – | |
| Pulse Input | Pulse Input | 15 | Pulse detection width | 8040 | 1F68 | 24424 | 5F68 | | | | | – | |
| Pulse Input | Pulse Input | 16 | Pulse detection width | 8044 | 1F6C | 24428 | 5F6C | | | | | – | |

## Pulse Input/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Pulse Input | Pulse Estimate Value | 1 | Estimate count direction | 8048 | 1F70 | 24432 | 5F70 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 1 | Estimate value scaling value (C1) | 8049 | 1F71 | 24433 | 5F71 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 1 | Reserved for system use | 8050 | 1F72 | 24434 | 5F72 | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 1 | Estimate value scaling value (C2) | 8051 | 1F73 | 24435 | 5F73 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 1 | Reserved for system use | 8052 | 1F74 | 24436 | 5F74 | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 1 | Estimate target value (L) | 8053 | 1F75 | 24437 | 5F75 | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 1 | Estimate target value (H) | 8054 | 1F76 | 24438 | 5F76 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 1 | Pre-target value (L) | 8055 | 1F77 | 24439 | 5F77 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 1 | Pre-target value (H) | 8056 | 1F78 | 24440 | 5F78 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 1 | Pre-pre-target value (L) | 8057 | 1F79 | 24441 | 5F79 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 1 | Pre-pre-target value (H) | 8058 | 1F7A | 24442 | 5F7A | | | | | – | |
| Pulse Input | Pulse Estimate Value | 1 | Estimate ]value upper limit (L) | 8059 | 1F7B | 24443 | 5F7B | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 1 | Estimate value upper limit (H) | 8060 | 1F7C | 24444 | 5F7C | | | | | – | |
| Pulse Input | Pulse Estimate Value | 1 | Estimate value lower limit (L) | 8061 | 1F7D | 24445 | 5F7D | | | | | – | |
| Pulse Input | Pulse Estimate Value | 1 | Estimate value lower limit (H) | 8062 | 1F7E | 24446 | 5F7E | | | | | – | |
| Pulse Input | Pulse Estimate Value | 1 | Action when the estimate value upper or lower limits are reached | 8063 | 1F7F | 24447 | 5F7F | | | | | – | |
| Pulse Input | Pulse Estimate Value | 1 | Preset value (L) | 8064 | 1F80 | 24448 | 5F80 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 1 | Preset value (H) | 8065 | 1F81 | 24449 | 5F81 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 2 | Estimate count direction | 8072 | 1F88 | 24456 | 5F88 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 2 | Estimate value scaling value (C1) | 8073 | 1F89 | 24457 | 5F89 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 2 | Reserved for system use | 8074 | 1F8A | 24458 | 5F8A | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 2 | Estimate value scaling value (C2) | 8075 | 1F8B | 24459 | 5F8B | | | | | – | |
| Pulse Input | Pulse Estimate Value | 2 | Reserved for system use | 8076 | 1F8C | 24460 | 5F8C | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 2 | Estimate target value (L) | 8077 | 1F8D | 24461 | 5F8D | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 2 | Estimate target value (H) | 8078 | 1F8E | 24462 | 5F8E | | | | | – | |
| Pulse Input | Pulse Estimate Value | 2 | Pre-target value (L) | 8079 | 1F8F | 24463 | 5F8F | | | | | – | |
| Pulse Input | Pulse Estimate Value | 2 | Pre-target value (H) | 8080 | 1F90 | 24464 | 5F90 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 2 | Pre-pre-target value (L) | 8081 | 1F91 | 24465 | 5F91 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 2 | Pre-pre-target value (H) | 8082 | 1F92 | 24466 | 5F92 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 2 | Estimate ]value upper limit (L) | 8083 | 1F93 | 24467 | 5F93 | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 2 | Estimate value upper limit (H) | 8084 | 1F94 | 24468 | 5F94 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 2 | Estimate value lower limit (L) | 8085 | 1F95 | 24469 | 5F95 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 2 | Estimate value lower limit (H) | 8086 | 1F96 | 24470 | 5F96 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 2 | Action when the estimate value upper or lower limits are reached | 8087 | 1F97 | 24471 | 5F97 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 2 | Preset value (L) | 8088 | 1F98 | 24472 | 5F98 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 2 | Preset value (H) | 8089 | 1F99 | 24473 | 5F99 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 3 | Estimate count direction | 8096 | 1FA0 | 24480 | 5FA0 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 3 | Estimate value scaling value (C1) | 8097 | 1FA1 | 24481 | 5FA1 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 3 | Reserved for system use | 8098 | 1FA2 | 24482 | 5FA2 | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 3 | Estimate value scaling value (C2) | 8099 | 1FA3 | 24483 | 5FA3 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 3 | Reserved for system use | 8100 | 1FA4 | 24484 | 5FA4 | | | | | – | When writing, write 0 |

## Pulse Input/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Pulse Input | Pulse Estimate Value | 3 | Estimate target value (L) | 8101 | 1FA5 | 24485 | 5FA5 | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 3 | Estimate target value (H) | 8102 | 1FA6 | 24486 | 5FA6 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 3 | Pre-target value (L) | 8103 | 1FA7 | 24487 | 5FA7 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 3 | Pre-target value (H) | 8104 | 1FA8 | 24488 | 5FA8 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 3 | Pre-pre-target value (L) | 8105 | 1FA9 | 24489 | 5FA9 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 3 | Pre-pre-target value (H) | 8106 | 1FAA | 24490 | 5FAA | | | | | – | |
| Pulse Input | Pulse Estimate Value | 3 | Estimate ]value upper limit (L) | 8107 | 1FAB | 24491 | 5FAB | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 3 | Estimate value upper limit (H) | 8108 | 1FAC | 24492 | 5FAC | | | | | – | |
| Pulse Input | Pulse Estimate Value | 3 | Estimate value lower limit (L) | 8109 | 1FAD | 24493 | 5FAD | | | | | – | |
| Pulse Input | Pulse Estimate Value | 3 | Estimate value lower limit (H) | 8110 | 1FAE | 24494 | 5FAE | | | | | – | |
| Pulse Input | Pulse Estimate Value | 3 | Action when the estimate value upper or lower limits are reached | 8111 | 1FAF | 24495 | 5FAF | | | | | – | |
| Pulse Input | Pulse Estimate Value | 3 | Preset value (L) | 8112 | 1FB0 | 24496 | 5FB0 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 3 | Preset value (H) | 8113 | 1FB1 | 24497 | 5FB1 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 4 | Estimate count direction | 8120 | 1FB8 | 24504 | 5FB8 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 4 | Estimate value scaling value (C1) | 8121 | 1FB9 | 24505 | 5FB91 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 4 | Reserved for system use | 8122 | 1FBA | 24506 | 5FBA | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 4 | Estimate value scaling value (C2) | 8123 | 1FBB | 24507 | 5FBB | | | | | – | |
| Pulse Input | Pulse Estimate Value | 4 | Reserved for system use | 8124 | 1FBC | 24508 | 5FBC | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 4 | Estimate target value (L) | 8125 | 1FBD | 24509 | 5FBD | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 4 | Estimate target value (H) | 8126 | 1FBE | 24510 | 5FBE | | | | | – | |
| Pulse Input | Pulse Estimate Value | 4 | Pre-target value (L) | 8127 | 1FBF | 24511 | 5FBF | | | | | – | |
| Pulse Input | Pulse Estimate Value | 4 | Pre-target value (H) | 8128 | 1FC0 | 24512 | 5FC0 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 4 | Pre-pre-target value (L) | 8129 | 1FC1 | 24513 | 5FC1 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 4 | Pre-pre-target value (H) | 8130 | 1FC2 | 24514 | 5FC2 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 4 | Estimate ]value upper limit (L) | 8131 | 1FC3 | 24515 | 5FC3 | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 4 | Estimate value upper limit (H) | 8132 | 1FC4 | 24516 | 5FC4 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 4 | Estimate value lower limit (L) | 8133 | 1FC5 | 24517 | 5FC5 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 4 | Estimate value lower limit (H) | 8134 | 1FC6 | 24518 | 5FC6 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 4 | Action when the estimate value upper or lower limits are reached | 8135 | 1FC7 | 24519 | 5FC7 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 4 | Preset value (L) | 8136 | 1FC8 | 24520 | 5FC8 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 4 | Preset value (H) | 8137 | 1FC9 | 24521 | 5FC9 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 5 | Estimate count direction | 8144 | 1FD0 | 24528 | 5FD0 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 5 | Estimate value scaling value (C1) | 8145 | 1FD1 | 24529 | 5FD1 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 5 | Reserved for system use | 8146 | 1FD2 | 24530 | 5FD2 | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 5 | Estimate value scaling value (C2) | 8147 | 1FD3 | 24531 | 5FD3 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 5 | Reserved for system use | 8148 | 1FD4 | 24532 | 5FD4 | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 5 | Estimate target value (L) | 8149 | 1FD5 | 24533 | 5FD5 | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 5 | Estimate target value (H) | 8150 | 1FD6 | 24534 | 5FD6 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 5 | Pre-target value (L) | 8151 | 1FD7 | 24535 | 5FD7 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 5 | Pre-target value (H) | 8152 | 1FD8 | 24536 | 5FD8 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 5 | Pre-pre-target value (L) | 8153 | 1FD9 | 24537 | 5FD9 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 5 | Pre-pre-target value (H) | 8154 | 1FDA | 24538 | 5FDA | | | | | – | |

## Pulse Input/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Pulse Input | Pulse Estimate Value | 5 | Estimate ]value upper limit (L) | 8155 | 1FDB | 24539 | 5FDB | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 5 | Estimate value upper limit (H) | 8156 | 1FDC | 24540 | 5FDC | | | | | – | |
| Pulse Input | Pulse Estimate Value | 5 | Estimate value lower limit (L) | 8157 | 1FDD | 24541 | 5FDD | | | | | – | |
| Pulse Input | Pulse Estimate Value | 5 | Estimate value lower limit (H) | 8158 | 1FDE | 24542 | 5FDE | | | | | – | |
| Pulse Input | Pulse Estimate Value | 5 | Action when the estimate value upper or lower limits are reached | 8159 | 1FDF | 24543 | 5FDF | | | | | – | |
| Pulse Input | Pulse Estimate Value | 5 | Preset value (L) | 8160 | 1FE0 | 24544 | 5FE0 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 5 | Preset value (H) | 8161 | 1FE1 | 24545 | 5FE1 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 6 | Estimate count direction | 8168 | 1FE8 | 24552 | 5FE8 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 6 | Estimate value scaling value (C1) | 8169 | 1FE9 | 24553 | 5FE9 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 6 | Reserved for system use | 8170 | 1FEA | 24554 | 5FEA | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 6 | Estimate value scaling value (C2) | 8171 | 1FEB | 24555 | 5FEB | | | | | – | |
| Pulse Input | Pulse Estimate Value | 6 | Reserved for system use | 8172 | 1FEC | 24556 | 5FEC | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 6 | Estimate target value (L) | 8173 | 1FED | 24557 | 5FED | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 6 | Estimate target value (H) | 8174 | 1FEE | 24558 | 5FEE | | | | | – | |
| Pulse Input | Pulse Estimate Value | 6 | Pre-target value (L) | 8175 | 1FEF | 24559 | 5FEF | | | | | – | |
| Pulse Input | Pulse Estimate Value | 6 | Pre-target value (H) | 8176 | 1FF0 | 24560 | 5FF0 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 6 | Pre-pre-target value (L) | 8177 | 1FF1 | 24561 | 5FF1 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 6 | Pre-pre-target value (H) | 8178 | 1FF2 | 24562 | 5FF2 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 6 | Estimate ]value upper limit (L) | 8179 | 1FF3 | 24563 | 5FF3 | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 6 | Estimate value upper limit (H) | 8180 | 1FF4 | 24564 | 5FF4 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 6 | Estimate value lower limit (L) | 8181 | 1FF5 | 24565 | 5FF5 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 6 | Estimate value lower limit (H) | 8182 | 1FF6 | 24566 | 5FF6 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 6 | Action when the estimate value upper or lower limits are reached | 8183 | 1FF7 | 24567 | 5FF7 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 6 | Preset value (L) | 8184 | 1FF8 | 24568 | 5FF8 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 6 | Preset value (H) | 8185 | 1FF9 | 24569 | 5FF9 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 7 | Estimate count direction | 8192 | 2000 | 24576 | 6000 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 7 | Estimate value scaling value (C1) | 8193 | 2001 | 24577 | 6001 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 7 | Reserved for system use | 8194 | 2002 | 24578 | 6002 | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 7 | Estimate value scaling value (C2) | 8195 | 2003 | 24579 | 6003 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 7 | Reserved for system use | 8196 | 2004 | 24580 | 6004 | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 7 | Estimate target value (L) | 8197 | 2005 | 24581 | 6005 | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 7 | Estimate target value (H) | 8198 | 2006 | 24582 | 6006 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 7 | Pre-target value (L) | 8199 | 2007 | 24583 | 6007 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 7 | Pre-target value (H) | 8200 | 2008 | 24584 | 6008 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 7 | Pre-pre-target value (L) | 8201 | 2009 | 24585 | 6009 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 7 | Pre-pre-target value (H) | 8202 | 200A | 24586 | 600A | | | | | – | |
| Pulse Input | Pulse Estimate Value | 7 | Estimate ]value upper limit (L) | 8203 | 200B | 24587 | 600B | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 7 | Estimate value upper limit (H) | 8204 | 200C | 24588 | 600C | | | | | – | |
| Pulse Input | Pulse Estimate Value | 7 | Estimate value lower limit (L) | 8205 | 200D | 24589 | 600D | | | | | – | |
| Pulse Input | Pulse Estimate Value | 7 | Estimate value lower limit (H) | 8206 | 200E | 24590 | 600E | | | | | – | |

## Pulse Input/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Pulse Input | Pulse Estimate Value | 7 | Action when the estimate value upper or lower limits are reached | 8207 | 200F | 24591 | 600F | | | | | – | |
| Pulse Input | Pulse Estimate Value | 7 | Preset value (L) | 8208 | 2010 | 24592 | 6010 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 7 | Preset value (H) | 8209 | 2011 | 24593 | 6011 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 8 | Estimate count direction | 8216 | 2018 | 24600 | 6018 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 8 | Estimate value scaling value (C1) | 8217 | 2019 | 24601 | 6019 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 8 | Reserved for system use | 8218 | 201A | 24602 | 601A | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 8 | Estimate value scaling value (C2) | 8219 | 201B | 24603 | 601B | | | | | – | |
| Pulse Input | Pulse Estimate Value | 8 | Reserved for system use | 8220 | 201C | 24604 | 601C | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 8 | Estimate target value (L) | 8221 | 201D | 24605 | 601D | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 8 | Estimate target value (H) | 8222 | 201E | 24606 | 601E | | | | | – | |
| Pulse Input | Pulse Estimate Value | 8 | Pre-target value (L) | 8223 | 201F | 24607 | 601F | | | | | – | |
| Pulse Input | Pulse Estimate Value | 8 | Pre-target value (H) | 8224 | 2020 | 24608 | 6020 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 8 | Pre-pre-target value (L) | 8225 | 2021 | 24609 | 6021 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 8 | Pre-pre-target value (H) | 8226 | 2022 | 24610 | 6022 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 8 | Estimate ]value upper limit (L) | 8227 | 2023 | 24611 | 6023 | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 8 | Estimate value upper limit (H) | 8228 | 2024 | 24612 | 6024 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 8 | Estimate value lower limit (L) | 8229 | 2025 | 24613 | 6025 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 8 | Estimate value lower limit (H) | 8230 | 2026 | 24614 | 6026 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 8 | Action when the estimate value upper or lower limits are reached | 8231 | 2027 | 24615 | 6027 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 8 | Preset value (L) | 8232 | 2028 | 24616 | 6028 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 8 | Preset value (H) | 8233 | 2029 | 24617 | 6029 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 9 | Estimate count direction | 8240 | 2030 | 24624 | 6030 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 9 | Estimate value scaling value (C1) | 8241 | 2031 | 24625 | 6031 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 9 | Reserved for system use | 8242 | 2032 | 24626 | 6032 | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 9 | Estimate value scaling value (C2) | 8243 | 2033 | 24627 | 6033 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 9 | Reserved for system use | 8244 | 2034 | 24628 | 6034 | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 9 | Estimate target value (L) | 8245 | 2035 | 24629 | 6035 | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 9 | Estimate target value (H) | 8246 | 2036 | 24630 | 6036 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 9 | Pre-target value (L) | 8247 | 2037 | 24631 | 6037 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 9 | Pre-target value (H) | 8248 | 2038 | 24632 | 6038 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 9 | Pre-pre-target value (L) | 8249 | 2039 | 24633 | 6039 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 9 | Pre-pre-target value (H) | 8250 | 203A | 24634 | 603A | | | | | – | |
| Pulse Input | Pulse Estimate Value | 9 | Estimate ]value upper limit (L) | 8251 | 203B | 24635 | 603B | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 9 | Estimate value upper limit (H) | 8252 | 203C | 24636 | 603C | | | | | – | |
| Pulse Input | Pulse Estimate Value | 9 | Estimate value lower limit (L) | 8253 | 203D | 24637 | 603D | | | | | – | |
| Pulse Input | Pulse Estimate Value | 9 | Estimate value lower limit (H) | 8254 | 203E | 24638 | 603E | | | | | – | |
| Pulse Input | Pulse Estimate Value | 9 | Action when the estimate value upper or lower limits are reached | 8255 | 203F | 24639 | 603F | | | | | – | |
| Pulse Input | Pulse Estimate Value | 9 | Preset value (L) | 8256 | 2040 | 24640 | 6040 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 9 | Preset value (H) | 8257 | 2041 | 24641 | 6041 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 10 | Estimate count direction | 8264 | 2048 | 24648 | 6048 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 10 | Estimate value scaling value (C1) | 8265 | 2049 | 24649 | 6049 | | | | | – | |

## Pulse Input/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Pulse Input | Pulse Estimate Value | 10 | Reserved for system use | 8266 | 204A | 24650 | 604A | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 10 | Estimate value scaling value (C2) | 8267 | 204B | 24651 | 604B | | | | | – | |
| Pulse Input | Pulse Estimate Value | 10 | Reserved for system use | 8268 | 204C | 24652 | 604C | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 10 | Estimate target value (L) | 8269 | 204D | 24653 | 604D | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 10 | Estimate target value (H) | 8270 | 204E | 24654 | 604E | | | | | – | |
| Pulse Input | Pulse Estimate Value | 10 | Pre-target value (L) | 8271 | 204F | 24655 | 604F | | | | | – | |
| Pulse Input | Pulse Estimate Value | 10 | Pre-target value (H) | 8272 | 2050 | 24656 | 6050 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 10 | Pre-pre-target value (L) | 8273 | 2051 | 24657 | 6051 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 10 | Pre-pre-target value (H) | 8274 | 2052 | 24658 | 6052 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 10 | Estimate ]value upper limit (L) | 8275 | 2053 | 24659 | 6053 | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 10 | Estimate value upper limit (H) | 8276 | 2054 | 24660 | 6054 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 10 | Estimate value lower limit (L) | 8277 | 2055 | 24661 | 6055 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 10 | Estimate value lower limit (H) | 8278 | 2056 | 24662 | 6056 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 10 | Action when the estimate value upper or lower limits are reached | 8279 | 2057 | 24663 | 6057 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 10 | Preset value (L) | 8280 | 2058 | 24664 | 6058 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 10 | Preset value (H) | 8281 | 2059 | 24665 | 6059 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 11 | Estimate count direction | 8288 | 2060 | 24672 | 6060 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 11 | Estimate value scaling value (C1) | 8289 | 2061 | 24673 | 6061 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 11 | Reserved for system use | 8290 | 2062 | 24674 | 6062 | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 11 | Estimate value scaling value (C2) | 8291 | 2063 | 24675 | 6063 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 11 | Reserved for system use | 8292 | 2064 | 24676 | 6064 | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 11 | Estimate target value (L) | 8293 | 2065 | 24677 | 6065 | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 11 | Estimate target value (H) | 8294 | 2066 | 24678 | 6066 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 11 | Pre-target value (L) | 8295 | 2067 | 24679 | 6067 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 11 | Pre-target value (H) | 8296 | 2068 | 24680 | 6068 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 11 | Pre-pre-target value (L) | 8297 | 2069 | 24681 | 6069 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 11 | Pre-pre-target value (H) | 8298 | 206A | 24682 | 606A | | | | | – | |
| Pulse Input | Pulse Estimate Value | 11 | Estimate ]value upper limit (L) | 8299 | 206B | 24683 | 606B | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 11 | Estimate value upper limit (H) | 8300 | 206C | 24684 | 606C | | | | | – | |
| Pulse Input | Pulse Estimate Value | 11 | Estimate value lower limit (L) | 8301 | 206D | 24685 | 606D | | | | | – | |
| Pulse Input | Pulse Estimate Value | 11 | Estimate value lower limit (H) | 8302 | 206E | 24686 | 606E | | | | | – | |
| Pulse Input | Pulse Estimate Value | 11 | Action when the estimate value upper or lower limits are reached | 8303 | 206F | 24687 | 606F | | | | | – | |
| Pulse Input | Pulse Estimate Value | 11 | Preset value (L) | 8304 | 2070 | 24688 | 6070 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 11 | Preset value (H) | 8305 | 2071 | 24689 | 6071 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 12 | Estimate count direction | 8312 | 2078 | 24696 | 6078 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 12 | Estimate value scaling value (C1) | 8313 | 2079 | 24697 | 6079 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 12 | Reserved for system use | 8314 | 207A | 24698 | 607A | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 12 | Estimate value scaling value (C2) | 8315 | 207B | 24699 | 607B | | | | | – | |
| Pulse Input | Pulse Estimate Value | 12 | Reserved for system use | 8316 | 207C | 24700 | 607C | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 12 | Estimate target value (L) | 8317 | 207D | 24701 | 607D | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 12 | Estimate target value (H) | 8318 | 207E | 24702 | 607E | | | | | – | |

## Pulse Input/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Pulse Input | Pulse Estimate Value | 12 | Pre-target value (L) | 8319 | 207F | 24703 | 607F | | | | | – | |
| Pulse Input | Pulse Estimate Value | 12 | Pre-target value (H) | 8320 | 2080 | 24704 | 6080 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 12 | Pre-pre-target value (L) | 8321 | 2081 | 24705 | 6081 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 12 | Pre-pre-target value (H) | 8322 | 2082 | 24706 | 6082 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 12 | Estimate ]value upper limit (L) | 8323 | 2083 | 24707 | 6083 | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 12 | Estimate value upper limit (H) | 8324 | 2084 | 24708 | 6084 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 12 | Estimate value lower limit (L) | 8325 | 2085 | 24709 | 6085 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 12 | Estimate value lower limit (H) | 8326 | 2086 | 24710 | 6086 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 12 | Action when the estimate value upper or lower limits are reached | 8327 | 2087 | 24711 | 6087 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 12 | Preset value (L) | 8328 | 2088 | 24712 | 6088 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 12 | Preset value (H) | 8329 | 2089 | 24713 | 6089 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 13 | Estimate count direction | 8336 | 2090 | 24720 | 6090 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 13 | Estimate value scaling value (C1) | 8337 | 2091 | 24721 | 6091 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 13 | Reserved for system use | 8338 | 2092 | 24722 | 6092 | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 13 | Estimate value scaling value (C2) | 8339 | 2093 | 24723 | 6093 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 13 | Reserved for system use | 8340 | 2094 | 24724 | 6094 | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 13 | Estimate target value (L) | 8341 | 2095 | 24725 | 6095 | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 13 | Estimate target value (H) | 8342 | 2096 | 24726 | 6096 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 13 | Pre-target value (L) | 8343 | 2097 | 24727 | 6097 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 13 | Pre-target value (H) | 8344 | 2098 | 24728 | 6098 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 13 | Pre-pre-target value (L) | 8345 | 2099 | 24729 | 6099 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 13 | Pre-pre-target value (H) | 8346 | 209A | 24730 | 609A | | | | | – | |
| Pulse Input | Pulse Estimate Value | 13 | Estimate ]value upper limit (L) | 8347 | 209B | 24731 | 609B | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 13 | Estimate value upper limit (H) | 8348 | 209C | 24732 | 609C | | | | | – | |
| Pulse Input | Pulse Estimate Value | 13 | Estimate value lower limit (L) | 8349 | 209D | 24733 | 609D | | | | | – | |
| Pulse Input | Pulse Estimate Value | 13 | Estimate value lower limit (H) | 8350 | 209E | 24734 | 609E | | | | | – | |
| Pulse Input | Pulse Estimate Value | 13 | Action when the estimate value upper or lower limits are reached | 8351 | 209F | 24735 | 609F | | | | | – | |
| Pulse Input | Pulse Estimate Value | 13 | Preset value (L) | 8352 | 20A0 | 24736 | 60A0 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 13 | Preset value (H) | 8353 | 20A1 | 24737 | 60A1 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 14 | Estimate count direction | 8360 | 20A8 | 24744 | 60A8 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 14 | Estimate value scaling value (C1) | 8361 | 20A9 | 24745 | 60A9 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 14 | Reserved for system use | 8362 | 20AA | 24746 | 60AA | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 14 | Estimate value scaling value (C2) | 8363 | 20AB | 24747 | 60AB | | | | | – | |
| Pulse Input | Pulse Estimate Value | 14 | Reserved for system use | 8364 | 20AC | 24748 | 60AC | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 14 | Estimate target value (L) | 8365 | 20AD | 24749 | 60AD | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 14 | Estimate target value (H) | 8366 | 20AE | 24750 | 60AE | | | | | – | |
| Pulse Input | Pulse Estimate Value | 14 | Pre-target value (L) | 8367 | 20AF | 24751 | 60AF | | | | | – | |
| Pulse Input | Pulse Estimate Value | 14 | Pre-target value (H) | 8368 | 20B0 | 24752 | 60B0 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 14 | Pre-pre-target value (L) | 8369 | 20B1 | 24753 | 60B1 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 14 | Pre-pre-target value (H) | 8370 | 20B2 | 24754 | 60B2 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 14 | Estimate ]value upper limit (L) | 8371 | 20B3 | 24755 | 60B3 | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 14 | Estimate value upper limit (H) | 8372 | 20B4 | 24756 | 60B4 | | | | | – | |

## Pulse Input/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Pulse Input | Pulse Estimate Value | 14 | Estimate value lower limit (L) | 8373 | 20B5 | 24757 | 60B5 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 14 | Estimate value lower limit (H) | 8374 | 20B6 | 24758 | 60B6 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 14 | Action when the estimate value upper or lower limits are reached | 8375 | 20B7 | 24759 | 60B7 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 14 | Preset value (L) | 8376 | 20B8 | 24760 | 60B8 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 14 | Preset value (H) | 8377 | 20B9 | 24761 | 60B9 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 15 | Estimate count direction | 8384 | 20C0 | 24768 | 60C0 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 15 | Estimate value scaling value (C1) | 8385 | 20C1 | 24769 | 60C1 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 15 | Reserved for system use | 8386 | 20C2 | 24770 | 60C2 | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 15 | Estimate value scaling value (C2) | 8387 | 20C3 | 24771 | 60C3 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 15 | Reserved for system use | 8388 | 20C4 | 24772 | 60C4 | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 15 | Estimate target value (L) | 8389 | 20C5 | 24773 | 60C5 | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 15 | Estimate target value (H) | 8390 | 20C6 | 24774 | 60C6 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 15 | Pre-target value (L) | 8391 | 20C7 | 24775 | 60C7 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 15 | Pre-target value (H) | 8392 | 20C8 | 24776 | 60C8 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 15 | Pre-pre-target value (L) | 8393 | 20C9 | 24777 | 60C9 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 15 | Pre-pre-target value (H) | 8394 | 20CA | 24778 | 60CA | | | | | – | |
| Pulse Input | Pulse Estimate Value | 15 | Estimate ]value upper limit (L) | 8395 | 20CB | 24779 | 60CB | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 15 | Estimate value upper limit (H) | 8396 | 20CC | 24780 | 60CC | | | | | – | |
| Pulse Input | Pulse Estimate Value | 15 | Estimate value lower limit (L) | 8397 | 20CD | 24781 | 60CD | | | | | – | |
| Pulse Input | Pulse Estimate Value | 15 | Estimate value lower limit (H) | 8398 | 20CE | 24782 | 60CE | | | | | – | |
| Pulse Input | Pulse Estimate Value | 15 | Action when the estimate value upper or lower limits are reached | 8399 | 20CF | 24783 | 60CF | | | | | – | |
| Pulse Input | Pulse Estimate Value | 15 | Preset value (L) | 8400 | 20D0 | 24784 | 60D0 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 15 | Preset value (H) | 8401 | 20D1 | 24785 | 60D1 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 16 | Estimate count direction | 8408 | 20D8 | 24792 | 60D8 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 16 | Estimate value scaling value (C1) | 8409 | 20D9 | 24793 | 60D9 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 16 | Reserved for system use | 8410 | 20DA | 24794 | 60DA | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 16 | Estimate value scaling value (C2) | 8411 | 20DB | 24795 | 60DB | | | | | – | |
| Pulse Input | Pulse Estimate Value | 16 | Reserved for system use | 8412 | 20DC | 24796 | 60DC | | | | | – | When writing, write 0 |
| Pulse Input | Pulse Estimate Value | 16 | Estimate target value (L) | 8413 | 20DD | 24797 | 60DD | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 16 | Estimate target value (H) | 8414 | 20DE | 24798 | 60DE | | | | | – | |
| Pulse Input | Pulse Estimate Value | 16 | Pre-target value (L) | 8415 | 20DF | 24799 | 60DF | | | | | – | |
| Pulse Input | Pulse Estimate Value | 16 | Pre-target value (H) | 8416 | 20E0 | 24800 | 60E0 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 16 | Pre-pre-target value (L) | 8417 | 20E1 | 24801 | 60E1 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 16 | Pre-pre-target value (H) | 8418 | 20E2 | 24802 | 60E2 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 16 | Estimate ]value upper limit (L) | 8419 | 20E3 | 24803 | 60E3 | | | | | – | Initial value = 999999999 |
| Pulse Input | Pulse Estimate Value | 16 | Estimate value upper limit (H) | 8420 | 20E4 | 24804 | 60E4 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 16 | Estimate value lower limit (L) | 8421 | 20E5 | 24805 | 60E5 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 16 | Estimate value lower limit (H) | 8422 | 20E6 | 24806 | 60E6 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 16 | Action when the estimate value upper or lower limits are reached | 8423 | 20E7 | 24807 | 60E7 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 16 | Preset value (L) | 8424 | 20E8 | 24808 | 60E8 | | | | | – | |
| Pulse Input | Pulse Estimate Value | 16 | Preset value (H) | 8425 | 20E9 | 24809 | 60E9 | | | | | – | |

## Pulse Input/Pulse Instant Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Pulse Input | Pulse Instant Value | 1 | Instant value update cycle | 8432 | 20F0 | 24816 | 60F0 | | | | | – | |
| Pulse Input | Pulse Instant Value | 1 | Decimal point position | 8433 | 20F1 | 24817 | 60F1 | | | | | – | |
| Pulse Input | Pulse Instant Value | 1 | Timebase | 8434 | 20F2 | 24818 | 60F2 | | | | | – | |
| Pulse Input | Pulse Instant Value | 1 | Instant value scaling value (C1) | 8435 | 20F3 | 24819 | 60F3 | | | | | – | |
| Pulse Input | Pulse Instant Value | 1 | Instant value scaling value (C2) | 8436 | 20F4 | 24820 | 60F4 | | | | | – | |
| Pulse Input | Pulse Instant Value | 1 | Instant value upper limit | 8437 | 20F5 | 24821 | 60F5 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 1 | Instant value lower limit | 8438 | 20F6 | 24822 | 60F6 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 1 | Instant value ratio | 8439 | 20F7 | 24823 | 60F7 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 1 | Instant value bias | 8440 | 20F8 | 24824 | 60F8 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 1 | Instant value filter | 8441 | 20F9 | 24825 | 60F9 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 2 | Instant value update cycle | 8448 | 2100 | 24832 | 6100 | | | | | – | |
| Pulse Input | Pulse Instant Value | 2 | Decimal point position | 8449 | 2101 | 24833 | 6101 | | | | | – | |
| Pulse Input | Pulse Instant Value | 2 | Timebase | 8450 | 2102 | 24834 | 6102 | | | | | – | |
| Pulse Input | Pulse Instant Value | 2 | Instant value scaling value (C1) | 8451 | 2103 | 24835 | 6103 | | | | | – | |
| Pulse Input | Pulse Instant Value | 2 | Instant value scaling value (C2) | 8452 | 2104 | 24836 | 6104 | | | | | – | |
| Pulse Input | Pulse Instant Value | 2 | Instant value upper limit | 8453 | 2105 | 24837 | 6105 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 2 | Instant value lower limit | 8454 | 2106 | 24838 | 6106 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 2 | Instant value ratio | 8455 | 2107 | 24839 | 6107 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 2 | Instant value bias | 8456 | 2108 | 24840 | 6108 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 2 | Instant value filter | 8457 | 2109 | 24841 | 6109 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 3 | Instant value update cycle | 8464 | 2110 | 24848 | 6110 | | | | | – | |
| Pulse Input | Pulse Instant Value | 3 | Decimal point position | 8465 | 2111 | 24849 | 6111 | | | | | – | |
| Pulse Input | Pulse Instant Value | 3 | Timebase | 8466 | 2112 | 24850 | 6112 | | | | | – | |
| Pulse Input | Pulse Instant Value | 3 | Instant value scaling value (C1) | 8467 | 2113 | 24851 | 6113 | | | | | – | |
| Pulse Input | Pulse Instant Value | 3 | Instant value scaling value (C2) | 8468 | 2114 | 24852 | 6114 | | | | | – | |
| Pulse Input | Pulse Instant Value | 3 | Instant value upper limit | 8469 | 2115 | 24853 | 6115 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 3 | Instant value lower limit | 8470 | 2116 | 24854 | 6116 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 3 | Instant value ratio | 8471 | 2117 | 24855 | 6117 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 3 | Instant value bias | 8472 | 2118 | 24856 | 6118 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 3 | Instant value filter | 8473 | 2119 | 24857 | 6119 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 4 | Instant value update cycle | 8480 | 2120 | 24864 | 6120 | | | | | – | |
| Pulse Input | Pulse Instant Value | 4 | Decimal point position | 8481 | 2121 | 24865 | 6121 | | | | | – | |
| Pulse Input | Pulse Instant Value | 4 | Timebase | 8482 | 2122 | 24866 | 6122 | | | | | – | |
| Pulse Input | Pulse Instant Value | 4 | Instant value scaling value (C1) | 8483 | 2123 | 24867 | 6123 | | | | | – | |
| Pulse Input | Pulse Instant Value | 4 | Instant value scaling value (C2) | 8484 | 2124 | 24868 | 6124 | | | | | – | |
| Pulse Input | Pulse Instant Value | 4 | Instant value upper limit | 8485 | 2125 | 24869 | 6125 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 4 | Instant value lower limit | 8486 | 2126 | 24870 | 6126 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 4 | Instant value ratio | 8487 | 2127 | 24871 | 6127 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 4 | Instant value bias | 8488 | 2128 | 24872 | 6128 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 4 | Instant value filter | 8489 | 2129 | 24873 | 6129 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 5 | Instant value update cycle | 8496 | 2130 | 24880 | 6130 | | | | | – | |
| Pulse Input | Pulse Instant Value | 5 | Decimal point position | 8497 | 2131 | 24881 | 6131 | | | | | – | |
| Pulse Input | Pulse Instant Value | 5 | Timebase | 8498 | 2132 | 24882 | 6132 | | | | | – | |
| Pulse Input | Pulse Instant Value | 5 | Instant value scaling value (C1) | 8499 | 2133 | 24883 | 6133 | | | | | – | |
| Pulse Input | Pulse Instant Value | 5 | Instant value scaling value (C2) | 8500 | 2134 | 24884 | 6134 | | | | | – | |
| Pulse Input | Pulse Instant Value | 5 | Instant value upper limit | 8501 | 2135 | 24885 | 6135 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 5 | Instant value lower limit | 8502 | 2136 | 24886 | 6136 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 5 | Instant value ratio | 8503 | 2137 | 24887 | 6137 | | | | | 2 | |

## Pulse Input/Pulse Instant Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Pulse Input | Pulse Instant Value | 5 | Instant value bias | 8504 | 2138 | 24888 | 6138 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 5 | Instant value filter | 8505 | 2139 | 24889 | 6139 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 6 | Instant value update cycle | 8512 | 2140 | 24896 | 6140 | | | | | – | |
| Pulse Input | Pulse Instant Value | 6 | Decimal point position | 8513 | 2141 | 24897 | 6141 | | | | | – | |
| Pulse Input | Pulse Instant Value | 6 | Timebase | 8514 | 2142 | 24898 | 6142 | | | | | – | |
| Pulse Input | Pulse Instant Value | 6 | Instant value scaling value (C1) | 8515 | 2143 | 24899 | 6143 | | | | | – | |
| Pulse Input | Pulse Instant Value | 6 | Instant value scaling value (C2) | 8516 | 2144 | 24900 | 6144 | | | | | – | |
| Pulse Input | Pulse Instant Value | 6 | Instant value upper limit | 8517 | 2145 | 24901 | 6145 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 6 | Instant value lower limit | 8518 | 2146 | 24902 | 6146 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 6 | Instant value ratio | 8519 | 2147 | 24903 | 6147 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 6 | Instant value bias | 8520 | 2148 | 24904 | 6148 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 6 | Instant value filter | 8521 | 2149 | 24905 | 6149 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 7 | Instant value update cycle | 8528 | 2150 | 24912 | 6150 | | | | | – | |
| Pulse Input | Pulse Instant Value | 7 | Decimal point position | 8529 | 2151 | 24913 | 6151 | | | | | – | |
| Pulse Input | Pulse Instant Value | 7 | Timebase | 8530 | 2152 | 24914 | 6152 | | | | | – | |
| Pulse Input | Pulse Instant Value | 7 | Instant value scaling value (C1) | 8531 | 2153 | 24915 | 6153 | | | | | – | |
| Pulse Input | Pulse Instant Value | 7 | Instant value scaling value (C2) | 8532 | 2154 | 24916 | 6154 | | | | | – | |
| Pulse Input | Pulse Instant Value | 7 | Instant value upper limit | 8533 | 2155 | 24917 | 6155 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 7 | Instant value lower limit | 8534 | 2156 | 24918 | 6156 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 7 | Instant value ratio | 8535 | 2157 | 24919 | 6157 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 7 | Instant value bias | 8536 | 2158 | 24920 | 6158 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 7 | Instant value filter | 8537 | 2159 | 24921 | 6159 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 8 | Instant value update cycle | 8544 | 2160 | 24928 | 6160 | | | | | – | |
| Pulse Input | Pulse Instant Value | 8 | Decimal point position | 8545 | 2161 | 24929 | 6161 | | | | | – | |
| Pulse Input | Pulse Instant Value | 8 | Timebase | 8546 | 2162 | 24930 | 6162 | | | | | – | |
| Pulse Input | Pulse Instant Value | 8 | Instant value scaling value (C1) | 8547 | 2163 | 24931 | 6163 | | | | | – | |
| Pulse Input | Pulse Instant Value | 8 | Instant value scaling value (C2) | 8548 | 2164 | 24932 | 6164 | | | | | – | |
| Pulse Input | Pulse Instant Value | 8 | Instant value upper limit | 8549 | 2165 | 24933 | 6165 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 8 | Instant value lower limit | 8550 | 2166 | 24934 | 6166 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 8 | Instant value ratio | 8551 | 2167 | 24935 | 6167 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 8 | Instant value bias | 8552 | 2168 | 24936 | 6168 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 8 | Instant value filter | 8553 | 2169 | 24937 | 6169 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 9 | Instant value update cycle | 8560 | 2170 | 24944 | 6170 | | | | | – | |
| Pulse Input | Pulse Instant Value | 9 | Decimal point position | 8561 | 2171 | 24945 | 6171 | | | | | – | |
| Pulse Input | Pulse Instant Value | 9 | Timebase | 8562 | 2172 | 24946 | 6172 | | | | | – | |
| Pulse Input | Pulse Instant Value | 9 | Instant value scaling value (C1) | 8563 | 2173 | 24947 | 6173 | | | | | – | |
| Pulse Input | Pulse Instant Value | 9 | Instant value scaling value (C2) | 8564 | 2174 | 24948 | 6174 | | | | | – | |
| Pulse Input | Pulse Instant Value | 9 | Instant value upper limit | 8565 | 2175 | 24949 | 6175 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 9 | Instant value lower limit | 8566 | 2176 | 24950 | 6176 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 9 | Instant value ratio | 8567 | 2177 | 24951 | 6177 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 9 | Instant value bias | 8568 | 2178 | 24952 | 6178 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 9 | Instant value filter | 8569 | 2179 | 24953 | 6179 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 10 | Instant value update cycle | 8576 | 2180 | 24960 | 6180 | | | | | – | |
| Pulse Input | Pulse Instant Value | 10 | Decimal point position | 8577 | 2181 | 24961 | 6181 | | | | | – | |
| Pulse Input | Pulse Instant Value | 10 | Timebase | 8578 | 2182 | 24962 | 6182 | | | | | – | |
| Pulse Input | Pulse Instant Value | 10 | Instant value scaling value (C1) | 8579 | 2183 | 24963 | 6183 | | | | | – | |
| Pulse Input | Pulse Instant Value | 10 | Instant value scaling value (C2) | 8580 | 2184 | 24964 | 6184 | | | | | – | |
| Pulse Input | Pulse Instant Value | 10 | Instant value upper limit | 8581 | 2185 | 24965 | 6185 | | | | | PULSE | |

## Pulse Input/Pulse Instant Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Pulse Input | Pulse Instant Value | 10 | Instant value lower limit | 8582 | 2186 | 24966 | 6186 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 10 | Instant value ratio | 8583 | 2187 | 24967 | 6187 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 10 | Instant value bias | 8584 | 2188 | 24968 | 6188 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 10 | Instant value filter | 8585 | 2189 | 24969 | 6189 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 11 | Instant value update cycle | 8592 | 2190 | 24976 | 6190 | | | | | – | |
| Pulse Input | Pulse Instant Value | 11 | Decimal point position | 8593 | 2191 | 24977 | 6191 | | | | | – | |
| Pulse Input | Pulse Instant Value | 11 | Timebase | 8594 | 2192 | 24978 | 6192 | | | | | – | |
| Pulse Input | Pulse Instant Value | 11 | Instant value scaling value (C1) | 8595 | 2193 | 24979 | 6193 | | | | | – | |
| Pulse Input | Pulse Instant Value | 11 | Instant value scaling value (C2) | 8596 | 2194 | 24980 | 6194 | | | | | – | |
| Pulse Input | Pulse Instant Value | 11 | Instant value upper limit | 8597 | 2195 | 24981 | 6195 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 11 | Instant value lower limit | 8598 | 2196 | 24982 | 6196 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 11 | Instant value ratio | 8599 | 2197 | 24983 | 6197 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 11 | Instant value bias | 8600 | 2198 | 24984 | 6198 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 11 | Instant value filter | 8601 | 2199 | 24985 | 6199 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 12 | Instant value update cycle | 8608 | 21A0 | 24992 | 61A0 | | | | | – | |
| Pulse Input | Pulse Instant Value | 12 | Decimal point position | 8609 | 21A1 | 24993 | 61A1 | | | | | – | |
| Pulse Input | Pulse Instant Value | 12 | Timebase | 8610 | 21A2 | 24994 | 61A2 | | | | | – | |
| Pulse Input | Pulse Instant Value | 12 | Instant value scaling value (C1) | 8611 | 21A3 | 24995 | 61A3 | | | | | – | |
| Pulse Input | Pulse Instant Value | 12 | Instant value scaling value (C2) | 8612 | 21A4 | 24996 | 61A4 | | | | | – | |
| Pulse Input | Pulse Instant Value | 12 | Instant value upper limit | 8613 | 21A5 | 24997 | 61A5 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 12 | Instant value lower limit | 8614 | 21A6 | 24998 | 61A6 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 12 | Instant value ratio | 8615 | 21A7 | 24999 | 61A7 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 12 | Instant value bias | 8616 | 21A8 | 25000 | 61A8 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 12 | Instant value filter | 8617 | 21A9 | 25001 | 61A9 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 13 | Instant value update cycle | 8624 | 21B0 | 25008 | 61B0 | | | | | – | |
| Pulse Input | Pulse Instant Value | 13 | Decimal point position | 8625 | 21B1 | 25009 | 61B1 | | | | | – | |
| Pulse Input | Pulse Instant Value | 13 | Timebase | 8626 | 21B2 | 25010 | 61B2 | | | | | – | |
| Pulse Input | Pulse Instant Value | 13 | Instant value scaling value (C1) | 8627 | 21B3 | 25011 | 61B3 | | | | | – | |
| Pulse Input | Pulse Instant Value | 13 | Instant value scaling value (C2) | 8628 | 21B4 | 25012 | 61B4 | | | | | – | |
| Pulse Input | Pulse Instant Value | 13 | Instant value upper limit | 8629 | 21B5 | 25013 | 61B5 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 13 | Instant value lower limit | 8630 | 21B6 | 25014 | 61B6 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 13 | Instant value ratio | 8631 | 21B7 | 25015 | 61B7 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 13 | Instant value bias | 8632 | 21B8 | 25016 | 61B8 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 13 | Instant value filter | 8633 | 21B9 | 25017 | 61B9 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 14 | Instant value update cycle | 8640 | 21C0 | 25024 | 61C0 | | | | | – | |
| Pulse Input | Pulse Instant Value | 14 | Decimal point position | 8641 | 21C1 | 25025 | 61C1 | | | | | – | |
| Pulse Input | Pulse Instant Value | 14 | Timebase | 8642 | 21C2 | 25026 | 61C2 | | | | | – | |
| Pulse Input | Pulse Instant Value | 14 | Instant value scaling value (C1) | 8643 | 21C3 | 25027 | 61C3 | | | | | – | |
| Pulse Input | Pulse Instant Value | 14 | Instant value scaling value (C2) | 8644 | 21C4 | 25028 | 61C4 | | | | | – | |
| Pulse Input | Pulse Instant Value | 14 | Instant value upper limit | 8645 | 21C5 | 25029 | 61C5 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 14 | Instant value lower limit | 8646 | 21C6 | 25030 | 61C6 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 14 | Instant value ratio | 8647 | 21C7 | 25031 | 61C7 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 14 | Instant value bias | 8648 | 21C8 | 25032 | 61C8 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 14 | Instant value filter | 8649 | 21C9 | 25033 | 61C9 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 15 | Instant value update cycle | 8656 | 21D0 | 25040 | 61D0 | | | | | – | |
| Pulse Input | Pulse Instant Value | 15 | Decimal point position | 8657 | 21D1 | 25041 | 61D1 | | | | | – | |
| Pulse Input | Pulse Instant Value | 15 | Timebase | 8658 | 21D2 | 25042 | 61D2 | | | | | – | |
| Pulse Input | Pulse Instant Value | 15 | Instant value scaling value (C1) | 8659 | 21D3 | 25043 | 61D3 | | | | | – | |

## Pulse Input/Pulse Instant Value

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Pulse Input | Pulse Instant Value | 15 | Instant value scaling value (C2) | 8660 | 21D4 | 25044 | 61D4 | | | | | – | |
| Pulse Input | Pulse Instant Value | 15 | Instant value upper limit | 8661 | 21D5 | 25045 | 61D5 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 15 | Instant value lower limit | 8662 | 21D6 | 25046 | 61D6 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 15 | Instant value ratio | 8663 | 21D7 | 25047 | 61D7 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 15 | Instant value bias | 8664 | 21D8 | 25048 | 61D8 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 15 | Instant value filter | 8665 | 21D9 | 25049 | 61D9 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 16 | Instant value update cycle | 8672 | 21E0 | 25056 | 61E0 | | | | | – | |
| Pulse Input | Pulse Instant Value | 16 | Decimal point position | 8673 | 21E1 | 25057 | 61E1 | | | | | – | |
| Pulse Input | Pulse Instant Value | 16 | Timebase | 8674 | 21E2 | 25058 | 61E2 | | | | | – | |
| Pulse Input | Pulse Instant Value | 16 | Instant value scaling value (C1) | 8675 | 21E3 | 25059 | 61E3 | | | | | – | |
| Pulse Input | Pulse Instant Value | 16 | Instant value scaling value (C2) | 8676 | 21E4 | 25060 | 61E4 | | | | | – | |
| Pulse Input | Pulse Instant Value | 16 | Instant value upper limit | 8677 | 21E5 | 25061 | 61E5 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 16 | Instant value lower limit | 8678 | 21E6 | 25062 | 61E6 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 16 | Instant value ratio | 8679 | 21E7 | 25063 | 61E7 | | | | | 2 | |
| Pulse Input | Pulse Instant Value | 16 | Instant value bias | 8680 | 21E8 | 25064 | 61E8 | | | | | PULSE | |
| Pulse Input | Pulse Instant Value | 16 | Instant value filter | 8681 | 21E9 | 25065 | 61E9 | | | | | 2 | |

## Function/Reception Monitoring

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Function | Reception monitoring | 1 | Address (L) | – | – | 3840 | 0F00 | | | | | – | |
| Function | Reception monitoring | 1 | Address (H) | – | – | 3841 | 0F01 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 1 | Time-out(L) | – | – | 3842 | 0F02 | | | | | – | |
| Function | Reception monitoring | 1 | Time-out (H) | – | – | 3843 | 0F03 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 1 | Mode | – | – | 3844 | 0F04 | | | | | – | |
| Function | Reception monitoring | 2 | Address (L) | – | – | 3848 | 0F08 | | | | | – | |
| Function | Reception monitoring | 2 | Address (H) | – | – | 3849 | 0F09 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 2 | Time-out(L) | – | – | 3850 | 0F0A | | | | | – | |
| Function | Reception monitoring | 2 | Time-out (H) | – | – | 3851 | 0F0B | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 2 | Mode | – | – | 3852 | 0F0C | | | | | – | |
| Function | Reception monitoring | 3 | Address (L) | – | – | 3856 | 0F10 | | | | | – | |
| Function | Reception monitoring | 3 | Address (H) | – | – | 3857 | 0F11 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 3 | Time-out(L) | – | – | 3858 | 0F12 | | | | | – | |
| Function | Reception monitoring | 3 | Time-out (H) | – | – | 3859 | 0F13 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 3 | Mode | – | – | 3860 | 0F14 | | | | | – | |
| Function | Reception monitoring | 4 | Address (L) | – | – | 3864 | 0F18 | | | | | – | |
| Function | Reception monitoring | 4 | Address (H) | – | – | 3865 | 0F19 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 4 | Time-out(L) | – | – | 3866 | 0F1A | | | | | – | |
| Function | Reception monitoring | 4 | Time-out (H) | – | – | 3867 | 0F1B | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 4 | Mode | – | – | 3868 | 0F1C | | | | | – | |
| Function | Reception monitoring | 5 | Address (L) | – | – | 3872 | 0F20 | | | | | – | |
| Function | Reception monitoring | 5 | Address (H) | – | – | 3873 | 0F21 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 5 | Time-out(L) | – | – | 3874 | 0F22 | | | | | – | |
| Function | Reception monitoring | 5 | Time-out (H) | – | – | 3875 | 0F23 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 5 | Mode | – | – | 3876 | 0F24 | | | | | – | |
| Function | Reception monitoring | 6 | Address (L) | – | – | 3880 | 0F28 | | | | | – | |
| Function | Reception monitoring | 6 | Address (H) | – | – | 3881 | 0F29 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 6 | Time-out(L) | – | – | 3882 | 0F2A | | | | | – | |
| Function | Reception monitoring | 6 | Time-out (H) | – | – | 3883 | 0F2B | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 6 | Mode | – | – | 3884 | 0F2C | | | | | – | |
| Function | Reception monitoring | 7 | Address (L) | – | – | 3888 | 0F30 | | | | | – | |
| Function | Reception monitoring | 7 | Address (H) | – | – | 3889 | 0F31 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 7 | Time-out(L) | – | – | 3890 | 0F32 | | | | | – | |
| Function | Reception monitoring | 7 | Time-out (H) | – | – | 3891 | 0F33 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 7 | Mode | – | – | 3892 | 0F34 | | | | | – | |
| Function | Reception monitoring | 8 | Address (L) | – | – | 3896 | 0F38 | | | | | – | |
| Function | Reception monitoring | 8 | Address (H) | – | – | 3897 | 0F39 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 8 | Time-out(L) | – | – | 3898 | 0F3A | | | | | – | |
| Function | Reception monitoring | 8 | Time-out (H) | – | – | 3899 | 0F3B | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 8 | Mode | – | – | 3900 | 0F3C | | | | | – | |
| Function | Reception monitoring | 9 | Address (L) | – | – | 3904 | 0F40 | | | | | – | |
| Function | Reception monitoring | 9 | Address (H) | – | – | 3905 | 0F41 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 9 | Time-out(L) | – | – | 3906 | 0F42 | | | | | – | |
| Function | Reception monitoring | 9 | Time-out (H) | – | – | 3907 | 0F43 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 9 | Mode | – | – | 3908 | 0F44 | | | | | – | |
| Function | Reception monitoring | 10 | Address (L) | – | – | 3912 | 0F48 | | | | | – | |

## Function/Reception Monitoring

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Function | Reception monitoring | 10 | Address (H) | – | – | 3913 | 0F49 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 10 | Time-out(L) | – | – | 3914 | 0F48 | | | | | – | |
| Function | Reception monitoring | 10 | Time-out (H) | – | – | 3915 | 0F4B | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 10 | Mode | – | – | 3916 | 0F4C | | | | | – | |
| Function | Reception monitoring | 11 | Address (L) | – | – | 3920 | 0F50 | | | | | – | |
| Function | Reception monitoring | 11 | Address (H) | – | – | 3921 | 0F51 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 11 | Time-out(L) | – | – | 3922 | 0F52 | | | | | – | |
| Function | Reception monitoring | 11 | Time-out (H) | – | – | 3923 | 0F53 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 11 | Mode | – | – | 3924 | 0F54 | | | | | – | |
| Function | Reception monitoring | 12 | Address (L) | – | – | 3928 | 0F58 | | | | | – | |
| Function | Reception monitoring | 12 | Address (H) | – | – | 3929 | 0F59 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 12 | Time-out(L) | – | – | 3930 | 0F5A | | | | | – | |
| Function | Reception monitoring | 12 | Time-out (H) | – | – | 3931 | 0F5B | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 12 | Mode | – | – | 3932 | 0F5C | | | | | – | |
| Function | Reception monitoring | 13 | Address (L) | – | – | 3936 | 0F60 | | | | | – | |
| Function | Reception monitoring | 13 | Address (H) | – | – | 3937 | 0F61 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 13 | Time-out(L) | – | – | 3938 | 0F62 | | | | | – | |
| Function | Reception monitoring | 13 | Time-out (H) | – | – | 3939 | 0F63 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 13 | Mode | – | – | 3940 | 0F64 | | | | | – | |
| Function | Reception monitoring | 14 | Address (L) | – | – | 3944 | 0F68 | | | | | – | |
| Function | Reception monitoring | 14 | Address (H) | – | – | 3945 | 0F69 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 14 | Time-out(L) | – | – | 3946 | 0F6A | | | | | – | |
| Function | Reception monitoring | 14 | Time-out (H) | – | – | 3947 | 0F6B | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 14 | Mode | – | – | 3948 | 0F6C | | | | | – | |
| Function | Reception monitoring | 15 | Address (L) | – | – | 3952 | 0F70 | | | | | – | |
| Function | Reception monitoring | 15 | Address (H) | – | – | 3953 | 0F71 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 15 | Time-out(L) | – | – | 3954 | 0F72 | | | | | – | |
| Function | Reception monitoring | 15 | Time-out (H) | – | – | 3955 | 0F73 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 15 | Mode | – | – | 3956 | 0F74 | | | | | – | |
| Function | Reception monitoring | 16 | Address (L) | – | – | 3960 | 0F78 | | | | | – | |
| Function | Reception monitoring | 16 | Address (H) | – | – | 3961 | 0F79 | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 16 | Time-out(L) | – | – | 3962 | 0F7A | | | | | – | |
| Function | Reception monitoring | 16 | Time-out (H) | – | – | 3963 | 0F7B | | | | | – | When writing, write 0 |
| Function | Reception monitoring | 16 | Mode | – | – | 3964 | 0F7C | | | | | – | |

## Other/UF LED Settings

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Other | UF LED Settings | 1 | Conditions for lighting | 10160 | 27B0 | 26544 | 67B0 | | | | | – | |
| Other | UF LED Settings | 1 | Lighting status | 10161 | 27B1 | 26545 | 67B1 | | | | | – | |
| Other | UF LED Settings | 2 | Conditions for lighting | 10164 | 27B4 | 26548 | 67B4 | | | | | – | |
| Other | UF LED Settings | 2 | Lighting status | 10165 | 27B5 | 26549 | 67B5 | | | | | – | |

## Other/Instrument Information

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Other | Instrument Information | 1 | F/W ROM ID | 10768 | 2A10 | 27152 | 6A10 | | × | | × | – | |
| Other | Instrument Information | 1 | F/W ROM Version 1 | 10769 | 2A11 | 27153 | 6A11 | | × | | × | – | |
| Other | Instrument Information | 1 | F/W ROM Version 2 | 10770 | 2A12 | 27154 | 6A12 | | × | | × | – | |
| Other | Instrument Information | 1 | Module interchange version | 10771 | 2A13 | 27155 | 6A13 | | × | | × | – | |
| Other | Instrument Information | 1 | Module version (Major, minor) | 10773 | 2A15 | 27157 | 6A15 | | × | | × | – | |

## Other/DI Tag Name

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Other | DI Tag Name | 1 | Tag name 1 | 7216 | 1C30 | 23600 | 5C30 | | | | | – | |
| Other | DI Tag Name | 1 | Tag name 2 | 7217 | 1C31 | 23601 | 5C31 | | | | | – | |
| Other | DI Tag Name | 1 | Tag name 3 | 7218 | 1C32 | 23602 | 5C32 | | | | | – | |
| Other | DI Tag Name | 1 | Tag name 4 | 7219 | 1C33 | 23603 | 5C33 | | | | | – | |
| Other | DI Tag Name | 1 | Tag name 5 | 7220 | 1C34 | 23604 | 5C34 | | | | | – | |
| Other | DI Tag Name | 1 | Tag name 6 | 7221 | 1C35 | 23605 | 5C35 | | | | | – | |
| Other | DI Tag Name | 1 | Tag name 7 | 7222 | 1C36 | 23606 | 5C36 | | | | | – | |
| Other | DI Tag Name | 1 | Tag name 8 | 7223 | 1C37 | 23607 | 5C37 | | | | | – | |
| Other | DI Tag Name | 2 | Tag name 1 | 7224 | 1C38 | 23608 | 5C38 | | | | | – | |
| Other | DI Tag Name | 2 | Tag name 2 | 7225 | 1C39 | 23609 | 5C39 | | | | | – | |
| Other | DI Tag Name | 2 | Tag name 3 | 7226 | 1C3A | 23610 | 5C3A | | | | | – | |
| Other | DI Tag Name | 2 | Tag name 4 | 7227 | 1C3B | 23611 | 5C3B | | | | | – | |
| Other | DI Tag Name | 2 | Tag name 5 | 7228 | 1C3C | 23612 | 5C3C | | | | | – | |
| Other | DI Tag Name | 2 | Tag name 6 | 7229 | 1C3D | 23613 | 5C3D | | | | | – | |
| Other | DI Tag Name | 2 | Tag name 7 | 7230 | 1C3E | 23614 | 5C3E | | | | | – | |
| Other | DI Tag Name | 2 | Tag name 8 | 7231 | 1C3F | 23615 | 5C3F | | | | | – | |
| Other | DI Tag Name | 3 | Tag name 1 | 7232 | 1C40 | 23616 | 5C40 | | | | | – | |
| Other | DI Tag Name | 3 | Tag name 2 | 7233 | 1C41 | 23617 | 5C41 | | | | | – | |
| Other | DI Tag Name | 3 | Tag name 3 | 7234 | 1C42 | 23618 | 5C42 | | | | | – | |
| Other | DI Tag Name | 3 | Tag name 4 | 7235 | 1C43 | 23619 | 5C43 | | | | | – | |
| Other | DI Tag Name | 3 | Tag name 5 | 7236 | 1C44 | 23620 | 5C44 | | | | | – | |
| Other | DI Tag Name | 3 | Tag name 6 | 7237 | 1C45 | 23621 | 5C45 | | | | | – | |
| Other | DI Tag Name | 3 | Tag name 7 | 7238 | 1C46 | 23622 | 5C46 | | | | | – | |
| Other | DI Tag Name | 3 | Tag name 8 | 7239 | 1C47 | 23623 | 5C47 | | | | | – | |
| Other | DI Tag Name | 4 | Tag name 1 | 7240 | 1C48 | 23624 | 5C48 | | | | | – | |
| Other | DI Tag Name | 4 | Tag name 2 | 7241 | 1C49 | 23625 | 5C49 | | | | | – | |
| Other | DI Tag Name | 4 | Tag name 3 | 7242 | 1C4A | 23626 | 5C4A | | | | | – | |
| Other | DI Tag Name | 4 | Tag name 4 | 7243 | 1C4B | 23627 | 5C4B | | | | | – | |
| Other | DI Tag Name | 4 | Tag name 5 | 7244 | 1C4C | 23628 | 5C4C | | | | | – | |
| Other | DI Tag Name | 4 | Tag name 6 | 7245 | 1C4D | 23629 | 5C4D | | | | | – | |
| Other | DI Tag Name | 4 | Tag name 7 | 7246 | 1C4E | 23630 | 5C4E | | | | | – | |
| Other | DI Tag Name | 4 | Tag name 8 | 7247 | 1C4F | 23631 | 5C4F | | | | | – | |
| Other | DI Tag Name | 5 | Tag name 1 | 7248 | 1C50 | 23632 | 5C50 | | | | | – | |
| Other | DI Tag Name | 5 | Tag name 2 | 7249 | 1C51 | 23633 | 5C51 | | | | | – | |
| Other | DI Tag Name | 5 | Tag name 3 | 7250 | 1C52 | 23634 | 5C52 | | | | | – | |
| Other | DI Tag Name | 5 | Tag name 4 | 7251 | 1C53 | 23635 | 5C53 | | | | | – | |
| Other | DI Tag Name | 5 | Tag name 5 | 7252 | 1C54 | 23636 | 5C54 | | | | | – | |
| Other | DI Tag Name | 5 | Tag name 6 | 7253 | 1C55 | 23637 | 5C55 | | | | | – | |
| Other | DI Tag Name | 5 | Tag name 7 | 7254 | 1C56 | 23638 | 5C56 | | | | | – | |
| Other | DI Tag Name | 5 | Tag name 8 | 7255 | 1C57 | 23639 | 5C57 | | | | | – | |
| Other | DI Tag Name | 6 | Tag name 1 | 7256 | 1C58 | 23640 | 5C58 | | | | | – | |
| Other | DI Tag Name | 6 | Tag name 2 | 7257 | 1C59 | 23641 | 5C59 | | | | | – | |
| Other | DI Tag Name | 6 | Tag name 3 | 7258 | 1C5A | 23642 | 5C5A | | | | | – | |
| Other | DI Tag Name | 6 | Tag name 4 | 7259 | 1C5B | 23643 | 5C5B | | | | | – | |
| Other | DI Tag Name | 6 | Tag name 5 | 7260 | 1C5C | 23644 | 5C5C | | | | | – | |
| Other | DI Tag Name | 6 | Tag name 6 | 7261 | 1C5D | 23645 | 5C5D | | | | | – | |
| Other | DI Tag Name | 6 | Tag name 7 | 7262 | 1C5E | 23646 | 5C5E | | | | | – | |
| Other | DI Tag Name | 6 | Tag name 8 | 7263 | 1C5F | 23647 | 5C5F | | | | | – | |
| Other | DI Tag Name | 7 | Tag name 1 | 7264 | 1C60 | 23648 | 5C60 | | | | | – | |
| Other | DI Tag Name | 7 | Tag name 2 | 7265 | 1C61 | 23649 | 5C61 | | | | | – | |
| Other | DI Tag Name | 7 | Tag name 3 | 7266 | 1C62 | 23650 | 5C62 | | | | | – | |
| Other | DI Tag Name | 7 | Tag name 4 | 7267 | 1C63 | 23651 | 5C63 | | | | | – | |
| Other | DI Tag Name | 7 | Tag name 5 | 7268 | 1C64 | 23652 | 5C64 | | | | | – | |
| Other | DI Tag Name | 7 | Tag name 6 | 7269 | 1C65 | 23653 | 5C65 | | | | | – | |
| Other | DI Tag Name | 7 | Tag name 7 | 7270 | 1C66 | 23654 | 5C66 | | | | | – | |
| Other | DI Tag Name | 7 | Tag name 8 | 7271 | 1C67 | 23655 | 5C67 | | | | | – | |
| Other | DI Tag Name | 8 | Tag name 1 | 7272 | 1C68 | 23656 | 5C68 | | | | | – | |
| Other | DI Tag Name | 8 | Tag name 2 | 7273 | 1C69 | 23657 | 5C69 | | | | | – | |
| Other | DI Tag Name | 8 | Tag name 3 | 7274 | 1C6A | 23658 | 5C6A | | | | | – | |
| Other | DI Tag Name | 8 | Tag name 4 | 7275 | 1C6B | 23659 | 5C6B | | | | | – | |

# Other/DI Tag Name

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Other | DI Tag Name | 8 | Tag name 5 | 7276 | 1C6C | 23660 | 5C6C | | | | | – | |
| Other | DI Tag Name | 8 | Tag name 6 | 7277 | 1C6D | 23661 | 5C6D | | | | | – | |
| Other | DI Tag Name | 8 | Tag name 7 | 7278 | 1C6E | 23662 | 5C6E | | | | | – | |
| Other | DI Tag Name | 8 | Tag name 8 | 7279 | 1C6F | 23663 | 5C6F | | | | | – | |
| Other | DI Tag Name | 9 | Tag name 1 | 7280 | 1C70 | 23664 | 5C70 | | | | | – | |
| Other | DI Tag Name | 9 | Tag name 2 | 7281 | 1C71 | 23665 | 5C71 | | | | | – | |
| Other | DI Tag Name | 9 | Tag name 3 | 7282 | 1C72 | 23666 | 5C72 | | | | | – | |
| Other | DI Tag Name | 9 | Tag name 4 | 7283 | 1C73 | 23667 | 5C73 | | | | | – | |
| Other | DI Tag Name | 9 | Tag name 5 | 7284 | 1C74 | 23668 | 5C74 | | | | | – | |
| Other | DI Tag Name | 9 | Tag name 6 | 7285 | 1C75 | 23669 | 5C75 | | | | | – | |
| Other | DI Tag Name | 9 | Tag name 7 | 7286 | 1C76 | 23670 | 5C76 | | | | | – | |
| Other | DI Tag Name | 9 | Tag name 8 | 7287 | 1C77 | 23671 | 5C77 | | | | | – | |
| Other | DI Tag Name | 10 | Tag name 1 | 7288 | 1C78 | 23672 | 5C78 | | | | | – | |
| Other | DI Tag Name | 10 | Tag name 2 | 7289 | 1C79 | 23673 | 5C79 | | | | | – | |
| Other | DI Tag Name | 10 | Tag name 3 | 7290 | 1C7A | 23674 | 5C7A | | | | | – | |
| Other | DI Tag Name | 10 | Tag name 4 | 7291 | 1C7B | 23675 | 5C7B | | | | | – | |
| Other | DI Tag Name | 10 | Tag name 5 | 7292 | 1C7C | 23676 | 5C7C | | | | | – | |
| Other | DI Tag Name | 10 | Tag name 6 | 7293 | 1C7D | 23677 | 5C7D | | | | | – | |
| Other | DI Tag Name | 10 | Tag name 7 | 7294 | 1C7E | 23678 | 5C7E | | | | | – | |
| Other | DI Tag Name | 10 | Tag name 8 | 7295 | 1C7F | 23679 | 5C7F | | | | | – | |
| Other | DI Tag Name | 11 | Tag name 1 | 7296 | 1C80 | 23680 | 5C80 | | | | | – | |
| Other | DI Tag Name | 11 | Tag name 2 | 7297 | 1C81 | 23681 | 5C81 | | | | | – | |
| Other | DI Tag Name | 11 | Tag name 3 | 7298 | 1C82 | 23682 | 5C82 | | | | | – | |
| Other | DI Tag Name | 11 | Tag name 4 | 7299 | 1C83 | 23683 | 5C83 | | | | | – | |
| Other | DI Tag Name | 11 | Tag name 5 | 7300 | 1C84 | 23684 | 5C84 | | | | | – | |
| Other | DI Tag Name | 11 | Tag name 6 | 7301 | 1C85 | 23685 | 5C85 | | | | | – | |
| Other | DI Tag Name | 11 | Tag name 7 | 7302 | 1C86 | 23686 | 5C86 | | | | | – | |
| Other | DI Tag Name | 11 | Tag name 8 | 7303 | 1C87 | 23687 | 5C87 | | | | | – | |
| Other | DI Tag Name | 12 | Tag name 1 | 7304 | 1C88 | 23688 | 5C88 | | | | | – | |
| Other | DI Tag Name | 12 | Tag name 2 | 7305 | 1C89 | 23689 | 5C89 | | | | | – | |
| Other | DI Tag Name | 12 | Tag name 3 | 7306 | 1C8A | 23690 | 5C8A | | | | | – | |
| Other | DI Tag Name | 12 | Tag name 4 | 7307 | 1C8B | 23691 | 5C8B | | | | | – | |
| Other | DI Tag Name | 12 | Tag name 5 | 7308 | 1C8C | 23692 | 5C8C | | | | | – | |
| Other | DI Tag Name | 12 | Tag name 6 | 7309 | 1C8D | 23693 | 5C8D | | | | | – | |
| Other | DI Tag Name | 12 | Tag name 7 | 7310 | 1C8E | 23694 | 5C8E | | | | | – | |
| Other | DI Tag Name | 12 | Tag name 8 | 7311 | 1C8F | 23695 | 5C8F | | | | | – | |
| Other | DI Tag Name | 13 | Tag name 1 | 7312 | 1C90 | 23696 | 5C90 | | | | | – | |
| Other | DI Tag Name | 13 | Tag name 2 | 7313 | 1C91 | 23697 | 5C91 | | | | | – | |
| Other | DI Tag Name | 13 | Tag name 3 | 7314 | 1C92 | 23698 | 5C92 | | | | | – | |
| Other | DI Tag Name | 13 | Tag name 4 | 7315 | 1C93 | 23699 | 5C93 | | | | | – | |
| Other | DI Tag Name | 13 | Tag name 5 | 7316 | 1C94 | 23700 | 5C94 | | | | | – | |
| Other | DI Tag Name | 13 | Tag name 6 | 7317 | 1C95 | 23701 | 5C95 | | | | | – | |
| Other | DI Tag Name | 13 | Tag name 7 | 7318 | 1C96 | 23702 | 5C96 | | | | | – | |
| Other | DI Tag Name | 13 | Tag name 8 | 7319 | 1C97 | 23703 | 5C97 | | | | | – | |
| Other | DI Tag Name | 14 | Tag name 1 | 7320 | 1C98 | 23704 | 5C98 | | | | | – | |
| Other | DI Tag Name | 14 | Tag name 2 | 7321 | 1C99 | 23705 | 5C99 | | | | | – | |
| Other | DI Tag Name | 14 | Tag name 3 | 7322 | 1C9A | 23706 | 5C9A | | | | | – | |
| Other | DI Tag Name | 14 | Tag name 4 | 7323 | 1C9B | 23707 | 5C9B | | | | | – | |
| Other | DI Tag Name | 14 | Tag name 5 | 7324 | 1C9C | 23708 | 5C9C | | | | | – | |
| Other | DI Tag Name | 14 | Tag name 6 | 7325 | 1C9D | 23709 | 5C9D | | | | | – | |
| Other | DI Tag Name | 14 | Tag name 7 | 7326 | 1C9E | 23710 | 5C9E | | | | | – | |
| Other | DI Tag Name | 14 | Tag name 8 | 7327 | 1C9F | 23711 | 5C9F | | | | | – | |
| Other | DI Tag Name | 15 | Tag name 1 | 7328 | 1CA0 | 23712 | 5CA0 | | | | | – | |
| Other | DI Tag Name | 15 | Tag name 2 | 7329 | 1CA1 | 23713 | 5CA1 | | | | | – | |
| Other | DI Tag Name | 15 | Tag name 3 | 7330 | 1CA2 | 23714 | 5CA2 | | | | | – | |
| Other | DI Tag Name | 15 | Tag name 4 | 7331 | 1CA3 | 23715 | 5CA3 | | | | | – | |
| Other | DI Tag Name | 15 | Tag name 5 | 7332 | 1CA4 | 23716 | 5CA4 | | | | | – | |
| Other | DI Tag Name | 15 | Tag name 6 | 7333 | 1CA5 | 23717 | 5CA5 | | | | | – | |
| Other | DI Tag Name | 15 | Tag name 7 | 7334 | 1CA6 | 23718 | 5CA6 | | | | | – | |
| Other | DI Tag Name | 15 | Tag name 8 | 7335 | 1CA7 | 23719 | 5CA7 | | | | | – | |

## Other/DI Tag Name

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Other | DI Tag Name | 16 | Tag name 1 | 7336 | 1CA8 | 23720 | 5CA8 | | | | | – | |
| Other | DI Tag Name | 16 | Tag name 2 | 7337 | 1CA9 | 23721 | 5CA9 | | | | | – | |
| Other | DI Tag Name | 16 | Tag name 3 | 7338 | 1CAA | 23722 | 5CAA | | | | | – | |
| Other | DI Tag Name | 16 | Tag name 4 | 7339 | 1CAB | 23723 | 5CAB | | | | | – | |
| Other | DI Tag Name | 16 | Tag name 5 | 7340 | 1CAC | 23724 | 5CAC | | | | | – | |
| Other | DI Tag Name | 16 | Tag name 6 | 7341 | 1CAD | 23725 | 5CAD | | | | | – | |
| Other | DI Tag Name | 16 | Tag name 7 | 7342 | 1CAE | 23726 | 5CAE | | | | | – | |
| Other | DI Tag Name | 16 | Tag name 8 | 7343 | 1CAF | 23727 | 5CAF | | | | | – | |

## Other/EV Tag Name

| Folder name | Bank name | No. | Item name | RAM address | | EEPROM address | | RAM | | EEPROM | | Decimal point information | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Decimal | Hexa-decimal | Decimal | Hexa-decimal | Read | Write | Read | Write | | |
| Other | EV Tag Name | 1 | Tag name 1 | 6768 | 1C70 | 23152 | 5C70 | | | | | – | |
| Other | EV Tag Name | 1 | Tag name 2 | 6769 | 1C71 | 23153 | 5C71 | | | | | – | |
| Other | EV Tag Name | 1 | Tag name 3 | 6770 | 1C72 | 23154 | 5C72 | | | | | – | |
| Other | EV Tag Name | 1 | Tag name 4 | 6771 | 1C73 | 23155 | 5C73 | | | | | – | |
| Other | EV Tag Name | 1 | Tag name 5 | 6772 | 1C74 | 23156 | 5C74 | | | | | – | |
| Other | EV Tag Name | 1 | Tag name 6 | 6773 | 1A75 | 23157 | 5A75 | | | | | – | |
| Other | EV Tag Name | 1 | Tag name 7 | 6774 | 1A76 | 23158 | 5A76 | | | | | – | |
| Other | EV Tag Name | 1 | Tag name 8 | 6775 | 1A77 | 23159 | 5A77 | | | | | – | |

## Bitmap allocation

### ■ Alarm information

#### ● Alarm information 1

RAM address : (10288/2830H)
EEPROM address : (26672/6830H)

| $b^{15}$ | $b^{14}$ | $b^{13}$ | $b^{12}$ | $b^{11}$ | $b^{10}$ | $b^{9}$ | $b^{8}$ | $b^{7}$ | $b^{6}$ | $b^{5}$ | $b^{4}$ | $b^{3}$ | $b^{2}$ | $b^{1}$ | $b^{0}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

LSB

1 to 16: undefined

#### ● Alarm information 2

RAM address : (10289/2831H)
EEPROM address : (26673/6831H)

| $b^{15}$ | $b^{14}$ | $b^{13}$ | $b^{12}$ | $b^{11}$ | $b^{10}$ | $b^{9}$ | $b^{8}$ | $b^{7}$ | $b^{6}$ | $b^{5}$ | $b^{4}$ | $b^{3}$ | $b^{2}$ | $b^{1}$ | $b^{0}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

LSB

1 to 8: undefined
9 : Reception monitors 1 to 16 (Soft failure) AL31
10 : Transmission time-out between modules (Soft failure) AL32
11 : RS-485 settings error (Soft failure) AL33
12 to 16 : undefined

#### ● Alarm information 3

RAM address : (10290/2832H)
EEPROM address : (26674/6832H)

| $b^{15}$ | $b^{14}$ | $b^{13}$ | $b^{12}$ | $b^{11}$ | $b^{10}$ | $b^{9}$ | $b^{8}$ | $b^{7}$ | $b^{6}$ | $b^{5}$ | $b^{4}$ | $b^{3}$ | $b^{2}$ | $b^{1}$ | $b^{0}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

LSB

1 : Base EEPROM read/write error (Hard failure) AL87
2 : Base EEPROM error (Soft failure) AL88
3 to 16: undefined

#### ● Alarm information 4

RAM address : (10291/2833H)
EEPROM address : (26675/6833H)

| $b^{15}$ | $b^{14}$ | $b^{13}$ | $b^{12}$ | $b^{11}$ | $b^{10}$ | $b^{9}$ | $b^{8}$ | $b^{7}$ | $b^{6}$ | $b^{5}$ | $b^{4}$ | $b^{3}$ | $b^{2}$ | $b^{1}$ | $b^{0}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

LSB

1 to 6: undefined
7 : Base EEPROM not initialized (Hard failure) AL83
8 : MAC address error (Hard failure) AL84
9 : RAM read/write error (Hard failure) AL85
10 : EEPROM read/write error (Hard failure) AL86
11 : RAM error (parameter area) (Soft failure) AL94
12 : RAM error (adjustment area) (Soft failure) AL95
13 : undefined
14 : EEPROM error (parameter area) (Soft failure) AL97
15 : EEPROM error (adjustment area) (Soft failure) AL98
16 : ROM error (Hard failure) AL99

● **DI Input 1 to 16**

RAM address : (10832/2A50H)
EEPROM address : (27216/6A50H)

LSB

| $b^{15}$ | $b^{14}$ | $b^{13}$ | $b^{12}$ | $b^{11}$ | $b^{10}$ | $b^{9}$ | $b^{8}$ | $b^{7}$ | $b^{6}$ | $b^{5}$ | $b^{4}$ | $b^{3}$ | $b^{2}$ | $b^{1}$ | $b^{0}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

1 : Status DI01
2 : Status DI02
3 : Status DI03
4 : Status DI04
5 : Status DI05
6 : Status DI06
7 : Status DI07
8 : Status DI08
9 : Status DI09
10 : Status DI10
11 : Status DI11
12 : Status DI12
13 : Status DI13
14 : Status DI14
15 : Status DI15
16 : Status DI16

● **DI Input (before delay) 1 to 16**

RAM address : (10834/2A52H)
EEPROM address : (27218/6A52H)

LSB

| $b^{15}$ | $b^{14}$ | $b^{13}$ | $b^{12}$ | $b^{11}$ | $b^{10}$ | $b^{9}$ | $b^{8}$ | $b^{7}$ | $b^{6}$ | $b^{5}$ | $b^{4}$ | $b^{3}$ | $b^{2}$ | $b^{1}$ | $b^{0}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

1 : Status DI01
2 : Status DI02
3 : Status DI03
4 : Status DI04
5 : Status DI05
6 : Status DI06
7 : Status DI07
8 : Status DI08
9 : Status DI09
10 : Status DI10
11 : Status DI11
12 : Status DI12
13 : Status DI13
14 : Status DI14
15 : Status DI15
16 : Status DI16

## ■ User-defined bit

### ● User-defined bits 1 to 16

RAM address : (10080/2760H)
EEPROM address : (26464/6760H)

LSB

| $b^{15}$ | $b^{14}$ | $b^{13}$ | $b^{12}$ | $b^{11}$ | $b^{10}$ | $b^{9}$ | $b^{8}$ | $b^{7}$ | $b^{6}$ | $b^{5}$ | $b^{4}$ | $b^{3}$ | $b^{2}$ | $b^{1}$ | $b^{0}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

1 : User-defined bit 1 UB01
2 : User-defined bit 2 UB02
3 : User-defined bit 3 UB03
4 : User-defined bit 4 UB04
5 : User-defined bit 5 UB05
6 : User-defined bit 6 UB06
7 : User-defined bit 7 UB07
8 : User-defined bit 8 UB08
9 : User-defined bit 9 UB09
10 : User-defined bit 10 UB010
11 : User-defined bit 11 UB011
12 : User-defined bit 12 UB012
13 : User-defined bit 13 UB013
14 : User-defined bit 14 UB014
15 : User-defined bit 15 UB015
16 : User-defined bit 16 UB016

### ● User-defined bits 17 to 32

RAM address : (10097/2771H)
EEPROM address : (26481/6771H)

LSB

| $b^{15}$ | $b^{14}$ | $b^{13}$ | $b^{12}$ | $b^{11}$ | $b^{10}$ | $b^{9}$ | $b^{8}$ | $b^{7}$ | $b^{6}$ | $b^{5}$ | $b^{4}$ | $b^{3}$ | $b^{2}$ | $b^{1}$ | $b^{0}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

1 : User-defined bit 17 UB017
2 : User-defined bit 18 UB018
3 : User-defined bit 19 UB019
4 : User-defined bit 20 UB020
5 : User-defined bit 21 UB021
6 : User-defined bit 22 UB022
7 : User-defined bit 23 UB023
8 : User-defined bit 24 UB024
9 : User-defined bit 25 UB025
10 : User-defined bit 26 UB026
11 : User-defined bit 27 UB027
12 : User-defined bit 28 UB028
13 : User-defined bit 29 UB029
14 : User-defined bit 30 UB030
15 : User-defined bit 31 UB031
16 : User-defined bit 32 UB032

# Chapter 10. LIST OF PARAMETER SETTINGS

## Description of list

### Meaning of user levels

0 : Displayed in simple, standard or multiple functions
1 : Displayed in standard or multiple functions
2 : Displayed in multiple functions

### NX-DX1 and NX-DX2

No symbol : Supported
× : Not supported

### Meaning of the decimal point position in the Remarks field

PULSE : Determined by the settings for “decimal point position” 1 to 16 in the pulse instant value bank.

## Monitor/Monitor

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Monitor | Alarm | 1 | Alarm information 1 | | 0 | | 0 | • Alarm information 1 (See P. 9-43) | | |
| Monitor | Alarm | 1 | Alarm information 2 | | 0 | | 0 | • Alarm information 2 (See P. 9-43) | | |
| Monitor | Alarm | 1 | Alarm information 3 | | 0 | | 0 | • Alarm information 3 (See P. 9-43) | | |
| Monitor | Alarm | 1 | Alarm information 4 | | 0 | | 0 | • Alarm information 4 (See P. 9-43) | | |
| Monitor | Monitor (DI Input) | 1 | DI input 1 to 16 | | 0 | | 0 | • DI input 1 to 16 (See P.9-44) | | |
| Monitor | Monitor (DI Input) | 1 | Reserved for system use | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 1 | DI input (before input delay) 1 to 16 | | 0 | | 0 | • DI input (before delay) 1 to 16 (See P.9-44) | | |
| Monitor | Monitor (DI Input) | 1 | Reserved for system use | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 1 | DI input | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 1 | DI input (before input delay) | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 2 | DI input | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 2 | DI input (before input delay) | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 3 | DI input | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 3 | DI input (before input delay) | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 4 | DI input | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 4 | DI input (before input delay) | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 5 | DI input | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 5 | DI input (before input delay) | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 6 | DI input | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 6 | DI input (before input delay) | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 7 | DI input | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 7 | DI input (before input delay) | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 8 | DI input | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 8 | DI input (before input delay) | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 9 | DI input | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 9 | DI input (before input delay) | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 10 | DI input | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 10 | DI input (before input delay) | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 11 | DI input | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 11 | DI input (before input delay) | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 12 | DI input | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 12 | DI input (before input delay) | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 13 | DI input | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 13 | DI input (before input delay) | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 14 | DI input | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 14 | DI input (before input delay) | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 15 | DI input | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 15 | DI input (before input delay) | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 16 | DI input | | 0 | | 0 | | | |
| Monitor | Monitor (DI Input) | 16 | DI input (before input delay) | | 0 | | 0 | | | |
| Monitor | Monitor (EV Output) | 1 | EV output | | 0 | | 0 | | x | |

## Monitor/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Monitor | Monitor (Pulse Estimate Value) | 1 | Estimate value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 1 | Estimate value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 1 | Estimate value before reset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 1 | Estimate value before reset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 1 | Estimate value before preset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 1 | Estimate value before preset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 1 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 1 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 1 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 1 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 2 | Estimate value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 2 | Estimate value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 2 | Estimate value before reset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 2 | Estimate value before reset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 2 | Estimate value before preset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 2 | Estimate value before preset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 2 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 2 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 2 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 2 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 3 | Estimate value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 3 | Estimate value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 3 | Estimate value before reset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 3 | Estimate value before reset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 3 | Estimate value before preset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 3 | Estimate value before preset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 3 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 3 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 3 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 3 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 4 | Estimate value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 4 | Estimate value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 4 | Estimate value before reset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 4 | Estimate value before reset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 4 | Estimate value before preset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 4 | Estimate value before preset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 4 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 4 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 4 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 4 | Estimate value reset completed flag | | 0 | | | | 0 | × |

## Monitor/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Monitor | Monitor (Pulse Estimate Value) | 5 | Estimate value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 5 | Estimate value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 5 | Estimate value before reset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 5 | Estimate value before reset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 5 | Estimate value before preset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 5 | Estimate value before preset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 5 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 5 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 5 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 5 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 6 | Estimate value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 6 | Estimate value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 6 | Estimate value before reset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 6 | Estimate value before reset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 6 | Estimate value before preset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 6 | Estimate value before preset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 6 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 6 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 6 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 6 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 7 | Estimate value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 7 | Estimate value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 7 | Estimate value before reset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 7 | Estimate value before reset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 7 | Estimate value before preset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 7 | Estimate value before preset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 7 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 7 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 7 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 7 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 8 | Estimate value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 8 | Estimate value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 8 | Estimate value before reset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 8 | Estimate value before reset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 8 | Estimate value before preset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 8 | Estimate value before preset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 8 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 8 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 8 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 8 | Estimate value reset completed flag | | 0 | | | | 0 | × |

## Monitor/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Monitor | Monitor (Pulse Estimate Value) | 9 | Estimate value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 9 | Estimate value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 9 | Estimate value before reset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 9 | Estimate value before reset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 9 | Estimate value before preset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 9 | Estimate value before preset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 9 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 9 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 9 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 9 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 10 | Estimate value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 10 | Estimate value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 10 | Estimate value before reset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 10 | Estimate value before reset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 10 | Estimate value before preset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 10 | Estimate value before preset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 10 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 10 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 10 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 10 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 11 | Estimate value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 11 | Estimate value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 11 | Estimate value before reset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 11 | Estimate value before reset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 11 | Estimate value before preset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 11 | Estimate value before preset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 11 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 11 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 11 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 11 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 12 | Estimate value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 12 | Estimate value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 12 | Estimate value before reset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 12 | Estimate value before reset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 12 | Estimate value before preset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 12 | Estimate value before preset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 12 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 12 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 12 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 12 | Estimate value reset completed flag | | 0 | | | | 0 | × |

## Monitor/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Monitor | Monitor (Pulse Estimate Value) | 13 | Estimate value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 13 | Estimate value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 13 | Estimate value before reset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 13 | Estimate value before reset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 13 | Estimate value before preset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 13 | Estimate value before preset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 13 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 13 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 13 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 13 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 14 | Estimate value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 14 | Estimate value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 14 | Estimate value before reset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 14 | Estimate value before reset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 14 | Estimate value before preset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 14 | Estimate value before preset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 14 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 14 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 14 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 14 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 15 | Estimate value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 15 | Estimate value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 15 | Estimate value before reset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 15 | Estimate value before reset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 15 | Estimate value before preset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 15 | Estimate value before preset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 15 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 15 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 15 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 15 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 16 | Estimate value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 16 | Estimate value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 16 | Estimate value before reset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 16 | Estimate value before reset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 16 | Estimate value before preset (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 16 | Estimate value before preset (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Value) | 16 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 16 | Estimate value reset completed flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 16 | Estimate value reset received flag | | 0 | | | | 0 | × |
| Monitor | Monitor (Pulse Estimate Value) | 16 | Estimate value reset completed flag | | 0 | | | | 0 | × |

## Monitor/Pulse Instant Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Monitor | Monitor (Pulse Instant Value) | 1 | Instant value | | 0 | | 0 | Decimal point position = PULSE | × | |
| Monitor | Monitor (Pulse Instant Value) | 1 | Instant value upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 1 | Instant value lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 1 | Instant value reset received flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 1 | Instant value reset completed flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 2 | Instant value | | 0 | | 0 | Decimal point position = PULSE | × | |
| Monitor | Monitor (Pulse Instant Value) | 2 | Instant value upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 2 | Instant value lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 2 | Instant value reset received flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 2 | Instant value reset completed flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 3 | Instant value | | 0 | | 0 | Decimal point position = PULSE | × | |
| Monitor | Monitor (Pulse Instant Value) | 3 | Instant value upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 3 | Instant value lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 3 | Instant value reset received flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 3 | Instant value reset completed flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 4 | Instant value | | 0 | | 0 | Decimal point position = PULSE | × | |
| Monitor | Monitor (Pulse Instant Value) | 4 | Instant value upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 4 | Instant value lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 4 | Instant value reset received flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 4 | Instant value reset completed flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 5 | Instant value | | 0 | | 0 | Decimal point position = PULSE | × | |
| Monitor | Monitor (Pulse Instant Value) | 5 | Instant value upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 5 | Instant value lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 5 | Instant value reset received flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 5 | Instant value reset completed flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 6 | Instant value | | 0 | | 0 | Decimal point position = PULSE | × | |
| Monitor | Monitor (Pulse Instant Value) | 6 | Instant value upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 6 | Instant value lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 6 | Instant value reset received flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 6 | Instant value reset completed flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 7 | Instant value | | 0 | | 0 | Decimal point position = PULSE | × | |
| Monitor | Monitor (Pulse Instant Value) | 7 | Instant value upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 7 | Instant value lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 7 | Instant value reset received flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 7 | Instant value reset completed flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 8 | Instant value | | 0 | | 0 | Decimal point position = PULSE | × | |

## Monitor/Pulse Instant Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Monitor | Monitor (Pulse Instant Value) | 8 | Instant value upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 8 | Instant value lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 8 | Instant value reset received flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 8 | Instant value reset completed flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 9 | Instant value | | 0 | | 0 | Decimal point position = PULSE | × | |
| Monitor | Monitor (Pulse Instant Value) | 9 | Instant value upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 9 | Instant value lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 9 | Instant value reset received flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 9 | Instant value reset completed flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 10 | Instant value | | 0 | | 0 | Decimal point position = PULSE | × | |
| Monitor | Monitor (Pulse Instant Value) | 10 | Instant value upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 10 | Instant value lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 10 | Instant value reset received flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 10 | Instant value reset completed flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 11 | Instant value | | 0 | | 0 | Decimal point position = PULSE | × | |
| Monitor | Monitor (Pulse Instant Value) | 11 | Instant value upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 11 | Instant value lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 11 | Instant value reset received flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 11 | Instant value reset completed flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 12 | Instant value | | 0 | | 0 | Decimal point position = PULSE | × | |
| Monitor | Monitor (Pulse Instant Value) | 12 | Instant value upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 12 | Instant value lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 12 | Instant value reset received flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 12 | Instant value reset completed flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 13 | Instant value | | 0 | | 0 | Decimal point position = PULSE | × | |
| Monitor | Monitor (Pulse Instant Value) | 13 | Instant value upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 13 | Instant value lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 13 | Instant value reset received flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 13 | Instant value reset completed flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 14 | Instant value | | 0 | | 0 | Decimal point position = PULSE | × | |
| Monitor | Monitor (Pulse Instant Value) | 14 | Instant value upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 14 | Instant value lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 14 | Instant value reset received flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 14 | Instant value reset completed flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 15 | Instant value | | 0 | | 0 | Decimal point position = PULSE | × | |
| Monitor | Monitor (Pulse Instant Value) | 15 | Instant value upper limit flag | | 0 | | 0 | | × | |

## Monitor/Pulse Instant Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Monitor | Monitor (Pulse Instant Value) | 15 | Instant value lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 15 | Instant value reset received flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 15 | Instant value reset completed flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 16 | Instant value | | 0 | | 0 | Decimal point position = PULSE | × | |
| Monitor | Monitor (Pulse Instant Value) | 16 | Instant value upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 16 | Instant value lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 16 | Instant value reset received flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Instant Value) | 16 | Instant value reset completed flag | | 0 | | 0 | | × | |

## Monitor/Pulse Count Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Monitor | Monitor (Pulse Count Value) | 1 | Estimate count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 1 | Estimate count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 1 | Instant count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 1 | Instant count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 2 | Estimate count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 2 | Estimate count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 2 | Instant count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 2 | Instant count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 3 | Estimate count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 3 | Estimate count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 3 | Instant count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 3 | Instant count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 4 | Estimate count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 4 | Estimate count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 4 | Instant count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 4 | Instant count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 5 | Estimate count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 5 | Estimate count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 5 | Instant count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 5 | Instant count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 6 | Estimate count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 6 | Estimate count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 6 | Instant count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 6 | Instant count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 7 | Estimate count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 7 | Estimate count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 7 | Instant count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 7 | Instant count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 8 | Estimate count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 8 | Estimate count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 8 | Instant count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 8 | Instant count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 9 | Estimate count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 9 | Estimate count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 9 | Instant count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 9 | Instant count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 10 | Estimate count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 10 | Estimate count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 10 | Instant count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 10 | Instant count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 11 | Estimate count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 11 | Estimate count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 11 | Instant count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 11 | Instant count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 12 | Estimate count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 12 | Estimate count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 12 | Instant count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 12 | Instant count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 13 | Estimate count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 13 | Estimate count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 13 | Instant count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 13 | Instant count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 14 | Estimate count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 14 | Estimate count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 14 | Instant count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 14 | Instant count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 15 | Estimate count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 15 | Estimate count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 15 | Instant count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 15 | Instant count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 16 | Estimate count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 16 | Estimate count value (H) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 16 | Instant count value (L) | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Count Value) | 16 | Instant count value (H) | | 0 | | 0 | | × | |

## Monitor/Pulse Estimate Target Management

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Monitor | Monitor (Pulse Estimate Target Management) | 1 | Estimate target flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 1 | Pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 1 | Pre-pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 1 | Estimate upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 1 | Estimate lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 2 | Estimate target flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 2 | Pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 2 | Pre-pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 2 | Estimate upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 2 | Estimate lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 3 | Estimate target flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 3 | Pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 3 | Pre-pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 3 | Estimate upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 3 | Estimate lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 4 | Estimate target flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 4 | Pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 4 | Pre-pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 4 | Estimate upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 4 | Estimate lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 5 | Estimate target flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 5 | Pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 5 | Pre-pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 5 | Estimate upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 5 | Estimate lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 6 | Estimate target flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 6 | Pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 6 | Pre-pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 6 | Estimate upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 6 | Estimate lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 7 | Estimate target flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 7 | Pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 7 | Pre-pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 7 | Estimate upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 7 | Estimate lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 8 | Estimate target flag | | 0 | | 0 | | × | |

## Monitor/Pulse Estimate Target Management

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Monitor | Monitor (Pulse Estimate Target Management) | 8 | Pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 8 | Pre-pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 8 | Estimate upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 8 | Estimate lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 9 | Estimate target flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 9 | Pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 9 | Pre-pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 9 | Estimate upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 9 | Estimate lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 10 | Estimate target flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 10 | Pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 10 | Pre-pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 10 | Estimate upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 10 | Estimate lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 11 | Estimate target flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 11 | Pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 11 | Pre-pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 11 | Estimate upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 11 | Estimate lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 12 | Estimate target flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 12 | Pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 12 | Pre-pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 12 | Estimate upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 12 | Estimate lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 13 | Estimate target flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 13 | Pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 13 | Pre-pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 13 | Estimate upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 13 | Estimate lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 14 | Estimate target flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 14 | Pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 14 | Pre-pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 14 | Estimate upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 14 | Estimate lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 15 | Estimate target flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 15 | Pre-target flag | | 0 | | 1 | | × | |

## Monitor/Pulse Estimate Target Management

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Monitor | Monitor (Pulse Estimate Target Management) | 15 | Pre-pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 15 | Estimate upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 15 | Estimate lower limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 16 | Estimate target flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 16 | Pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 16 | Pre-pre-target flag | | 0 | | 1 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 16 | Estimate upper limit flag | | 0 | | 0 | | × | |
| Monitor | Monitor (Pulse Estimate Target Management) | 16 | Estimate lower limit flag | | 0 | | 0 | | | |

## Monitor/Standard Bit

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Monitor | Bits: 1024 to 1151 | 1 | Always 0 (Off) | | 0 | | 0 | | | |
| Monitor | Bits: 1024 to 1151 | 1 | Always 1 (On) | | 0 | | 0 | | | |
| Monitor | Bits: 1152 to 1279 | 1 | DI1 input status | | 0 | | 0 | | | |
| Monitor | Bits: 1152 to 1279 | 1 | DI2 input status | | 0 | | 0 | | | |
| Monitor | Bits: 1152 to 1279 | 1 | DI3 input status | | 0 | | 0 | | | |
| Monitor | Bits: 1152 to 1279 | 1 | DI4 input status | | 0 | | 0 | | | |
| Monitor | Bits: 1152 to 1279 | 1 | DI5 input status | | 0 | | 0 | | | |
| Monitor | Bits: 1152 to 1279 | 1 | DI6 input status | | 0 | | 0 | | | |
| Monitor | Bits: 1152 to 1279 | 1 | DI7 input status | | 0 | | 0 | | | |
| Monitor | Bits: 1152 to 1279 | 1 | DI8 input status | | 0 | | 0 | | | |
| Monitor | Bits: 1152 to 1279 | 1 | DI9 input status | | 0 | | 0 | | | |
| Monitor | Bits: 1152 to 1279 | 1 | DI10 input status | | 0 | | 0 | | | |
| Monitor | Bits: 1152 to 1279 | 1 | DI11 input status | | 0 | | 0 | | | |
| Monitor | Bits: 1152 to 1279 | 1 | DI12 input status | | 0 | | 0 | | | |
| Monitor | Bits: 1152 to 1279 | 1 | DI13 input status | | 0 | | 0 | | | |
| Monitor | Bits: 1152 to 1279 | 1 | DI14 input status | | 0 | | 0 | | | |
| Monitor | Bits: 1152 to 1279 | 1 | DI15 input status | | 0 | | 0 | | | |
| Monitor | Bits: 1152 to 1279 | 1 | DI16 input status | | 0 | | 0 | | | |
| Monitor | Bits: 1280 to 1407 | 1 | EV1 output status | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 1 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 2 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 3 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 4 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 5 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 6 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 7 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 8 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 9 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 10 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 11 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 12 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 13 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 14 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 15 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 16 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 17 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 18 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 19 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 20 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 21 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 22 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 23 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 24 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 25 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 26 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 27 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 28 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 29 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 30 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 31 | | 0 | | 0 | | | |
| Monitor | Bits: 1408 to 1535 | 1 | User-defined bit 32 | | 0 | | 0 | | | |
| Monitor | Bits: 1536 to 1663 | 1 | RS-485 communication status (normal transmission of 1 frame) | | 0 | | 0 | | | |
| Monitor | Bits: 1792 to 1919 | 1 | Representative of all alarms (OR of all displayed alarms) | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 1 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 2 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 3 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 4 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 5 | | 0 | | 0 | | | |

## Monitor/Standard Bit

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 6 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 7 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 8 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 9 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 10 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 11 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 12 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 13 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 14 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 15 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 16 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | Parameter error (AL94/AL97 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | Adjustment data error (AL95/AL98 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | EEPROM not initialized (AL83 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | ROM error (AL99 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | EEPROM RW error (AL86 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | Reception monitoring 1 to 16 (AL31 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | Transmission time-out between modules (AL32 | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | Writing to EEPROM | | 0 | | 0 | | | |
| Monitor | Bits: 1920 to 2047 | 1 | RS-485 settings error (AL33 | | 0 | | 0 | | | |

## Monitor/User-Defined Bit

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Monitor | User-Defined Bit | 1 | User-defined bit 1 to 16 | | 0 | | 0 | • User-defined bit 1 to 16 (See P. 9-45) | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 1 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 2 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 3 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 4 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 5 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 6 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 7 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 8 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 9 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 10 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 11 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 12 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 13 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 14 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 15 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 16 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 17 to 32 | | 0 | | 0 | • User-defined bit 17 to 32 (See P. 9-45) | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 17 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 18 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 19 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 20 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 21 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 22 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 23 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 24 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 25 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 26 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 27 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 28 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 29 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 30 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 31 | 0:OFF 1:ON | 0 | | 0 | | | |
| Monitor | User-Defined Bit | 1 | User-defined bit 32 | 0:OFF 1:ON | 0 | | 0 | | | |

## Monitor/User-Defined Number

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Monitor | User-Defined Number | 1 | User-defined number 1 | -32768 to +32767 | 0 | | 0 | | | |
| Monitor | User-Defined Number | 1 | User-defined number 2 | -32768 to +32767 | 0 | | 0 | | | |
| Monitor | User-Defined Number | 1 | User-defined number 3 | -32768 to +32767 | 0 | | 0 | | | |
| Monitor | User-Defined Number | 1 | User-defined number 4 | -32768 to +32767 | 0 | | 0 | | | |
| Monitor | User-Defined Number | 1 | User-defined number 5 | -32768 to +32767 | 0 | | 0 | | | |
| Monitor | User-Defined Number | 1 | User-defined number 6 | -32768 to +32767 | 0 | | 0 | | | |
| Monitor | User-Defined Number | 1 | User-defined number 7 | -32768 to +32767 | 0 | | 0 | | | |
| Monitor | User-Defined Number | 1 | User-defined number 8 | -32768 to +32767 | 0 | | 0 | | | |
| Monitor | User-Defined Number | 1 | User-defined number 9 | -32768 to +32767 | 0 | | 0 | | | |
| Monitor | User-Defined Number | 1 | User-defined number 10 | -32768 to +32767 | 0 | | 0 | | | |
| Monitor | User-Defined Number | 1 | User-defined number 11 | -32768 to +32767 | 0 | | 0 | | | |
| Monitor | User-Defined Number | 1 | User-defined number 12 | -32768 to +32767 | 0 | | 0 | | | |
| Monitor | User-Defined Number | 1 | User-defined number 13 | -32768 to +32767 | 0 | | 0 | | | |
| Monitor | User-Defined Number | 1 | User-defined number 14 | -32768 to +32767 | 0 | | 0 | | | |
| Monitor | User-Defined Number | 1 | User-defined number 15 | -32768 to +32767 | 0 | | 0 | | | |
| Monitor | User-Defined Number | 1 | User-defined number 16 | -32768 to +32767 | 0 | | 0 | | | |

## Command/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Commands | Command (Pulse Estimate Value) | 1 | Start estimating | 0:Estimating stopped<br>1:Estimating | 1 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 1 | Hold estimate values | 0:Normal operation<br>1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 1 | Request estimate value reset | 0:No reset request<br>1:Estimate value reset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 1 | Reset estimate values | 0:No reset request<br>1:Resets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 1 | Request estimate value preset | 0:No preset request<br>1: Estimate value preset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 1 | Preset estimate values | 0:No preset request<br>1:Presets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 2 | Start estimating | 0:Estimating stopped<br>1:Estimating | 1 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 2 | Hold estimate values | 0:Normal operation<br>1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 2 | Request estimate value reset | 0:No reset request<br>1: Estimate value reset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 2 | Reset estimate values | 0:No reset request<br>1:Resets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 2 | Request estimate value preset | 0:No preset request<br>1: Estimate value preset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 2 | Preset estimate values | 0:No preset request<br>1:Presets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 3 | Start estimating | 0:Estimating stopped<br>1:Estimating | 1 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 3 | Hold estimate values | 0:Normal operation<br>1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 3 | Request estimate value reset | 0:No reset request<br>1: Estimate value reset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 3 | Reset estimate values | 0:No reset request<br>1:Resets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 3 | Request estimate value preset | 0:No preset request<br>1: Estimate value preset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 3 | Preset estimate values | 0:No preset request<br>1:Presets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 4 | Start estimating | 0:Estimating stopped<br>1:Estimating | 1 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 4 | Hold estimate values | 0:Normal operation<br>1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 4 | Request estimate value reset | 0:No reset request<br>1: Estimate value reset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 4 | Reset estimate values | 0:No reset request<br>1:Resets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 4 | Request estimate value preset | 0:No preset request<br>1: Estimate value preset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 4 | Preset estimate values | 0:No preset request<br>1:Presets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 5 | Start estimating | 0:Estimating stopped<br>1:Estimating | 1 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 5 | Hold estimate values | 0:Normal operation<br>1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 5 | Request estimate value reset | 0:No reset request<br>1: Estimate value reset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 5 | Reset estimate values | 0:No reset request<br>1:Resets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 5 | Request estimate value preset | 0:No preset request<br>1: Estimate value preset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 5 | Preset estimate values | 0:No preset request<br>1:Presets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 6 | Start estimating | 0:Estimating stopped<br>1:Estimating | 1 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 6 | Hold estimate values | 0:Normal operation<br>1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 6 | Request estimate value reset | 0:No reset request<br>1: Estimate value reset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 6 | Reset estimate values | 0:No reset request<br>1:Resets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 6 | Request estimate value preset | 0:No preset request<br>1: Estimate value preset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 6 | Preset estimate values | 0:No preset request<br>1:Presets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |

## Command/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Commands | Command (Pulse Estimate Value) | 7 | Start estimating | 0:Estimating stopped<br>1:Estimating | 1 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 7 | Hold estimate values | 0:Normal operation<br>1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 7 | Request estimate value reset | 0:No reset request<br>1: Estimate value reset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 7 | Reset estimate values | 0:No reset request<br>1:Resets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 7 | Request estimate value preset | 0:No preset request<br>1: Estimate value preset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 7 | Preset estimate values | 0:No preset request<br>1:Presets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 8 | Start estimating | 0:Estimating stopped<br>1:Estimating | 1 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 8 | Hold estimate values | 0:Normal operation<br>1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 8 | Request estimate value reset | 0:No reset request<br>1:Estimate value reset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 8 | Reset estimate values | 0:No reset request<br>1:Resets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 8 | Request estimate value preset | 0:No preset request<br>1: Estimate value preset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 8 | Preset estimate values | 0:No preset request<br>1:Presets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 9 | Start estimating | 0:Estimating stopped<br>1:Estimating | 1 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 9 | Hold estimate values | 0:Normal operation<br>1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 9 | Request estimate value reset | 0:No reset request<br>1:Estimate value reset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 9 | Reset estimate values | 0:No reset request<br>1:Resets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 9 | Request estimate value preset | 0:No preset request<br>1:Estimate value preset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 9 | Preset estimate values | 0:No preset request<br>1:Presets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 10 | Start estimating | 0:Estimating stopped<br>1:Estimating | 1 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 10 | Hold estimate values | 0:Normal operation<br>1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 10 | Request estimate value reset | 0:No reset request<br>1: Estimate value reset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 10 | Reset estimate values | 0:No reset request<br>1:Resets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 10 | Request estimate value preset | 0:No preset request<br>1: Estimate value preset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 10 | Preset estimate values | 0:No preset request<br>1:Presets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 11 | Start estimating | 0:Estimating stopped<br>1:Estimating | 1 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 11 | Hold estimate values | 0:Normal operation<br>1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 11 | Request estimate value reset | 0:No reset request<br>1: Estimate value reset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 11 | Reset estimate values | 0:No reset request<br>1:Resets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 11 | Request estimate value preset | 0:No preset request<br>1: Estimate value preset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 11 | Preset estimate values | 0:No preset request<br>1:Presets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 12 | Start estimating | 0:Estimating stopped<br>1:Estimating | 1 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 12 | Hold estimate values | 0:Normal operation<br>1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 12 | Request estimate value reset | 0:No reset request<br>1: Estimate value reset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 12 | Reset estimate values | 0:No reset request<br>1:Resets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 12 | Request estimate value preset | 0:No preset request<br>1: Estimate value preset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 12 | Preset estimate values | 0:No preset request<br>1:Presets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |

## Command/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Commands | Command (Pulse Estimate Value) | 13 | Start estimating | 0:Estimating stopped<br>1:Estimating | 1 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 13 | Hold estimate values | 0:Normal operation<br>1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 13 | Request estimate value reset | 0:No reset request<br>1: Estimate value reset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 13 | Reset estimate values | 0:No reset request<br>1:Resets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 13 | Request estimate value preset | 0:No preset request<br>1: Estimate value preset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 13 | Preset estimate values | 0:No preset request<br>1:Presets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 14 | Start estimating | 0:Estimating stopped<br>1:Estimating | 1 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 14 | Hold estimate values | 0:Normal operation<br>1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 14 | Request estimate value reset | 0:No reset request<br>1: Estimate value reset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 14 | Reset estimate values | 0:No reset request<br>1:Resets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 14 | Request estimate value preset | 0:No preset request<br>1: Estimate value preset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 14 | Preset estimate values | 0:No preset request<br>1:Presets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 15 | Start estimating | 0:Estimating stopped<br>1:Estimating | 1 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 15 | Hold estimate values | 0:Normal operation<br>1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 15 | Request estimate value reset | 0:No reset request<br>1: Estimate value reset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 15 | Reset estimate values | 0:No reset request<br>1:Resets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 15 | Request estimate value preset | 0:No preset request<br>1: Estimate value preset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 15 | Preset estimate values | 0:No preset request<br>1:Presets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 16 | Start estimating | 0:Estimating stopped<br>1:Estimating | 1 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 16 | Hold estimate values | 0:Normal operation<br>1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 16 | Request estimate value reset | 0:No reset request<br>1: Estimate value reset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 16 | Reset estimate values | 0:No reset request<br>1:Resets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Estimate Value) | 16 | Request estimate value preset | 0:No preset request<br>1: Estimate value preset | 0 | | 0 | | × | |
| Commands | Command (Pulse Estimate Value) | 16 | Preset estimate values | 0:No preset request<br>1:Presets estimate values | 0 | | 0 | When finished, automatically becomes 0 | × | |

## Command/Pulse Instant Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Commands | Command (Pulse Instant Value) | 1 | Hold instant values | 0:Normal operation 1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 1 | Request instant value reset | 0:No reset request 1:Resets instant values | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 1 | Reset instant values | 0:No reset request 1:Resets instant values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Instant Value) | 2 | Hold instant values | 0:Normal operation 1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 2 | Request instant value reset | 0:No reset request 1:Resets instant values | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 2 | Reset instant values | 0:No reset request 1:Resets instant values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Instant Value) | 3 | Hold instant values | 0:Normal operation 1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 3 | Request instant value reset | 0:No reset request 1:Resets instant values | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 3 | Reset instant values | 0:No reset request 1:Resets instant values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Instant Value) | 4 | Hold instant values | 0:Normal operation 1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 4 | Request instant value reset | 0:No reset request 1:Resets instant values | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 4 | Reset instant values | 0:No reset request 1:Resets instant values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Instant Value) | 5 | Hold instant values | 0:Normal operation 1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 5 | Request instant value reset | 0:No reset request 1:Resets instant values | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 5 | Reset instant values | 0:No reset request 1:Resets instant values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Instant Value) | 6 | Hold instant values | 0:Normal operation 1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 6 | Request instant value reset | 0:No reset request 1:Resets instant values | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 6 | Reset instant values | 0:No reset request 1:Resets instant values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Instant Value) | 7 | Hold instant values | 0:Normal operation 1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 7 | Request instant value reset | 0:No reset request 1:Resets instant values | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 7 | Reset instant values | 0:No reset request 1:Resets instant values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Instant Value) | 8 | Hold instant values | 0:Normal operation 1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 8 | Request instant value reset | 0:No reset request 1:Resets instant values | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 8 | Reset instant values | 0:No reset request 1:Resets instant values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Instant Value) | 9 | Hold instant values | 0:Normal operation 1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 9 | Request instant value reset | 0:No reset request 1:Resets instant values | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 9 | Reset instant values | 0:No reset request 1:Resets instant values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Instant Value) | 10 | Hold instant values | 0:Normal operation 1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 10 | Request instant value reset | 0:No reset request 1:Resets instant values | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 10 | Reset instant values | 0:No reset request 1:Resets instant values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Instant Value) | 11 | Hold instant values | 0:Normal operation 1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 11 | Request instant value reset | 0:No reset request 1:Resets instant values | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 11 | Reset instant values | 0:No reset request 1:Resets instant values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Instant Value) | 12 | Hold instant values | 0:Normal operation 1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 12 | Request instant value reset | 0:No reset request 1:Resets instant values | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 12 | Reset instant values | 0:No reset request 1:Resets instant values | 0 | | 0 | When finished, automatically becomes 0 | × | |

## Command/Pulse Instant Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Commands | Command (Pulse Instant Value) | 13 | Hold instant values | 0:Normal operation<br>1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 13 | Request instant value reset | 0:No reset request<br>1:Resets instant values | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 13 | Reset instant values | 0:No reset request<br>1:Resets instant values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Instant Value) | 14 | Hold instant values | 0:Normal operation<br>1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 14 | Request instant value reset | 0:No reset request<br>1:Resets instant values | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 14 | Reset instant values | 0:No reset request<br>1:Resets instant values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Instant Value) | 15 | Hold instant values | 0:Normal operation<br>1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 15 | Request instant value reset | 0:No reset request<br>1:Resets instant values | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 15 | Reset instant values | 0:No reset request<br>1:Resets instant values | 0 | | 0 | When finished, automatically becomes 0 | × | |
| Commands | Command (Pulse Instant Value) | 16 | Hold instant values | 0:Normal operation<br>1:Holding | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 16 | Request instant value reset | 0:No reset request<br>1:Resets instant values | 0 | | 0 | | × | |
| Commands | Command (Pulse Instant Value) | 16 | Reset instant values | 0:No reset request<br>1:Resets instant values | 0 | | 0 | When finished, automatically becomes 0 | × | |

## Communication/Ethernet Communication

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Communications | Ethernet Communications | 1 | MAC address 1 | 0 to 255 | – | | 0 | | | |
| Communications | Ethernet Communications | 1 | MAC address 2 | 0 to 255 | – | | 0 | | | |
| Communications | Ethernet Communications | 1 | MAC address 3 | 0 to 255 | – | | 0 | | | |
| Communications | Ethernet Communications | 1 | MAC address 4 | 0 to 255 | – | | 0 | | | |
| Communications | Ethernet Communications | 1 | MAC address 5 | 0 to 255 | – | | 0 | | | |
| Communications | Ethernet Communications | 1 | MAC address 6 | 0 to 255 | – | | 0 | | | |
| Communications | Ethernet Communications | 1 | IPv4 address 1 | 0 to 255 | 192 | | 0 | Changes in settings take effect after the power is restarted | | |
| Communications | Ethernet Communications | 1 | IPv4 address 2 | 0 to 255 | 168 | | 0 | Changes in settings take effect after the power is restarted | | |
| Communications | Ethernet Communications | 1 | IPv4 address 3 | 0 to 255 | 255 | | 0 | Changes in settings take effect after the power is restarted | | |
| Communications | Ethernet Communications | 1 | IPv4 address 4 | 0 to 255 | 254 | | 0 | Changes in settings take effect after the power is restarted | | |
| Communications | Ethernet Communications | 1 | IPv4 address net mask 1 | 0 to 255 | 255 | | 0 | Changes in settings take effect after the power is restarted | | |
| Communications | Ethernet Communications | 1 | IPv4 address net mask 2 | 0 to 255 | 255 | | 0 | Changes in settings take effect after the power is restarted | | |
| Communications | Ethernet Communications | 1 | IPv4 address net mask 3 | 0 to 255 | 255 | | 0 | Changes in settings take effect after the power is restarted | | |
| Communications | Ethernet Communications | 1 | IPv4 address net mask 4 | 0 to 255 | 0 | | 0 | Changes in settings take effect after the power is restarted | | |
| Communications | Ethernet Communications | 1 | IPv4 default gateway 1 | 0 to 255 | 0 | | 0 | Changes in settings take effect after the power is restarted | | |
| Communications | Ethernet Communications | 1 | IPv4 default gateway 2 | 0 to 255 | 0 | | 0 | Changes in settings take effect after the power is restarted | | |
| Communications | Ethernet Communications | 1 | IPv4 default gateway 3 | 0 to 255 | 0 | | 0 | Changes in settings take effect after the power is restarted | | |
| Communications | Ethernet Communications | 1 | IPv4 default gateway 4 | 0 to 255 | 0 | | 0 | Changes in settings take effect after the power is restarted | | |
| Communications | Ethernet Communications | 1 | MODBUS/TCP port number | 0 to 65535 | 502 | | 0 | Changes in settings take effect after the power is restarted.<br>0 to 501 and 503 to 1023 are typically in use. Avoid using these wherever possible.<br>1252 is reserved for system use. Do not use. | | |

## Communication/RS-485 Communication

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Communications | RS-485 Communications | 1 | Communication type | 0: CPL<br>1: MODBUS ASCII<br>2: MODBUS RTU | 0 | | 0 | | | |
| Communications | RS-485 Communications | 1 | Device address | 0-127 | 127 | | 0 | 0: Communication function is unavailable | | |
| Communications | RS-485 Communications | 1 | Transmission speed | 0: 4800 bps<br>1: 9600 bps<br>2: 19200 bps<br>3: 38400 bps<br>4: 57600 bps<br>5: 115200 bps | 2 | | 0 | | | |
| Communications | RS-485 Communications | 1 | Data format (data length) | 0: 7 bits<br>1: 8 bits | 1 | | 0 | | | |
| Communications | RS-485 Communications | 1 | Data format (parity) | 0: Even parity<br>1: Odd parity<br>2: No parity | 0 | | 0 | | | |
| Communications | RS-485 Communications | 1 | Data format (stop bits) | 0: 1 stop bit<br>1: 2 stop bits | 0 | | 0 | | | |
| Communications | RS-485 Communications | 1 | Minimum response time | 1 to 250 | 3 | ms | 0 | | | |

## Basic/Setup

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Basic | Setup | 1 | Start delay at power ON | 0 to 60 s | 0 | s | 1 | | | |
| Basic | Setup | 1 | Advanced function password1 | 0 to 65535 | 0 | | 2 | | | |
| Basic | Setup | 1 | Advanced function password 2 | 0 to 65535 | 0 | | 2 | | | |
| Basic | Setup | 1 | Advanced function password 3 | 0 to 65535 | 0 | | 2 | | | |
| Basic | Setup | 1 | Advanced function password 4 | 0 to 65535 | 0 | | 2 | | | |
| Basic | Setup | 1 | Advanced function password 5 | 0 to 65535 | 0 | | 2 | | | |
| Basic | Setup | 1 | Advanced function password 6 | 0 to 65535 | 0 | | 2 | | | |
| Basic | Setup | 1 | Advanced function password 7 | 0 to 65535 | 0 | | 2 | | | |
| Basic | Setup | 1 | Advanced function password 8 | 0 to 65535 | 0 | | 2 | | | |
| Basic | Setup | 1 | Advanced function password 9 | 0 to 65535 | 0 | | 2 | | | |
| Basic | Setup | 1 | Advanced function password 10 | 0 to 65535 | 0 | | 2 | | | |
| Basic | Setup | 1 | Advanced function password 11 | 0 to 65535 | 0 | | 2 | | | |
| Basic | Setup | 1 | Advanced function password 12 | 0 to 65535 | 0 | | 2 | | | |
| Basic | Setup | 1 | Advanced function password 13 | 0 to 65535 | 0 | | 2 | | | |
| Basic | Setup | 1 | Advanced function password 14 | 0 to 65535 | 0 | | 2 | | | |
| Basic | Setup | 1 | Advanced function password 15 | 0 to 65535 | 0 | | 2 | | | |
| Basic | Setup | 1 | Advanced function password 16 | 0 to 65535 | 0 | | 2 | | | |

## Input-output/DI Input

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Input-output | DI Input | 1 | Input direct/reverse | 0: Direct 1: Reverse | 0 | | 0 | | | |
| Input-output | DI Input | 2 | Input direct/reverse | 0: Direct 1: Reverse | 0 | | 0 | | | |
| Input-output | DI Input | 3 | Input direct/reverse | 0: Direct 1: Reverse | 0 | | 0 | | | |
| Input-output | DI Input | 4 | Input direct/reverse | 0: Direct 1: Reverse | 0 | | 0 | | | |
| Input-output | DI Input | 5 | Input direct/reverse | 0: Direct 1: Reverse | 0 | | 0 | | | |
| Input-output | DI Input | 6 | Input direct/reverse | 0: Direct 1: Reverse | 0 | | 0 | | | |
| Input-output | DI Input | 7 | Input direct/reverse | 0: Direct 1: Reverse | 0 | | 0 | | | |
| Input-output | DI Input | 8 | Input direct/reverse | 0: Direct 1: Reverse | 0 | | 0 | | | |
| Input-output | DI Input | 9 | Input direct/reverse | 0: Direct 1: Reverse | 0 | | 0 | | | |
| Input-output | DI Input | 10 | Input direct/reverse | 0: Direct 1: Reverse | 0 | | 0 | | | |
| Input-output | DI Input | 11 | Input direct/reverse | 0: Direct 1: Reverse | 0 | | 0 | | | |
| Input-output | DI Input | 12 | Input direct/reverse | 0: Direct 1: Reverse | 0 | | 0 | | | |
| Input-output | DI Input | 13 | Input direct/reverse | 0: Direct 1: Reverse | 0 | | 0 | | | |
| Input-output | DI Input | 14 | Input direct/reverse | 0: Direct 1: Reverse | 0 | | 0 | | | |
| Input-output | DI Input | 15 | Input direct/reverse | 0: Direct 1: Reverse | 0 | | 0 | | | |
| Input-output | DI Input | 16 | Input direct/reverse | 0: Direct 1: Reverse | 0 | | 0 | | | |
| Input-output | DI Input | 1 | ON delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 1 | OFF delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 2 | ON delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 2 | OFF delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 3 | ON delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 3 | OFF delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 4 | ON delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 4 | OFF delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 5 | ON delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 5 | OFF delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 6 | ON delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 6 | OFF delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 7 | ON delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 7 | OFF delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 8 | ON delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 8 | OFF delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 9 | ON delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 9 | OFF delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 10 | ON delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 10 | OFF delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 11 | ON delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 11 | OFF delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 12 | ON delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 12 | OFF delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 13 | ON delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 13 | OFF delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 14 | ON delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 14 | OFF delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 15 | ON delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 15 | OFF delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 16 | ON delay | 0.0 to 3200.0 | 0 | s | 0 | | | |
| Input-output | DI Input | 16 | OFF delay | 0.0 to 3200.0 | 0 | s | 0 | | | |

## Input-output/EV Output

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Input-output | EV output | 1 | Output type | 1024 to 2047: Standard bit | 1024 | | 0 | | × | |

## Pulse Input/Pulse Input

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Pulse Input | Pulse Input | 1 | Pulse detection width | 0 to 1000 ms (detection width function is invalid at 0) | 0 | ms | 0 | | × | |
| Pulse input | Pulse input | 1 | High-speed count active | 0: Disabled 1: Enabled | 0(DX1), 1(DX2) | | 0 | | × | |
| Pulse Input | Pulse Input | 2 | Pulse detection width | 0 to 1000 ms (detection width function is invalid at 0) | 0 | ms | 0 | | × | |
| Pulse input | Pulse input | 2 | High-speed count active | 0: Disabled 1: Enabled | 0(DX1), 1(DX2) | | 0 | | × | |
| Pulse Input | Pulse Input | 3 | Pulse detection width | 0 to 1000 ms (detection width function is invalid at 0) | 0 | ms | 0 | | × | |
| Pulse input | Pulse input | 3 | High-speed count active | 0: Disabled 1: Enabled | 0(DX1), 1(DX2) | | 0 | | × | |
| Pulse Input | Pulse Input | 4 | Pulse detection width | 0 to 1000 ms (detection width function is invalid at 0) | 0 | ms | 0 | | × | |
| Pulse input | Pulse input | 4 | High-speed count active | 0: Disabled 1: Enabled | 0(DX1), 1(DX2) | | 0 | | × | |
| Pulse Input | Pulse Input | 5 | Pulse detection width | 0 to 1000 ms (detection width function is invalid at 0) | 0 | ms | 0 | | × | |
| Pulse input | Pulse input | 5 | High-speed count active | 0: Disabled 1: Enabled | 0(DX1), 1(DX2) | | 0 | | × | |
| Pulse Input | Pulse Input | 6 | Pulse detection width | 0 to 1000 ms (detection width function is invalid at 0) | 0 | ms | 0 | | × | |
| Pulse input | Pulse input | 6 | High-speed count active | 0: Disabled 1: Enabled | 0(DX1), 1(DX2) | | 0 | | × | |
| Pulse Input | Pulse Input | 7 | Pulse detection width | 0 to 1000 ms (detection width function is invalid at 0) | 0 | ms | 0 | | × | |
| Pulse input | Pulse input | 7 | High-speed count active | 0: Disabled 1: Enabled | 0(DX1), 1(DX2) | | 0 | | × | |
| Pulse Input | Pulse Input | 8 | Pulse detection width | 0 to 1000 ms (detection width function is invalid at 0) | 0 | ms | 0 | | × | |
| Pulse input | Pulse input | 8 | High-speed count active | 0: Disabled 1: Enabled | 0(DX1), 1(DX2) | | 0 | | × | |
| Pulse Input | Pulse Input | 9 | Pulse detection width | 0 to 1000 ms (detection width function is invalid at 0) | 0 | ms | 0 | | × | |
| Pulse Input | Pulse Input | 10 | Pulse detection width | 0 to 1000 ms (detection width function is invalid at 0) | 0 | ms | 0 | | × | |
| Pulse Input | Pulse Input | 11 | Pulse detection width | 0 to 1000 ms (detection width function is invalid at 0) | 0 | ms | 0 | | × | |
| Pulse Input | Pulse Input | 12 | Pulse detection width | 0 to 1000 ms (detection width function is invalid at 0) | 0 | ms | 0 | | × | |
| Pulse Input | Pulse Input | 13 | Pulse detection width | 0 to 1000 ms (detection width function is invalid at 0) | 0 | ms | 0 | | × | |
| Pulse Input | Pulse Input | 14 | Pulse detection width | 0 to 1000 ms (detection width function is invalid at 0) | 0 | ms | 0 | | × | |
| Pulse Input | Pulse Input | 15 | Pulse detection width | 0 to 1000 ms (detection width function is invalid at 0) | 0 | ms | 0 | | × | |
| Pulse Input | Pulse Input | 16 | Pulse detection width | 0 to 1000 ms (detection width function is invalid at 0) | 0 | ms | 0 | | × | |

## Pulse Input/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Pulse input | Pulse Estimate Value | 1 | Estimate count direction | 0: Count up<br>1: Count down | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 1 | Estimate value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 1 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 1 | Estimate value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 1 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 1 | Estimate target value (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999<br>Range = 0 to 1073741823 | × | |
| Pulse Input | Pulse Estimate Value | 1 | Estimate target value (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 1 | Pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 1 | Pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 1 | Pre-pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 1 | Pre-pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 1 | Estimate ]value upper limit (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999<br>Range = 0 to 1073741823 | x | |
| Pulse Input | Pulse Estimate Value | 1 | Estimate value upper limit (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 1 | Estimate value lower limit (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 1 | Estimate value lower limit (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 1 | Action when the estimate value upper or lower limits are reached | 0: Stop at the estimate upper limit (lower limit)<br>1: Recount from the estimate lower limit (upper limit) | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 1 | Preset value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 1 | Preset value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse input | Pulse Estimate Value | 2 | Estimate count direction | 0: Count up<br>1: Count down | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 2 | Estimate value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 2 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 2 | Estimate value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 2 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 2 | Estimate target value (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999<br>Range = 0 to 1073741823 | × | |
| Pulse Input | Pulse Estimate Value | 2 | Estimate target value (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 2 | Pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 2 | Pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 2 | Pre-pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 2 | Pre-pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 2 | Estimate ]value upper limit (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999<br>Range = 0 to 1073741823 | x | |
| Pulse Input | Pulse Estimate Value | 2 | Estimate value upper limit (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 2 | Estimate value lower limit (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 2 | Estimate value lower limit (H) | 0 to 16383 | 0 | | 0 | | × | |

## Pulse Input/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Pulse Input | Pulse Estimate Value | 2 | Action when the estimate value upper or lower limits are reached | 0: Stop at the estimate upper limit (lower limit)<br>1: Recount from the estimate lower limit (upper limit) | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 2 | Preset value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 2 | Preset value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse input | Pulse Estimate Value | 3 | Estimate count direction | 0: Count up<br>1: Count down | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 3 | Estimate value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 3 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 3 | Estimate value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 3 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 3 | Estimate target value (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999<br>Range = 0 to 1073741823 | × | |
| Pulse Input | Pulse Estimate Value | 3 | Estimate target value (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 3 | Pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 3 | Pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 3 | Pre-pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 3 | Pre-pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 3 | Estimate ]value upper limit (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999<br>Range = 0 to 1073741823 | x | |
| Pulse Input | Pulse Estimate Value | 3 | Estimate value upper limit (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 3 | Estimate value lower limit (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 3 | Estimate value lower limit (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 3 | Action when the estimate value upper or lower limits are reached | 0: Stop at the estimate upper limit (lower limit)<br>1: Recount from the estimate lower limit (upper limit) | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 3 | Preset value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 3 | Preset value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse input | Pulse Estimate Value | 4 | Estimate count direction | 0: Count up<br>1: Count down | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 4 | Estimate value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 4 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 4 | Estimate value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 4 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 4 | Estimate target value (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999<br>Range = 0 to 1073741823 | × | |
| Pulse Input | Pulse Estimate Value | 4 | Estimate target value (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 4 | Pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 4 | Pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 4 | Pre-pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 4 | Pre-pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 4 | Estimate ]value upper limit (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999<br>Range = 0 to 1073741823 | x | |
| Pulse Input | Pulse Estimate Value | 4 | Estimate value upper limit (H) | 0 to 16383 | 15258 | | 0 | | × | |

## Pulse Input/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Pulse Input | Pulse Estimate Value | 4 | Estimate value lower limit (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 4 | Estimate value lower limit (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 4 | Action when the estimate value upper or lower limits are reached | 0: Stop at the estimate upper limit (lower limit)<br>1: Recount from the estimate lower limit (upper limit) | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 4 | Preset value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 4 | Preset value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse input | Pulse Estimate Value | 5 | Estimate count direction | 0: Count up<br>1: Count down | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 5 | Estimate value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 5 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 5 | Estimate value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 5 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 5 | Estimate target value (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999<br>Range = 0 to 1073741823 | × | |
| Pulse Input | Pulse Estimate Value | 5 | Estimate target value (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 5 | Pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 5 | Pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 5 | Pre-pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 5 | Pre-pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 5 | Estimate ]value upper limit (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999<br>Range = 0 to 1073741823 | x | |
| Pulse Input | Pulse Estimate Value | 5 | Estimate value upper limit (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 5 | Estimate value lower limit (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 5 | Estimate value lower limit (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 5 | Action when the estimate value upper or lower limits are reached | 0: Stop at the estimate upper limit (lower limit)<br>1: Recount from the estimate lower limit (upper limit) | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 5 | Preset value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 5 | Preset value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse input | Pulse Estimate Value | 6 | Estimate count direction | 0: Count up<br>1: Count down | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 6 | Estimate value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 6 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 6 | Estimate value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 6 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 6 | Estimate target value (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999<br>Range = 0 to 1073741823 | × | |
| Pulse Input | Pulse Estimate Value | 6 | Estimate target value (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 6 | Pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 6 | Pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 6 | Pre-pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 6 | Pre-pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |

## Pulse Input/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Pulse Input | Pulse Estimate Value | 6 | Estimate ]value upper limit (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999 Range = 0 to 1073741823 | x | |
| Pulse Input | Pulse Estimate Value | 6 | Estimate value upper limit (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 6 | Estimate value lower limit (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 6 | Estimate value lower limit (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 6 | Action when the estimate value upper or lower limits are reached | 0: Stop at the estimate upper limit (lower limit)<br>1: Recount from the estimate lower limit (upper limit) | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 6 | Preset value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 6 | Preset value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse input | Pulse Estimate Value | 7 | Estimate count direction | 0: Count up<br>1: Count down | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 7 | Estimate value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 7 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 7 | Estimate value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 7 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 7 | Estimate target value (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999 Range = 0 to 1073741823 | × | |
| Pulse Input | Pulse Estimate Value | 7 | Estimate target value (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 7 | Pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 7 | Pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 7 | Pre-pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 7 | Pre-pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 7 | Estimate ]value upper limit (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999 Range = 0 to 1073741823 | x | |
| Pulse Input | Pulse Estimate Value | 7 | Estimate value upper limit (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 7 | Estimate value lower limit (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 7 | Estimate value lower limit (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 7 | Action when the estimate value upper or lower limits are reached | 0: Stop at the estimate upper limit (lower limit)<br>1: Recount from the estimate lower limit (upper limit) | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 7 | Preset value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 7 | Preset value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse input | Pulse Estimate Value | 8 | Estimate count direction | 0: Count up<br>1: Count down | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 8 | Estimate value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 8 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 8 | Estimate value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 8 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 8 | Estimate target value (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999 Range = 0 to 1073741823 | × | |
| Pulse Input | Pulse Estimate Value | 8 | Estimate target value (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 8 | Pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 8 | Pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |

## Pulse Input/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Pulse Input | Pulse Estimate Value | 8 | Pre-pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 8 | Pre-pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 8 | Estimate ]value upper limit (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999 Range = 0 to 1073741823 | x | |
| Pulse Input | Pulse Estimate Value | 8 | Estimate value upper limit (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 8 | Estimate value lower limit (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 8 | Estimate value lower limit (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 8 | Action when the estimate value upper or lower limits are reached | 0: Stop at the estimate upper limit (lower limit)<br>1: Recount from the estimate lower limit (upper limit) | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 8 | Preset value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 8 | Preset value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse input | Pulse Estimate Value | 9 | Estimate count direction | 0: Count up<br>1: Count down | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 9 | Estimate value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 9 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 9 | Estimate value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 9 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 9 | Estimate target value (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999 Range = 0 to 1073741823 | × | |
| Pulse Input | Pulse Estimate Value | 9 | Estimate target value (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 9 | Pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 9 | Pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 9 | Pre-pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 9 | Pre-pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 9 | Estimate ]value upper limit (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999 Range = 0 to 1073741823 | x | |
| Pulse Input | Pulse Estimate Value | 9 | Estimate value upper limit (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 9 | Estimate value lower limit (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 9 | Estimate value lower limit (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 9 | Action when the estimate value upper or lower limits are reached | 0: Stop at the estimate upper limit (lower limit)<br>1: Recount from the estimate lower limit (upper limit) | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 9 | Preset value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 9 | Preset value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse input | Pulse Estimate Value | 10 | Estimate count direction | 0: Count up<br>1: Count down | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 10 | Estimate value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 10 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 10 | Estimate value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 10 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 10 | Estimate target value (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999 Range = 0 to 1073741823 | × | |
| Pulse Input | Pulse Estimate Value | 10 | Estimate target value (H) | 0 to 16383 | 15258 | | 0 | | × | |

## Pulse Input/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Pulse Input | Pulse Estimate Value | 10 | Pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 10 | Pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 10 | Pre-pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 10 | Pre-pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 10 | Estimate ]value upper limit (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999 Range = 0 to 1073741823 | x | |
| Pulse Input | Pulse Estimate Value | 10 | Estimate value upper limit (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 10 | Estimate value lower limit (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 10 | Estimate value lower limit (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 10 | Action when the estimate value upper or lower limits are reached | 0: Stop at the estimate upper limit (lower limit)<br>1: Recount from the estimate lower limit (upper limit) | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 10 | Preset value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 10 | Preset value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse input | Pulse Estimate Value | 11 | Estimate count direction | 0: Count up<br>1: Count down | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 11 | Estimate value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 11 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 11 | Estimate value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 11 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 11 | Estimate target value (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999 Range = 0 to 1073741823 | × | |
| Pulse Input | Pulse Estimate Value | 11 | Estimate target value (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 11 | Pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 11 | Pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 11 | Pre-pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 11 | Pre-pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 11 | Estimate ]value upper limit (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999 Range = 0 to 1073741823 | x | |
| Pulse Input | Pulse Estimate Value | 11 | Estimate value upper limit (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 11 | Estimate value lower limit (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 11 | Estimate value lower limit (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 11 | Action when the estimate value upper or lower limits are reached | 0: Stop at the estimate upper limit (lower limit)<br>1: Recount from the estimate lower limit (upper limit) | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 11 | Preset value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 11 | Preset value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse input | Pulse Estimate Value | 12 | Estimate count direction | 0: Count up<br>1: Count down | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 12 | Estimate value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 12 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 12 | Estimate value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 12 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |

## Pulse Input/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Pulse Input | Pulse Estimate Value | 12 | Estimate target value (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999 Range = 0 to 1073741823 | × | |
| Pulse Input | Pulse Estimate Value | 12 | Estimate target value (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 12 | Pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 12 | Pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 12 | Pre-pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 12 | Pre-pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 12 | Estimate ]value upper limit (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999 Range = 0 to 1073741823 | x | |
| Pulse Input | Pulse Estimate Value | 12 | Estimate value upper limit (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 12 | Estimate value lower limit (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 12 | Estimate value lower limit (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 12 | Action when the estimate value upper or lower limits are reached | 0: Stop at the estimate upper limit (lower limit)<br>1: Recount from the estimate lower limit (upper limit) | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 12 | Preset value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 12 | Preset value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse input | Pulse Estimate Value | 13 | Estimate count direction | 0: Count up<br>1: Count down | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 13 | Estimate value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 13 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 13 | Estimate value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 13 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 13 | Estimate target value (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999 Range = 0 to 1073741823 | × | |
| Pulse Input | Pulse Estimate Value | 13 | Estimate target value (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 13 | Pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 13 | Pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 13 | Pre-pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 13 | Pre-pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 13 | Estimate ]value upper limit (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999 Range = 0 to 1073741823 | x | |
| Pulse Input | Pulse Estimate Value | 13 | Estimate value upper limit (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 13 | Estimate value lower limit (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 13 | Estimate value lower limit (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 13 | Action when the estimate value upper or lower limits are reached | 0: Stop at the estimate upper limit (lower limit)<br>1: Recount from the estimate lower limit (upper limit) | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 13 | Preset value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 13 | Preset value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse input | Pulse Estimate Value | 14 | Estimate count direction | 0: Count up<br>1: Count down | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 14 | Estimate value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 14 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |

## Pulse Input/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Pulse Input | Pulse Estimate Value | 14 | Estimate value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 14 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 14 | Estimate target value (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999 Range = 0 to 1073741823 | × | |
| Pulse Input | Pulse Estimate Value | 14 | Estimate target value (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 14 | Pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 14 | Pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 14 | Pre-pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 14 | Pre-pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 14 | Estimate ]value upper limit (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999 Range = 0 to 1073741823 | x | |
| Pulse Input | Pulse Estimate Value | 14 | Estimate value upper limit (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 14 | Estimate value lower limit (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 14 | Estimate value lower limit (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 14 | Action when the estimate value upper or lower limits are reached | 0: Stop at the estimate upper limit (lower limit)<br>1: Recount from the estimate lower limit (upper limit) | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 14 | Preset value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 14 | Preset value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse input | Pulse Estimate Value | 15 | Estimate count direction | 0: Count up<br>1: Count down | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 15 | Estimate value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 15 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 15 | Estimate value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 15 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 15 | Estimate target value (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999 Range = 0 to 1073741823 | × | |
| Pulse Input | Pulse Estimate Value | 15 | Estimate target value (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 15 | Pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 15 | Pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 15 | Pre-pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 15 | Pre-pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 15 | Estimate ]value upper limit (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999 Range = 0 to 1073741823 | x | |
| Pulse Input | Pulse Estimate Value | 15 | Estimate value upper limit (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 15 | Estimate value lower limit (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 15 | Estimate value lower limit (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 15 | Action when the estimate value upper or lower limits are reached | 0: Stop at the estimate upper limit (lower limit)<br>1: Recount from the estimate lower limit (upper limit) | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 15 | Preset value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 15 | Preset value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse input | Pulse Estimate Value | 16 | Estimate count direction | 0: Count up<br>1: Count down | 0 | | 0 | | × | |

## Pulse Input/Pulse Estimate Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Pulse Input | Pulse Estimate Value | 16 | Estimate value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 16 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 16 | Estimate value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 16 | Reserved for system use | 0 fixed | 0 | | 0 | When writing, write 0 | × | |
| Pulse Input | Pulse Estimate Value | 16 | Estimate target value (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999<br>Range = 0 to 1073741823 | × | |
| Pulse Input | Pulse Estimate Value | 16 | Estimate target value (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 16 | Pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 16 | Pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 16 | Pre-pre-target value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 16 | Pre-pre-target value (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 16 | Estimate ]value upper limit (L) | 0 to 65535 | 51711 | | 0 | Initial value = 999999999<br>Range = 0 to 1073741823 | x | |
| Pulse Input | Pulse Estimate Value | 16 | Estimate value upper limit (H) | 0 to 16383 | 15258 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 16 | Estimate value lower limit (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 16 | Estimate value lower limit (H) | 0 to 16383 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 16 | Action when the estimate value upper or lower limits are reached | 0: Stop at the estimate upper limit (lower limit)<br>1: Recount from the estimate lower limit (upper limit) | 1 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 16 | Preset value (L) | 0 to 65535 | 0 | | 0 | | × | |
| Pulse Input | Pulse Estimate Value | 16 | Preset value (H) | 0 to 16383 | 0 | | 0 | | × | |

## Pulse Input/Pulse Instant Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Pulse Input | Pulse Instant Value | 1 | Instant value update cycle | 1 to 32000 | 1 | ×100 ms | 0 | | × | |
| Pulse Input | Pulse Instant Value | 1 | Decimal point position | 0 No decimal point<br>1: 1 digit after the decimal point<br>2: 2 digits after the decimal point<br>3: 3 digits after the decimal point<br>4: 4 digits after the decimal point | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 1 | Timebase | 0: Instant value update cycle<br>1: seconds<br>2: minutes<br>3: hours | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 1 | Instant value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 1 | Instant value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 1 | Instant value upper limit | 0 to 32000 U | 32000 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 1 | Instant value lower limit | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 1 | Instant value ratio | 0.01 to 320.00 | 1.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 1 | Instant value bias | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 1 | Instant value filter | 0.00 to 120.00 | 0.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 2 | Instant value update cycle | 1 to 32000 | 1 | ×100 ms | 0 | | × | |
| Pulse Input | Pulse Instant Value | 2 | Decimal point position | 0 No decimal point<br>1: 1 digit after the decimal point<br>2: 2 digits after the decimal point<br>3: 3 digits after the decimal point<br>4: 4 digits after the decimal point | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 2 | Timebase | 0: Instant value update cycle<br>1: seconds<br>2: minutes<br>3: hours | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 2 | Instant value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 2 | Instant value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 2 | Instant value upper limit | 0 to 32000 U | 32000 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 2 | Instant value lower limit | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 2 | Instant value ratio | 0.01 to 320.00 | 1.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 2 | Instant value bias | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 2 | Instant value filter | 0.00 to 120.00 | 0.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 3 | Instant value update cycle | 1 to 32000 | 1 | ×100 ms | 0 | | × | |
| Pulse Input | Pulse Instant Value | 3 | Decimal point position | 0 No decimal point<br>1: 1 digit after the decimal point<br>2: 2 digits after the decimal point<br>3: 3 digits after the decimal point<br>4: 4 digits after the decimal point | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 3 | Timebase | 0: Instant value update cycle<br>1: seconds<br>2: minutes<br>3: hours | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 3 | Instant value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 3 | Instant value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 3 | Instant value upper limit | 0 to 32000 U | 32000 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 3 | Instant value lower limit | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |

## Pulse Input/Pulse Instant Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Pulse Input | Pulse Instant Value | 3 | Instant value ratio | 0.01 to 320.00 | 1.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 3 | Instant value bias | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 3 | Instant value filter | 0.00 to 120.00 | 0.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 4 | Instant value update cycle | 1 to 32000 | 1 | ×100 ms | 0 | | × | |
| Pulse Input | Pulse Instant Value | 4 | Decimal point position | 0 No decimal point<br>1: 1 digit after the decimal point<br>2: 2 digits after the decimal point<br>3: 3 digits after the decimal point<br>4: 4 digits after the decimal point | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 4 | Timebase | 0: Instant value update cycle<br>1: seconds<br>2: minutes<br>3: hours | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 4 | Instant value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 4 | Instant value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 4 | Instant value upper limit | 0 to 32000 U | 32000 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 4 | Instant value lower limit | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 4 | Instant value ratio | 0.01 to 320.00 | 1.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 4 | Instant value bias | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 4 | Instant value filter | 0.00 to 120.00 | 0.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 5 | Instant value update cycle | 1 to 32000 | 1 | ×100 ms | 0 | | × | |
| Pulse Input | Pulse Instant Value | 5 | Decimal point position | 0 No decimal point<br>1: 1 digit after the decimal point<br>2: 2 digits after the decimal point<br>3: 3 digits after the decimal point<br>4: 4 digits after the decimal point | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 5 | Timebase | 0: Instant value update cycle<br>1: seconds<br>2: minutes<br>3: hours | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 5 | Instant value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 5 | Instant value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 5 | Instant value upper limit | 0 to 32000 U | 32000 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 5 | Instant value lower limit | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 5 | Instant value ratio | 0.01 to 320.00 | 1.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 5 | Instant value bias | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 5 | Instant value filter | 0.00 to 120.00 | 0.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 6 | Instant value update cycle | 1 to 32000 | 1 | ×100 ms | 0 | | × | |
| Pulse Input | Pulse Instant Value | 6 | Decimal point position | 0 No decimal point<br>1: 1 digit after the decimal point<br>2: 2 digits after the decimal point<br>3: 3 digits after the decimal point<br>4: 4 digits after the decimal point | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 6 | Timebase | 0: Instant value update cycle<br>1: seconds<br>2: minutes<br>3: hours | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 6 | Instant value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |

## Pulse Input/Pulse Instant Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Pulse Input | Pulse Instant Value | 6 | Instant value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 6 | Instant value upper limit | 0 to 32000 U | 32000 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 6 | Instant value lower limit | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 6 | Instant value ratio | 0.01 to 320.00 | 1.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 6 | Instant value bias | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 6 | Instant value filter | 0.00 to 120.00 | 0.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 7 | Instant value update cycle | 1 to 32000 | 1 | ×100 ms | 0 | | × | |
| Pulse Input | Pulse Instant Value | 7 | Decimal point position | 0 No decimal point<br>1: 1 digit after the decimal point<br>2: 2 digits after the decimal point<br>3: 3 digits after the decimal point<br>4: 4 digits after the decimal point | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 7 | Timebase | 0: Instant value update cycle<br>1: seconds<br>2: minutes<br>3: hours | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 7 | Instant value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 7 | Instant value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 7 | Instant value upper limit | 0 to 32000 U | 32000 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 7 | Instant value lower limit | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 7 | Instant value ratio | 0.01 to 320.00 | 1.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 7 | Instant value bias | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 7 | Instant value filter | 0.00 to 120.00 | 0.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 8 | Instant value update cycle | 1 to 32000 | 1 | ×100 ms | 0 | | × | |
| Pulse Input | Pulse Instant Value | 8 | Decimal point position | 0 No decimal point<br>1: 1 digit after the decimal point<br>2: 2 digits after the decimal point<br>3: 3 digits after the decimal point<br>4: 4 digits after the decimal point | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 8 | Timebase | 0: Instant value update cycle<br>1: seconds<br>2: minutes<br>3: hours | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 8 | Instant value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 8 | Instant value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 8 | Instant value upper limit | 0 to 32000 U | 32000 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 8 | Instant value lower limit | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 8 | Instant value ratio | 0.01 to 320.00 | 1.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 8 | Instant value bias | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 8 | Instant value filter | 0.00 to 120.00 | 0.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 9 | Instant value update cycle | 1 to 32000 | 1 | ×100 ms | 0 | | × | |
| Pulse Input | Pulse Instant Value | 9 | Decimal point position | 0 No decimal point<br>1: 1 digit after the decimal point<br>2: 2 digits after the decimal point<br>3: 3 digits after the decimal point<br>4: 4 digits after the decimal point | 0 | | 0 | | × | |

## Pulse Input/Pulse Instant Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Pulse Input | Pulse Instant Value | 9 | Timebase | 0: Instant value update cycle<br>1: seconds<br>2: minutes<br>3: hours | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 9 | Instant value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 9 | Instant value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 9 | Instant value upper limit | 0 to 32000 U | 32000 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 9 | Instant value lower limit | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 9 | Instant value ratio | 0.01 to 320.00 | 1.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 9 | Instant value bias | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 9 | Instant value filter | 0.00 to 120.00 | 0.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 10 | Instant value update cycle | 1 to 32000 | 1 | ×100 ms | 0 | | × | |
| Pulse Input | Pulse Instant Value | 10 | Decimal point position | 0 No decimal point<br>1: 1 digit after the decimal point<br>2: 2 digits after the decimal point<br>3: 3 digits after the decimal point<br>4: 4 digits after the decimal point | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 10 | Timebase | 0: Instant value update cycle<br>1: seconds<br>2: minutes<br>3: hours | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 10 | Instant value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 10 | Instant value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 10 | Instant value upper limit | 0 to 32000 U | 32000 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 10 | Instant value lower limit | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 10 | Instant value ratio | 0.01 to 320.00 | 1.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 10 | Instant value bias | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 10 | Instant value filter | 0.00 to 120.00 | 0.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 11 | Instant value update cycle | 1 to 32000 | 1 | ×100 ms | 0 | | × | |
| Pulse Input | Pulse Instant Value | 11 | Decimal point position | 0 No decimal point<br>1: 1 digit after the decimal point<br>2: 2 digits after the decimal point<br>3: 3 digits after the decimal point<br>4: 4 digits after the decimal point | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 11 | Timebase | 0: Instant value update cycle<br>1: seconds<br>2: minutes<br>3: hours | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 11 | Instant value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 11 | Instant value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 11 | Instant value upper limit | 0 to 32000 U | 32000 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 11 | Instant value lower limit | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 11 | Instant value ratio | 0.01 to 320.00 | 1.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 11 | Instant value bias | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 11 | Instant value filter | 0.00 to 120.00 | 0.00 | | 0 | | × | |

## Pulse Input/Pulse Instant Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Pulse Input | Pulse Instant Value | 12 | Instant value update cycle | 1 to 32000 | 1 | ×100 ms | 0 | | × | |
| Pulse Input | Pulse Instant Value | 12 | Decimal point position | 0 No decimal point<br>1: 1 digit after the decimal point<br>2: 2 digits after the decimal point<br>3: 3 digits after the decimal point<br>4: 4 digits after the decimal point | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 12 | Timebase | 0: Instant value update cycle<br>1: seconds<br>2: minutes<br>3: hours | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 12 | Instant value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 12 | Instant value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 12 | Instant value upper limit | 0 to 32000 U | 32000 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 12 | Instant value lower limit | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 12 | Instant value ratio | 0.01 to 320.00 | 1.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 12 | Instant value bias | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 12 | Instant value filter | 0.00 to 120.00 | 0.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 13 | Instant value update cycle | 1 to 32000 | 1 | ×100 ms | 0 | | × | |
| Pulse Input | Pulse Instant Value | 13 | Decimal point position | 0 No decimal point<br>1: 1 digit after the decimal point<br>2: 2 digits after the decimal point<br>3: 3 digits after the decimal point<br>4: 4 digits after the decimal point | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 13 | Timebase | 0: Instant value update cycle<br>1: seconds<br>2: minutes<br>3: hours | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 13 | Instant value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 13 | Instant value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 13 | Instant value upper limit | 0 to 32000 U | 32000 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 13 | Instant value lower limit | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 13 | Instant value ratio | 0.01 to 320.00 | 1.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 13 | Instant value bias | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 13 | Instant value filter | 0.00 to 120.00 | 0.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 14 | Instant value update cycle | 1 to 32000 | 1 | ×100 ms | 0 | | × | |
| Pulse Input | Pulse Instant Value | 14 | Decimal point position | 0 No decimal point<br>1: 1 digit after the decimal point<br>2: 2 digits after the decimal point<br>3: 3 digits after the decimal point<br>4: 4 digits after the decimal point | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 14 | Timebase | 0: Instant value update cycle<br>1: seconds<br>2: minutes<br>3: hours | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 14 | Instant value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 14 | Instant value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 14 | Instant value upper limit | 0 to 32000 U | 32000 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 14 | Instant value lower limit | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |

## Pulse Input/Pulse Instant Value

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Pulse Input | Pulse Instant Value | 14 | Instant value ratio | 0.01 to 320.00 | 1.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 14 | Instant value bias | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 14 | Instant value filter | 0.00 to 120.00 | 0.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 15 | Instant value update cycle | 1 to 32000 | 1 | ×100 ms | 0 | | × | |
| Pulse Input | Pulse Instant Value | 15 | Decimal point position | 0 No decimal point<br>1: 1 digit after the decimal point<br>2: 2 digits after the decimal point<br>3: 3 digits after the decimal point<br>4: 4 digits after the decimal point | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 15 | Timebase | 0: Instant value update cycle<br>1: seconds<br>2: minutes<br>3: hours | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 15 | Instant value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 15 | Instant value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 15 | Instant value upper limit | 0 to 32000 U | 32000 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 15 | Instant value lower limit | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 15 | Instant value ratio | 0.01 to 320.00 | 1.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 15 | Instant value bias | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 15 | Instant value filter | 0.00 to 120.00 | 0.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 16 | Instant value update cycle | 1 to 32000 | 1 | ×100 ms | 0 | | × | |
| Pulse Input | Pulse Instant Value | 16 | Decimal point position | 0 No decimal point<br>1: 1 digit after the decimal point<br>2: 2 digits after the decimal point<br>3: 3 digits after the decimal point<br>4: 4 digits after the decimal point | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 16 | Timebase | 0: Instant value update cycle<br>1: seconds<br>2: minutes<br>3: hours | 0 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 16 | Instant value scaling value (C1) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 16 | Instant value scaling value (C2) | 1 to 32000 | 1 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 16 | Instant value upper limit | 0 to 32000 U | 32000 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 16 | Instant value lower limit | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 16 | Instant value ratio | 0.01 to 320.00 | 1.00 | | 0 | | × | |
| Pulse Input | Pulse Instant Value | 16 | Instant value bias | 0 to 32000 U | 0 | | 0 | Decimal point position = PULSE | × | |
| Pulse Input | Pulse Instant Value | 16 | Instant value filter | 0.00 to 120.00 | 0.00 | | 0 | | × | |

## Function/Reception Monitoring

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Function | Reception monitoring | 1 | Address (L) | 0 to 65535 | 0 | | 1 | | | |
| Function | Reception monitoring | 1 | Address (H) | 0 to 65535 | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 1 | Time-out(L) | 0 to 65535 | 180 | s | 1 | | | |
| Function | Reception monitoring | 1 | Time-out(H) | 0 fixed | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 1 | Mode | 0: Without reception monitoring<br>1: With reception monitoring | 0 | | 1 | | | |
| Function | Reception monitoring | 2 | Address (L) | 0 to 65535 | 0 | | 1 | | | |
| Function | Reception monitoring | 2 | Address (H) | 0 to 65535 | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 2 | Time-out(L) | 0 to 65535 | 180 | s | 1 | | | |
| Function | Reception monitoring | 2 | Time-out(H) | 0 fixed | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 2 | Mode | 0: Without reception monitoring<br>1: With reception monitoring | 0 | | 1 | | | |
| Function | Reception monitoring | 3 | Address (L) | 0 to 65535 | 0 | | 1 | | | |
| Function | Reception monitoring | 3 | Address (H) | 0 to 65535 | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 3 | Time-out(L) | 0 to 65535 | 180 | s | 1 | | | |
| Function | Reception monitoring | 3 | Time-out(H) | 0 fixed | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 3 | Mode | 0: Without reception monitoring<br>1: With reception monitoring | 0 | | 1 | | | |
| Function | Reception monitoring | 4 | Address (L) | 0 to 65535 | 0 | | 1 | | | |
| Function | Reception monitoring | 4 | Address (H) | 0 to 65535 | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 4 | Time-out(L) | 0 to 65535 | 180 | s | 1 | | | |
| Function | Reception monitoring | 4 | Time-out(H) | 0 fixed | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 4 | Mode | 0: Without reception monitoring<br>1: With reception monitoring | 0 | | 1 | | | |
| Function | Reception monitoring | 5 | Address (L) | 0 to 65535 | 0 | | 1 | | | |
| Function | Reception monitoring | 5 | Address (H) | 0 to 65535 | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 5 | Time-out(L) | 0 to 65535 | 180 | s | 1 | | | |
| Function | Reception monitoring | 5 | Time-out(H) | 0 fixed | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 5 | Mode | 0: Without reception monitoring<br>1: With reception monitoring | 0 | | 1 | | | |
| Function | Reception monitoring | 6 | Address (L) | 0 to 65535 | 0 | | 1 | | | |
| Function | Reception monitoring | 6 | Address (H) | 0 to 65535 | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 6 | Time-out(L) | 0 to 65535 | 180 | s | 1 | | | |
| Function | Reception monitoring | 6 | Time-out(H) | 0 fixed | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 6 | Mode | 0: Without reception monitoring<br>1: With reception monitoring | 0 | | 1 | | | |
| Function | Reception monitoring | 7 | Address (L) | 0 to 65535 | 0 | | 1 | | | |
| Function | Reception monitoring | 7 | Address (H) | 0 to 65535 | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 7 | Time-out(L) | 0 to 65535 | 180 | s | 1 | | | |
| Function | Reception monitoring | 7 | Time-out(H) | 0 fixed | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 7 | Mode | 0: Without reception monitoring<br>1: With reception monitoring | 0 | | 1 | | | |
| Function | Reception monitoring | 8 | Address (L) | 0 to 65535 | 0 | | 1 | | | |
| Function | Reception monitoring | 8 | Address (H) | 0 to 65535 | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 8 | Time-out(L) | 0 to 65535 | 180 | s | 1 | | | |
| Function | Reception monitoring | 8 | Time-out(H) | 0 fixed | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 8 | Mode | 0: Without reception monitoring<br>1: With reception monitoring | 0 | | 1 | | | |
| Function | Reception monitoring | 9 | Address (L) | 0 to 65535 | 0 | | 1 | | | |
| Function | Reception monitoring | 9 | Address (H) | 0 to 65535 | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 9 | Time-out(L) | 0 to 65535 | 180 | s | 1 | | | |
| Function | Reception monitoring | 9 | Time-out(H) | 0 fixed | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 9 | Mode | 0: Without reception monitoring<br>1: With reception monitoring | 0 | | 1 | | | |

## Function/Reception Monitoring

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Function | Reception monitoring | 10 | Address (L) | 0 to 65535 | 0 | | 1 | | | |
| Function | Reception monitoring | 10 | Address (H) | 0 to 65535 | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 10 | Time-out(L) | 0 to 65535 | 180 | s | 1 | | | |
| Function | Reception monitoring | 10 | Time-out(H) | 0 fixed | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 10 | Mode | 0: Without reception monitoring<br>1: With reception monitoring | 0 | | 1 | | | |
| Function | Reception monitoring | 11 | Address (L) | 0 to 65535 | 0 | | 1 | | | |
| Function | Reception monitoring | 11 | Address (H) | 0 to 65535 | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 11 | Time-out(L) | 0 to 65535 | 180 | s | 1 | | | |
| Function | Reception monitoring | 11 | Time-out(H) | 0 fixed | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 11 | Mode | 0: Without reception monitoring<br>1: With reception monitoring | 0 | | 1 | | | |
| Function | Reception monitoring | 12 | Address (L) | 0 to 65535 | 0 | | 1 | | | |
| Function | Reception monitoring | 12 | Address (H) | 0 to 65535 | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 12 | Time-out(L) | 0 to 65535 | 180 | s | 1 | | | |
| Function | Reception monitoring | 12 | Time-out(H) | 0 fixed | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 12 | Mode | 0: Without reception monitoring<br>1: With reception monitoring | 0 | | 1 | | | |
| Function | Reception monitoring | 13 | Address (L) | 0 to 65535 | 0 | | 1 | | | |
| Function | Reception monitoring | 13 | Address (H) | 0 to 65535 | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 13 | Time-out(L) | 0 to 65535 | 180 | s | 1 | | | |
| Function | Reception monitoring | 13 | Time-out(H) | 0 fixed | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 13 | Mode | 0: Without reception monitoring<br>1: With reception monitoring | 0 | | 1 | | | |
| Function | Reception monitoring | 14 | Address (L) | 0 to 65535 | 0 | | 1 | | | |
| Function | Reception monitoring | 14 | Address (H) | 0 to 65535 | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 14 | Time-out(L) | 0 to 65535 | 180 | s | 1 | | | |
| Function | Reception monitoring | 14 | Time-out(H) | 0 fixed | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 14 | Mode | 0: Without reception monitoring<br>1: With reception monitoring | 0 | | 1 | | | |
| Function | Reception monitoring | 15 | Address (L) | 0 to 65535 | 0 | | 1 | | | |
| Function | Reception monitoring | 15 | Address (H) | 0 to 65535 | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 15 | Time-out(L) | 0 to 65535 | 180 | s | 1 | | | |
| Function | Reception monitoring | 15 | Time-out(H) | 0 fixed | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 15 | Mode | 0: Without reception monitoring<br>1: With reception monitoring | 0 | | 1 | | | |
| Function | Reception monitoring | 16 | Address (L) | 0 to 65535 | 0 | | 1 | | | |
| Function | Reception monitoring | 16 | Address (H) | 0 to 65535 | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 16 | Time-out(L) | 0 to 65535 | 180 | s | 1 | | | |
| Function | Reception monitoring | 16 | Time-out(H) | 0 fixed | 0 | | 1 | When writing, write 0 | | |
| Function | Reception monitoring | 16 | Mode | 0: Without reception monitoring<br>1: With reception monitoring | 0 | | 1 | | | |

## Other/UF LED Settings

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Other | UF LED Settings | 1 | Conditions for lighting | 1024 to 2047: Standard bit | 1792 | | 1 | | | |
| Other | UF LED Settings | 1 | Lighting status | 0: Off<br>1: Lit<br>2: Lit (reverse video)<br>3: Fast blink<br>4: Fast blink (conditional reverse video)<br>5: Slow blink<br>6: Slow blink (conditional reverse video) | 3 | | 1 | | | |
| Other | UF LED Settings | 2 | Conditions for lighting | 1024 to 2047: Standard bit | 1968 | | 1 | | | |
| Other | UF LED Settings | 2 | Lighting status | 0: Off<br>1: Lit<br>2: Lit (reverse video)<br>3: Fast blink<br>4: Fast blink (conditional reverse video)<br>5: Slow blink<br>6: Slow blink (conditional reverse video) | 3 | | 1 | | | |

## Other/Instrument Information

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Other | Instrument Information | 1 | F/W ROM ID | | – | | 0 | | | |
| Other | Instrument Information | 1 | F/W ROM Version 1 | | – | | 0 | | | |
| Other | Instrument Information | 1 | F/W ROM Version 2 | | – | | 0 | | | |
| Other | Instrument Information | 1 | Module interchange version | | – | | 0 | | | |
| Other | Instrument Information | 1 | Module version (Major, minor) | | – | | 0 | | | |

## Other/DI Tag Name

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Other | DI Tag Name | 1 | Tag name 1 | | DI1 | | 0 | | | |
| Other | DI Tag Name | 1 | Tag name 2 | | | | | | | |
| Other | DI Tag Name | 1 | Tag name 3 | | | | | | | |
| Other | DI Tag Name | 1 | Tag name 4 | | | | | | | |
| Other | DI Tag Name | 1 | Tag name 5 | | | | | | | |
| Other | DI Tag Name | 1 | Tag name 6 | | | | | | | |
| Other | DI Tag Name | 1 | Tag name 7 | | | | | | | |
| Other | DI Tag Name | 1 | Tag name 8 | | | | | | | |
| Other | DI Tag Name | 2 | Tag name 1 | | DI2 | | 0 | | | |
| Other | DI Tag Name | 2 | Tag name 2 | | | | | | | |
| Other | DI Tag Name | 2 | Tag name 3 | | | | | | | |
| Other | DI Tag Name | 2 | Tag name 4 | | | | | | | |
| Other | DI Tag Name | 2 | Tag name 5 | | | | | | | |
| Other | DI Tag Name | 2 | Tag name 6 | | | | | | | |
| Other | DI Tag Name | 2 | Tag name 7 | | | | | | | |
| Other | DI Tag Name | 2 | Tag name 8 | | | | | | | |
| Other | DI Tag Name | 3 | Tag name 1 | | DI3 | | 0 | | | |
| Other | DI Tag Name | 3 | Tag name 2 | | | | | | | |
| Other | DI Tag Name | 3 | Tag name 3 | | | | | | | |
| Other | DI Tag Name | 3 | Tag name 4 | | | | | | | |
| Other | DI Tag Name | 3 | Tag name 5 | | | | | | | |
| Other | DI Tag Name | 3 | Tag name 6 | | | | | | | |
| Other | DI Tag Name | 3 | Tag name 7 | | | | | | | |
| Other | DI Tag Name | 3 | Tag name 8 | | | | | | | |
| Other | DI Tag Name | 4 | Tag name 1 | | DI4 | | 0 | | | |
| Other | DI Tag Name | 4 | Tag name 2 | | | | | | | |
| Other | DI Tag Name | 4 | Tag name 3 | | | | | | | |
| Other | DI Tag Name | 4 | Tag name 4 | | | | | | | |
| Other | DI Tag Name | 4 | Tag name 5 | | | | | | | |
| Other | DI Tag Name | 4 | Tag name 6 | | | | | | | |
| Other | DI Tag Name | 4 | Tag name 7 | | | | | | | |
| Other | DI Tag Name | 4 | Tag name 8 | | | | | | | |
| Other | DI Tag Name | 5 | Tag name 1 | | DI5 | | 0 | | | |
| Other | DI Tag Name | 5 | Tag name 2 | | | | | | | |
| Other | DI Tag Name | 5 | Tag name 3 | | | | | | | |
| Other | DI Tag Name | 5 | Tag name 4 | | | | | | | |
| Other | DI Tag Name | 5 | Tag name 5 | | | | | | | |
| Other | DI Tag Name | 5 | Tag name 6 | | | | | | | |
| Other | DI Tag Name | 5 | Tag name 7 | | | | | | | |
| Other | DI Tag Name | 5 | Tag name 8 | | | | | | | |
| Other | DI Tag Name | 6 | Tag name 1 | | DI6 | | 0 | | | |
| Other | DI Tag Name | 6 | Tag name 2 | | | | | | | |
| Other | DI Tag Name | 6 | Tag name 3 | | | | | | | |
| Other | DI Tag Name | 6 | Tag name 4 | | | | | | | |
| Other | DI Tag Name | 6 | Tag name 5 | | | | | | | |
| Other | DI Tag Name | 6 | Tag name 6 | | | | | | | |
| Other | DI Tag Name | 6 | Tag name 7 | | | | | | | |
| Other | DI Tag Name | 6 | Tag name 8 | | | | | | | |
| Other | DI Tag Name | 7 | Tag name 1 | | DI7 | | 0 | | | |
| Other | DI Tag Name | 7 | Tag name 2 | | | | | | | |
| Other | DI Tag Name | 7 | Tag name 3 | | | | | | | |
| Other | DI Tag Name | 7 | Tag name 4 | | | | | | | |
| Other | DI Tag Name | 7 | Tag name 5 | | | | | | | |
| Other | DI Tag Name | 7 | Tag name 6 | | | | | | | |
| Other | DI Tag Name | 7 | Tag name 7 | | | | | | | |
| Other | DI Tag Name | 7 | Tag name 8 | | | | | | | |
| Other | DI Tag Name | 8 | Tag name 1 | | DI8 | | 0 | | | |
| Other | DI Tag Name | 8 | Tag name 2 | | | | | | | |
| Other | DI Tag Name | 8 | Tag name 3 | | | | | | | |
| Other | DI Tag Name | 8 | Tag name 4 | | | | | | | |
| Other | DI Tag Name | 8 | Tag name 5 | | | | | | | |
| Other | DI Tag Name | 8 | Tag name 6 | | | | | | | |
| Other | DI Tag Name | 8 | Tag name 7 | | | | | | | |
| Other | DI Tag Name | 8 | Tag name 8 | | | | | | | |

## Other/DI Tag Name

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Other | DI Tag Name | 9 | Tag name 1 | | DI9 | | 0 | | | |
| Other | DI Tag Name | 9 | Tag name 2 | | | | | | | |
| Other | DI Tag Name | 9 | Tag name 3 | | | | | | | |
| Other | DI Tag Name | 9 | Tag name 4 | | | | | | | |
| Other | DI Tag Name | 9 | Tag name 5 | | | | | | | |
| Other | DI Tag Name | 9 | Tag name 6 | | | | | | | |
| Other | DI Tag Name | 9 | Tag name 7 | | | | | | | |
| Other | DI Tag Name | 9 | Tag name 8 | | | | | | | |
| Other | DI Tag Name | 10 | Tag name 1 | | DI10 | | 0 | | | |
| Other | DI Tag Name | 10 | Tag name 2 | | | | | | | |
| Other | DI Tag Name | 10 | Tag name 3 | | | | | | | |
| Other | DI Tag Name | 10 | Tag name 4 | | | | | | | |
| Other | DI Tag Name | 10 | Tag name 5 | | | | | | | |
| Other | DI Tag Name | 10 | Tag name 6 | | | | | | | |
| Other | DI Tag Name | 10 | Tag name 7 | | | | | | | |
| Other | DI Tag Name | 10 | Tag name 8 | | | | | | | |
| Other | DI Tag Name | 11 | Tag name 1 | | DI11 | | 0 | | | |
| Other | DI Tag Name | 11 | Tag name 2 | | | | | | | |
| Other | DI Tag Name | 11 | Tag name 3 | | | | | | | |
| Other | DI Tag Name | 11 | Tag name 4 | | | | | | | |
| Other | DI Tag Name | 11 | Tag name 5 | | | | | | | |
| Other | DI Tag Name | 11 | Tag name 6 | | | | | | | |
| Other | DI Tag Name | 11 | Tag name 7 | | | | | | | |
| Other | DI Tag Name | 11 | Tag name 8 | | | | | | | |
| Other | DI Tag Name | 12 | Tag name 1 | | DI12 | | 0 | | | |
| Other | DI Tag Name | 12 | Tag name 2 | | | | | | | |
| Other | DI Tag Name | 12 | Tag name 3 | | | | | | | |
| Other | DI Tag Name | 12 | Tag name 4 | | | | | | | |
| Other | DI Tag Name | 12 | Tag name 5 | | | | | | | |
| Other | DI Tag Name | 12 | Tag name 6 | | | | | | | |
| Other | DI Tag Name | 12 | Tag name 7 | | | | | | | |
| Other | DI Tag Name | 12 | Tag name 8 | | | | | | | |
| Other | DI Tag Name | 13 | Tag name 1 | | DI13 | | 0 | | | |
| Other | DI Tag Name | 13 | Tag name 2 | | | | | | | |
| Other | DI Tag Name | 13 | Tag name 3 | | | | | | | |
| Other | DI Tag Name | 13 | Tag name 4 | | | | | | | |
| Other | DI Tag Name | 13 | Tag name 5 | | | | | | | |
| Other | DI Tag Name | 13 | Tag name 6 | | | | | | | |
| Other | DI Tag Name | 13 | Tag name 7 | | | | | | | |
| Other | DI Tag Name | 13 | Tag name 8 | | | | | | | |
| Other | DI Tag Name | 14 | Tag name 1 | | DI14 | | 0 | | | |
| Other | DI Tag Name | 14 | Tag name 2 | | | | | | | |
| Other | DI Tag Name | 14 | Tag name 3 | | | | | | | |
| Other | DI Tag Name | 14 | Tag name 4 | | | | | | | |
| Other | DI Tag Name | 14 | Tag name 5 | | | | | | | |
| Other | DI Tag Name | 14 | Tag name 6 | | | | | | | |
| Other | DI Tag Name | 14 | Tag name 7 | | | | | | | |
| Other | DI Tag Name | 14 | Tag name 8 | | | | | | | |
| Other | DI Tag Name | 15 | Tag name 1 | | DI15 | | 0 | | | |
| Other | DI Tag Name | 15 | Tag name 2 | | | | | | | |
| Other | DI Tag Name | 15 | Tag name 3 | | | | | | | |
| Other | DI Tag Name | 15 | Tag name 4 | | | | | | | |
| Other | DI Tag Name | 15 | Tag name 5 | | | | | | | |
| Other | DI Tag Name | 15 | Tag name 6 | | | | | | | |
| Other | DI Tag Name | 15 | Tag name 7 | | | | | | | |
| Other | DI Tag Name | 15 | Tag name 8 | | | | | | | |
| Other | DI Tag Name | 16 | Tag name 1 | | DI16 | | 0 | | | |
| Other | DI Tag Name | 16 | Tag name 2 | | | | | | | |
| Other | DI Tag Name | 16 | Tag name 3 | | | | | | | |
| Other | DI Tag Name | 16 | Tag name 4 | | | | | | | |
| Other | DI Tag Name | 16 | Tag name 5 | | | | | | | |
| Other | DI Tag Name | 16 | Tag name 6 | | | | | | | |
| Other | DI Tag Name | 16 | Tag name 7 | | | | | | | |
| Other | DI Tag Name | 16 | Tag name 8 | | | | | | | |

## Other/EV Tag Name

| Folder name | Bank name | No. | Item name | Setting range | Initial value | Unit | Display level | Remarks | NX-DX1 | NX-DX2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Other | EV Tag Name | 1 | Tag name 1 | | EV1 | | 0 | | | |
| Other | EV Tag Name | 1 | Tag name 2 | | | | | | | |
| Other | EV Tag Name | 1 | Tag name 3 | | | | | | | |
| Other | EV Tag Name | 1 | Tag name 4 | | | | | | | |
| Other | EV Tag Name | 1 | Tag name 5 | | | | | | | |
| Other | EV Tag Name | 1 | Tag name 6 | | | | | | | |
| Other | EV Tag Name | 1 | Tag name 7 | | | | | | | |
| Other | EV Tag Name | 1 | Tag name 8 | | | | | | | |

# Chapter 11. TROUBLESHOOTING

## ■ Alarm code descriptions and corrective actions

The table below shows the alarms that occur during instrument errors and the appropriate response.

| Alarm code | Hard failure/ Soft failure | Error name | Cause | Solution |
|---|---|---|---|---|
| AL31 | – | Reception monitors 1 to 16 | There was no write communication access to the set address within the set time | Check the status of the target module<br>Check the status of the target settings |
| AL32 | – | Transmission time-out between modules | No response from the set partner module | |
| AL33 | Soft | RS-485 settings error | RS-485 settings error | Write again and reboot |
| AL83 | Hard | EEPROM not initialized | EEPROM read error | Reboot and replace the unit |
| AL84 | Hard | MAC address error | MAC address error | |
| AL85 | Hard | RAM read/write error | RAM read/write error | |
| AL86 | Hard | EEPROM read/write error | EEPROM read/write error | |
| AL87 | Hard | Base EEPROM read/write error | Base EEPROM read/write error | |
| AL88 | Soft | Base EEPROM error | Main unit/base common parameters are inconsistent | Reboot and use push buttons |
| AL94 | Soft | RAM error (parameter area) | RAM error | Reboot and replace the unit |
| AL95 | Soft | RAM error (adjustment area) | | |
| AL97 | Soft | EEPROM error (parameter area) | EEPROM read error | |
| AL98 | Soft | EEPROM error (adjustment area) | | |
| AL99 | Hard | ROM error | ROM (memory) fault | |

[Hard]: If the error is hard, the FAIL LED is lit.
[Soft] : If the error is soft, the FAIL LED blinks slowly.

### Note

- For information regarding AL31 and AL32, refer to,
  ☞ Chapter 5 “Function for Transmitting Data Between Modules” in Network Instrumentation Module User’s Manual Network Design Version, CP-SP-1313E.

### Handling Precautions

- The device operation mode changes to idle mode if a hard failure or AL88 (base EEPROM error) occurs.

# Chapter 12. MAINTENANCE/INSPECTION AND DISPOSAL

## 12 - 1 Maintenance and Inspection

| | | |
|---|---|---|
| Cleaning | : | When removing dirt from the instrument, wipe it off with a soft cloth rag. |
| Part replacement | : | Do not replace any parts of this unit. |
| Fuse replacement | : | When replacing the fuse connected to the electric wiring, always use the fuse that is recommended for your power unit. |

# 12 - 2 Disposal

When disposing of this unit, dispose of it appropriately as industrial waste in accordance with local laws and regulations.

# Chapter 13. SPECIFICATIONS

## 13 - 1 Specifications

### ■ Digital input/pulse input

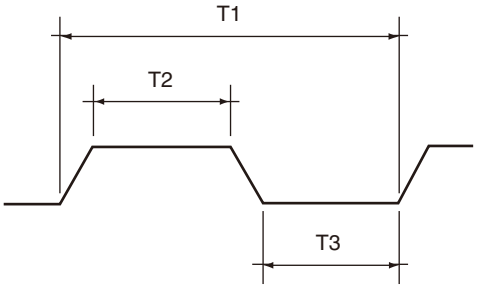
| | |
|---|---|
| Input points | : 16 |
| Common terminals | : Two common terminals per each eight channels |
| Polarity | : No polarity |
| Isolation between channels | : Per ch1 to ch8 and ch9 to ch16 |
| Recommended voltage | : DC 24 V |
| Input format | : common/−common shared types |
| Compatible output type | : No voltage contacts or transistors |
| Sampling cycle | : 50 ms |

- Input ch1 to 8 (NX-DX1)

| | |
|---|---|
| Rated input current | : Approximately 4.5 mA (when using DC 24 V power) |
| Rated input current | : Approximately 5.0 mA (when using DC 24 V power) |
| Input impedance | : Approximately 4.7 k |
| ON voltage/ON current | : DC 18 V or more/DC 2.8 mA or more |
| OFF voltage/OFF current | : DC 7 V or less/DC 1.5 mA or less |

- Input ch1 to 8 (NX-DX2)

| | |
|---|---|
| Rated input current | : Approximately 6.4 mA (when using DC 24 V power) |
| Rated input current | : Approximately 7.1 mA (when using DC 26.4 V power) |
| Input impedance | : Approximately 3.3 k |
| ON voltage/ON current | : DC 18 V or more/DC 4.8 mA or more |
| OFF voltage/OFF current | : DC 7 V or less/DC 1.5 mA or less |
| Pulse input waveform | : (for high-speed pulse input settings)<br>T1 ≥ 200 μs and (T2 and T3) ≥ 80 μs<br>(frequency 5 kHz maximum duty 40 to 60%)<br>: (for low-speed pulse input settings)<br>T1 ≥ 10 ms and (T2 and T3) ≥ 4 ms<br>(frequency 100Hz maximum duty 40 to 60%) |



- Input ch9 to 16 (NX-DX1 and NX-DX2)

| | |
|---|---|
| Rated input current | : Approximately 4.5 mA (when using DC 24 V power) |
| Rated input current | : Approximately 5.0 mA (when using DC 26.4 V power) |
| Input impedance | : Approximately 4.7 k |
| ON voltage/ON current | : DC 18 V or more/DC 3.8 mA or more |
| OFF voltage/OFF current | : DC 7 V or less/DC 1.5 mA or less |
| Pulse input waveform (NX-DX2) | : T1 ≥ 10 ms, (T2, T3) ≥ 4 ms (frequency 100 Hz maximum duty 40 to 60%) |

## ■ Event output (NX-DX2)

| | |
|---|---|
| Output points | : 1 |
| Contact rated voltage | : DC 12 to 24 V |
| Appliable voltage | : DC 10 to 30 V |
| Allowable output current | : DC 100 mA max. |
| Output format | : Photo MOS relay output (no voltage a contact) |
| Polarity | : No polarity |
| OFF-state leakage current | : 100 μA max. |
| ON-state maximum voltage drop | : 2 V or less (when DC 24 V 0.1 A) |

## ■ Standard conditions

| | |
|---|---|
| Ambient temperature | : 23 ± 2 |
| Ambient humidity | : 60 ± 5% RH (without condensation) |
| Rated voltage | : DC 24 V |
| Vibration | : 0 $m/s^2$ |
| Shock | : 0 $m/s^2$ |
| Installation angle | : Reference plane ±3° |

## ■ Operating conditions

| | |
|---|---|
| Ambient temperature | : 0 to 50 (at unit underside when installed) |
| Ambient humidity | : 10 to 90% RH (without condensation) |
| Allowable operating voltage | : DC 21.6-26.4 V |
| Vibration | : 0 to 3.2 $m/s^2$ (10 to 150 Hz for 2 h each in X, Y, and Z directions) |
| Shock | : 0 to 9.8 $m/s^2$ |
| Installation angle | : Reference plane ±3° |
| Dust | : 0.3 $mg/m^3$ max |
| Corrosive gas | : None |
| Altitude | : 2000 m max. |
| Degree of pollution | : 2 (same as a normal office environment) |

## ■ Transportation conditions

| | |
|---|---|
| Ambient temperature | : -20 to +70 |
| Ambient humidity | : 5 to 95% RH (without condensation) |
| Vibration | : 0 to 9.8 m/s$^2$ (10 to 150 Hz for 2 h each in X, Y, and Z directions) |
| Shock | : 0 to 300 m/s$^2$(three times the up/down direction when installed on the DIN rail) |
| Package drop test | : 60 cm drop height (using the free drop method for 1 corner, 3 ridges and 6 faces) |

## ■ Other

| | |
|---|---|
| Memory backup | : Nonvolatile memory (EEPROM) |
| Number of EEPROM write cycles | : 100,000 times max. |
| Estimation data memory | : Nonvolatile memory (FeRAM) |
| Insulation resistance | : DC 500 V, 20 M or more (power terminal (1) and (2) and between the power terminals and insulated I/O terminal) |
| Voltage resistance | : AC 500 V, 1 min (power terminal (1) and (2) and between the power terminals and insulated I/O terminal) |
| Power consumption | : 4 W max. (under operating conditions) |
| Action when power is turned on | : Reset time approx. 10 sec (the time until normal operations under standard conditions) |
| Power ON inrush current | : Max. 20 A (under operating conditions) |
| Case material and color | : Modified PPO resin, black |
| Installation method | : Attach to DIN rail |
| Torque for appropriate tightening of terminal screws | : 0.6 ± 0.1 N • m |
| Mass | : 200 g max. |

## ■ Communication specifications

- Loader communications

| | |
|---|---|
| Dedicated loader | : SLP-NX-J70 or SLP-NX-J71 |
| Connection cable | : Provided with the loader (SLP-NX-J70) (USB loader cable) |

- Ethernet communications

| | |
|---|---|
| Protocol | : MODBUS/TCP |

- RS-485 communication

| | |
|---|---|
| Protocol | : MODBUS(RTU/ASCII), CPL |
| Network | : Multidrop method (31 slaves per host terminal) |
| Signal level | : Conforms to RS-485 |
| Communication/Synchronizing method | : Half-duplex, start/stop synchronization |
| Maximum line length | : 500 m |
| Number of communication lines | : 3-wire system |
| Terminating resistor | : External (150 1/2 W min.) |
| Transmission speed | : Select 4800, 9600, 19200, 38400, 57600, or 115200 bps |

## ■ Communication action for each status

○: functions ×: does not function

| Launching | Device operation mode | Device operation mode RUN | Device operation mode IDLE |
|---|---|---|---|
| Host communication | × | ○ | ○* |
| Loader communications | × | ○ | ○ |
| Inter-module data transfer function | ○ | ○ | × |

* The device operation mode changes to idle mode if a Hard failure or AL88 (base EEPROM error) occurs, and host communications stop working.

## ■ Communication box (sold separately, model no.: NX-CB1_ _ _ _ )

- Transmission path format : • Ethernet ports 1 and 2
  IEEE802.3/IEEE802.3u 10BASE-T/100BASE-TX
  (has autonegotiation and Auto MDI/ MDI-X functions)
  • Ethernet ports 3 and 4
  IEEE802.3u 100BASE-TX
  (Has Full Duplex and Auto MDI/MDI-X functions. The autonegotiation function is enabled for connected devices, unless there is a connection between communication boxes)
- Connectors : RJ-45
- Cables : UTP cable (4P), category 5e or higher (straight) (both ends ANSI/TIA/EIA-568-B)

## ■ Communication adapter (sold separately, model nos.: NX-CL1_ _ _ _ , NX-CR1_ _ _ _ )

- Transmission path format : IEEE802.3u 100BASE-TX
  (Has Full Duplex and Auto MDI/MDI-X functions. The autonegotiation function is enabled for connected devices)
- Connectors : RJ-45
- Cables : UTP cable (4P), category 5e or higher (straight) (both ends ANSI/TIA/EIA-568-B)

## ■ Terminal adapters (sold separately, model nos.: NX-CL1_ _ _ _ , NX-CR1_ _ _ _ )

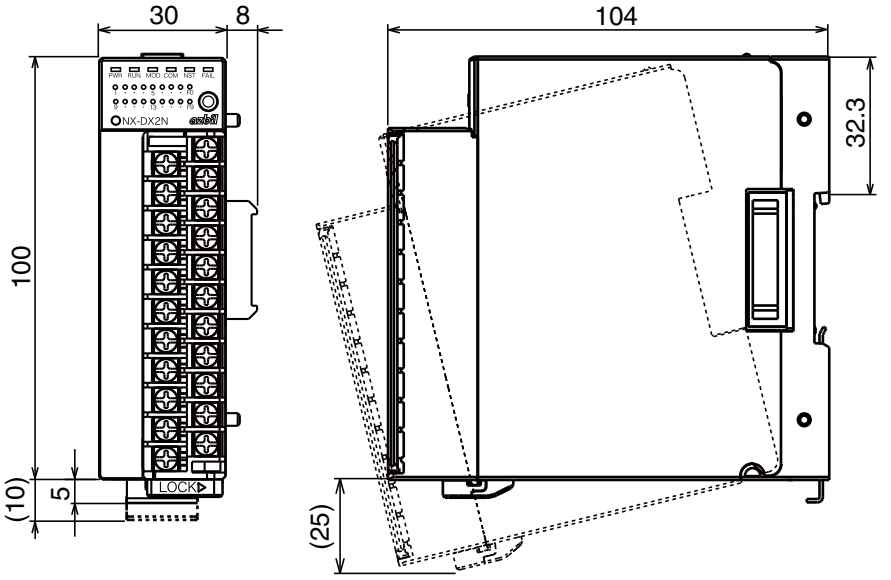
This is the adapter to be used as the ring communication terminal for chain connections (Ethernet communication path in the base).

# 13 - 2 External Dimensions

## ■ Digital input/pulse input module

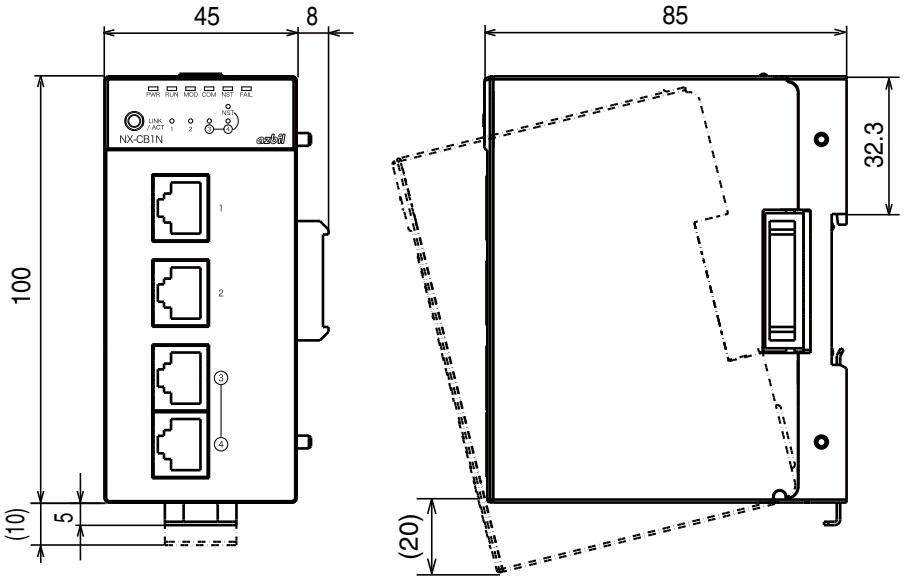
Although the NX-DX2 is used in the following diagrams, the dimensions for NX-DX1 are all the same.

Unit: mm




## ■ Communication box

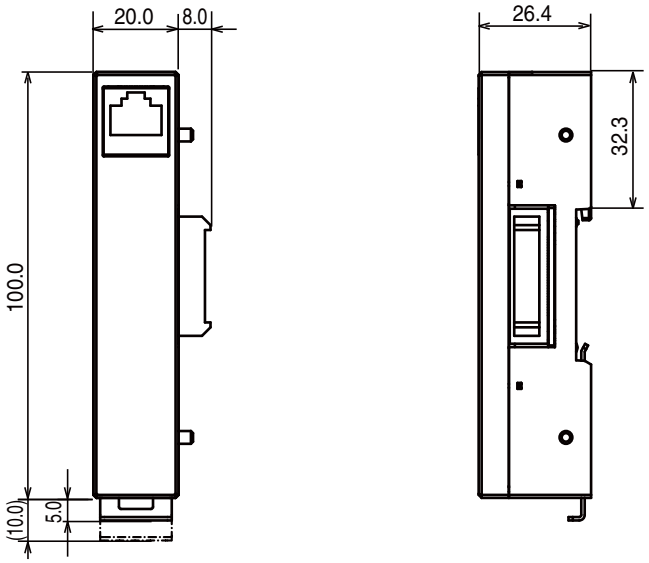
Unit: mm



## ■ Communication adapter

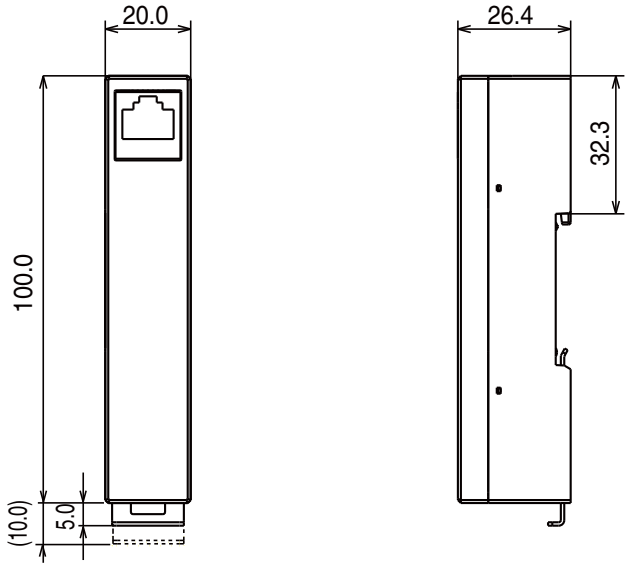
### ● For left connection

Unit: mm




### ● For right connection

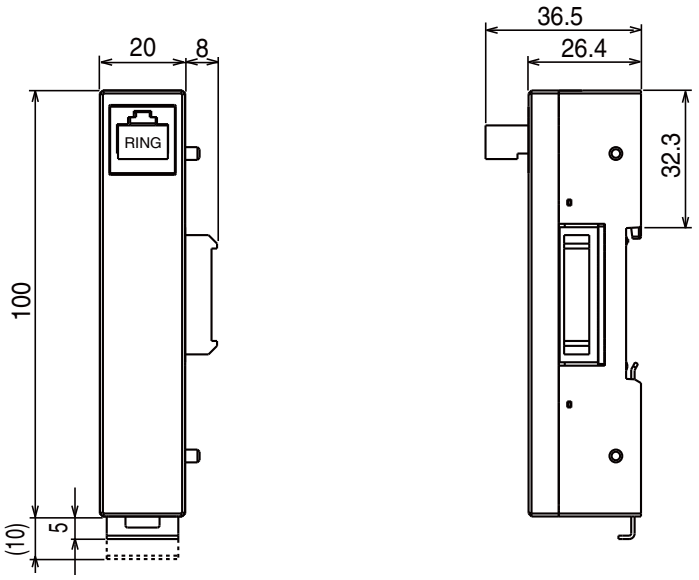
Unit: mm



## ■ Terminal adapter

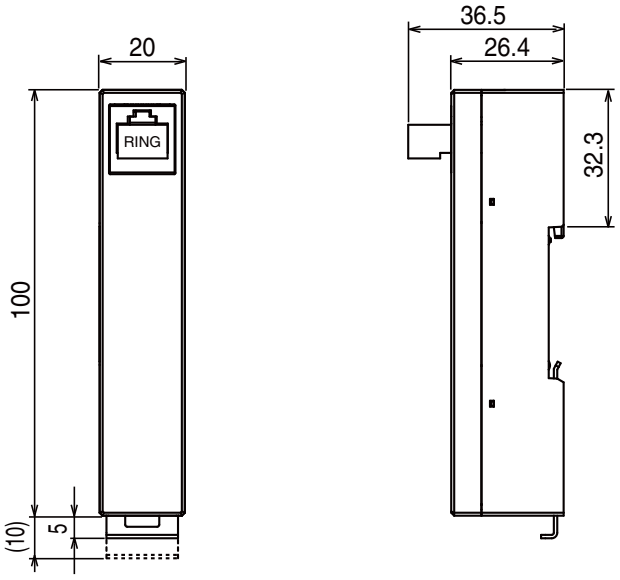
### ● For left connection

Unit: mm




### ● For right connection

Unit: mm



# Appendices

## Appendix - 1 Standard bit codes

### ■ List of Standard Bit Codes

The range of standard bit codes is 1024 to 2027.

Codes that do not appear in this table are undefined and should not be used.

| Standard bit No. | Meaning of standard bit |
|---|---|
| 1024 | Always 0 (Off) |
| 1025 | Always 1 (On) |
| 1152 | DI1 input status |
| 1153 | DI2 input status |
| 1154 | DI3 input status |
| 1155 | DI4 input status |
| 1156 | DI5 input status |
| 1157 | DI6 input status |
| 1158 | DI7 input status |
| 1159 | DI8 input status |
| 1160 | DI9 input status |
| 1161 | DI10 input status |
| 1162 | DI11 input status |
| 1163 | DI12 input status |
| 1164 | DI13 input status |
| 1165 | DI14 input status |
| 1166 | DI15 input status |
| 1167 | DI16 input status |
| 1280 | EV1 input status |
| 1408 | user-defined bit 1 |
| 1409 | user-defined bit 2 |
| 1410 | user-defined bit 3 |
| 1411 | user-defined bit 4 |
| 1412 | user-defined bit 5 |
| 1413 | user-defined bit 6 |
| 1414 | user-defined bit 7 |
| 1415 | user-defined bit 8 |
| 1416 | user-defined bit 9 |
| 1417 | user-defined bit 10 |
| 1418 | user-defined bit 11 |
| 1419 | user-defined bit 12 |
| 1420 | user-defined bit 13 |
| 1421 | user-defined bit 14 |
| 1422 | user-defined bit 15 |
| 1423 | user-defined bit 16 |
| 1424 | user-defined bit 17 |
| 1425 | user-defined bit 18 |
| 1426 | user-defined bit 19 |
| 1427 | user-defined bit 20 |
| 1428 | user-defined bit 21 |
| 1429 | user-defined bit 22 |
| 1430 | user-defined bit 23 |
| 1431 | user-defined bit 24 |
| 1432 | user-defined bit 25 |
| 1433 | user-defined bit 26 |
| 1434 | user-defined bit 27 |
| 1435 | user-defined bit 28 |
| 1436 | user-defined bit 29 |

| Standard bit No. | Meaning of standard bit |
|---|---|
| 1437 | user-defined bit 30 |
| 1438 | user-defined bit 31 |
| 1439 | user-defined bit 32 |
| 1545 | RS-485 communication status (normal transmission of 1 frame) |
| 1792 | Representative of all alarms (OR of all displayed alarms) |
| 1920 | Reception monitoring 1 |
| 1921 | Reception monitoring 2 |
| 1922 | Reception monitoring 3 |
| 1923 | Reception monitoring 4 |
| 1924 | Reception monitoring 5 |
| 1925 | Reception monitoring 6 |
| 1926 | Reception monitoring 7 |
| 1927 | Reception monitoring 8 |
| 1928 | Reception monitoring 9 |
| 1929 | Reception monitoring 10 |
| 1930 | Reception monitoring 11 |
| 1931 | Reception monitoring 12 |
| 1932 | Reception monitoring 13 |
| 1933 | Reception monitoring 14 |
| 1934 | Reception monitoring 15 |
| 1935 | Reception monitoring 16 |
| 1968 | Parameter error (AL94/AL97) |
| 1969 | Adjustment data error (AL95/AL98) |
| 1970 | EEPROM not initialized (AL83) |
| 1972 | ROM error (AL99) |
| 1974 | EEPROM RW error (AL86) |
| 1979 | Reception monitoring 1-16 (AL31) |
| 1980 | Transmission time-out between modules (AL32) |
| 1981 | Writing to EEPROM |
| 1983 | RS-485 settings error (AL33) |

# Appendix - 2 ROM Version History

This section describes the functions added and the specifications changed for the new ROM version.

## ■ Version 1.01 (available November 2010)

### ● Specifications change

| Description |
| --- |
| The wait time for inter-module data transfer function sending to begin while running is fixed at 5 seconds. However, it will change after the start delay at power ON -> after the host communication receiving wait time. |

# Revision History

| Printed date | Manual Number | Edition | Revised pages | Description |
|---|---|---|---|---|
| **Jan. 2011** | **CP-SP-1323E** | **1st Edition** | | |

# Terms and Conditions

We would like to express our appreciation for your purchase and use of Yamatake products.
You are required to acknowledge and agree upon the following terms and conditions for your purchase of Yamatake products (field instruments, control valves, and control products), unless otherwise stated in any separate document, including, without limitation, estimation sheets, written agreements, catalogs, specifications and instruction manuals.

1. Warranty period and warranty scope

1.1 Warranty period

Yamatake products shall be warranted for one (1) year from the date of your purchase of the said products or the delivery of the said products to a place designated by you.

1.2 Warranty scope

In the event that Yamatake product has any failure attributable to Yamatake during the aforementioned warranty period, Yamatake shall, without charge, deliver a replacement for the said product to the place where you purchased, or repair the said product and deliver it to the aforementioned place.
Notwithstanding the foregoing, any failure falling under one of the following shall not be covered under this warranty:

(1) Failure caused by your improper use of Yamatake product (noncompliance with conditions, environment of use, precautions, etc. set forth in catalogs, specifications, instruction manuals, etc.);
(2) Failure caused for other reasons than Yamatake product;
(3) Failure caused by any modification or repair made by any person other than Yamatake or Yamatake's subcontractors;
(4) Failure caused by your use of Yamatake product in a manner not conforming to the intended usage of that product;
(5) Failure that the state-of-the-art at the time of Yamatake's shipment did not allow Yamatake to predict; or
(6) Failure that arose from any reason not attributable to Yamatake, including, without limitation, acts of God, disasters, and actions taken by a third party.

Please note that the term "warranty" as used herein refers to equipment-only-warranty, and Yamatake shall not be liable for any damages, including direct, indirect, special, incidental or consequential damages in connection with or arising out of Yamatake products.

2. Ascertainment of suitability

You are required to ascertain the suitability of Yamatake product in case of your use of the same with your machinery, equipment, etc. (hereinafter referred to as "Equipment") on your own responsibility, taking the following matters into consideration:

(1) Regulations and standards or laws that your Equipment is to comply with.
(2) Examples of application described in any documents provided by Yamatake are for your reference purpose only, and you are required to check the functions and safety of your Equipment prior to your use.
(3) Measures to be taken to secure the required level of the reliability and safety of your Equipment in your use
Although Yamatake is constantly making efforts to improve the quality and reliability of Yamatake products, there exists a possibility that parts and machinery may break down.
You are required to provide your Equipment with fool-proof design, fail-safe design, anti-flame propagation design, safety design, or the like so that the said Equipment may satisfy the level of the reliability and safety required in your use, whereby preventing any occurrence of physical injuries, fires, significant damage, and so forth.

3. Precautions and restrictions on application

Yamatake products other than those explicitly specified as applicable (e.g. Yamatake Limit Switch For Nuclear Energy) shall not be used in a nuclear energy controlled area (radiation controlled area).
Any Yamatake products shall not be used for/with medical equipment.
In addition,
you are required to conduct a consultation with our sales representative and understand detail specifications, cautions for operation, and so forth by reference to catalogs, specifications, instruction manual, etc. in case that you intend to use Yamatake product for any purposes specified in (1) through (6) below.
Moreover, you are required to provide your Equipment with fool-proof design, fail-safe design, anti-flame propagation design and other designs of protection/safety circuit on your own responsibility to ensure the reliability and safety, whereby preventing problems caused by failure or nonconformity.

(1) For use under such conditions or in such environments as not stated in technical documents, including catalogs, specification, and instruction manuals
(2) For use of specific purposes, such as:
  * Nuclear energy/radiation related facilities
    [For use outside nuclear energy controlled areas] [For use of Yamatake Limit Switch For Nuclear Energy]
  * Machinery or equipment for space/sea bottom
  * Transportation equipment
    [Railway, aircraft, vessels, vehicle equipment, etc.]
  * Antidisaster/crime-prevention equipment
  * Burning appliances
  * Electrothermal equipment
  * Amusement facilities
(3) Supply systems such as electricity/gas/water supply systems, large-scale communication systems, and traffic/air traffic control systems requiring high reliability
(4) Facilities that are to comply with regulations of governmental/public agencies or specific industries
(5) Machinery or equipment that may affect human lives, human bodies or properties
(6) Other machinery or equipment equivalent to those set forth in items (1) to (5) above which require high reliability and safety

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   Use of Yamatake products, including switches, which contain electronic components, over a prolonged period may degrade insulation or increase contact-resistance and may result in heat generation or any other similar problem causing such product or switch to develop safety hazards such as smoking, ignition, and electrification. Although acceleration of the above situation varies depending on the conditions or environment of use of the products, you are required not to use any Yamatake products for a period exceeding ten (10) years unless otherwise stated in specifications or instruction manuals.

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   Mechanical components, such as relays and switches, used for Yamatake products will reach the end of their life due to wear by repetitious open/close operations.
   In addition, electronic components such as electrolytic capacitors will reach the end of their life due to aged deterioration based on the conditions or environment in which such electronic components are used.
   Although acceleration of the above situation varies depending on the conditions or environment of use, the number of open/close operations of relays, etc. as prescribed in specifications or instruction manuals, or depending on the design margin of your machine or equipment, you are required to renew any Yamatake products every 5 to 10 years unless otherwise specified in specifications or instruction manuals.
   Field instruments (sensors such as pressure/flow/level sensors, regulating valves, etc.) will reach the end of their life due to aged deterioration of parts.
   For those parts that will reach the end of their life due to aged deterioration, recommended replacement cycles are prescribed. You are required to replace parts based on such recommended replacement cycles.

6. Other precautions

   Prior to your use of Yamatake products, you are required to understand and comply with specifications (e.g., conditions and environment of use), precautions, warnings/cautions/notices as set forth in the technical documents prepared for individual Yamatake products, such as catalogs, specifications, and instruction manuals to ensure the quality, reliability, and safety of those products.

7. Changes to specifications

   Please note that the descriptions contained in any documents provided by Yamatake are subject to change without notice for improvement or for any other reason.
   For inquires or information on specifications as you may need to check, please contact our branch offices or sales offices, or your local sales agents.

8. Discontinuance of the supply of products/parts

   Please note that the production of any Yamatake product may be discontinued without notice.
   For repairable products, we will, in principle, undertake repairs for five (5) years after the discontinuance of those products. In some cases, however, we cannot undertake such repairs for reasons, such as the absence of repair parts.
   For field instruments, we may not be able to undertake parts replacement for similar reasons.

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