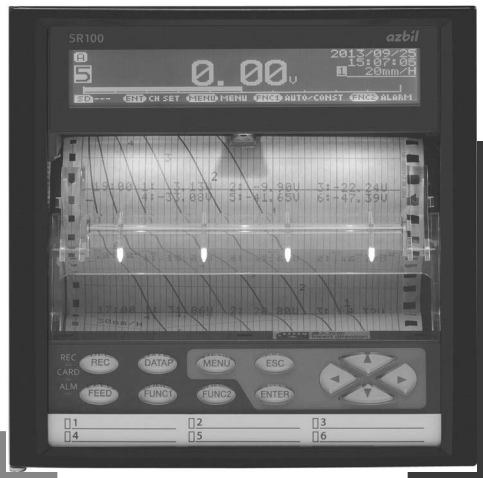
azbil

No.CP-UM-5746E

Hybrid Recorder
SR Series
Parameter Setting Software

Instruction Manual



Thank you for purchasing the SR series Hybrid Recorder.
This manual contains information for ensuring the correct use of the SR series Hybrid Recorder. 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 SR series Hybrid Recorder. Be sure to keep this manual nearby for handy reference.

Azbil Corporation

Table of Contents

1. Introduction

Thank you for purchasing our hybrid recorder.
With this software, you can set various parameters on your PC by connecting the hybrid recorder to the PC via communication interface.
This instruction manual describes how to prepare hardware, install the program, and operate it. Make sure to read this instruction manual in advance in order to understand this software well and to prevent troubles from occurring.
Furthermore, display screen of this instruction manual is all as of multi-point types' if not specified. Please note that settings of the multi-point type and pen type use the same operation if not specified.

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4. Please note that the marks “TM” and “®” are omitted throughout this manual

Precautions

1. Be careful not to drop the software when taking it out of the package.
2. If not used for a long time, keep the software in a CD case after installation and store it at room temperature, away from dust.
3. Keep this instruction manual carefully until the software is discarded.
4. When discarding the software, follow the local regulations for waste disposal and cooperate in recycling.

■ Checking before use

After opening the package of this software, be sure to check the following before use. If you have found any problems, please contact the dealer where you purchased the product or the nearest sales office of Azbil.

1. Appearance
   Check the appearance of the product to see if there is any damage.

2. Label
   Check that the model written on the label is correct.

Cautions for handling the CD-ROM

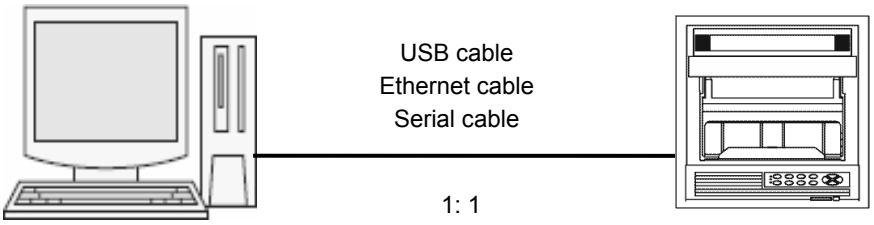
1. Eject the CD-ROM media from the drive when not used.
2. Be sure to keep the disk in a CD case.
3. Keep the disk away from direct sunlight, high temperature and humidity.
4. Keep the signal side clean from fingerprints, dirt, dust, scratches and water drops.

2. System Requirement

Use the software in the environment described below.

2-1. System Configuration

To use the software, the PC and the device should be connected one-to-one with an appropriate cable for the communication type.



2-2. Operating Condition of Software

Required devices	Contents and conditions	
PC	CPU	1GHz 32 bit or 64 bit.
	Memory	1GB or more (32bit), 2GB or more (64bit).
	Hard disk space	2GB or more free hard disk space.
	Disk drive	CD drive.
	Removable disk drive	Compatible with SD memory card.
	Supported OS	Windows XP SP3 (32bit) Windows Vista SP2 (32bit/64bit) Windows 7 SP1 (32bit/64bit) * .NET Framework 3.5 or later must be able to be installed on the OS.
	Communications interface	USB Serial Ethernet (at least one of them is required).
Required library	.NET Framework3.5	
Display	Screen resolution 800 x 600 or more.	
Printer	Compatible with Windows.	
Mouse	Compatible with Windows.	
Keyboard	Compatible with Windows.	
Target device	SR series one unit	

3. How to Setup

3-1. Installation

3-1-1. New Installation

Install the software from the CD-ROM to the PC before using it.
Use the following procedure for installation.

<Procedure>

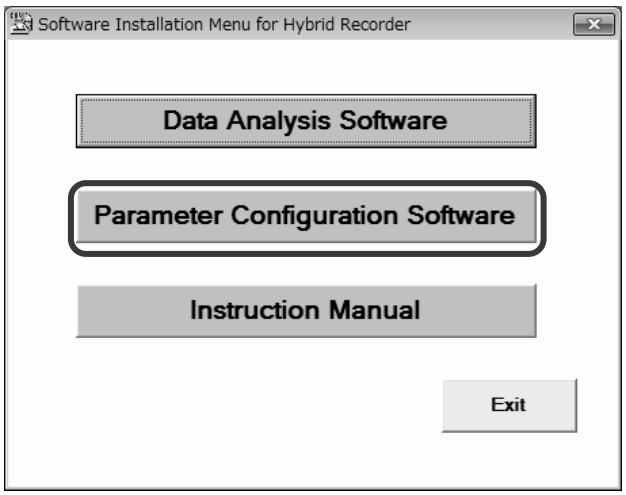
(1) Insert the CD-ROM

Start Windows, and then insert the CD-ROM into the CD-ROM drive. The menu screen is started automatically.

* It the menu screen is not started automatically, start "asmenux.exe" in the CD-ROM.

(2) Click the [Parameter Configuration Software] button

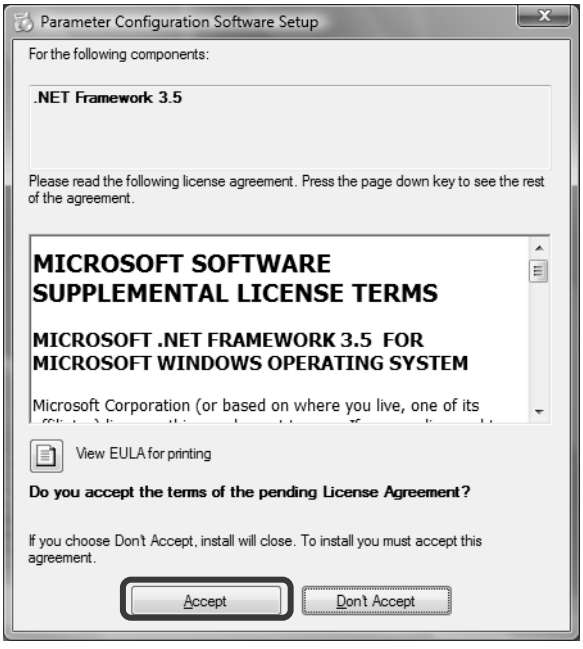
Click the [Parameter Configuration Software] button on the Hybrid Recorder Software Install Menu screen.



(3) Accept the license terms (If .NET Framework 3.5 is already installed, go to step (4))

When the Microsoft Software Supplemental License Terms (.NET Framework 3.5) is displayed, read the contents carefully.
If you accept them, click the [Accept] button. This will start the installation of .NET Framework 3.5 (this process may take several minutes).
If you click the [Don't Accept] button, you cannot use this software.

* The license terms may not be displayed when .NET Framework 3.5 is already installed.

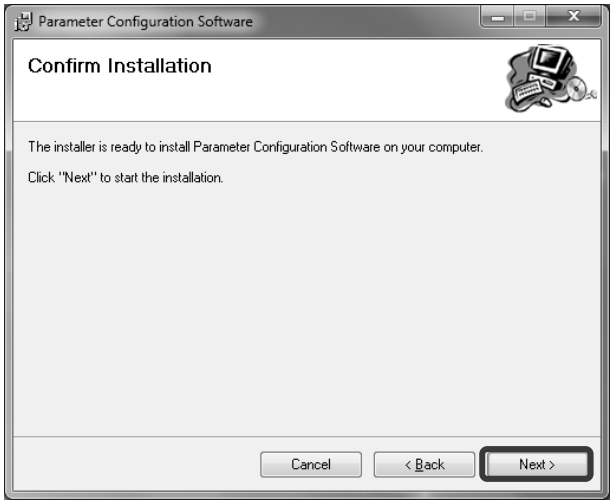


(4) Click the [Next] button

The Parameter Configuration Software Setup Wizard screen is started. Click the [Next] button.

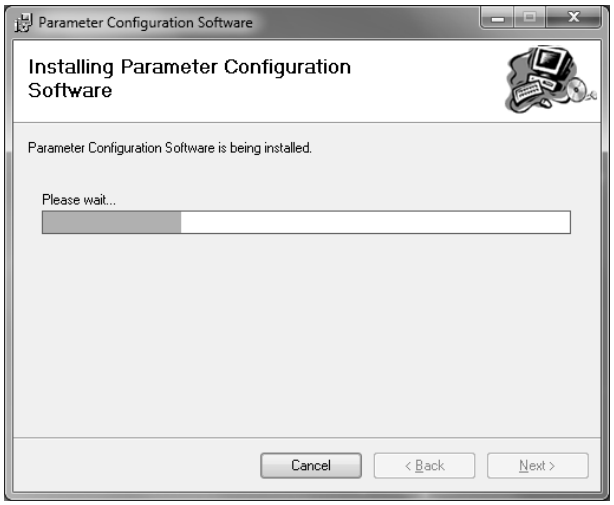
(5) Click the [Next] button

On the Confirm Installation screen, click the [Next] button.



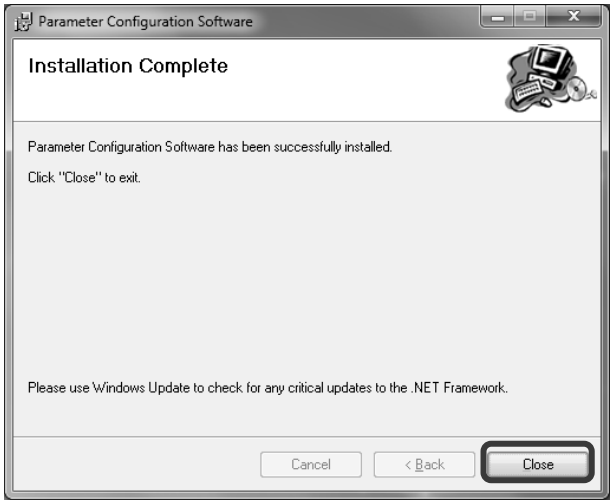
(6) Start the installation

The installation is started. The screen indicating the progress of installation appears. Wait until the installation is completed.



(7) Complete the installation

The installation complete screen appears. Click the [Close] button to finish.



3-1-2. Installation at Upgrade

This software is sometimes upgraded to add newly supported devices or to fix issues.
Use the following procedure for version upgrade.

<Procedure>

(1) Uninstall the current version (refer to section 3-2).

(2) Install the new version (refer to section 3-1-1).

Remarks **About uninstallation for version upgrade**

- The uninstallation should be done from the [Program and Features] dialog box in Windows as described in "3-2. Uninstallation".
  You cannot complete the uninstallation by simply deleting the files (moving them to the "Recycle Bin").
- Do not delete the folder during an uninstallation for version upgrade.

3-1-3. Installation of USB Driver

If you connect your PC to the device via a USB cable, you need to install the USB driver.
Use the following procedure for installation.

<Procedure>

• **When Using Windows XP or Windows Vista** (Screenshots of Windows XP are used.)

* We use screenshots of Windows XP for description. This procedure is the same as that for Windows Vista in principle.

(1) Start the Found New Hardware Wizard

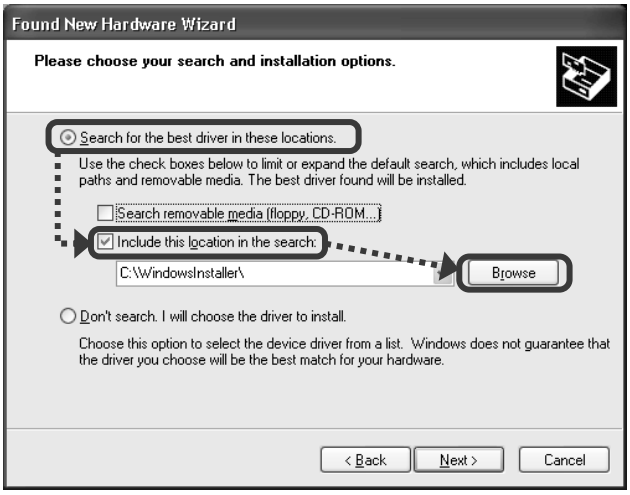
When you connect the USB cable, the Found New Hardware Wizard is started automatically. Select [No, not this time], and click the [Next] button.

(2) Select the installation method

The installation method selection screen appears. Select [Install from a list or specific location (Advanced)], and click the [Next] button.

(3) Specify the search location

On the search and installation option selection screen, select [Search for the best driver in these locations], check the [Include this location in the search] check box ☑, and then click the [Browse] button.

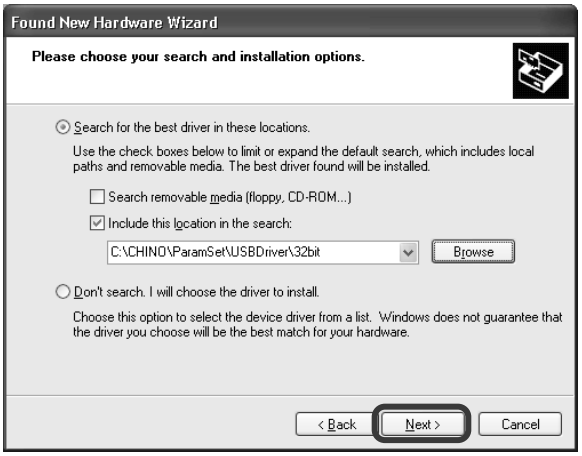


(4) Select the folder

When the [Browse For Folder] dialog box appears, select a file below depending on the OS you use, and then click the [OK] button (if you cannot find the folder, click [My Computer] → [C:] → [CHINO] → [ParamSet] → [32bit]).
* For 64bit version Windows Vista, click [64bit].

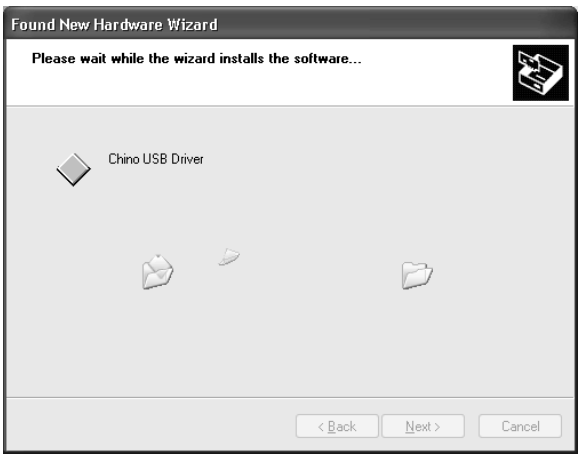
(5) Click the [Next] button

When you specified the search location, click the [Next] button.



(6) Start the installation

The installation is started. The screen indicating the progress of installation appears. Wait until the installation is completed.



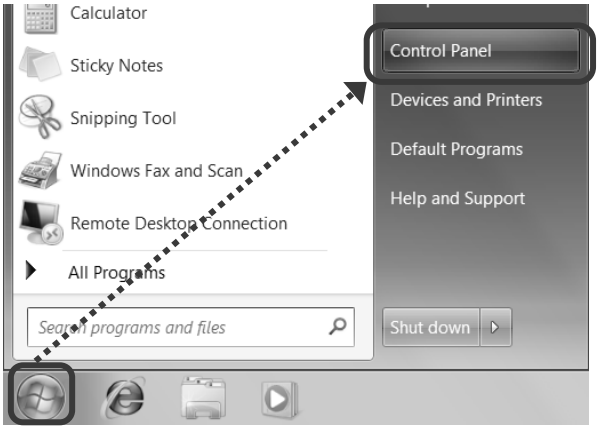
(7) Complete the installation

The Completing the Found New Hardware Wizard screen appears. Click the [Finish] button to finish.

• When Using Windows 7

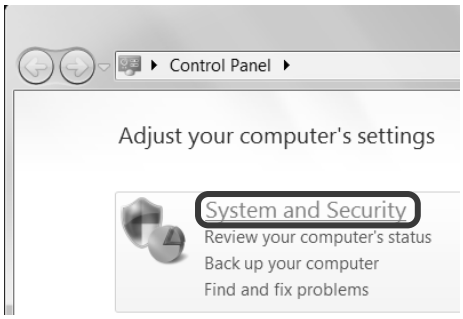
(1) Open the Control Panel

After connecting the USB cable, click [Start] → [Control Panel].



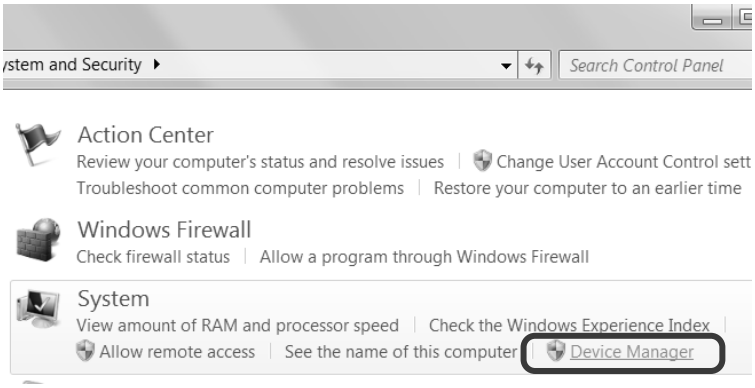
(2) Click [System and Security]

When the Control Panel is displayed, click [System and Security].



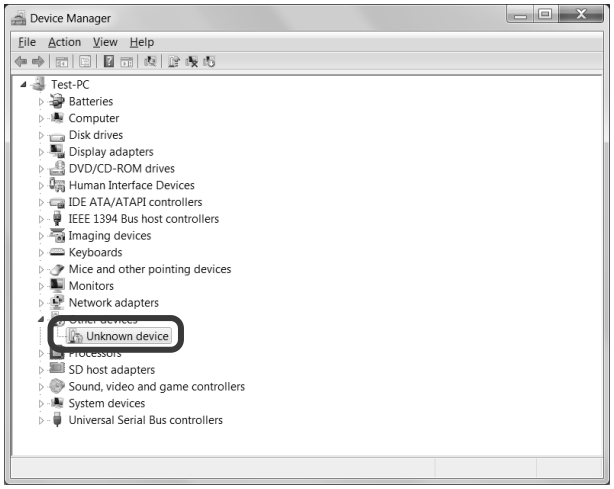
(3) Click [Device Manager]

When the System and Security screen is displayed, click [Device Manager].



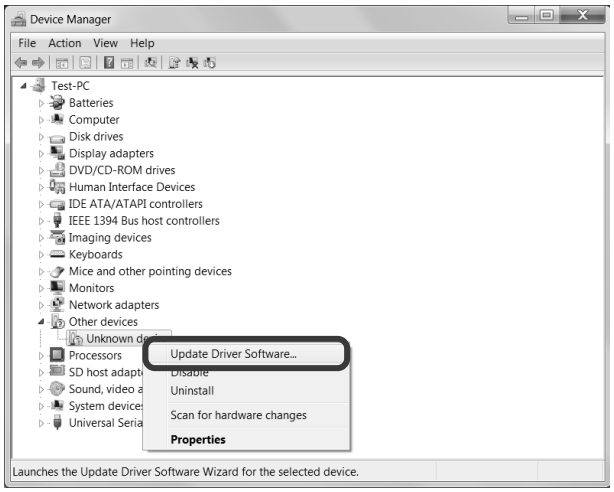
(4) Click [Unknown device]

When the Device Manager screen is displayed, click [Other Devices], and then [Unknown device].



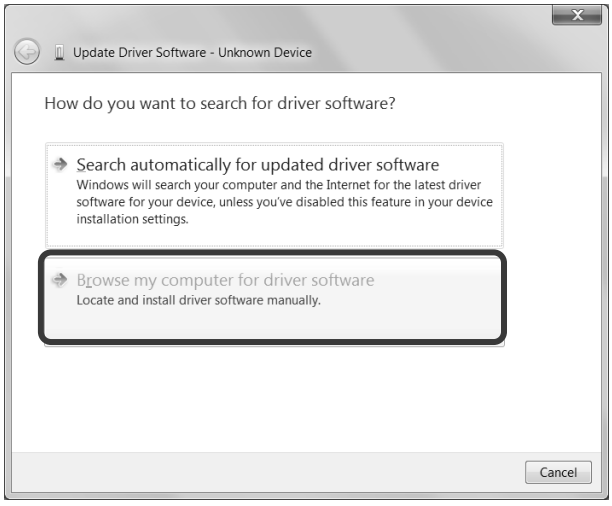
(5) Click [Update Driver Software]

Right-click [Unknown Device], and then click [Update Driver Software] on the displayed menu.



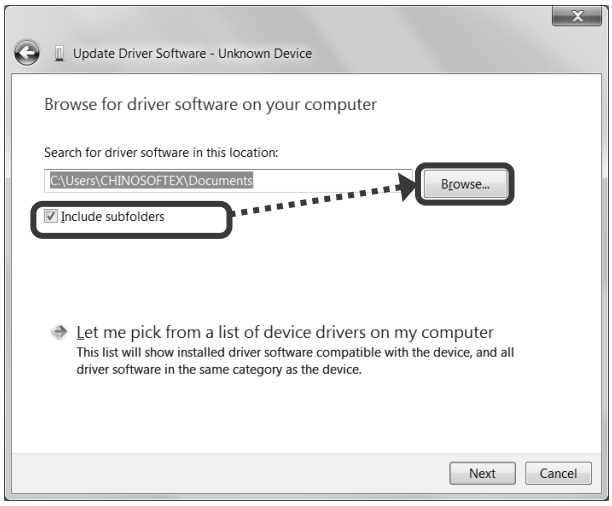
(6) Click [Browse my computer for driver software]

On the screen for selecting how to search the driver software, click [Browse my computer for driver software].



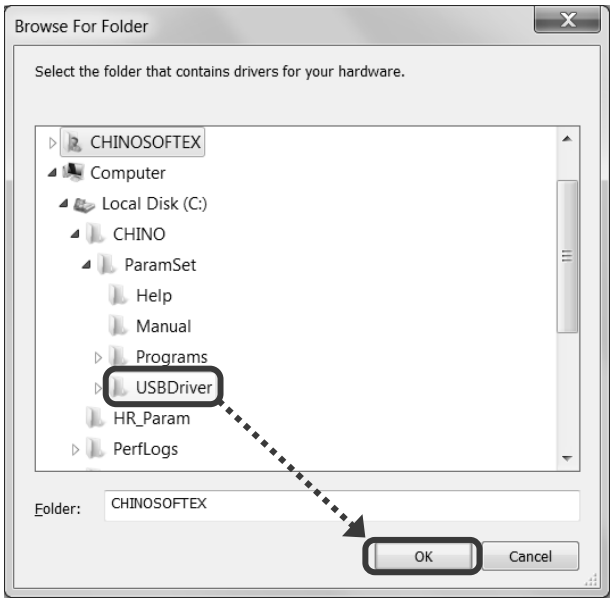
(7) Specify the search location

On the Browse for driver software screen, select the [Include subfolders] check box ☑, and then click the [Browse] button.



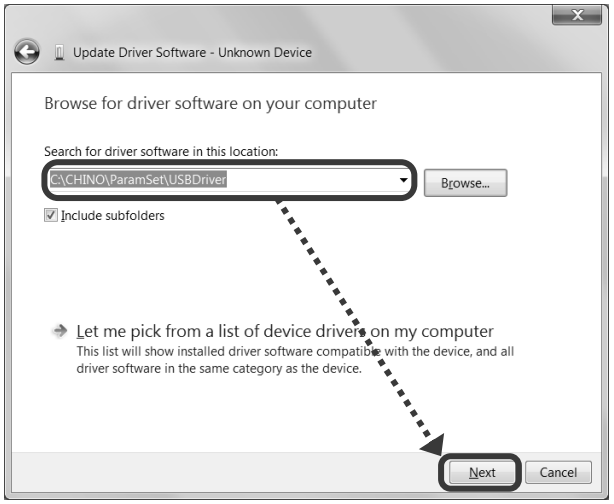
(8) Select the folder

When the Browse folders screen is displayed, select [USBDriver] (if you cannot find [USBDriver], click [Computer] → [(C:)] → [CHINO] → [ParamSet] → [USBDriver]).
Confirm that [USBDriver] is selected in the [Folder (F):] field, and then click the [OK] button.



(9) Click the [Next] button

When you specified the search location, click the [Next] button.



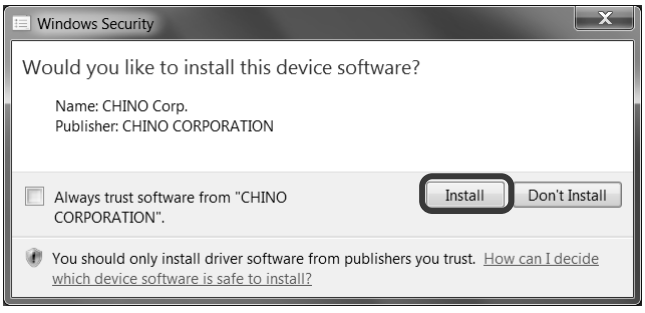
(10) Click [Install] or [Install this driver software anyway]

One of the following screens is displayed.
Follow the instruction for the displayed screen.

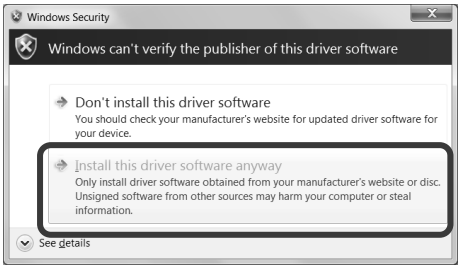
- **For the Windows Security screen (a)**
  Click the [Install] button to start the installation.

- **For the Windows Security screen (b)**
  Click [Install this driver software anyway] to start the installation.

Windows Security screen (a)

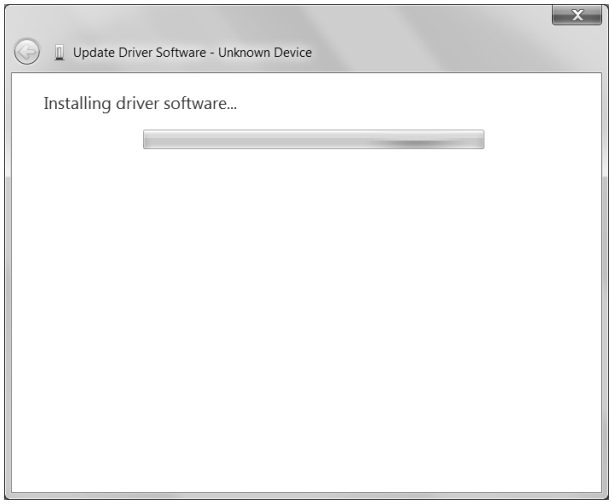


Windows Security screen (b)



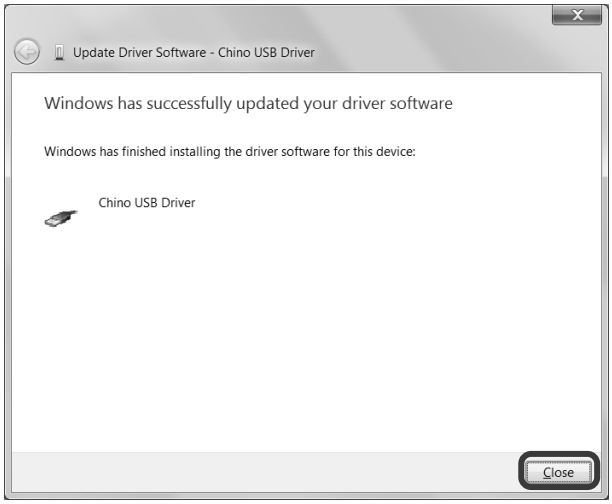
(11) Start the installation

The installation is started. The screen indicating the progress of installation appears. Wait until the installation is completed.



(12) Complete the installation

The driver software update completion screen is displayed. Click the [Close] button to finish.

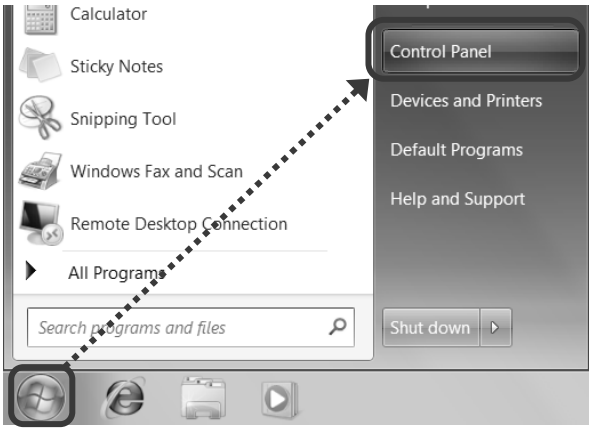


3-2. Uninstallation

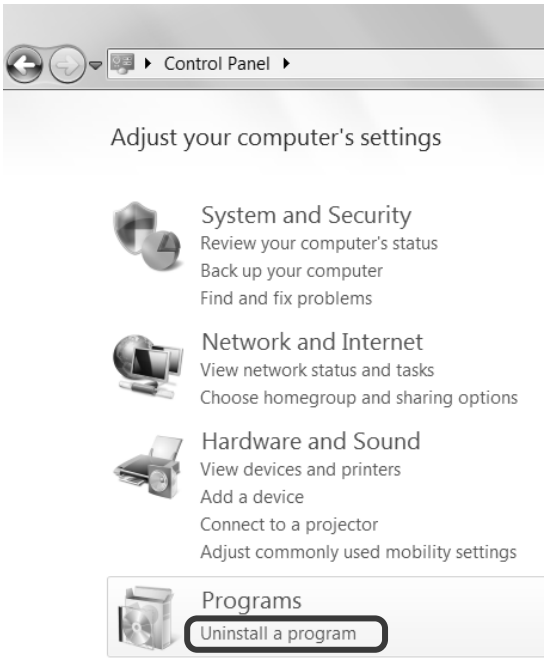
This section describes how to delete the software from the hard disk.
Exit all programs related to the software before starting the uninstallation.

<Procedure>

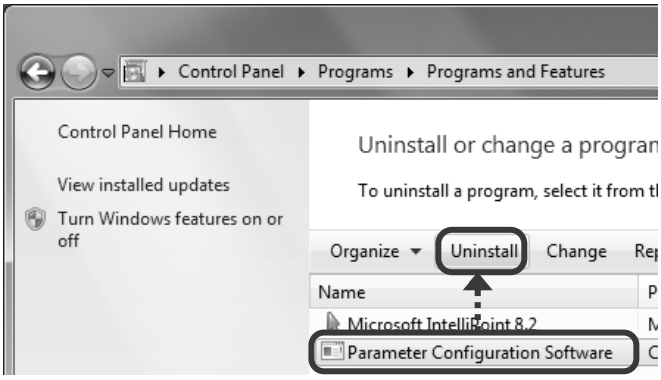
(1) Open the Control Panel
Click [Start] → [Control Panel].



(2) Click [Uninstall a program]
When the Control Panel is displayed, click [Uninstall a program].

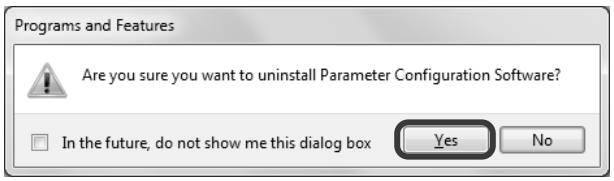


(3) Delete [Parameter Configuration Software]
Select [Parameter Configuration Software] from the list displayed in [Uninstall or change a program], and then click [Uninstall].



(4) Click [Yes]

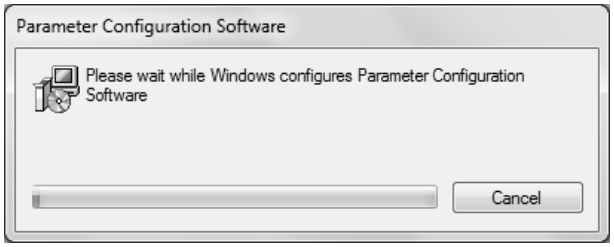
On the Program and Feature screen, click [Yes].



(5) Start uninstallation

The uninstallation is started. The screen indicating the progress of uninstallation appears. Wait until the uninstallation is completed. When the uninstallation is completed, the screen shown right is closed automatically.

* At this point, the folder related to the software still remains. To completely delete the software, delete the installation folder "ParamSet" using the Windows Explorer. The location of the folder is shown in the table below.



[Location of the folder related to the software]

OS	Location of folder
Windows XP	C:¥Documents and Settings¥[user name]¥Application Data¥CHINO¥ParamSet¥
Windows Vista, Windows 7	C:¥Users¥[user name]¥AppData¥Roaming¥CHINO¥ParamSet¥

Remarks **About uninstallation for version upgrade**

- You cannot complete the uninstallation by simply deleting the files (moving them to the "Recycle Bin").
- Do not delete the folder during an uninstallation for version upgrade.

4. Valid Value Range in Software

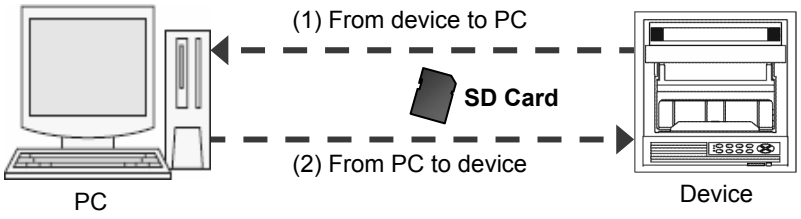
The following figures show the range of value that can be handled by the software and the device.

1. Valid Value Range in Parameter Configuration Software (or PC) and Device:-30000 to 99999

The PC and the device can handle values in the range -30000 to 99999.

2. Valid Value Range Set via SD Card:-30000 to 99999

When being set via SD card, the same range of values can be handled as the PC and the device themselves can handle.



(1) When you save a value in the range -30000 to 99999 which is edited on the device to an SD card and read it on the PC, it is displayed as a value in the range -30000 to 99999.
(2) When you save a value in the range -30000 to 99999 which is edited on the PC to an SD card and read it on the device, it is displayed as a value in the range -30000 to 99999.

5. Startup and Exit of Software

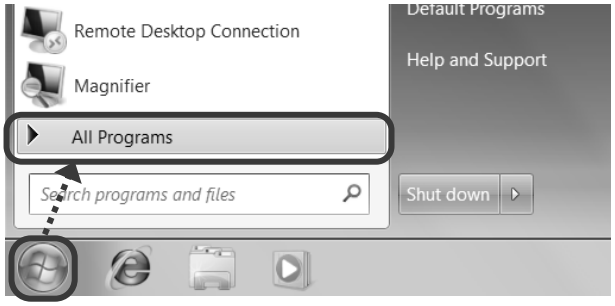
5-1. Startup

This section describes how to start up the software.

<Procedure>

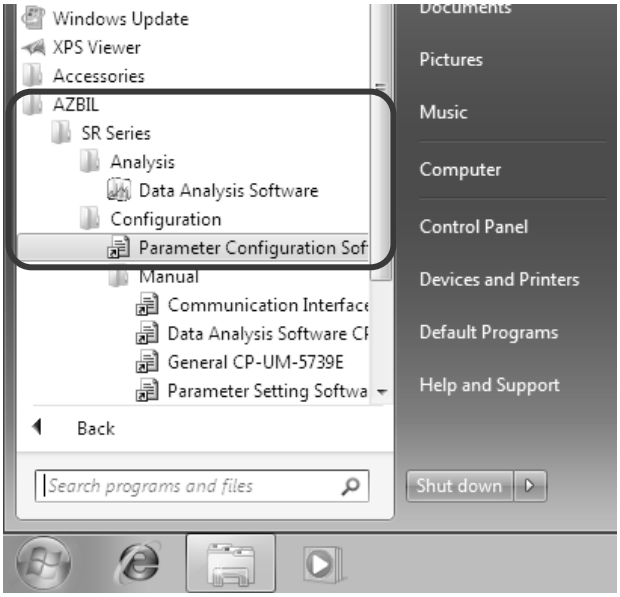
(1) Display all programs

Click [Start] → [All Programs].



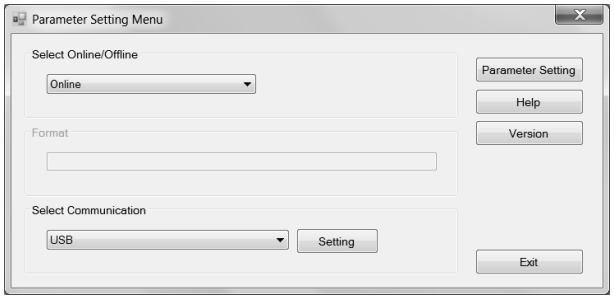
(2) Click [Parameter Configuration Software]

Next, click [azbil] → [SR Series] → [Configuration] → [Parameter Configuration Software] to start up the software.



(3) Open the Parameter Setting Menu screen

The Parameter Setting Menu screen appears. Set the parameters depending on your device (refer to section 6).



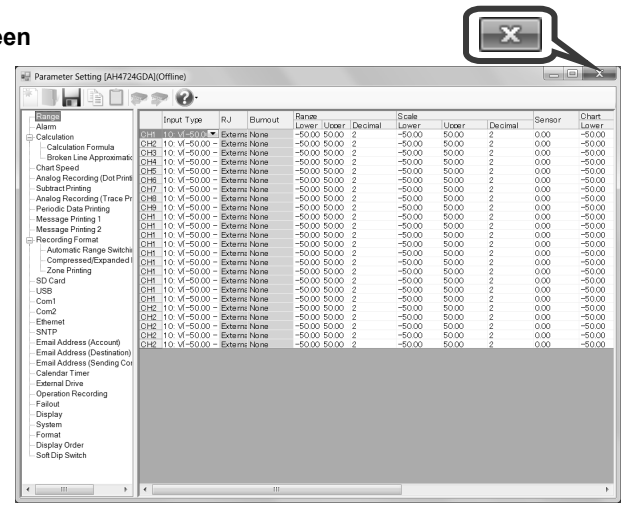
5-2. Exit

This section describes how to exit the software.

<Procedure>

(1) Click the [X] button on the Parameter Setting screen

Click the [X] button on the right side of the title bar to close the Parameter Setting screen.



(2) Click the [Exit] or [×] button on the Parameter Setting Menu screen

Click the [Exit] or [×] button on the Parameter Setting Menu screen to exit the software.

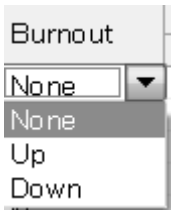
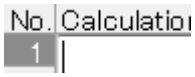
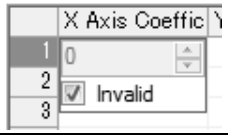
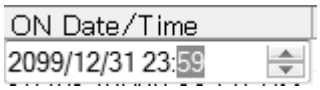
6. How to Operate

6-1. Basic Rules

This section describes generally common items for setting operations.

6-1-1. How to Input Setting Values

You can enter a setting value by selecting a setting item and entering a value directly, selecting a value from a drop-down list, or entering a value in a field directly (see the table below).

Button	Description
	Click button and select a value from the list.
	Enter a value directly or click button to select a value.
	Enter a value directly.
	Click the check box to clear it, and enter a value directly or click button to select a value.
	Enter a value directly, or select each value in the right and left fields and click button to select a value.
	Click the check box to select it.
	Enter the date and time directly.

6-1-2. Inputting Characters and Alphanumeric

Only one byte alphanumeric characters can be used for a character or value.
Multi-byte characters can be entered temporarily, but they cannot be set by pressing the Enter key.
Multi-byte characters need to be converted to one byte characters before pressing the Enter key.

Only °C, μ, Ω, ^{2} and ^{3} are supported as special characters. To enter these characters, right click on input position then select an input character and press the Enter key.

6-1-3. Decimal Location

When you change the decimal location in a setting value, the ones in other setting values are changed accordingly. The decimal locations of the alarm value for the alarm setting and the dead band are also changed with a decimal location change of the range in the range setup.

1. When entering the voltage

(1) If you change the decimal location of the range (Example: 1→2)

: To be changed

Range			Scale			Sensor	Chart Recording		
Lower	Upper	Decimal	Lower	Upper	Decimal		Lower	Upper	Decimal
−500.0	500.0	1	−500.0	500.0	1	0.0	−500.0	500.0	1

⇩

Range			Scale			Sensor	Chart Recording		
Lower	Upper	Decimal	Lower	Upper	Decimal		Lower	Upper	Decimal
−50.00	50.00	2	−50.00	50.00	2	0.00	−50.00	50.00	2

The decimal locations of the scale, sensor correction, and chart recording are changed with a decimal location change of the range.

Type	Alarm Value	Dead Band
Upper	−3276.8	0.0

⇨

Type	Alarm Value	Dead Band
Upper	−327.68	0.00

The decimal locations of the alarm value for the alarm setting and the dead band are also changed with a decimal location change of the range.

(2) If you change the decimal location of the scale (Example: 1→2)

: To be changed

Range			Scale			Sensor	Chart Recording		
Lower	Upper	Decimal	Lower	Upper	Decimal		Lower	Upper	Decimal
−500.0	500.0	1	−500.0	500.0	1	0.0	−500.0	500.0	1

⇩

Range			Scale			Sensor	Chart Recording		
Lower	Upper	Decimal	Lower	Upper	Decimal		Lower	Upper	Decimal
−500.0	500.0	1	−50.00	50.00	2	0.00	−50.00	50.00	2

The decimal locations of the sensor correction and chart recording are changed with a decimal location change of the scale.

(3) If you change the decimal location of the chart recording (Example: 1→3)

: To be changed

Range			Scale			Sensor	Chart Recording		
Lower	Upper	Decimal	Lower	Upper	Decimal		Lower	Upper	Decimal
−500.0	500.0	1	−500.0	500.0	1	0.0	−500.0	500.0	1

⇩

Range			Scale			Sensor	Chart Recording		
Lower	Upper	Decimal	Lower	Upper	Decimal		Lower	Upper	Decimal
−500.0	500.0	1	−500.0	500.0	1	0.0	−5.000	5.000	3

The decimal locations of the range, scale, and sensor correction are not changed with a decimal location change of the chart recording (Independent).

Remarks **Effects on setting parameters when changing a decimal location of the range**

- You should set any parameter needs after setting the decimal location of the range. If you change the decimal location of the range after setting parameters, their values would be changed accordingly.
- If you change the decimal location of the range after changing the decimal location of the scale or chart recording, the latter would move to the same location as the former.

2. When entering the thermocouple/resistance thermometer

(1) If you change the decimal location of the range (Example: 0→1)

: To be changed

Range			Scale			Sensor	Chart Recording		
Lower	Upper	Decimal	Lower	Upper	Decimal		Lower	Upper	Decimal
−200	900	0	−200	900	0	0	−200	900	0

⇩

Range			Scale			Sensor	Chart Recording		
Lower	Upper	Decimal	Lower	Upper	Decimal		Lower	Upper	Decimal
−20.0	90.0	1	−20.0	90.0	1	0.0	−20.0	90.0	1

The decimal locations of the scale, sensor correction, and chart recording are changed with a decimal location change of the range.

Type	Alarm Value	Dead Band
Upper	−32768	0

⇨

Type	Alarm Value	Dead Band
Upper	−3276.8	0.0

The decimal locations of the alarm value for the alarm setting and the dead band are also changed with a decimal location change of the range.

(2) If you change the decimal location of the scale (Example: 1→2)

: To be changed

Range			Scale			Sensor	Chart Recording		
Lower	Upper	Decimal	Lower	Upper	Decimal		Lower	Upper	Decimal
−20.0	90.0	1	−20.0	90.0	1	0.0	−20.0	90.0	1

⇩

Range			Scale			Sensor	Chart Recording		
Lower	Upper	Decimal	Lower	Upper	Decimal		Lower	Upper	Decimal
−20.0	90.0	1	−20.00	90.00	2	0.00	−20.00	90.00	2

The decimal locations of the sensor correction and chart recording are changed with a decimal location change of the scale.

(3) If you change the decimal location of the chart recording (Example: 1→3)

: To be changed

Range			Scale			Sensor	Chart Recording		
Lower	Upper	Decimal	Lower	Upper	Decimal		Lower	Upper	Decimal
−20.0	90.0	1	−20.0	90.0	1	0.0	−20.0	90.0	1

⇩

Range			Scale			Sensor	Chart Recording		
Lower	Upper	Decimal	Lower	Upper	Decimal		Lower	Upper	Decimal
−20.0	90.0	1	−20.0	90.0	1	0.0	−0.200	0.900	3

The decimal locations of the range, scale, and sensor correction are not changed with a decimal location change of the chart recording (Independent).

Remarks **Effects on setting parameters when changing a decimal location of the range**

- You should set any parameter needs after setting the decimal location of the range. If you change the decimal location of the range after setting parameters, their values would be changed accordingly.
- If you change the decimal location of the range after changing the decimal location of the scale or chart recording, the latter would move to the same location as the former.

6-1-4. Operation Flow

<Procedure>

(1) Start this software

When you start the parameter setting software, the Parameter Setting Menu screen is displayed (refer to section 5-1).

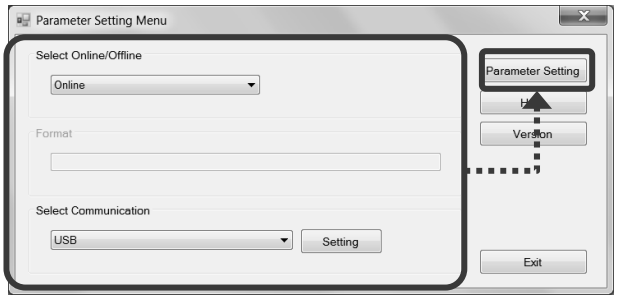
(2) Select online or offline

Specify whether you set parameters of the software online or offline (see the table below). After the selection, click the [Parameter Setting] button to display the Parameter Setting screen.

[Select Online/Offline]

Selection item	Refer to
Offline (New)	Section 6-2-1
Offline (File)	Section 6-2-2
Online*	Section 6-2-3

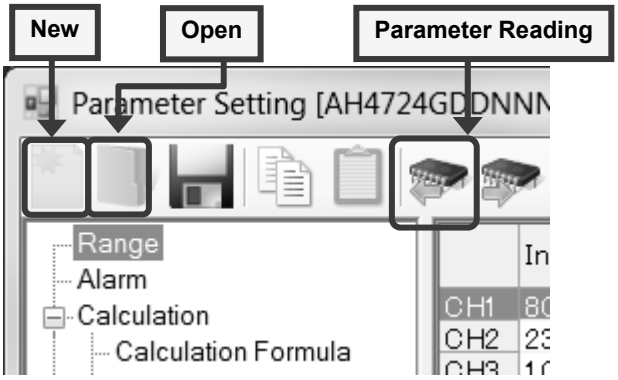
* Check if the PC is connected to the device with an appropriate cable for the communication method.



(3) Create and obtain setting parameters

From the tool bar in the Parameter Setting screen, you can create new setting parameters, edit existing files, and communicate with the device to read setting parameters from it (refer to section 6-6).

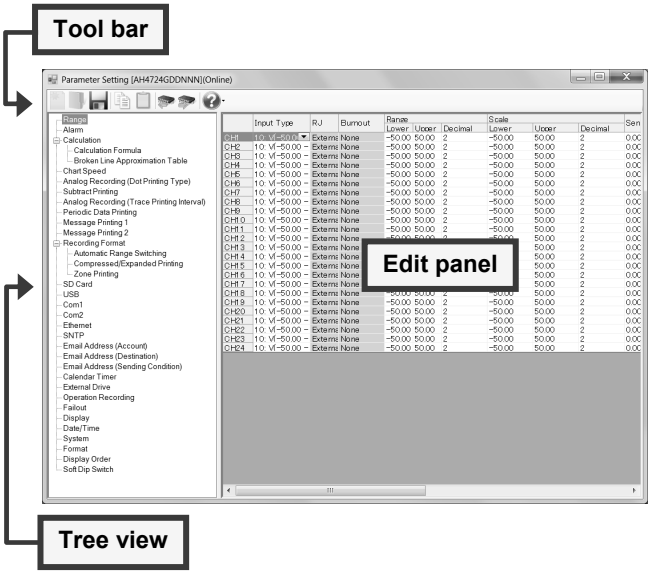
Click the [New] button to create a new setting parameter, the [Open] button to edit an existing file, or the [Parameter Reading] button to communicate with the device to read setting parameters from it (refer to section 4).



(4) Edit in the Parameter Setting screen

The setting items and setting parameters of the device specified in the step 3 are displayed in the tree view and the edit panel in the Parameter Setting screen.

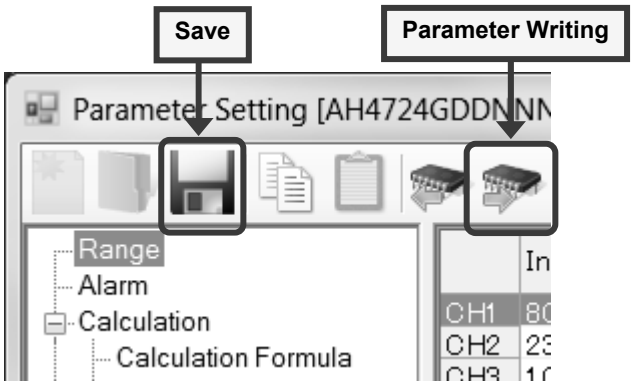
Select a setting item in the tree view and edit a setting parameter in the edit panel (refer to section 6-6-1 to 6-6-38).



(5) Store and write setting parameters

Store the setting parameters that you edited to a file or write them to the connected device (refer to section 6-6).

From the tool bar in the Parameter Setting screen, click the [Save] button to save the setting parameters to a file or the [Parameter Writing] button to write to the connected device (refer to section 4).



(6) Exit this software

Close the Parameter Setting screen, then close the Parameter Setting Menu screen (refer to section 5-2).

Remarks **Precautions for Exit**

When you edit setting parameters, click the [Save] button or the [Parameter Writing] button as appropriate before closing the Parameter Setting screen.

If you close the Parameter Setting screen without clicking the [Save] button or the [Parameter Writing] button after editing setting parameters, the data you entered would be lost.

6-1-5. Setting Items by Device (for multi-point type)

Setting items vary depending on the multi-point type device (see the table below).

[Available items in the menu by the device (multi-point type)] ○: Available ×: Unavailable △: Conditional

No.	Menu item		Available items by the device (multi-point type)	Refer to
			SR series	
1	Range		○	Section 6-6-1
2	Alarm		○	Section 6-6-2
3	Calculation		○	Section 6-6-3
4	Calculation Formula		○	Section 6-6-4
5	Broken Line Approximation Table		○	Section 6-6-5
6	Chart Speed		○	Section 6-6-6
7	Analog Recording (Dot Printing Type)		○	Section 6-6-8
8	Subtract Printing		○	Section 6-6-9
9	Analog Recording (Trace Printing Interval)		○	Section 6-6-10
10	Periodic Data Printing	Data Interval	○	Section 6-6-12
11		Specified Time	○	Section 6-6-13
12	Message Printing 1		○	Section 6-6-14
13	Message Printing 2		○	Section 6-6-15
14	Recording Format		○	Section 6-6-16
15	Automatic Range Switching		○	Section 6-6-17
16	Compressed/Expanded Printing		○	Section 6-6-18
17	Zone Printing		○	Section 6-6-19
18	SD Card		○	Section 6-6-20
19	USB		○	Section 6-6-21
20	COM1		△(* 1)	Section 6-6-22
21	COM2		△(* 1)	Section 6-6-23
22	Ethernet		△(* 1)	Section 6-6-24
23	SNTP		△(* 1)	Section 6-6-25
24	Email Address (Account)		△(* 1)	Section 6-6-26
25	Email Address (Destination)		△(* 1)	Section 6-6-27
26	Email Address (Sending Condition)		△(* 1)	Section 6-6-28
27	Calendar Timer		○	Section 6-6-29
28	External Drive		△(* 2)	Section 6-6-30
29	Operation Recording		△(* 2)	Section 6-6-31
30	Failout		○	Section 6-6-32
31	Display		○	Section 6-6-33
32	Date/Time		△(* 3)	Section 6-6-34
33	System		○	Section 6-6-35
34	Format		○(* 4)	Section 6-6-36
35	Display Order		○	Section 6-6-37
36	Soft Dip Switch		○(* 4)	Section 6-6-38

* 1: Refer to the table “Available items in the menu by the communication method of the device.”

* 2: Refer to the table “Available items in the menu by the alarm output and the external drive method of the device.”

* 3: Not displayed when in offline.

* 4: Only display is available. Setting change can not be done.

***1: [Available items in the menu by the communication method of the device (multi-point type)]**

○: Available ×: Non-display

No.	Menu item	Available items by the communication method (multi-point type)							Refer to
		SR series							
		N	R	A	Q	C	E	G	
20	COM1	×	○	○	○	○	×	○	Section 6-6-22
21	COM2	×	×	×	○	○	×	○	Section 6-6-23
22	Ethernet	×	×	×	×	×	○	○	Section 6-6-24
23	SNTP	×	×	×	×	×	○	○	Section 6-6-25
24	Email Address (Account)	×	×	×	×	×	○	○	Section 6-6-26
25	Email Address (Destination)	×	×	×	×	×	○	○	Section 6-6-27
26	Email Address (Sending Condition)	×	×	×	×	×	○	○	Section 6-6-28

N: None
R: RS-232C
A: RS-422A/RS-485
Q: RS-232C+RS-485
C: RS-422A/RS-485+RS-485
E: Ethernet
G: Ethernet + RS-422A/RS-485 + RS-485
F: Ethernet + RS-422A/RS-485 + RS-485 + Low order communication

***2: [Available items in the menu by the alarm output and the external drive method of the device (multi-point type)]**

○: Available ×: Non-display

No.	Menu item	Available items by the alarm output and the external drive method (multi point type)								Refer to
		SR series								
		0	2	4	A	8	B	F	D	
28	External Drive	×	×	○	○	○	○	○	○	Section 6-6-30
29	Operation Recording	×	×	○	○	○	○	○	○	Section 6-6-31

0: None
2: Mechanical relay "a" contact alarm output 2 points
4: Mechanical relay "c" contact alarm output 4 points + external drive 5 points
A: Mechanical relay "a" contact alarm output 6 points + external drive 5 points
8: Mechanical relay "c" contact alarm output 8 points + external drive 10 points
B: Mechanical relay "a" contact alarm output 12 points + external drive 10 points
F: Mechanical relay "c" contact alarm output 16 points + external drive 20 points
D: Mechanical relay "a" contact alarm output 24 points + external drive 20 points

6-1-6. Setting Items by Device (for pen type)

Setting items vary depending on the pen type device (see the table below).

[Available items in the menu by the device (pen type)] ○: Available ×: Unavailable △: Conditional

No.	Menu item		Available items by the device (pen type)	Refer to
			SR series	
1	Range		○	Section 6-6-1
2	Alarm		○	Section 6-6-2
3	Calculation		○	Section 6-6-3
4	Calculation Formula		○	Section 6-6-4
5	Broken Line Approximation Table		○	Section 6-6-5
6	Chart Speed		○	Section 6-6-7
7	Subtract Printing		○	Section 6-6-9
8	Time Axis Synchronization		○	Section 6-6-11
9	Periodic Data Printing	Data Interval	○	Section 6-6-12
10		Specified Time	○	Section 6-6-13
11	Message Printing 1		○	Section 6-6-14
12	Message Printing 2		○	Section 6-6-15
13	Recording Format		○	Section 6-6-16
14	Automatic Range Switching		○	Section 6-6-17
15	Compressed/Expanded Printing		○	Section 6-6-18
16	Zone Printing		○	Section 6-6-19
17	SD Card		○	Section 6-6-20
18	USB		○	Section 6-6-21
19	COM1		△(* 1)	Section 6-6-22
20	COM2		△(* 1)	Section 6-6-23
21	Ethernet		△(* 1)	Section 6-6-24
22	SNTP		△(* 1)	Section 6-6-25
23	Email Address (Account)		△(* 1)	Section 6-6-26
24	Email Address (Destination)		△(* 1)	Section 6-6-27
25	Email Address (Sending Condition)		△(* 1)	Section 6-6-28
26	Calendar Timer		○	Section 6-6-29
27	External Drive		△(* 2)	Section 6-6-30
28	Operation Recording		△(* 2)	Section 6-6-31
29	Failout		○	Section 6-6-32
30	Display		○	Section 6-6-33
31	Date/Time		△(* 3)	Section 6-6-34
32	System		○	Section 6-6-35
33	Format		○(* 4)	Section 6-6-36
34	Display Order		○	Section 6-6-37
35	Soft Dip Switch		○(* 4)	Section 6-6-38

* 1: Refer to the table "Available items in the menu by the communication method of the device."

* 2: Refer to the table "Available items in the menu by the alarm output and the external drive method of the device."

* 3: Not displayed when in offline.

* 4: Only display is available. Setting change can not be done.

***1: [Available items in the menu by the communication method of the device (pen type)]**

○: Available ×: Non-display

No.	Menu item	Available items by the communication method (pen type)							Refer to
		SR series							
		N	R	A	Q	C	E	G	
19	COM1	×	○	○	○	○	×	○	Section 6-6-22
20	COM2	×	×	×	○	○	×	○	Section 6-6-23
21	Ethernet	×	×	×	×	×	○	○	Section 6-6-24
22	SNTP	×	×	×	×	×	○	○	Section 6-6-25
23	Email Address (Account)	×	×	×	×	×	○	○	Section 6-6-26
24	Email Address (Destination)	×	×	×	×	×	○	○	Section 6-6-27
25	Email Address (Sending Condition)	×	×	×	×	×	○	○	Section 6-6-28

N: None
R: RS-232C
A: RS-422A/RS-485
Q: RS-232C+RS-485
C: RS-422A/RS-485+RS-485
E: Ethernet
G: Ethernet + RS-422A/RS-485 + RS-485

***2: [Available items in the menu by the alarm output and the external drive method of the device (pen type)]**

○: Available ×: Non-display

No.	Menu item	Available items by the alarm output and the external drive method (pen type)						Refer to
		SR series						
		0	2	4	A	8	B	
28	External Drive	×	×	○	○	○	○	Section 6-6-30
29	Operation Recording	×	×	○	○	○	○	Section 6-6-31

0: None
2: Mechanical relay "a" contact alarm output 2 points
4: Mechanical relay "c" contact alarm output 4 points + external drive 5 points
A: Mechanical relay "a" contact alarm output 6 points + external drive 5 points
8: Mechanical relay "c" contact alarm output 8 points + external drive 10 points
B: Mechanical relay "a" contact alarm output 12 points + external drive 10 points

6-2. Operation of Parameter Setting Menu Screen

In the Parameter Setting Menu screen, specify whether you edit parameters of this software online or offline.
There are three options to select online or offline.

Selection item	Description	Refer to
Offline (New)	Specify this option if you want to create parameters in a new file without communication.	Section 6-2-1
Offline (File)	Specify this option if you want to edit parameters in an existing file without communication.	Section 6-2-2
Online	Specify this option to edit parameters of the device through communication.	Section 6-2-3

* You can also show the Help screen or the version from this menu screen (refer to section 6-7 and 6-8).

6-2-1. Offline (New) Setting

Specify this option if you want to create parameters in a new file without communication.

<Procedure>

(1) Select [Offline (New)]
Select [Offline (New)] from [Select Online/Offline].

(2) Enter the format
In [Format], enter the model of the device by using one byte characters excluding "- (hyphen)".

(3) Click the [Parameter Setting] button
Click the [Parameter Setting] button to display the Parameter Setting screen, where you can set parameters (refer to section 6-6).

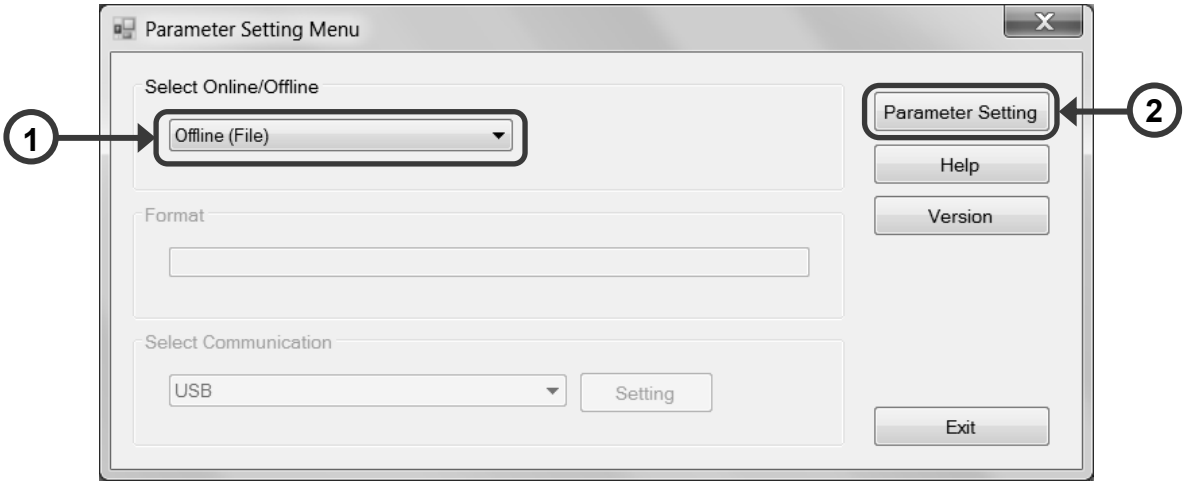
Remarks **If a warning message is displayed**

Close the warning message window by clicking the [OK] button and reconfigure the model.

6-2-2. Offline (File) Setting

Specify this option if you want to edit parameters in an existing file without communication.

<Procedure>

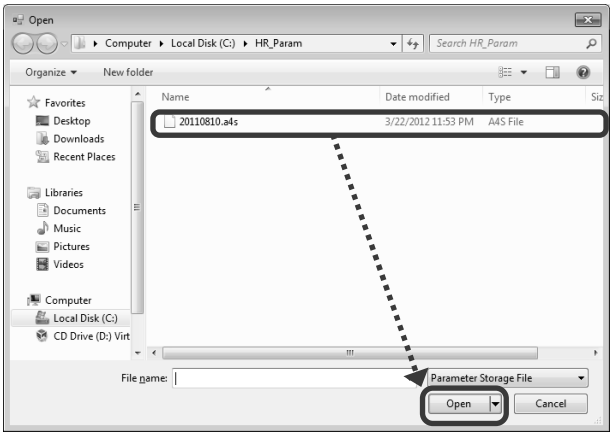


(1) Select [Offline (File)]

Select [Offline (File)] from [Select Online/Offline].

(2) Click the [Parameter Setting] button

The Open screen is displayed. Specify a file and click the [Open] button. The Parameter Setting screen is displayed to enable you to edit the specified file (refer to section 6-6).



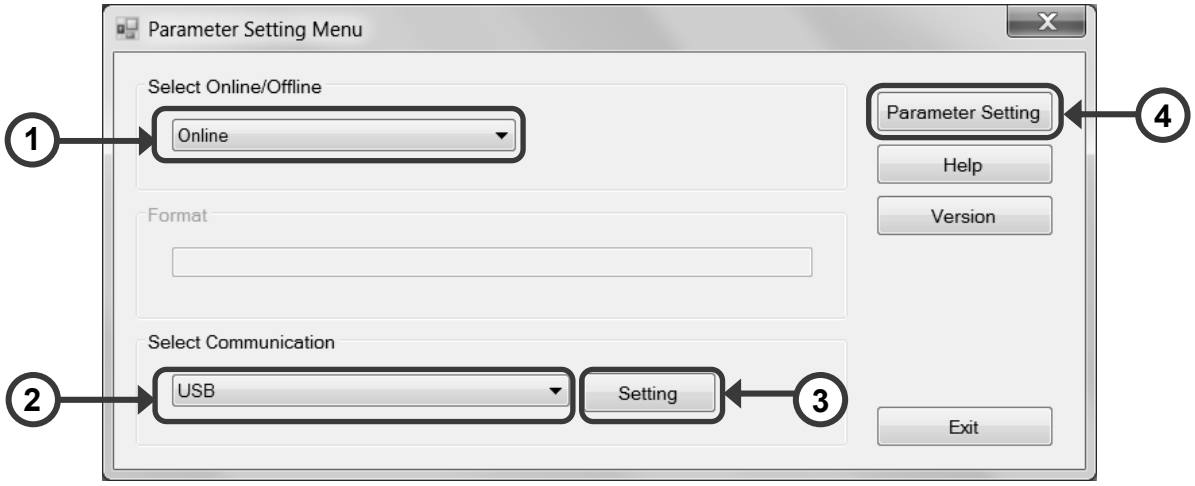
Remarks **If a warning message is displayed**

Close the warning message window by clicking the [OK] button and reconfigure the file.

6-2-3. Online Setting

Specify this option to edit parameters of the device through communication.

<Procedure>



(1) Select [Online]

Select [Online] from [Select Online/Offline].

* Check if the PC is connected to the device with an appropriate cable for the communication method.

(2) Select [Select Communication]

Select a communication path for this software to communicate with the device from the [Select Communication] list.

Selection item
Ethernet
Serial
USB

(3) Click the [Setting] button

Click the [Set] button to display the setting screen for the communication path specified in the [Select Communication] list.

Select Communication	display screen	Refer to
When [Ethernet] is selected	Ethernet adapter setting screen	Refer to section 6-3
When [Serial] is selected	Serial adapter setting screen	Refer to section 6-4
When [USB] is selected	USB adapter setting screen	Refer to section 6-5

(4) Click the [Parameter Setting] button

Click the [Parameter Setting] button to display the Parameter Setting screen, where you can edit parameters for the connected device (refer to section 6-6).

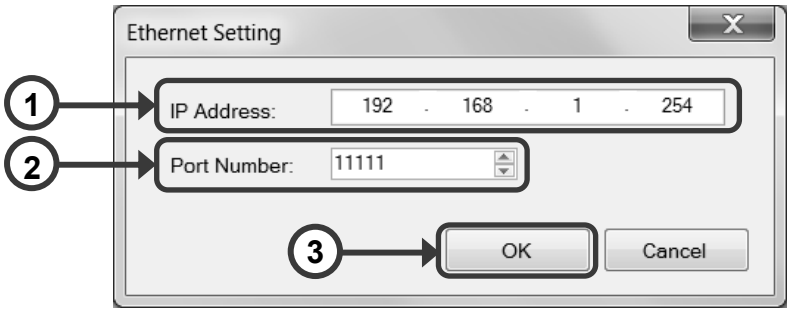
Remarks **If a warning message is displayed**

Close the message window by clicking the [OK] button in the warning message screen and reconfigure parameters after confirming there is no problem with the communication.

6-3. Operation of Ethernet Adapter Setting Screen

Configure the communication adapter for connecting PC to the device using Ethernet.
This screen is displayed when you select [Online] and [Ethernet] from the [Select Communication] list in the Parameter Setting Menu screen.

<Procedure>



(1) Enter the IP address

Enter the IP address of the connected device using one byte characters.

Setting Range
"0.0.0.0" to "255.255.255.255"

DHCP (obtaining an IP address automatically) cannot be used.
For the IP address, please contact the network administrator of the network you are connecting to.

(2) Enter the port number

Enter the port number.

Setting Range
0 to 65535

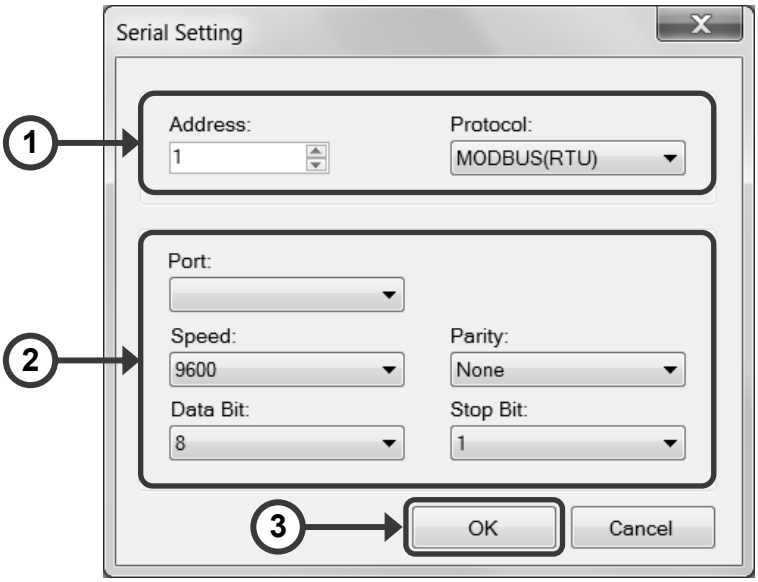
(3) Click the [OK] button

Click the [OK] button to close the Ethernet adaptor setting screen.
Return to the Parameter Setting Menu screen and continue your setting (refer to (4) in section 6-2-3).

6-4. Operation of Serial Adapter Setting Screen

Configure the communication adapter for connecting PC to the device using serial.
This screen is displayed when you select [Online] and [Serial] from the [Select Communication] list in the Parameter Setting Menu screen.

<Procedure>



(1) Configure MODBUS

Specify the address and the communications protocol with the connected device.

Programming parameter	Setting Range
Address	1 to 99
Protocol	MODBUS (RTU)
	MODBUS (ASCII)

(2) Configure the serial communication

Configure the serial communication.

Programming parameter	Setting Range
Port	Displays the serial port name options obtained from the PC. * This field is blank if serial port names cannot be obtained.
Speed	4800
	9600
	19200
	38400
Data bit	7
	8

Programming parameter	Setting Range
Parity	None
	Odd
	Even
Stop Bit	1
	2

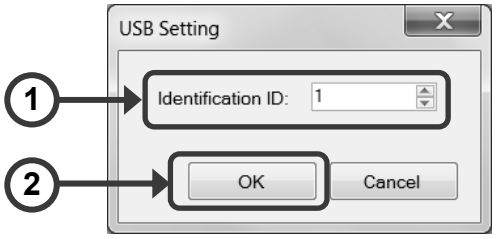
(3) Click the [OK] button

Click the [OK] button to close the serial adaptor setting screen.
Return to the Parameter Setting Menu screen and continue your setting (refer to (4) in section 6-2-3).

6-5. Operation of USB Adapter Setting Screen

Configure the communication adapter for connecting PC to the device using USB.
This screen is displayed when you select [Online] and [USB] from the [Select Communication] list in the Parameter Setting Menu screen.

<Procedure>



(1) Enter the identification ID

Enter the identification ID using one byte characters.

Setting Range
1 to 5

(2) Click the [OK] button

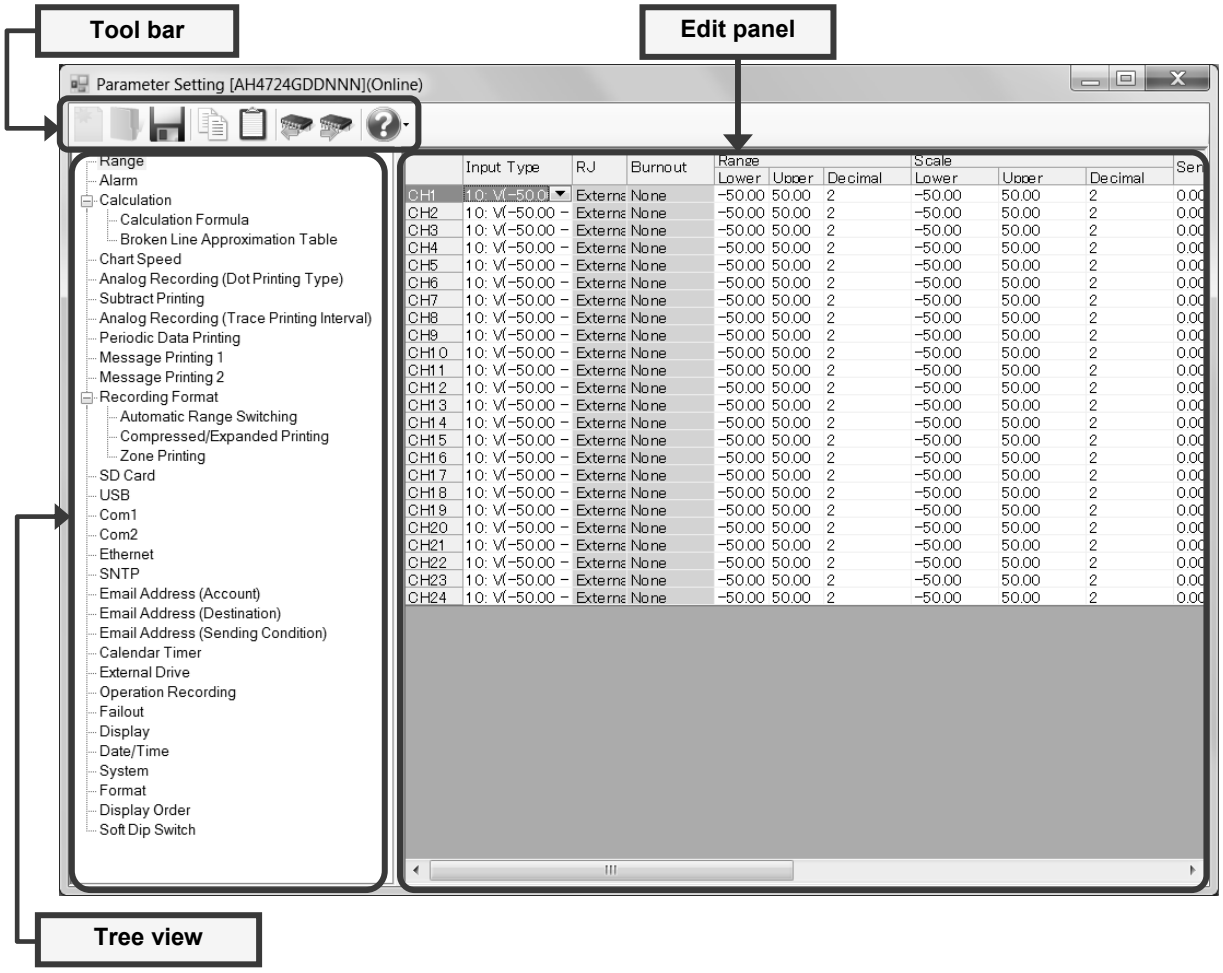
Click the [OK] button to close the USB adaptor setting screen.
Return to the Parameter Setting Menu screen and continue your setting (refer to (4) in section 6-2-3).

6-6. Operation of Parameter Setting Screen

The Parameter Setting screen consists of the tool bar, tree view, and edit panel.
The tool bar allows you to create and store a file and perform external input/output of parameters, the tree view to select setting items for obtained parameters, and the edit panel to edit setting parameter values.

Remarks

When you edit setting parameters, click the [Save] button or the [Parameter Writing] button as appropriate before closing the Parameter Setting screen.
If you close the Parameter Setting screen without clicking the [Save] button or the [Parameter Writing] button after editing setting parameters, the data you entered would be lost.



Display Configuration	Description
Tool bar	From the tool bar, you can operate the files, read and write parameters, and show the Help page. Device information obtained from the tool bar is displayed in the tree view and the edit panel. Buttons on the tool bar are enabled or disabled depending on whether you select online or offline. When buttons are enabled, they are displayed in color and can be clicked. When buttons are disabled, they are displayed in gray and cannot be clicked (refer to the table in the next page).
Tree view	In the tree view, device information obtained from the tool bar is displayed by category (setting item). When you select a setting item displayed in the tree view, its setting parameter is displayed in the edit panel. The setting items displayed in the tree view vary depending on the device model to be edited (for multi-point type, refer to section 6-1-5 and for pen type refer to section 6-1-6).
Edit panel	In the edit panel, the setting parameters of the setting item selected in the tree view are displayed. You can select a setting parameter displayed in the edit panel to edit its value.

[Buttons on the tool bar and their availability] ○: Enabled x: Disabled

Button		Description	Enabled/Disabled when selecting		
			Offline (New)	Offline (File)	Online
	New	Creates a new setting file. The edit panel is updated with the initial values.	○	○	×
	Open	Reads a specified setting file and displays its parameters in the edit panel.	○	○	○
	Save	Overwrites the setting file when it exists or stores the file with a new name in any folder when the specified file does not exist.	○	○	○
	Copy	Duplicates parameters and hold them temporarily (see the table below). The duplicated parameters are kept after a paste operation and will be updated when this button is clicked the next time.	○ (* 1)	○ (* 1)	○ (* 1)
	Paste	Pastes the parameters duplicated by the [Copy] button (see the table below).	○ (* 2)	○ (* 2)	○ (* 2)
	Parameter Reading	Reads parameters from the connected device through communication (refer to section 4) and displays them in the tree view and the edit panel.	×	×	○
	Parameter Writing	Writes the edited parameters to the connected device through communication (refer to section 4).	×	×	○
	Help	Shows the help information. You can see the help (refer to section 6-7) and version information (refer to section 6-8).	○	○	○

* 1: Enabled only when the [Copy] button is available in the displayed edit panel.

* 2: Enabled only when parameters are duplicated by the [Copy] button.

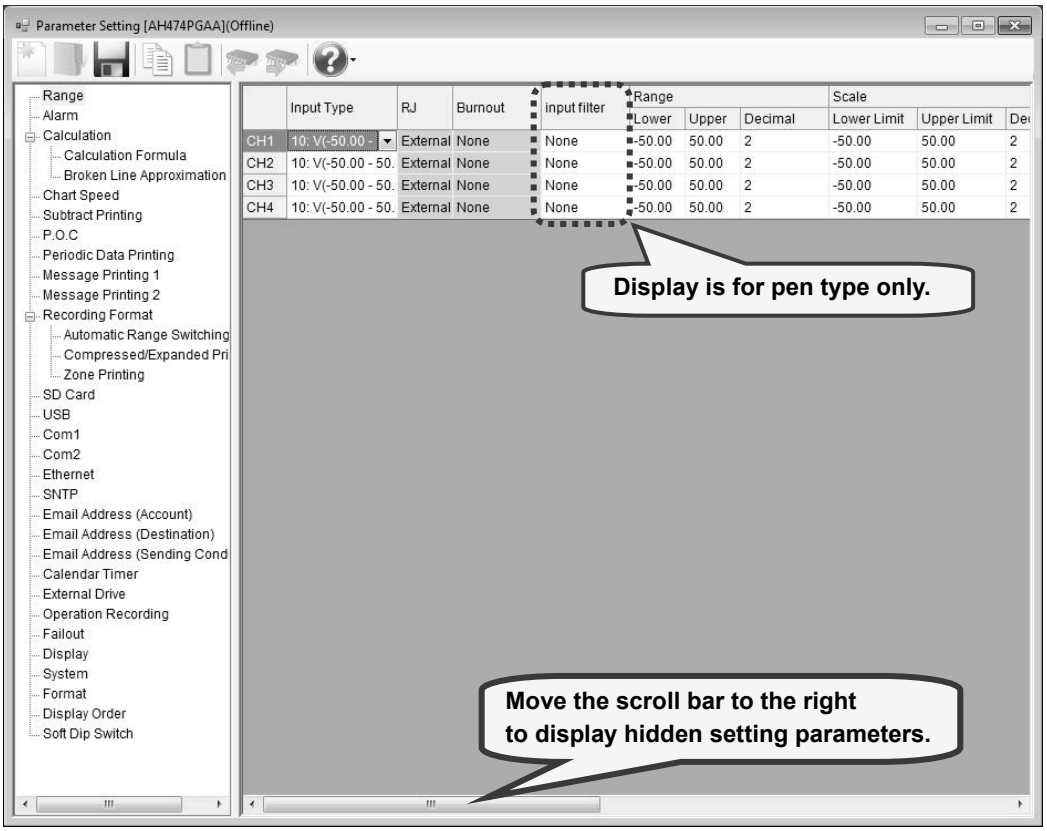
[Edit panels in which the [Copy] and [Paste] buttons are available and a set of parameters to be duplicated]

Edit panel	A set of parameters to be duplicated	Refer to
Range	Parameters belonging to one CH	2. in section 6-6-1
Alarm	Parameters belonging to one alarm level	2. in section 6-6-2
Calculation	Parameters belonging to one CH	2. in section 6-6-3
Calculation Formula	Parameters belonging to one calculation formula number	2. in section 6-6-4
Broken Line Approximation Table	Parameters belonging to one table	2. in section 6-6-5
Subtract Printing	Parameters belonging to one CH	2. in section 6-6-9
Periodic Data Printing (Specified Time)	Parameters belonging to one specified time number	2. in section 6-6-13
Message Printing 1	Parameters belonging to one message number	2. in section 6-6-14
Automatic Range Switching	Parameters belonging to one CH	2. in section 6-6-17
Compressed/Expanded Printing	Parameters belonging to one CH	2. in section 6-6-18
Calendar Timer	Parameters belonging to one timer number	2. in section 6-6-78
Operation Recording	Parameters belonging to one external drive number	2. in section 6-6-31

6-6-1. Range Settings "Range"

- The range settings for the input channel are displayed in the table format to enable you to edit them.
- The columns of the table present the setting parameter types, and the rows present the channel numbers.
- The number of the displayed channels varies depending on the device model.

  * Refer to the instruction manual of the device and other manuals for more details on the settings.



*The screen is for pen type.

1. Parameter setting

For the range settings, you can edit the following setting parameters by the channel.

[Range Settings "Range" Parameter List]

Setting parameter	Function	Remarks
Input Type "INPUT"	Select the input type	Refer to the table "[Input type]"
RJ "RJ"	Select whether the reference junction compensation contact is used or not Software screen / Device screen: Internal / INT External / EXT	If you change the input type to [Unused], [DC voltage], or [Resistance thermometer], for which you cannot set whether RJ is used or not, the [RJ] setting is changed to [External].
Burnout "BURN"	Select whether the burn is detected or not and the operation if detected Software screen / Device screen: None / None Up / UP Down / DOWN	If you change the input type to [Unused] or all the mV DC voltage, for which you cannot set the burnout, the [Burnout] setting is changed to [None].
Input Filter “FILTER”	Time constant (sec.) of the input filter Software screen / Device screen: None / None 0.5 / 0.5s 1 to 5 / 1s to 5s	Setting is only available at pen type.
Decimal Location	Set the decimal location	Refer to section 6-1

<table>
<tr><td>Scale Minimum
"RANGE-L"</td><td>The minimum value of the measurement range to be used in the range that is determined by the input type</td><td rowspan="2">-30000 to 30000
It can be set to three places of decimals. Example:
-30.000
The decimal location changes according to the one of the range</td></tr>
<tr><td>Scale Maximum
"RANGE-H"</td><td>The maximum value of the measurement range to be used in the range that is determined by the input type</td></tr>
<tr><td>Scale Lower Limit
"SCALE-L"</td><td>The minimum value to be used for scaling for the range determined by the range minimum and maximum values when the voltage range such as mV is selected as the input type</td><td>-30000 to 99999
It can be set to three places of decimals. Example: -30.000
The decimal location changes according to the one of the scale</td></tr>
<tr><td>Scale Upper Limit
"SCALE-H"</td><td>The maximum value to be used for scaling for the range determined by the range minimum and maximum values when the voltage range such as mV is selected as the input type</td><td></td></tr>
<tr><td>Sensor Correction
"SHIFT"</td><td>The offset amount for the data after scaling</td><td>-30000 to 99999
See the remarks of "Scale Lower/Upper Limit" for details</td></tr>
<tr><td>Chart Recording Lower Limit
"REC-L"</td><td>The minimum value (Left) of the chart recording</td><td rowspan="2">-30000 to 99999
It can be set to three places of decimals. Example: -30.000
The decimal location changes according to the one of the chart recording</td></tr>
<tr><td>Chart Recording Upper Limit
"REC-H"</td><td>The maximum value (Right) of the chart recording</td></tr>
<tr><td>Unit
"UNIT"</td><td>Set the number of characters using up to 6 characters</td><td rowspan="2">Available characters (one byte):
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789+-*/%^().,_:;<>=![]¥
Available characters (special characters):
°C, µ, Ω, ², ³
(refer to section 6-1-2)</td></tr>
<tr><td>Tag
"TAG"</td><td>Set the number of characters using up to 10 characters</td></tr>
<tr><td>Display
"Disp"</td><td>Select whether the measurement value is displayed or not<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Display</td><td>ON</td></tr><tr><td>Hide</td><td>OFF</td></tr></table></td><td></td></tr>
<tr><td>Analog Recording
"Rec"</td><td>Specify whether the analog recording is turned on or off<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Record</td><td>ON</td></tr><tr><td>Do Not Record</td><td>OFF</td></tr></table></td><td></td></tr>
<tr><td>Digital Recording/Printing
"DIGI.REC"</td><td>Select the digital recording/printing is turned on or off<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Record</td><td>ON</td></tr><tr><td>Do Not Record</td><td>OFF</td></tr></table></td><td></td></tr>
<tr><td>SD Card Recording
"SD-CARD.REC"</td><td>Specify whether the SD card recording is turned on or off<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Record</td><td>ON</td></tr><tr><td>Do Not Record</td><td>OFF</td></tr></table></td><td></td></tr>
</table>

***1: [Input type]**

Input type (Initial value)	Input type (Initial value)	Input type (Initial value)	Input type (Initial value)
Unused	25: E (-200.0 to 350.0)	40: W-WRe26 (0 to 2315)	56: L (-200 to 900)
01: mV (-13.80 to 13.80)	26: E (-200 to 900)	41:WRe5-WRe26(0 to 2315)	70: Pt100 (-140.0 to 150.0)
02:mV (-27.60 to 27.60)	27: J (-200.0 to 250.0)	43: PtRh40-20 (0 to 1880)	71: Pt100 (-200.0 to 300.0)
03: mV (-69.00 to 69.00)	28: J (-200.0 to 500.0)	44: NiMo-Ni (0.0 to 290.0)	72: Pt100 (-200.0 to 850.0)
04: mV (-200.0 to 200.0)	29: J (-200 to 1200)	45: NiMo-Ni (0.0 to 600.0)	73: oPt100 (-140.0 to 150.0)
05: mV (-500.0 to 500.0)	30: T (-200.0 to 250.0)	46: NiMo-Ni (0 to 1310)	74: oPt100 (-200.0 to 300.0)
07: V (-5.00 to 5.00)	31: T (-200.0 to 400.0)	47: CR-AuFe (0.0 to 280.0)	75: oPt100 (-200.0 to 649.0)
08: V (-10.00 to 10.00)	32: R (0 to 1200)	48: Platinel2 (0.0 to 350.0)	76: JPt100 (-140.0 to 150.0)
09: V (-20.00 to 20.00)	33: R (0 to 1760)	49: Platinel2 (0.0 to 650.0)	77: JPt100 (-200.0 to 300.0)
10: V (-50.00 to 50.00)	34: S (0 to 1300)	50: Platinel2 (0 to 1390)	78: JPt100 (-200.0 to 649.0)
16: V (-1.00 to 1.00)	35: S (0 to 1760)	51: U (-200.0 to 250.0)	79: Pt50 (-200.0 to 649.0)
21: K (-200.0 to 300.0)	36: B (0 to 1820)	52: U (-200.0 to 500.0)	80: Pt-Co (4.0 to 374.0)
22: K (-200.0 to 600.0)	37: N (-200.0 to 400.0)	53: U (-200.0 to 600.0)	84: Pt100 (-200.0 to 649.0)
23: K (-200 to 1370)	38: N (-200.0 to 750.0)	54: L (-200.0 to 250.0)	94: Au/Pt (0.0 to 1000.0)
24: E (-200.0 to 200.0)	39: N (-200 to 1300)	55: L (-200.0 to 500.0)	

2. Copy and paste operations for range setting

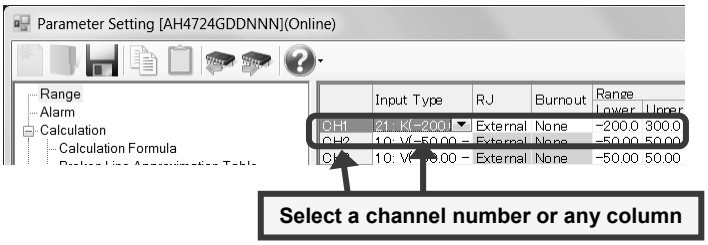
For the range setting, you can copy and paste parameters per one channel (parameters belonging to one channel).

<How to copy/paste>

(1) Select the copy source

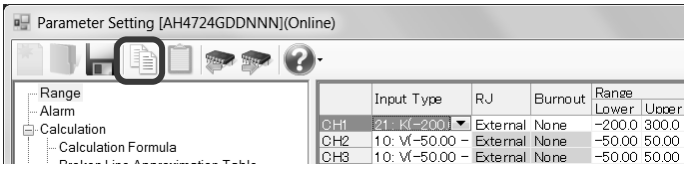
Click to select a channel number or any column to copy from.

* You can copy parameters per one channel. That means you cannot select multiple channels to copy the parameters at a time.



(2) Click the [Copy] button

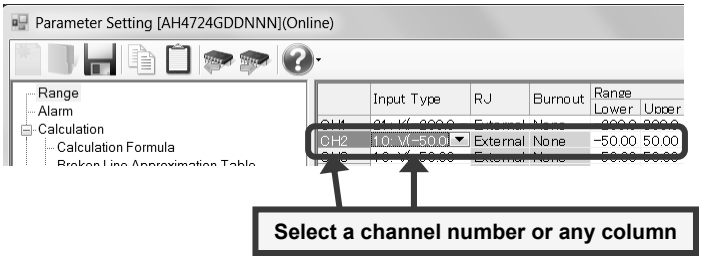
Click the [Copy] button from the tool bar to copy the selected parameters.



(3) Select the paste destination

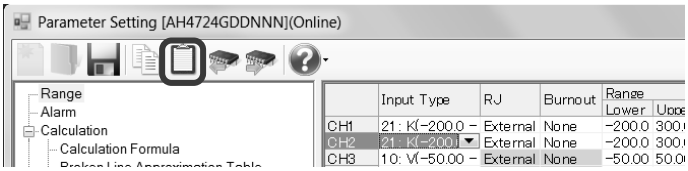
Click to select a channel number or any column to paste to.

* You can paste the parameters to one channel. That means you cannot select multiple channels to paste the parameters at a time.



(4) Click the [Paste] button

Click the [Paste] button from the tool bar to paste the parameters to the selected location.



Remarks **"Keeping copied data" and "Copy/paste unit"**

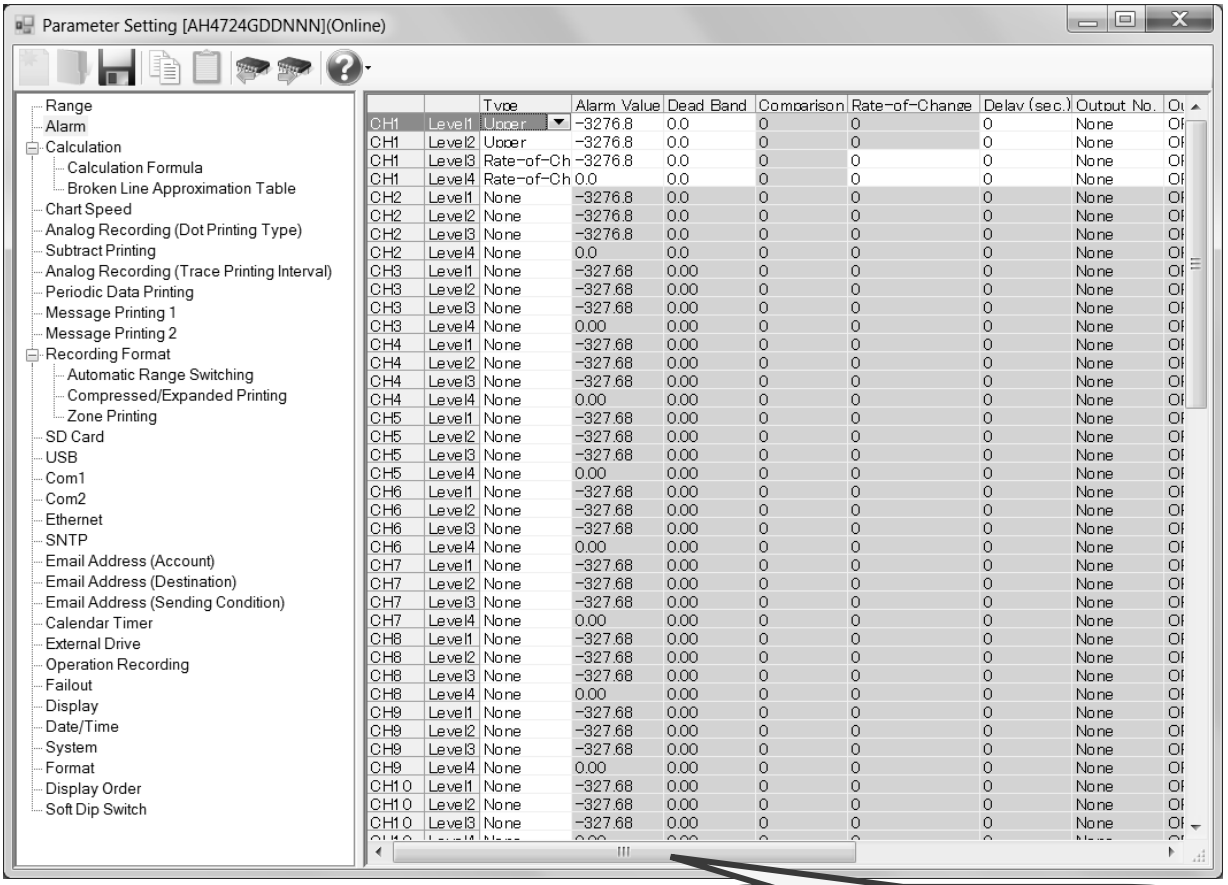
- The copied parameters are kept after a paste operation until the [Copy] button is clicked the next time. Note that, if you move to another setting item in the edit panel after a copy operation, the copied parameters are lost.
- You cannot copy or paste per setting parameter. The copy or paste operation can be used by one channel.

Remarks **Effects on other settings**

Changing the input type, scale upper limit, or scale lower limit in the range setting can affect other settings such as the alarm, dead band, and so on.
This applies to the copy operation. Please pay attention.

6-6-2. Alarm Settings "Alarm"

- The alarm settings for the alarm channels are displayed in the table format to enable you to edit them.
- The columns of the table present the setting parameter types, and the rows present the pairs of the channel number and the alarm level.
- The number of the displayed channels varies depending on the device model.
  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

For the alarm settings, you can edit the following setting parameters by the level of the channel.

[Alarm Settings "Alarm" Parameter List]

Setting parameter	Function	Remarks
Level "Level"	Select the setting level Software screen / Device screen Level1 / (Level) 1 Level2 / (Level) 2 Level 3 / (Level) 3 Level 4 / (Level) 4	
Type "Mode"	Select the alarm type Software screen / Device screen None / None Upper / H Lower / L Rate-of-Change Upper / U Rate-of-Change Lower / D Diff. Upper / B Diff. Lower / S	
Alarm Value "Value"	Specify the alarm judgment value	-30000 to 99999 The decimal location changes according to the one of the scale
Dead Band "D.Band"	Setting the dead band width	0 to 99999 See the remarks of "Alarm Value" for details

<table>
<tr><td>Comparison CH
"Comp.CH"</td><td>Specify the channel (standard CH) to be subtracted from the setting channel
(Only for the differential alarm)<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>1 to 24</td><td>1 to 24</td></tr></table></td><td>The number of the displayed channels varies depending on the device model.</td></tr>
<tr><td>Rate-of-Change Standard Time (sec.)
"Std.TIME"</td><td>Specify the rate-of-change standard time
(Only for the rate-of-change alarm)<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>0 to 6000
(multi-point type)</td><td>0 to 6000
(multi-point type)</td></tr><tr><td>0 to 600.0
(pen type)</td><td>0 to 600.0
(pen type)</td></tr></table></td><td><u>For multi-point type</u>
The minimum setting unit is 1 second

<u>For pen type</u>
The minimum setting unit is 0.1 second</td></tr>
<tr><td>Delay (sec.)
"Delay"</td><td>Specify the delay time from an alarm decision to the output<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>0 to 6000</td><td>0 to 6000</td></tr></table></td><td>The minimum setting unit is 1 second</td></tr>
<tr><td>Output No.
"Relay No."</td><td>Specify the location to which an alarm is output (relay number)<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>-</td></tr><tr><td>1 to 24</td><td>1 to 24</td></tr><tr><td>Dummy Output</td><td>99</td></tr></table></td><td>The number of the displayed channels varies depending on the device model.</td></tr>
<tr><td>Output Mode
"And/Or"</td><td>Select the connection method for connecting to the output destination<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>OR</td><td>Or</td></tr><tr><td>AND</td><td>And</td></tr></table></td><td></td></tr>
<tr><td>Trigger Message No.
"Message No Activation"</td><td>Specify the message No. to be printed when an alarm occurs<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>-</td></tr><tr><td>1 to 20</td><td>1 to 20</td></tr></table></td><td></td></tr>
<tr><td>Cancel Message No.
"Message No Reset"</td><td>Specify the message No. to be printed when an alarm is reset<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>-</td></tr><tr><td>1 to 20</td><td>1 to 20</td></tr></table></td><td></td></tr>
<tr><td>Display Stored
"Hold-DISP"</td><td>Select whether the alarm display and the Status LED "ALM" are stored or not<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Stop</td><td>Not Hold</td></tr><tr><td>Cancel By Key Operation</td><td>Hold:Reset by KEY</td></tr><tr><td>Cancel By External Drive</td><td>Hold:Reset by EX</td></tr></table></td><td></td></tr>
<tr><td>Maintain Output
"Hold-OUT"</td><td>Select whether the alarm output status is maintained or not<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Stop</td><td>Not Hold</td></tr><tr><td>Cancel By Key Operation</td><td>Hold:Reset by KEY</td></tr><tr><td>Cancel By External Drive</td><td>Hold:Reset by EX</td></tr></table></td><td></td></tr>
<tr><td>Cancel External Drive No.
"Hold-EX"</td><td>Specify the linking external drive No. when [Hold:Reset by EX] is selected in [Hold-OUT]<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>-</td></tr><tr><td>1 to 20</td><td>1 to 20</td></tr></table></td><td>If the alarm status is "reset", the maintained output status is canceled when you switch the external drive No. specified here from OFF to ON
The number of the displayed channels varies depending on the device model.</td></tr>
</table>

Remarks **Relation with the decimal location in the scale setting value**

The decimal locations of the alarm value and dead band are changed according to the one of the scale setting value for the setting channel. If you change the decimal location of the scale in Range settings, the ones of the alarm value and dead band are changed accordingly. The dead band is specified with an absolute value.

2. Copy and paste operations for alarm setting

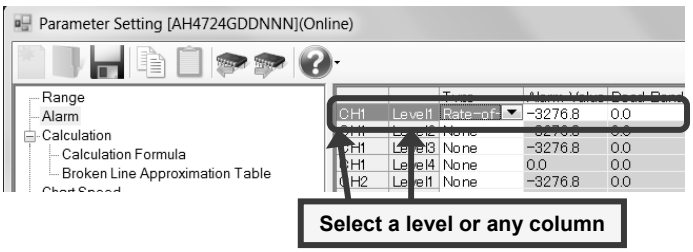
For the alarm setting, you can copy and paste parameters per level (parameters belonging to one alarm level).

<How to copy/paste>

(1) Select the copy source

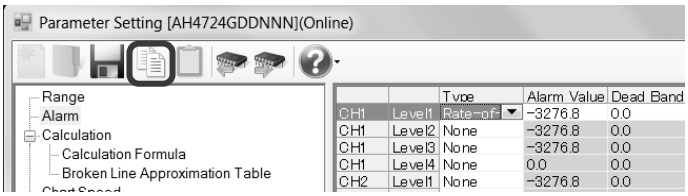
Click to select a level or any column to copy from.

* You can copy parameters per one level. That means, you cannot select multiple levels to copy the parameters at a time.



(2) Click the [Copy] button

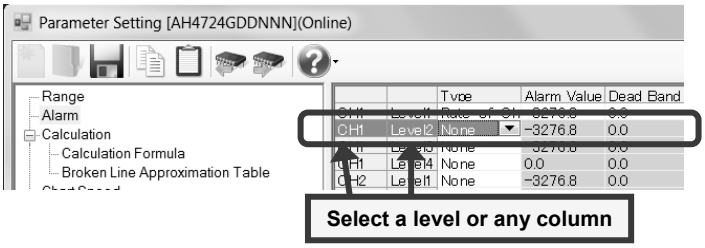
Click the [Copy] button from the tool bar to copy the selected parameters.



(3) Select the paste destination

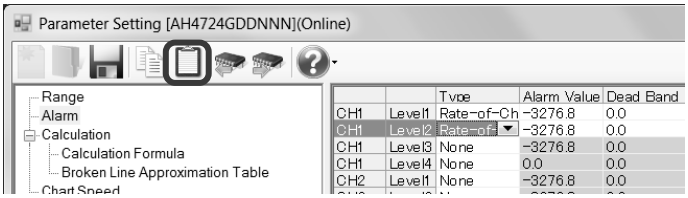
Click to select a level or any column to paste to.

* You can paste the parameters to one level. That means, you cannot select multiple levels to paste the parameters at a time.



(4) Click the [Paste] button

Click the [Paste] button from the tool bar to paste the parameters to the selected location.

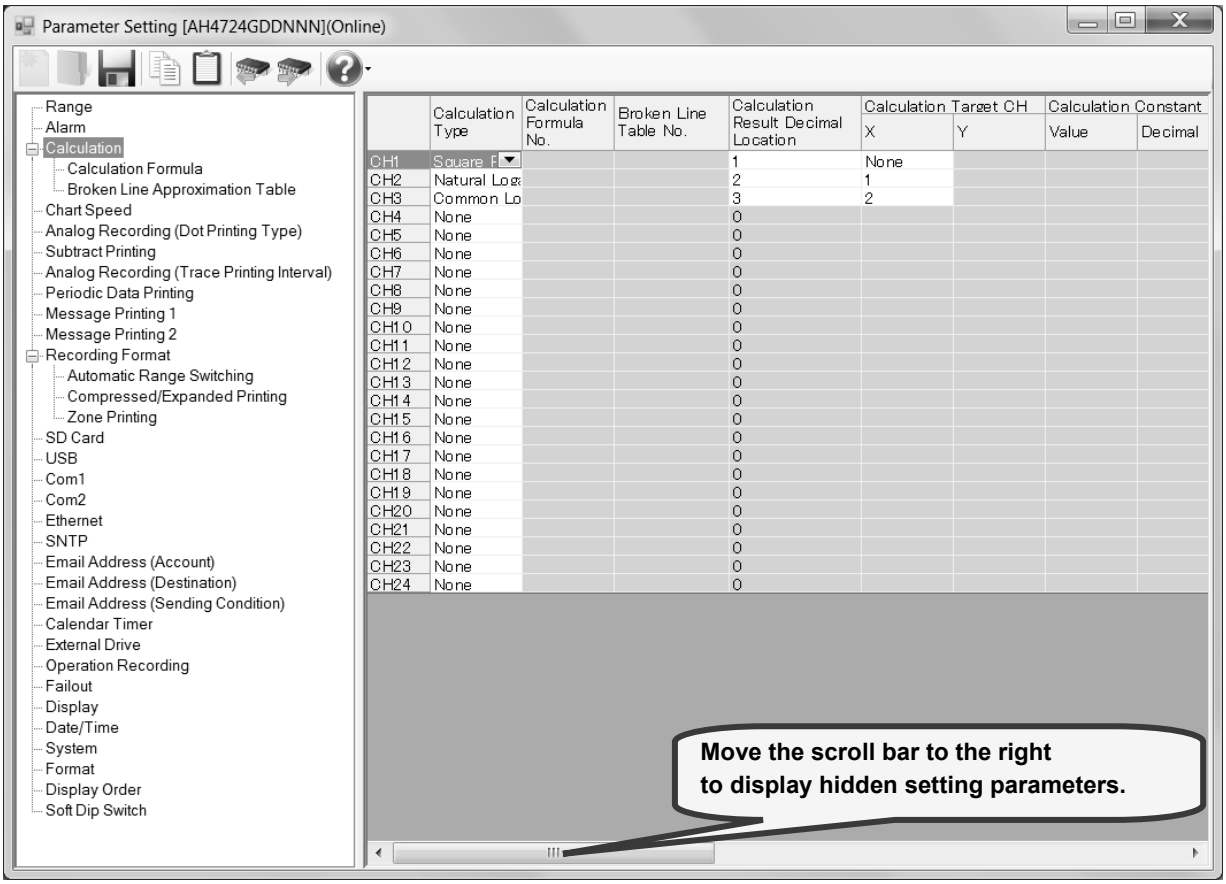


Remarks **"Keeping copied data" and "Copy/paste unit"**

- The copied parameters are kept after a paste operation until the [Copy] button is clicked the next time. Note that, if you move to another setting item in the edit panel after a copy operation, the copied parameters are lost.
- You cannot copy or paste per setting parameter. The copy or paste operation can be used by one level.

6-6-3. Calculation Settings "Calc"

- The calculation settings for the input channel are displayed in the table format to enable you to edit them.
- The columns of the table present the setting parameter types, and the rows present the channel numbers.
- When you select [Calculation Formula] in [Calculation Type], you need to perform the Calculation Formula Settings (refer to section 6-4-4). When you select [Broken Line Approximation], you need to perform the Broken Line Approximation Table Settings (refer to section 6-6-5).
  * Refer to the instruction manual of the device and the manual for option for more details on the settings.
- The number of the displayed channels varies depending on the device model.



1. Parameter setting

For the calculation settings, you can edit the following setting parameters by the channel.

[Calculation Settings "Calc" Parameter List]

Setting parameter	Function	Remarks
Calculation Type "Kind"	Select the calculation type	*1: Setting is available for pen type only.

Software screen	Device screen
None	None
Square Roots Calculation	Root
Natural Logarithmic Calculation	LoGe
Common Logarithmic Calculation	LOG10
Integration Calculation	INT
Temperature/Humidity Calculation	Humidity
Data Communication Input	COM.Input
Arithmetic Calculation 1(MUL)	MUL
Arithmetic Calculation 2(DIV)	DIV
Maximum Value Calculation	High-Peak
Minimum Value Calculation	Low-Peak
Average Calculation	Average
Exponential Calculation	Power
Absolute Value Calculation	ABS *1
Calculation Formula	Formula
Broken Line Approximation	BrokenLine

<table>
<tr><td>Calculation Formula No.
"Form.No."</td><td>When you select [Calculation Formula] in [Calculation Type], specify the calculation formula No. to use
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>-</td></tr><tr><td>1 to 12</td><td>1 to 12</td></tr></table></td><td></td></tr>
<tr><td>Broken Line Table No.
"Seg.Table No."</td><td>When you select [Broken Line Approximation] in [Calculation Type], specify the broken line table No. to use
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>-</td></tr><tr><td>1 to 6</td><td>1 to 6</td></tr></table></td><td></td></tr>
<tr><td>Calculation Result Decimal Location
"Decimal point"</td><td>Specify the decimal location in the calculation result
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>0 to 3</td><td>0 to 3</td></tr></table></td><td></td></tr>
<tr><td>Calculation Target CH X
"CH.X"</td><td>Specify the target X data to be used in calculations at the CH (Set connecting device registered No. [communication option])
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>-</td></tr><tr><td>1 to 24</td><td>1 to 24</td></tr></table></td><td>The number of the displayed channels varies depending on the device model.</td></tr>
<tr><td>Calculation Target CH Y
"CH.Y"</td><td>Specify the target Y data to be used in calculations at the CH (Set the CH No. which assigned as connecting device reading data [communication option])
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>-</td></tr><tr><td>1 to 24</td><td>1 to 24</td></tr></table></td><td>The number of the displayed channels varies depending on the device model.</td></tr>
<tr><td>Decimal Location</td><td>Specify the decimal location in the calculation constant A - D</td><td>It can be set to three places of decimals. Example: -30.000</td></tr>
<tr><td>Calculation Constant A
"Const.A"</td><td>When you select [Arithmetic Calculation 1(MUL)] and [Arithmetic Calculation 2(DIV)] in [Calculation Type], specify [Calculation Constant A]</td><td rowspan="4">-30000 to 99999
This changes according to the decimal location of each calculation constant value
It can be set to three places of decimals. Example: -30.000</td></tr>
<tr><td>Calculation Constant B
"Const.B"</td><td>When you select [Arithmetic Calculation 1(MUL)] and [Arithmetic Calculation 2(DIV)] in [Calculation Type], specify [Calculation Constant B]</td></tr>
<tr><td>Calculation Constant C
"Const.C"</td><td>When you select [Arithmetic Calculation 1(MUL)] in [Calculation Type],
specify [Calculation Constant C]</td></tr>
<tr><td>Calculation Constant D
"Const.D"</td><td>When you select [Arithmetic Calculation 1(MUL)] in [Calculation Type],
specify [Calculation Constant D]</td></tr>
<tr><td>Start Time (Hour, Minute)
"[Start]"</td><td>Specify the calculation start time
After setting this value, the calculation is postponed until the specified start time (Until then, the data is invalid)
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>0*: 00 to 23*: 59</td><td>0*: 00 to 23*: 59</td></tr></table>*"-" can be set as the "hour" in the time</td><td>If "-" is set, the calculation starts as follows:.
<u>Integration:</u>
Starts by the external reset
<u>Maximum value, Minimum value, Average, Calculation formula:</u>
Starts when the power is turned on or immediately after setting this value</td></tr>
<tr><td>Interval (Hour, Minutes)
"[Interval]"</td><td>Specify the calculation interval
When an integration operation is specified, the integrated value is reset with this interval
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>0*: 00 to 24*: 59</td><td>0*: 00 to 24*: 59</td></tr></table>*"-" can be set as the "hour" in the time</td><td>If "-" is set, the interval is invalid.</td></tr>
<tr><td>Time Unit
"TimeUnit"</td><td>Integration time unit
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Hour</td><td>Hour</td></tr><tr><td>Minute</td><td>Min</td></tr><tr><td>Second</td><td>Sec</td></tr></table></td><td></td></tr>
<tr><td>Reset Method
"INT-Reset"</td><td>Specify the method to reset the integrated value from an integration operation
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>None</td></tr><tr><td>Interval</td><td>Interval</td></tr><tr><td>External Drive (Batch)</td><td>EX (All)</td></tr><tr><td>External Drive (Individual)</td><td>EX</td></tr></table></td><td></td></tr>
<tr><td>External Drive No.
"INT-Reset.EX"</td><td>If you select [External Drive (Batch)] or [External Drive (Individual)] in [Reset Method], specify the linking external drive No.
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>-</td></tr><tr><td>1 to 20</td><td>1 to 20</td></tr></table></td><td>The number varies depending on the device model.</td></tr>
</table>

2. Copy and paste operations for calculation setting

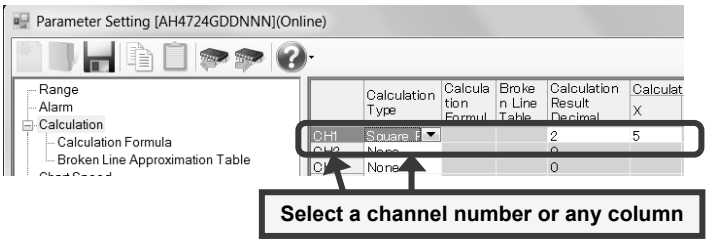
For the calculation setting, you can copy and paste parameters per channel (parameters belonging to one channel).

<How to copy/paste>

(1) Select the copy source

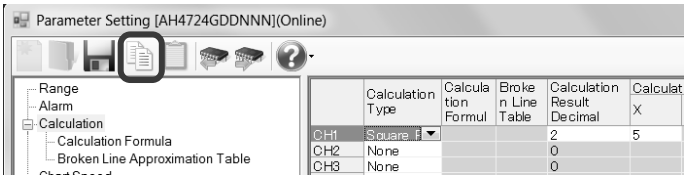
Click to select a channel number or any column to copy from.

* You can copy parameters per one channel. That means you cannot select multiple channels to copy the parameters at a time.



(2) Click the [Copy] button

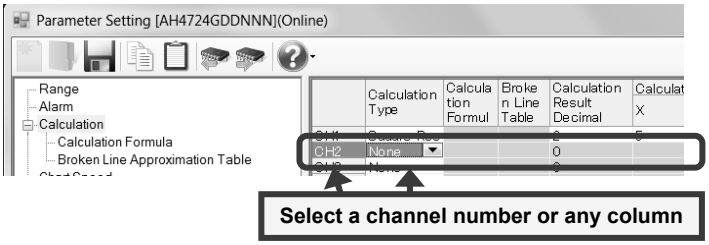
Click the [Copy] button from the tool bar to copy the selected parameters.



(3) Select the paste destination

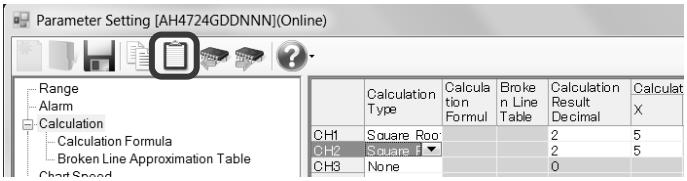
Click to select a channel number or any column to paste to.

* You can paste the parameters to one channel. That means you cannot select multiple channels to paste the parameters at a time.



(4) Click the [Paste] button

Click the [Paste] button from the tool bar to paste the parameters to the selected location.

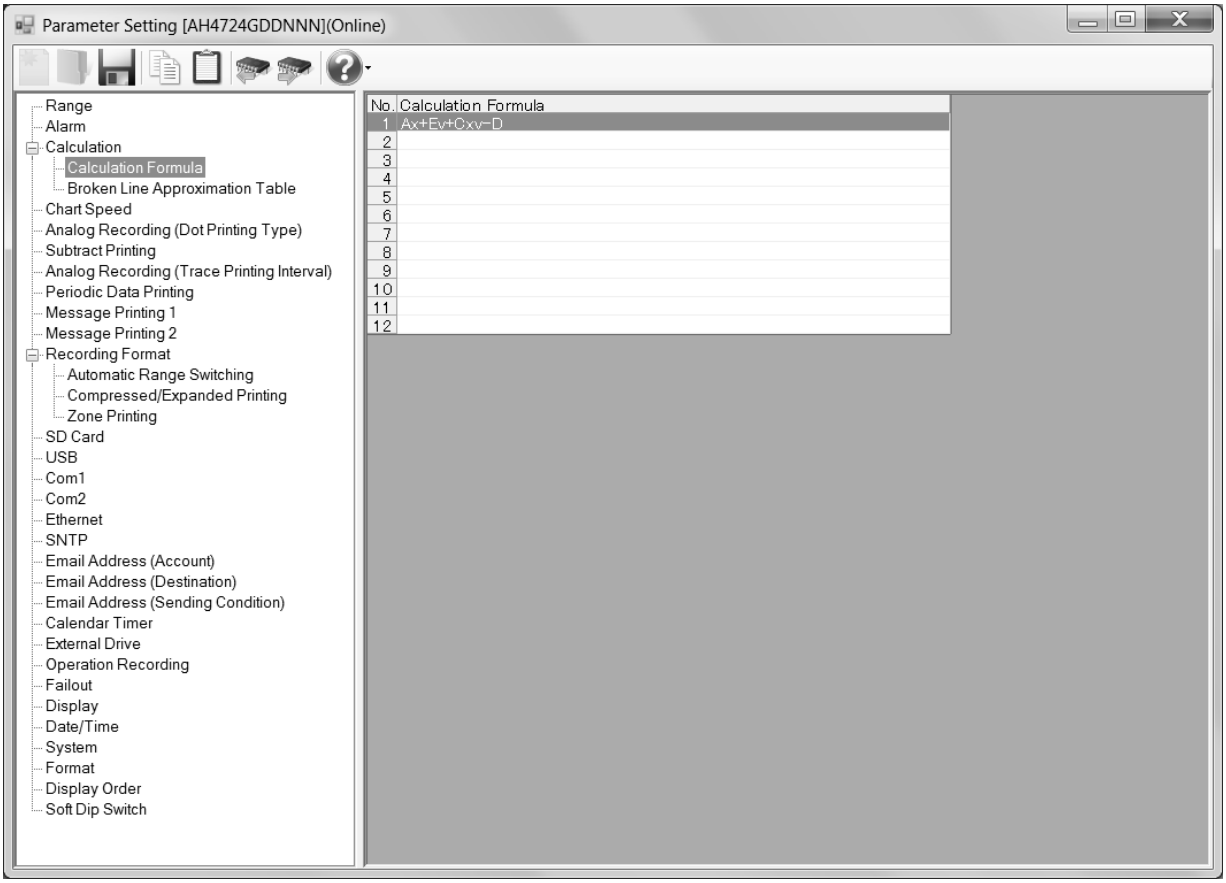


Remarks "Keeping copied data" and "Copy/paste unit"

- The copied parameters are kept after a paste operation until the [Copy] button is clicked the next time. Note that, if you move to another setting item in the edit panel after a copy operation, the copied parameters are lost.
- You cannot copy or paste per setting parameter. The copy or paste operation can be used by one channel.

6-6-4. Calculation Formula Settings "Formula"

- The settings for the calculation formula are displayed in the table format to enable you to edit them.
- The columns of the table present the calculation formulas, and the rows present the calculation formula numbers.
- You can use a registered calculation formula by selecting it in [Calculation Type] in the [Calculation] settings.
  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

You can configure the following parameters in the calculation formula settings.

[Calculation Formula Settings "Formula" Parameter List]

Setting parameter	Function	Remarks
Calculation Formula "Formula"	Specify the calculation formula to be used when you set [Calculation Formula] in the [Calculation] settings, using 50 characters (one byte) at a maximum Up to 12 formulas can be registered, common to all channels	Available characters (one byte): ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789+-*/%^().,<>=!# (refer to section 6-1-2)

2. Copy and paste operations for calculation formula setting

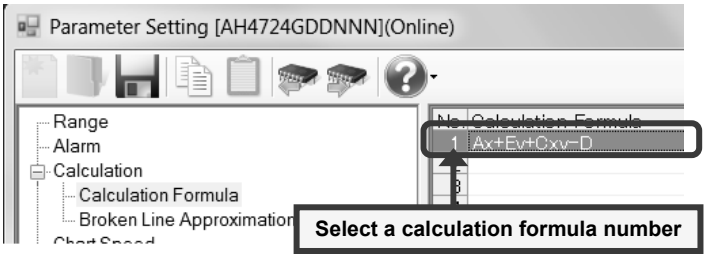
For the calculation formula setting, you can copy and paste parameters per calculation formula (parameters belonging to one calculation formula number).

<How to copy/paste>

(1) Select the copy source

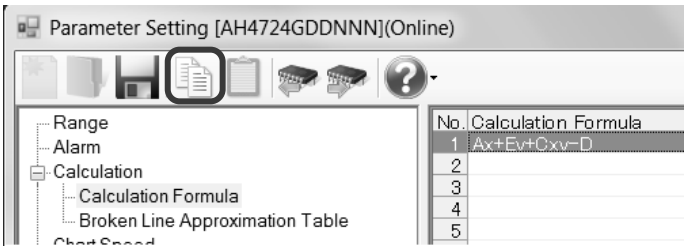
Click to select a calculation formula number to copy from.

* You can copy parameters per one calculation formula number. That means you cannot select multiple calculation formula numbers to copy the parameters at a time.



(2) Click the [Copy] button

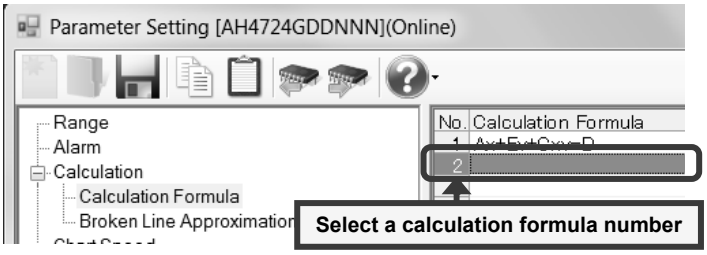
Click the [Copy] button from the tool bar to copy the selected parameters.



(3) Select the paste destination

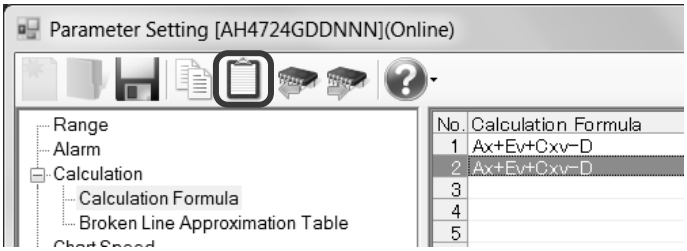
Click to select a calculation formula number to paste to.

* You can paste the parameters to one calculation formula number. That means you cannot select multiple calculation formula numbers to paste the parameters at a time.



(4) Click the [Paste] button

Click the [Paste] button from the tool bar to paste the parameters to the selected location.

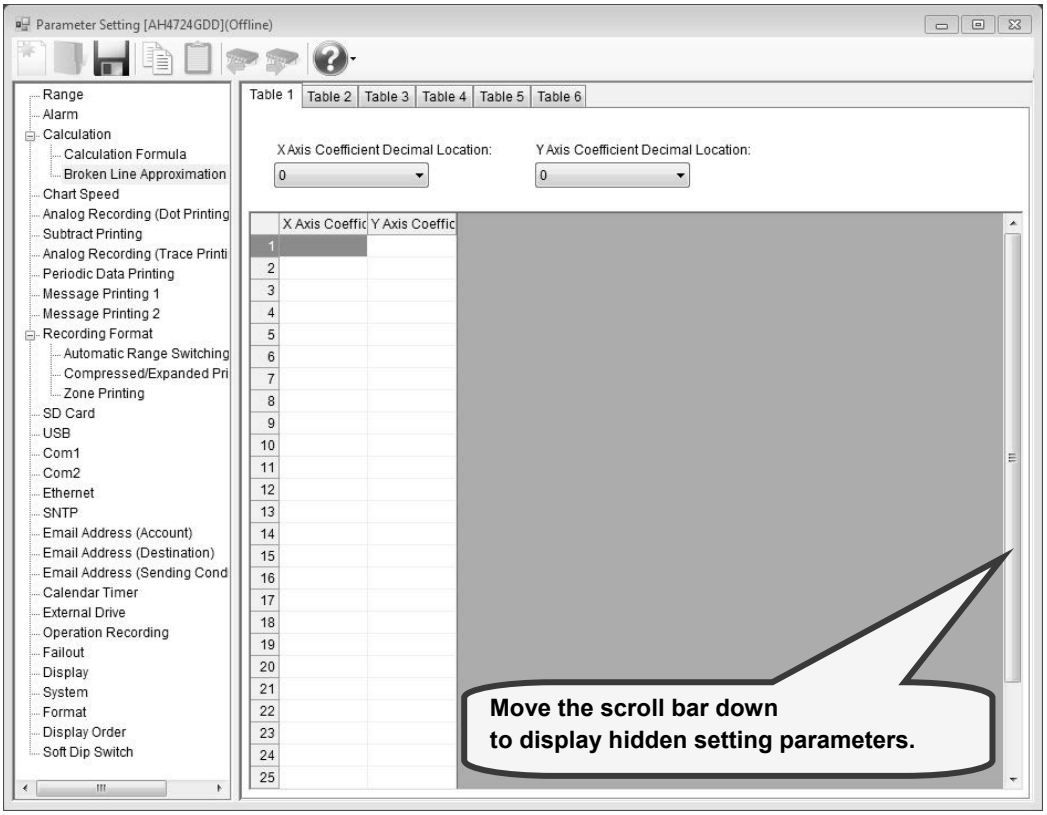


Remarks "Keeping copied data" and "Copy/paste unit"

- The copied parameters are kept after a paste operation until the [Copy] button is clicked the next time. Note that, if you move to another setting item in the edit panel after a copy operation, the copied parameters are lost.
- You cannot copy or paste per setting parameter. The copy or paste operation can be used by one calculation formula number.

6-6-5. Broken Line Approximation Table Settings "Seg.Tbl"

- The settings for the broken line approximation table are displayed in the [Tables 1] to [Table 6] tabs to enable you to edit them.
- The columns of the table present the coefficient types, and the rows present the coefficient numbers. Specify the decimal location of each coefficient above the table.
- You can set 6 tables and 30 broken lines at a maximum per table. For each channel with [Broken Line Approximation] selected in [Calculation Type], select a table to use from these 6 tables.
  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

You can configure the following parameters in the broken line approximation table settings.

[Broken Line Approximation Table Settings "Seg.Tbl" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>X Axis Coefficient Decimal Location "X.Dot"</td><td>Specify the X axis coefficient decimal location
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>0 to 3</td><td>0 to 3</td></tr></table></td><td>It can be set to three places of decimals. Example: -30.000</td></tr>
<tr><td>Y Axis Coefficient Decimal Location "Y.Dot"</td><td>Specify the Y axis coefficient decimal location
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>0 to 3</td><td>0 to 3</td></tr></table></td><td>It can be set to three places of decimals. Example: -30.000</td></tr>
<tr><td>X Axis Coefficient "X-01 to X-30"</td><td>Specify X1 - X30 in the broken line approximation table
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Disabled</td><td>-</td></tr><tr><td>-30000 to 99999</td><td>-30000 to 99999</td></tr></table></td><td rowspan="2"></td></tr>
<tr><td>Y Axis Coefficient "Y-01 to Y-30"</td><td>Specify Y1 - Y30 in the broken line approximation table
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Disabled</td><td>-</td></tr><tr><td>-30000 to 99999</td><td>-30000 to 99999</td></tr></table></td></tr>
</table>

2. Copy and paste operations for broken line approximation table setting

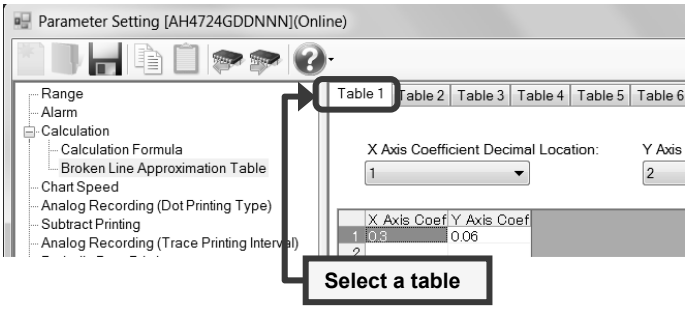
For the broken line approximation table setting, you can copy and paste parameters per table (parameters belonging to one table).

<How to copy/paste>

(1) Select the copy source

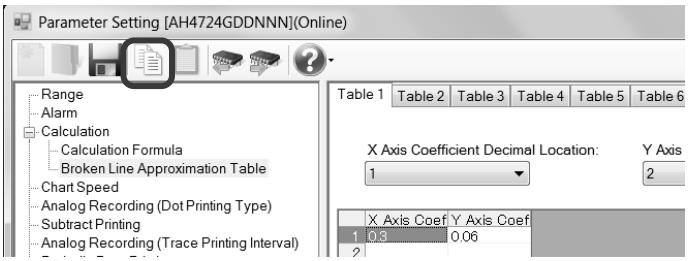
Click to select a table to copy from.

* You can copy parameters per one table. That means you cannot select multiple tables to copy the parameters at a time.



(2) Click the [Copy] button

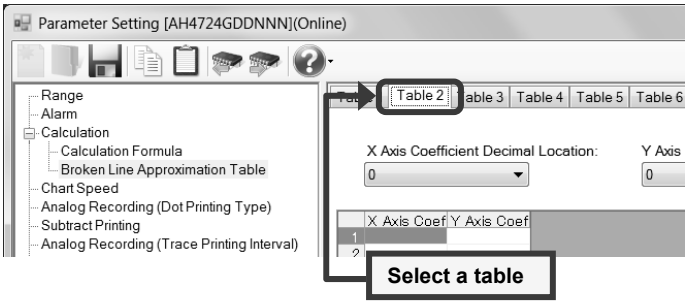
Click the [Copy] button from the tool bar to copy the selected parameters.



(3) Select the paste destination

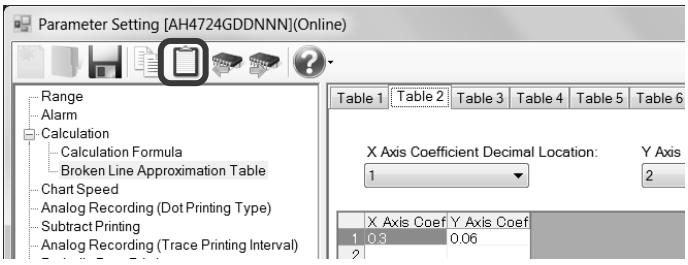
Click to select a table to paste to.

* You can paste the parameters to one table. That means you cannot select multiple tables to paste the parameters at a time.



(4) Click the [Paste] button

Click the [Paste] button from the tool bar to paste the parameters to the selected location.



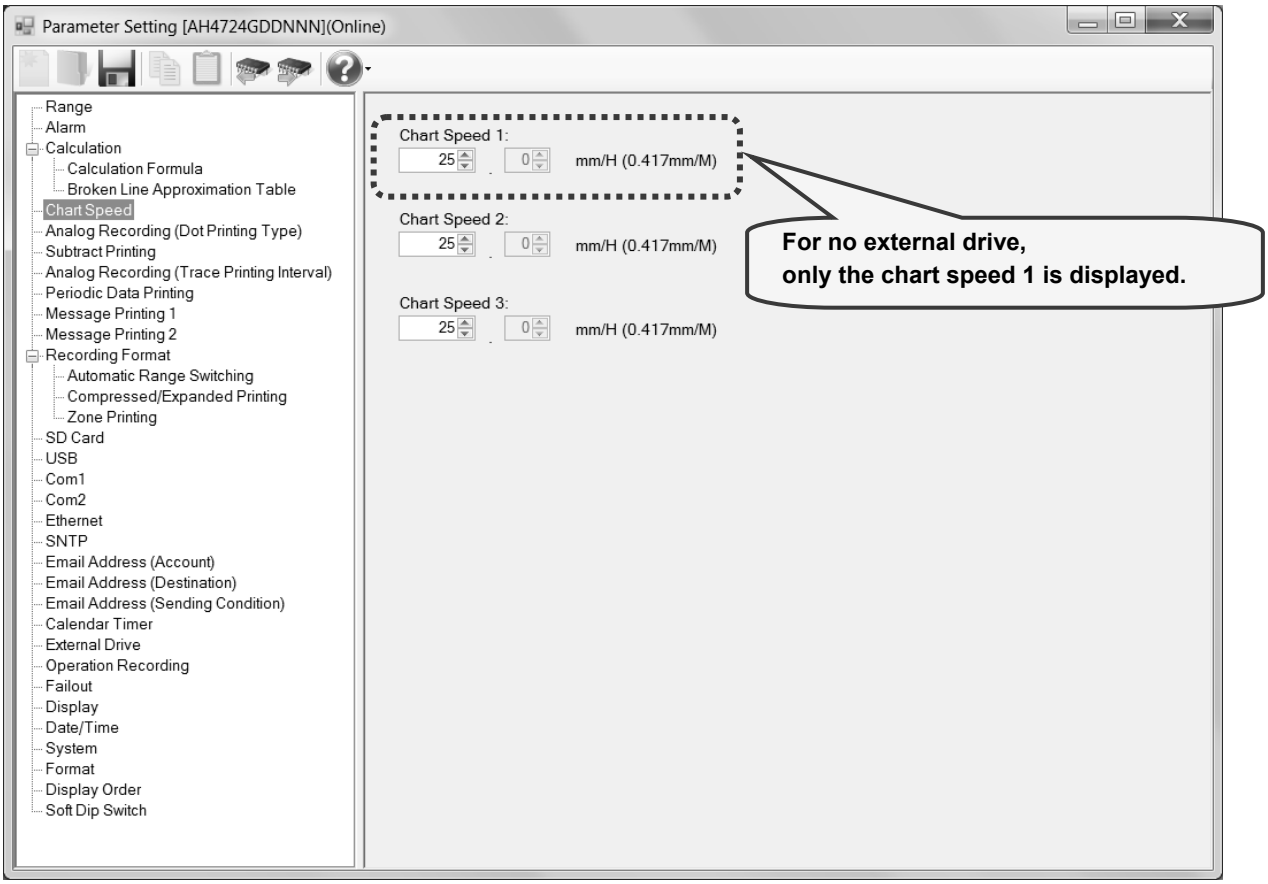
Remarks "Keeping copied data" and "Copy/paste unit"

- The copied parameters are kept after a paste operation until the [Copy] button is clicked the next time. Note that, if you move to another setting item in the edit panel after a copy operation, the copied parameters are lost.
- You cannot copy or paste per setting parameter. The copy or paste operation can be used by one table.

6-6-6. Chart Speed Settings "Chart" (for multi-point type)

- The chart speed settings are displayed to enable you to edit them.
- The chart speed 1 to 3 is displayed. The left and right numbers present the integer and fraction parts respectively. The setting unit is mm/H. The value converted to mm/M is displayed in parentheses next to the chart speed display unit (mm/H).
- For no external drive, you can set the value of the chart speed 1 only (for multi-point type).

* Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

You can configure the following parameters in the chart speed settings.

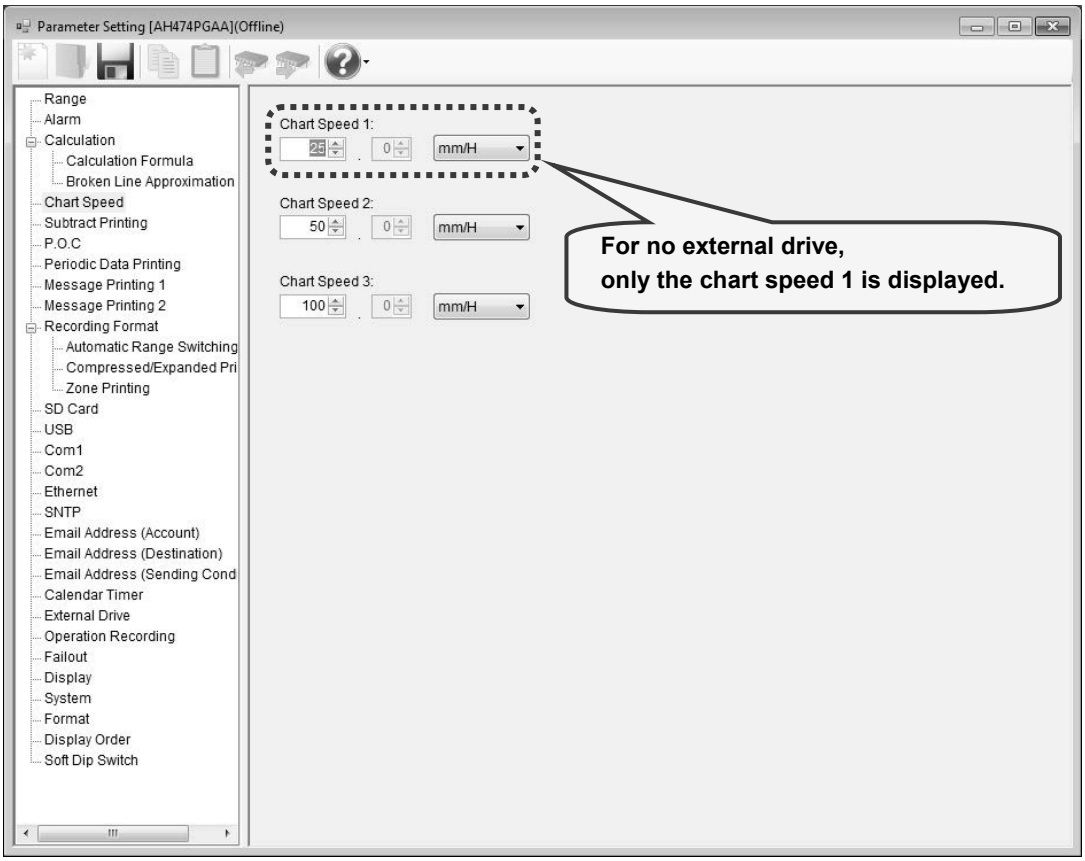
[Chart Speed Settings "Chart" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>Chart Speed 1
"ChartSpeed1"</td><td>Configure the chart speed 1
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>1 to 1500</td><td>1 to 1500</td></tr><tr><td>12.5 *1</td><td>12.5 *1</td></tr></table></td><td rowspan="3">*1: You can set 0 (12.0mm/H) or 5 (12.5mm/H) for the right fraction part when the left integer part is 12.</td></tr>
<tr><td>Chart Speed 2
"ChartSpeed2"</td><td>Configure the chart speed 2
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>1 to 1500</td><td>1 to 1500</td></tr><tr><td>12.5 *1</td><td>12.5 *1</td></tr></table></td></tr>
<tr><td>Chart Speed 3
"ChartSpeed3"</td><td>Configure the chart speed 3
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>1 to 1500</td><td>1 to 1500</td></tr><tr><td>12.5 *1</td><td>12.5 *1</td></tr></table></td></tr>
</table>

6-6-7. Chart Speed Settings "Chart" (for pen type)

- The chart speed settings are displayed to enable you to edit them.
- The chart speed 1 to 3 is displayed. The left and right numbers present the integer and fraction parts respectively. The setting unit is mm/H or mm/M.
- For no external drive, you can set the value of the chart speed 1 only (for pen type).

* Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

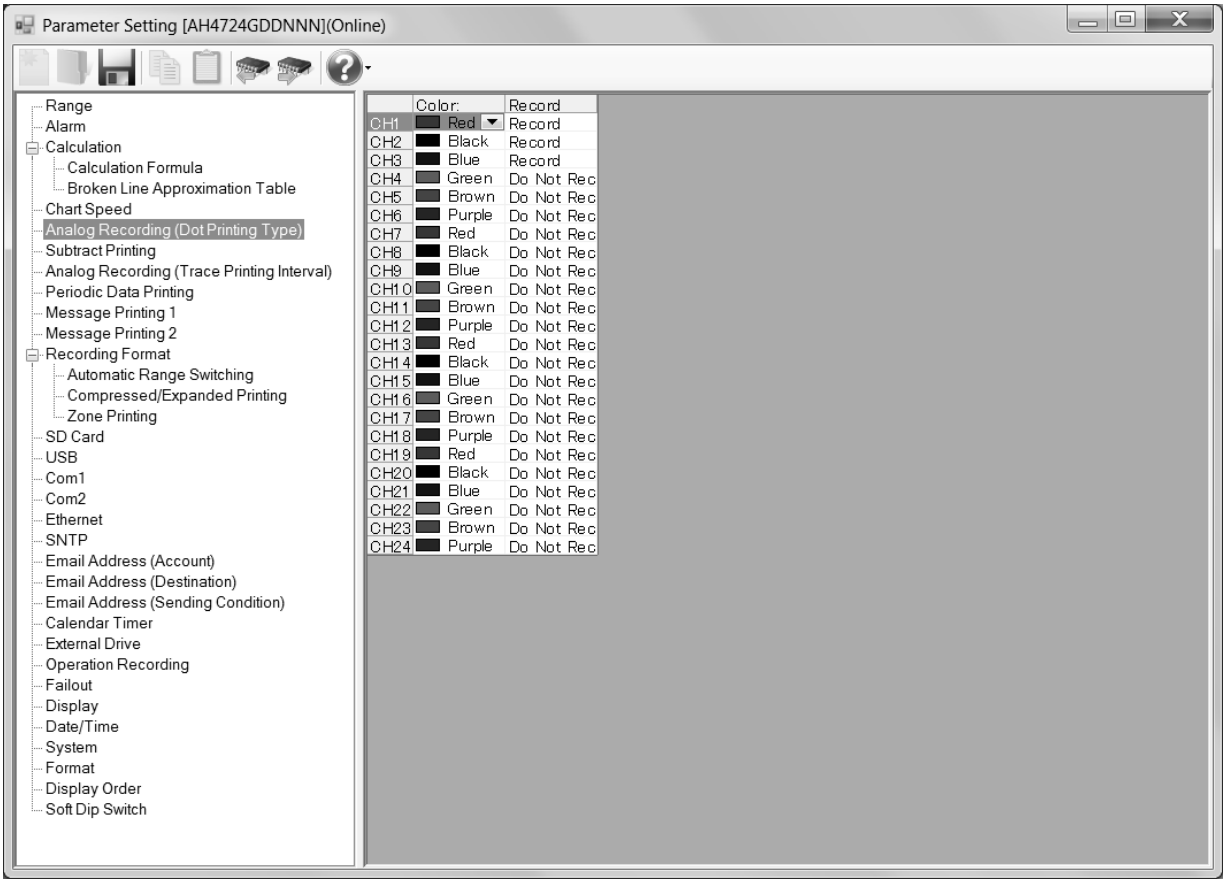
You can configure the following parameters in the chart speed settings.

[Chart Speed Settings "Chart" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>Chart Speed 1
"ChartSpeed1"</td><td>Configure the chart speed 1
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>1 to 600 *1</td><td>1 to 600 *1</td></tr><tr><td>1 to 200 *2</td><td>1 to 200 *2</td></tr><tr><td>12.5 *3</td><td>12.5 *3</td></tr></table></td><td rowspan="4">*1: if the unit is mm/H
*2: If the unit is mm/M
*3: You can set 0 (12.0mm/H) or 5 (12.5mm/H) for the left fraction part when the left integer part is 12 and unit is mm/H.
*4: When the chart speed is12.5mm/H and unit is changed to mm/M, unit is force changed to 12.0mm/M and changing of integer part is disabled.</td></tr>
<tr><td>Chart Speed 2
"ChartSpeed2"</td><td>Configure the chart speed 2
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>1 to 600 *1</td><td>1 to 600 *1</td></tr><tr><td>1 to 200 *2</td><td>1 to 200 *2</td></tr><tr><td>12.5 *3</td><td>12.5 *3</td></tr></table></td></tr>
<tr><td>Chart Speed 3
"ChartSpeed3"</td><td>Configure the chart speed 3
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>1 to 600 *1</td><td>1 to 600 *1</td></tr><tr><td>1 to 200 *2</td><td>1 to 200 *2</td></tr><tr><td>12.5 *3</td><td>12.5 *3</td></tr></table></td></tr>
<tr><td>Unit</td><td>Select unit of chart speed 1
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>mm/H *4</td><td>mm/H *4</td></tr><tr><td>mm/M *4</td><td>mm/M *4</td></tr></table></td></tr>
</table>

6-6-8. Analog Recording (Dot Printing Type) Settings "Dot" (for multi-point type)

- The analog recording (dot printing type) settings for the input channels are displayed in the table format to enable you to edit them.
- The columns of the table present the setting parameter types, and the rows present the channel numbers.
- The number of the displayed channels varies depending on the device model.
  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

You can configure the following parameters in the chart speed settings.

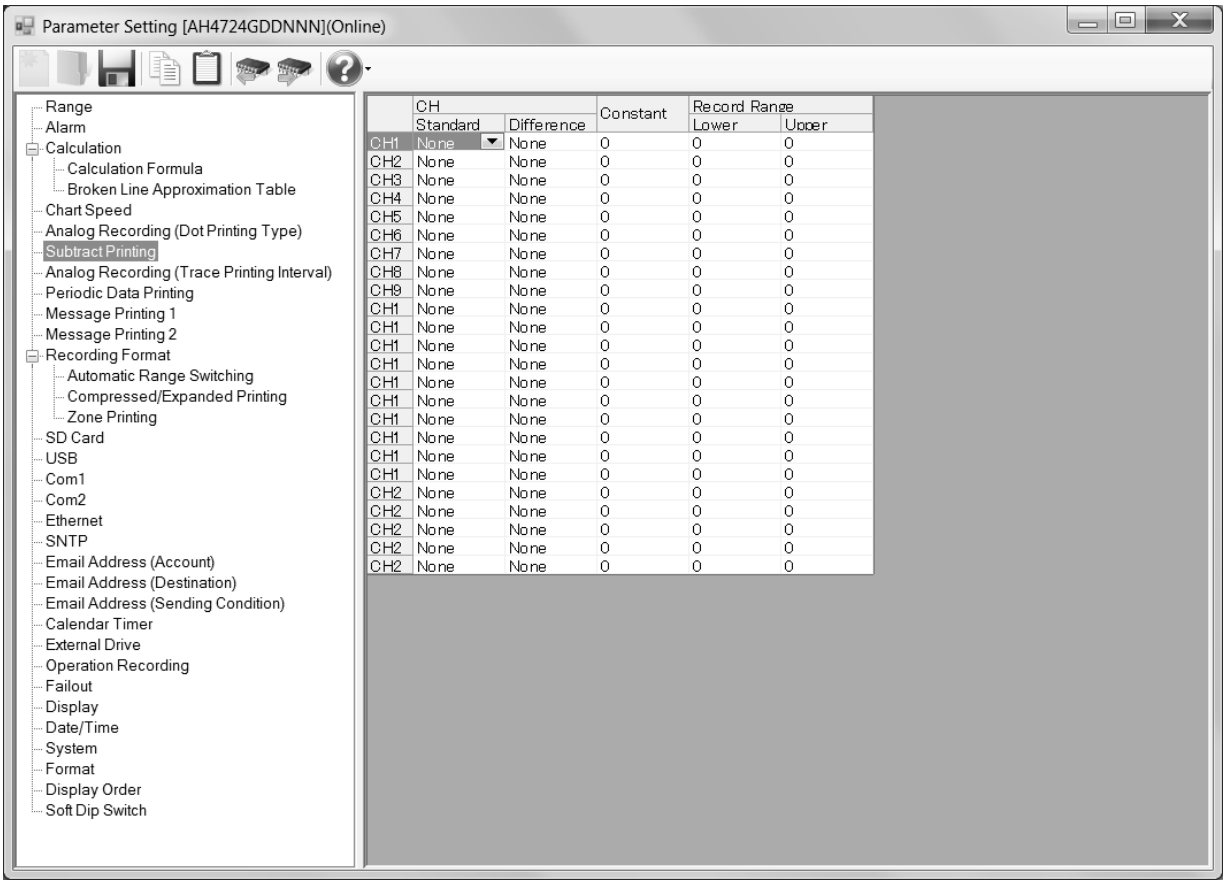
[Analog Recording (multi Point Type) Settings "Dot" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>Color
"Color"</td><td>Select the chart color
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Red</td><td>Red</td></tr><tr><td>Black</td><td>Black</td></tr><tr><td>Blue</td><td>Blue</td></tr><tr><td>Green</td><td>Green</td></tr><tr><td>Brown</td><td>Brown</td></tr><tr><td>Purple</td><td>Purple</td></tr></table></td><td></td></tr>
<tr><td>Record
"Rec"</td><td>Specify whether the analog recording is turned on or off
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Record</td><td>ON</td></tr><tr><td>Do Not Record</td><td>OFF</td></tr></table></td><td></td></tr>
</table>

6-6-9. Subtract Printing Settings "Sub Prt"

- The subtract printing settings for the input channels are displayed in the table format to enable you to edit them.
- The columns of the table present the setting parameter types, and the rows present the channel numbers.
- The number of the displayed channels varies depending on the device model.

  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

You can configure the following parameters in the subtract printing settings.

[Subtract Printing Settings "Sub Prt" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>"Kind"</td><td>Specify the kind of subtract printing
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Set the standard CH to [None]</td><td>None</td></tr><tr><td>Set the standard CH and difference CH to other than [None]</td><td>CH.X - CH.Y</td></tr><tr><td>Set the difference CH to [None]</td><td>CH.X - Const</td></tr></table></td><td>There is no option on the software side corresponding to "Kind".
The kind of the subtract printing ("Kind") is determined by setting these parameters.</td></tr>
<tr><td>Standard CH
"CH.X"</td><td>Specify the measurement CH to be subtracted from
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>-</td></tr><tr><td>1 to 24</td><td>1 to 24</td></tr></table></td><td>The number of the displayed channels varies depending on the device model.</td></tr>
<tr><td>Difference CH
"CH.Y"</td><td>Specify the measurement CH to subtract
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>-</td></tr><tr><td>1 to 24</td><td>1 to 24</td></tr></table></td><td>The number of the displayed channels varies depending on the device model.</td></tr>
<tr><td>Constant
"Const"</td><td>Specify the reference value to be subtracted from CH.X</td><td rowspan="3">-30000 to 99999
The decimal location changes according to the one of the scale
When the standard CH is set to [None], the decimal location is 0</td></tr>
<tr><td>Record Range Lower Limit
"Sub.REC-L"</td><td>Specify the lower limit of the subtract record range when recording the chart</td></tr>
<tr><td>Record Range Upper Limit
"Sub.REC-H"</td><td>Specify the upper limit of the subtract record range when recording the chart</td></tr>
</table>

2. Copy and paste operations for subtract printing setting

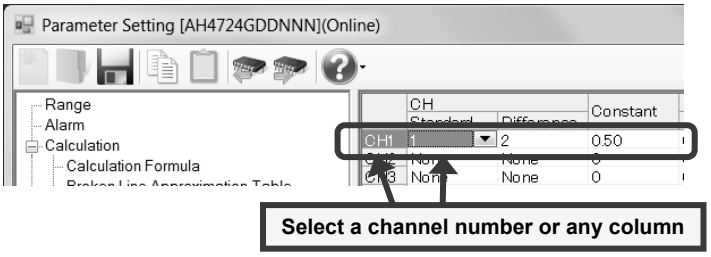
For the subtract printing setting, you can copy and paste parameters per channel (parameters belonging to one channel).

<How to copy/paste>

(1) Select the copy source

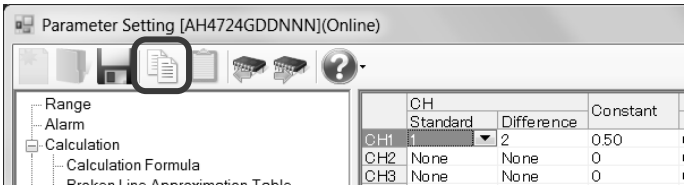
Click to select a channel number or any column to copy from.

* You can copy parameters per one channel. That means you cannot select multiple channels to copy the parameters at a time.



(2) Click the [Copy] button

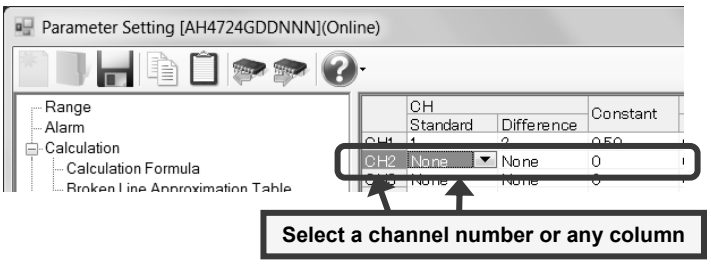
Click the [Copy] button from the tool bar to copy the selected parameters.



(3) Select the paste destination

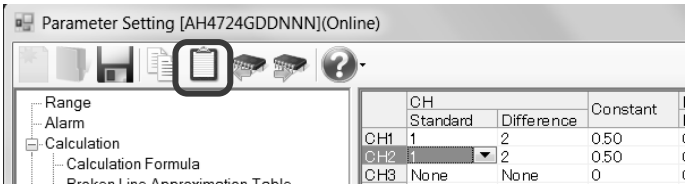
Click to select a channel number or any column to paste to.

* You can paste the parameters to one channel. That means you cannot select multiple channels to paste the parameters at a time.



(4) Click the [Paste] button

Click the [Paste] button from the tool bar to paste the parameters to the selected location.

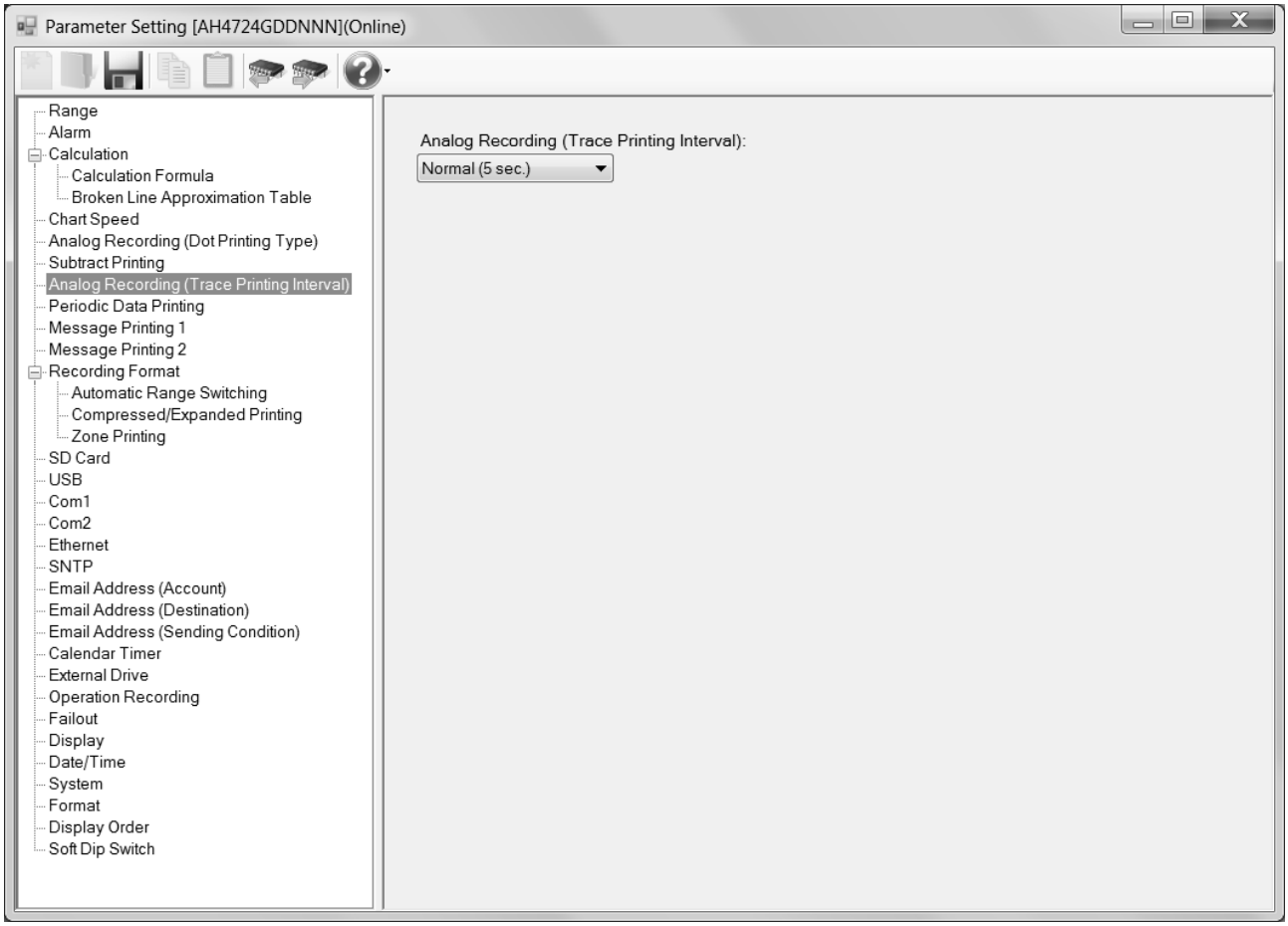


Remarks **"Keeping copied data" and "Copy/paste unit"**

- The copied parameters are kept after a paste operation until the [Copy] button is clicked the next time. Note that, if you move to another setting item in the edit panel after a copy operation, the copied parameters are lost.
- You cannot copy or paste per setting parameter. The copy or paste operation can be used by one channel.

6-6-10. Analog Recording (Trace Printing Interval) Settings "Dot.Int" (for multi-point type)

- The settings for the analog recording (trace printing interval) are displayed to enable you to edit them.
  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

You can configure the following parameters in the analog recording (trace printing interval) settings.

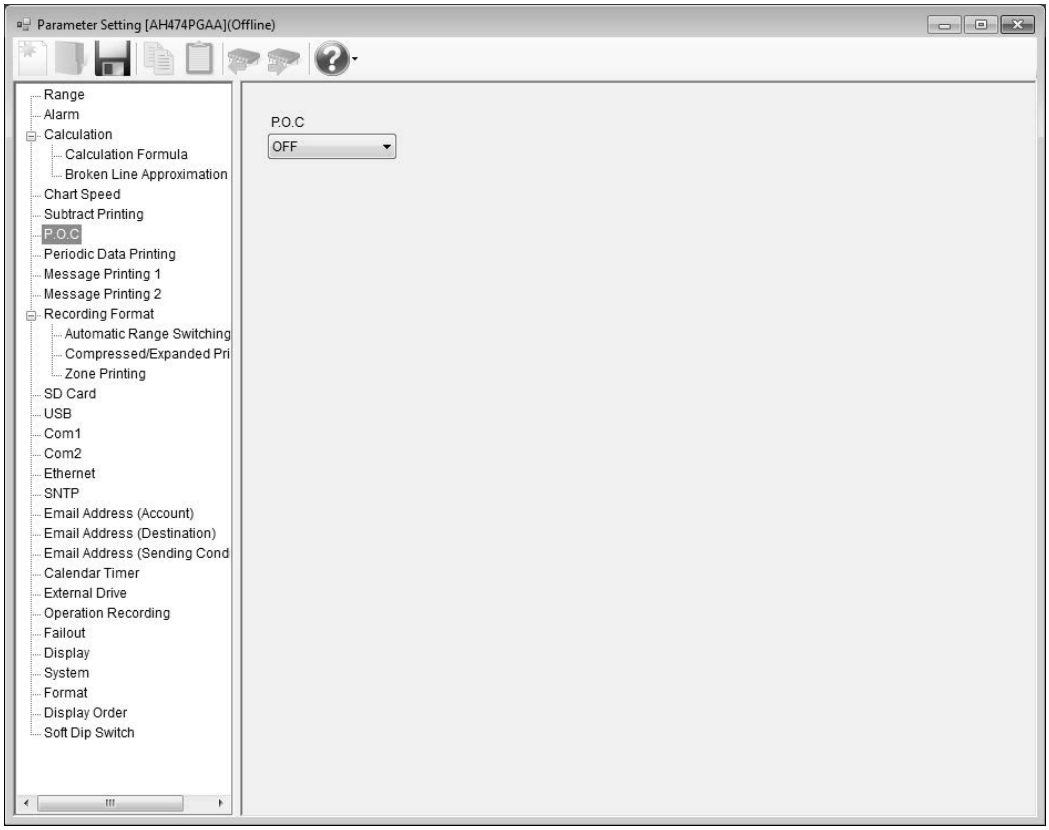
[Analog Recording (Trace Printing Interval) Settings "Dot.Int" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>Analog Recording (Trace Printing Interval)
"Dot-Interval"</td><td>Specify the trace printing interval
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Normal (5 sec.)</td><td>Normal</td></tr><tr><td>Quick (3 sec.)</td><td>Fast</td></tr><tr><td>Chart Synchronization *1</td><td>Synchro *1</td></tr></table></td><td>*1: If the “Chart Synchronization” is selected, operation recording settings “Ope.rec” (refer to section 6-6-31) is disabled.</td></tr>
</table>

6-6-11. Time Axis Synchronization Settings “POC” (for pen type only *1 except for one-pen type)

- The settings for the time axis synchronization are displayed to enable you to edit them.
- For multi-pen type (two-pen/three-pen/four-pen).

  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

You can configure the following parameters in the time axis synchronization settings.

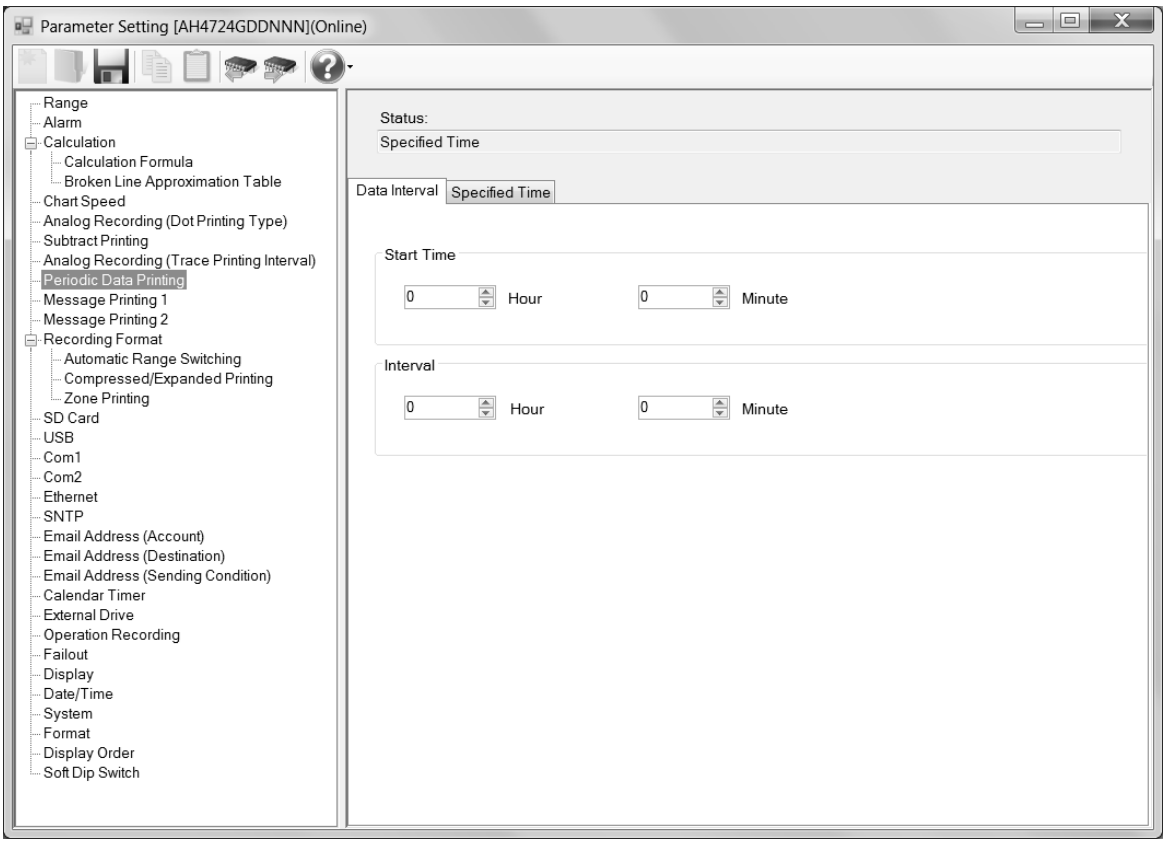
[Time Axis Synchronization Settings "POC" Parameter List]

Setting parameter	Function	Remarks
Time Axis Synchronization “POC ON/OFF”	Select Time Axis Synchronization ON/OFF	

Software screen	Device screen
With synchronize	OFF
Without synchronize	ON

6-6-12. Periodic (Data Interval) Data Printing Settings "Data.Int"

- The settings for the periodic data printing are displayed in the [Data Interval] and [Specified Time] tabs to enable you to edit them.
- In the [Data Interval] tab, the start time and the interval are displayed. The left field presents the hour (time) and the hours (interval), and the right one presents the minute (time) and the minutes (interval). In [Status] above the tabs, the setting status (interval) is displayed.
- If you set 0 hours and 1 minute or longer in [Interval], the interval printing is enabled ("Interval" is displayed in [Status]).
- You can specify per channel whether the measured data is printed or not by switching [Record] and [Do Not Record] in [Digital Recording/Printing] for the range settings (refer to section 6-6-1).
  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

You can configure the following parameters in the periodic (data interval) data printing settings.

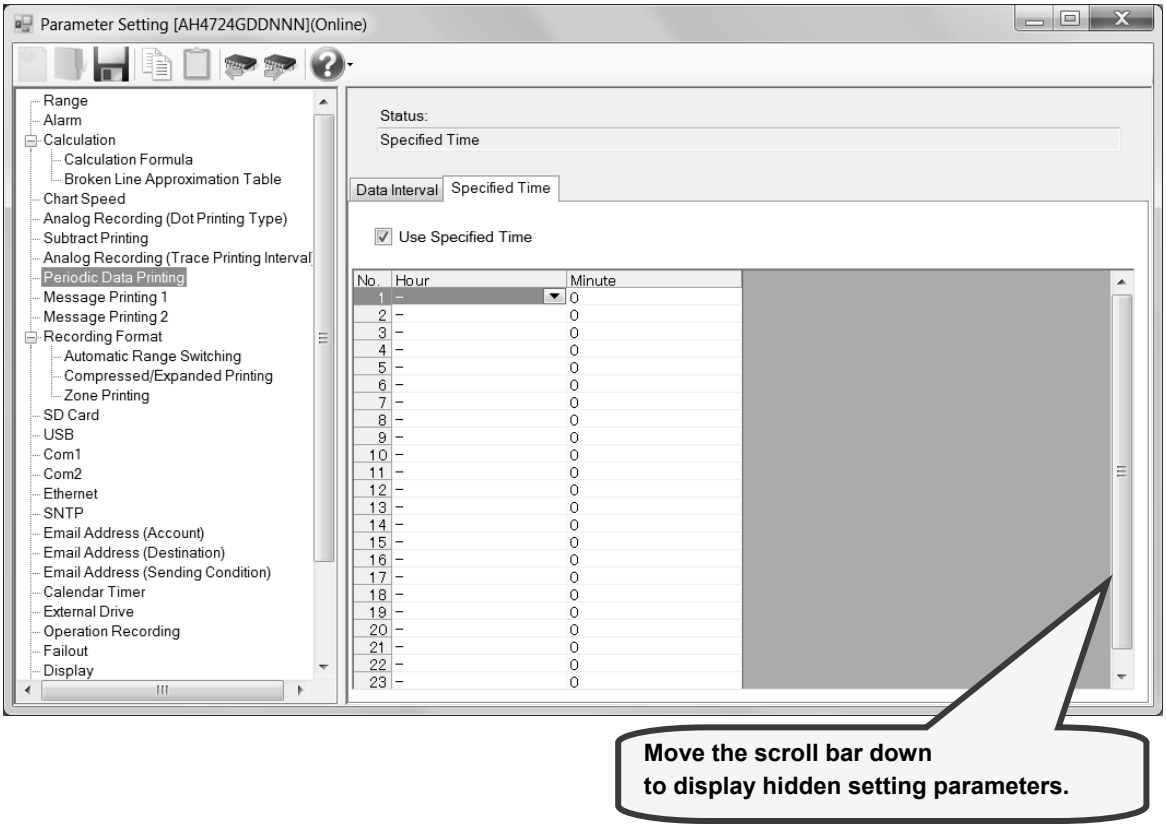
[Periodic (Data Interval) Data Printing Settings "DataInt" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>Start Time
"StartTime"</td><td>Specify the start time of the periodic data printing
(If you specify the time earlier than the current time, the start time is set to the same time on the next day)
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>0 to 23 hour</td><td>00 to 23 Hour</td></tr>
<tr><td>0 to 59 minute</td><td>00 to 59 Min</td></tr>
</table></td><td></td></tr>
<tr><td>Interval
"Interval"</td><td>Specify the interval (hours and minutes) to print the measurement value as a numerical number
(The maximum value is 24 hours and 1 minute step)
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>0 to 24 hours</td><td>00 to 24 Hour</td></tr>
<tr><td>0 to 59 minutes</td><td>00 to 59 Min</td></tr>
</table></td><td>When the interval is 0 hours and 0 minutes, "None" is displayed in [Status]. When it is another value, "Interval" is displayed in [Status].</td></tr>
</table>

* When you want to use an interval in the periodic data printing, set the interval to 0 hours and 1 minute or longer. When you want to use the specified time in the periodic data printing, reset the interval to 0 hours and 0 minutes.

6-6-13. Periodic (Specified Time) Data Printing Settings "PrtTime"

- The settings for the periodic data printing are displayed in the [Data Interval] and [Specified Time] tabs to enable you to edit them.
- In the [Specified Time] tab, the columns of the table present the setting parameter types and the rows present the specified time numbers. In [Status] above the tabs, the setting status (specified time) is displayed.
- When you set the interval to 0 hours and 0 minutes in [Data Interval] (refer to section 6-6-12) and select the [Use Specified Time] check box ☑,the specified time printing is enabled ("Specified Time" is displayed in [Status:]). You can register 24 specified times at a maximum.
- You can specify per channel whether the measured data is printed or not by switching [Record] and [Do Not Record] in [Digital Recording/Printing] for the range settings (refer to section 6-6-1).
  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

You can configure the following parameters in the periodic (specified time) data printing settings.

[Periodic (Specified Time) Data Printing Settings "PrtTime" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>Specified Time
"PrintTime"</td><td>Specify whether the specified time recording is turned on or off
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Switch ON and OFF using the check box</td><td>Switch ON and Off using the F1 key</td></tr></table>
Specify the interval (hours and minutes) to print the measurement value as a numerical number
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>0 to 23* hour</td><td>00 to 23* Hour</td></tr><tr><td>0 to 59 minute</td><td>00 to 59 Min</td></tr></table>* "-" (not use) can be set for the hour.</td><td>When you set the interval to 0 hours and 0 minutes and you use the specified time, "Specified Time" is displayed in [Status].</td></tr>
</table>

* Even if you set the interval to a value other than 0 hours and 0 minutes in [Data Interval], you can enter the specified time. Note that, when you want to use the specified time in [Periodic Data Printing], be sure to set the interval to 0 hours and 0 minutes and select the [Use Specified Time] ☑ check box.

2. Copy and paste operations for periodic (specified time) data printing setting

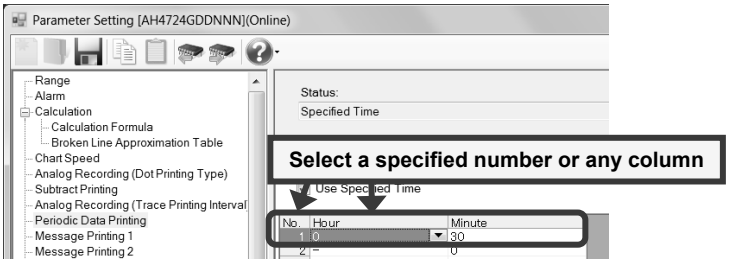
For the periodic (specified time) settings, you can copy and paste parameters per specified time number (parameters belonging to one specified time number).

<How to copy/paste>

(1) Select the copy source

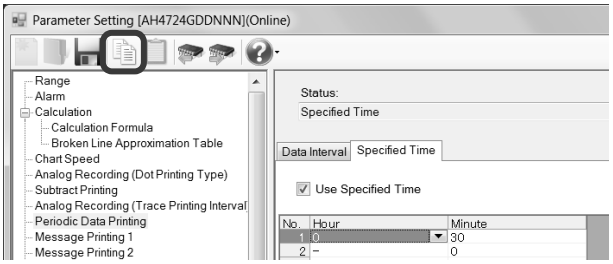
Click to select a specific time number or any column to copy from.

* You can copy parameters per one specified time number. That means you cannot select multiple specified time numbers to copy the parameters at a time.



(2) Click the [Copy] button

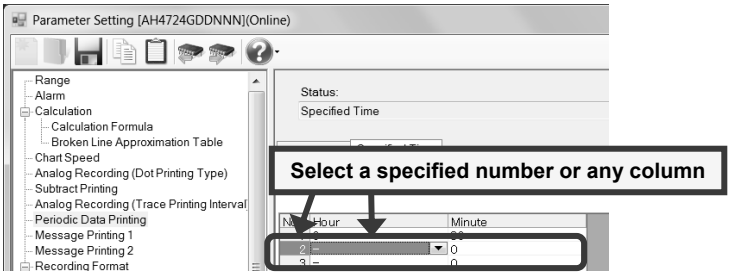
Click the [Copy] button from the tool bar to copy the selected parameters.



(3) Select the paste destination

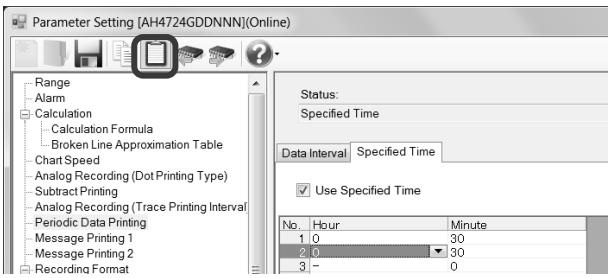
Click to select a specified time number or any column to paste to.

* You can paste the parameters to one specified time number. That means you cannot select multiple specified time numbers to paste the parameters at a time.



(4) Click the [Paste] button

Click the [Paste] button from the tool bar to paste the parameters to the selected location.

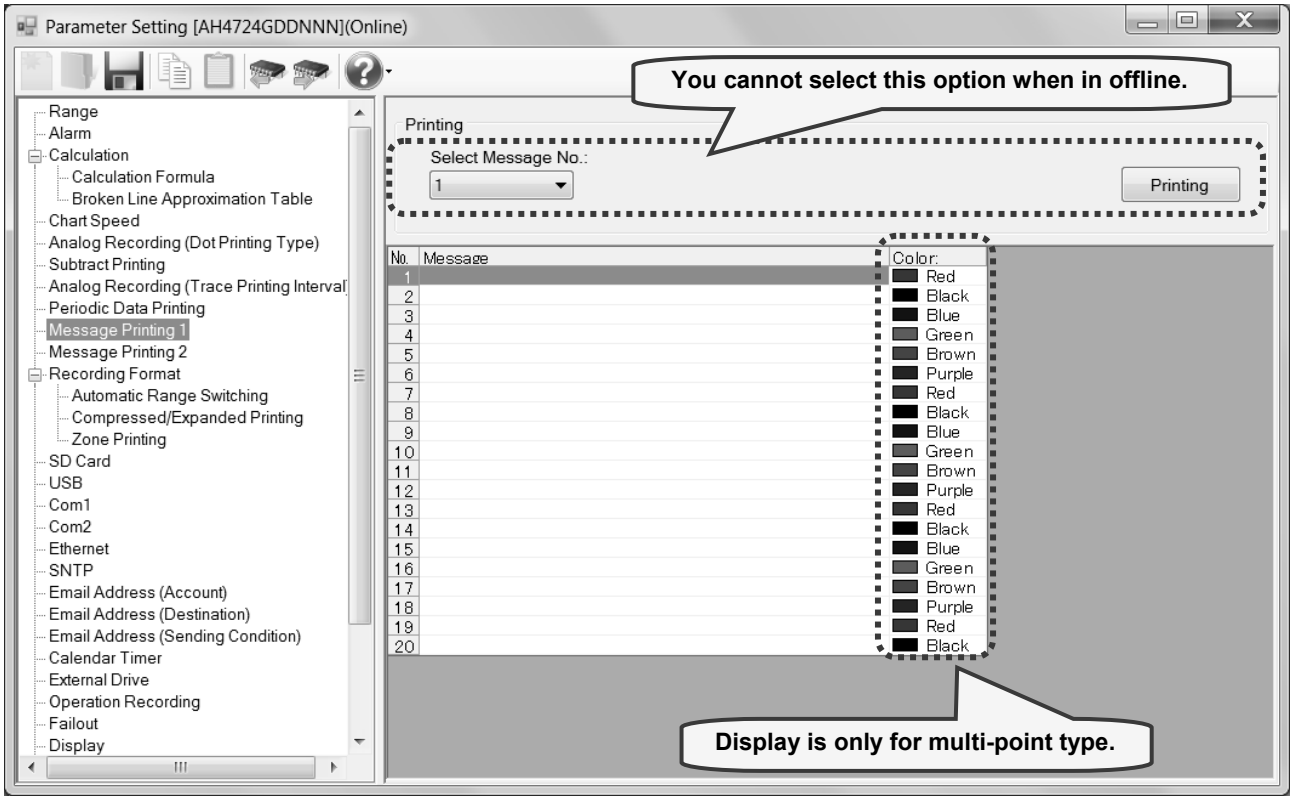


Remarks **"Keeping copied data" and "Copy/paste unit"**

- The copied parameters are kept after a paste operation until the [Copy] button is clicked the next time. Note that, if you move to another setting item in the edit panel after a copy operation, the copied parameters are lost.
- You cannot copy or paste per setting parameter. The copy or paste operation can be used by one specified time number.

6-6-14. Message Printing 1 Settings "MsgPrt1"

- The settings for the message printing 1 are displayed in the table format to enable you to edit them.
- The columns of the table present the setting parameter types, and the rows present the message numbers. When you connect to the device and in online, you can specify any number in [Select Message No.] above the table to print a message in the connected device.
- For example, you can work with the settings of the calendar timer (refer to section 6-6-29) or the external drive (refer to section 6-6-30) to print a registered message.
- When you select [Online] in the Parameter Setting Menu screen, you can send a message selected by the message No. to the device to print it. When you select [Offline], you cannot print a message.
  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

You can configure the following parameters in the message printing 1 settings.

[Message Printing 1 Settings "MsgPrt1" Parameter List]

Setting parameter	Function	Remarks
Message "Message"	Set the number of characters to be printed using up to 15 characters You can register 20 messages at a maximum	Available characters (one byte): ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789+-*/%^()._:;<>=![]¥ Available characters (special characters): °C, μ, Ω, ^{2}, ^{3} (refer to section 6-1-2)
Color "Color"	Select the message print color Software screen / Device screen: Red/Red, Black/Black, Blue/Blue, Green/Green, Brown/Brown, Purple/Purple	Setting is only available for multi-point type.

2. Copy and paste operations for message printing 1 setting

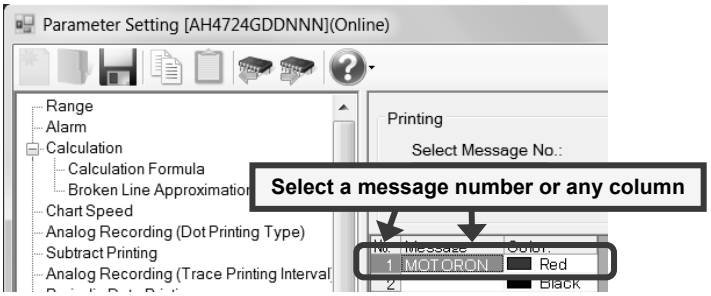
For the message printing 1 settings, you can copy and paste parameters per message number (parameters belonging to one message number).

<How to copy/paste>

(1) Select the copy source

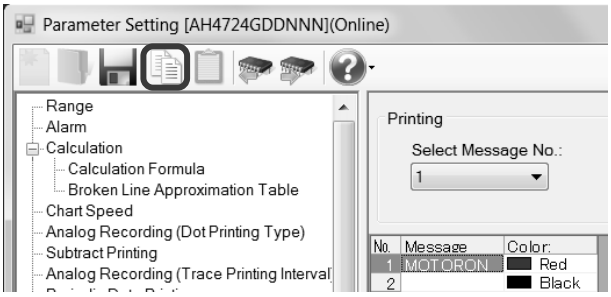
Click to select a specific time number or any column to copy from.

* You can copy parameters per one message number. That means you cannot select multiple message numbers to copy the parameters at a time.



(2) Click the [Copy] button

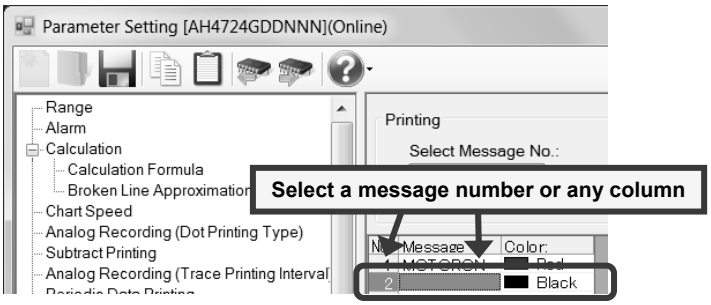
Click the [Copy] button from the tool bar to copy the selected parameters.



(3) Select the paste destination

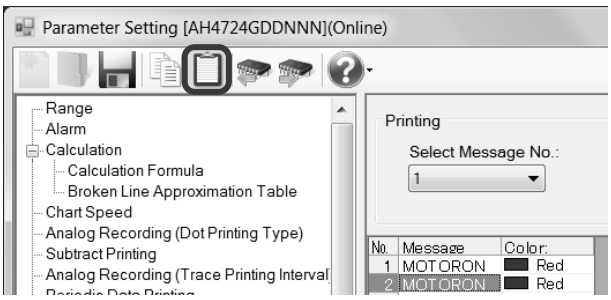
Click to select a message number or any column to paste to.

* You can paste the parameters to one message number. That means you cannot select multiple message numbers to paste the parameters at a time.



(4) Click the [Paste] button

Click the [Paste] button from the tool bar to paste the parameters to the selected location.

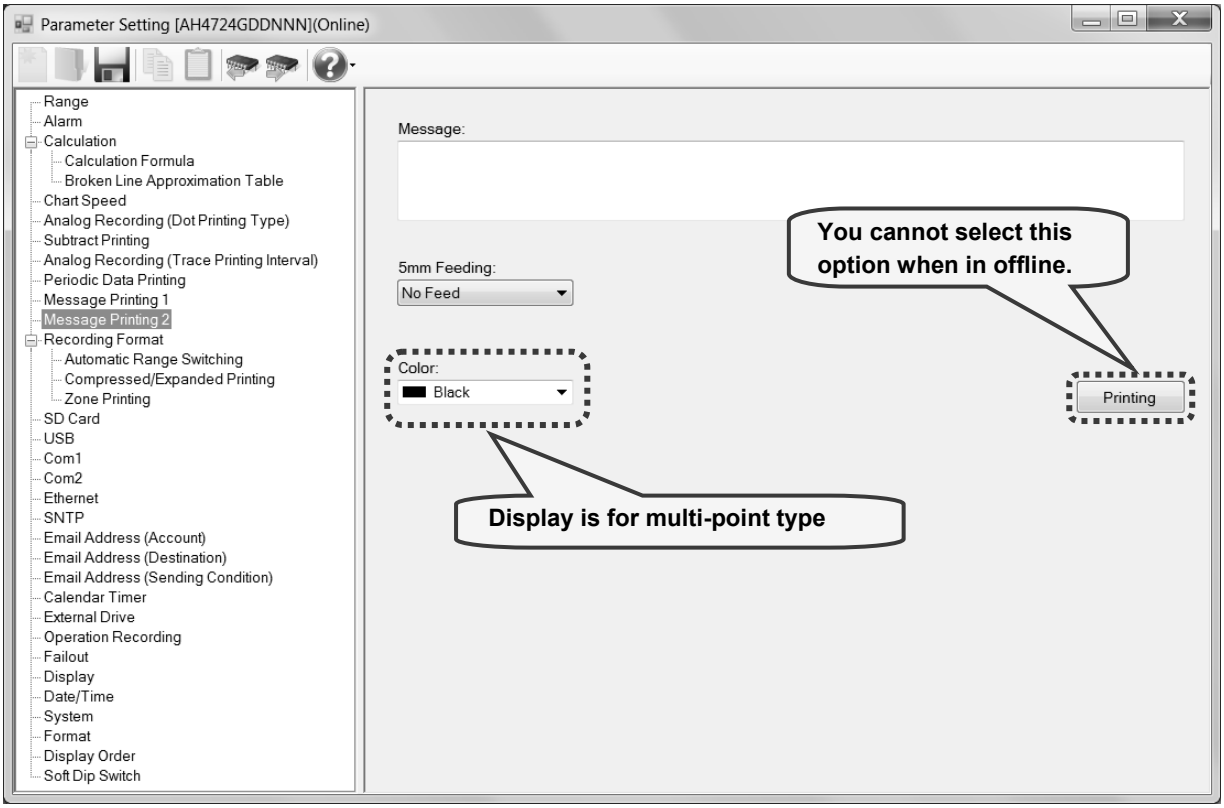


Remarks "Keeping copied data" and "Copy/paste unit"

- The copied parameters are kept after a paste operation until the [Copy] button is clicked the next time. Note that, if you move to another setting item in the edit panel after a copy operation, the copied parameters are lost.
- You cannot copy or paste per setting parameter. The copy or paste operation can be used by one message number.

6-6-15. Message Printing 2 Settings "MsgPrt2"

- The message printing 2 settings are displayed to enable you to edit them.
- When you select [Online] in the Parameter Setting Menu screen, you can send an input message to the device to print it. When you select [Offline], you cannot print a message.
  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

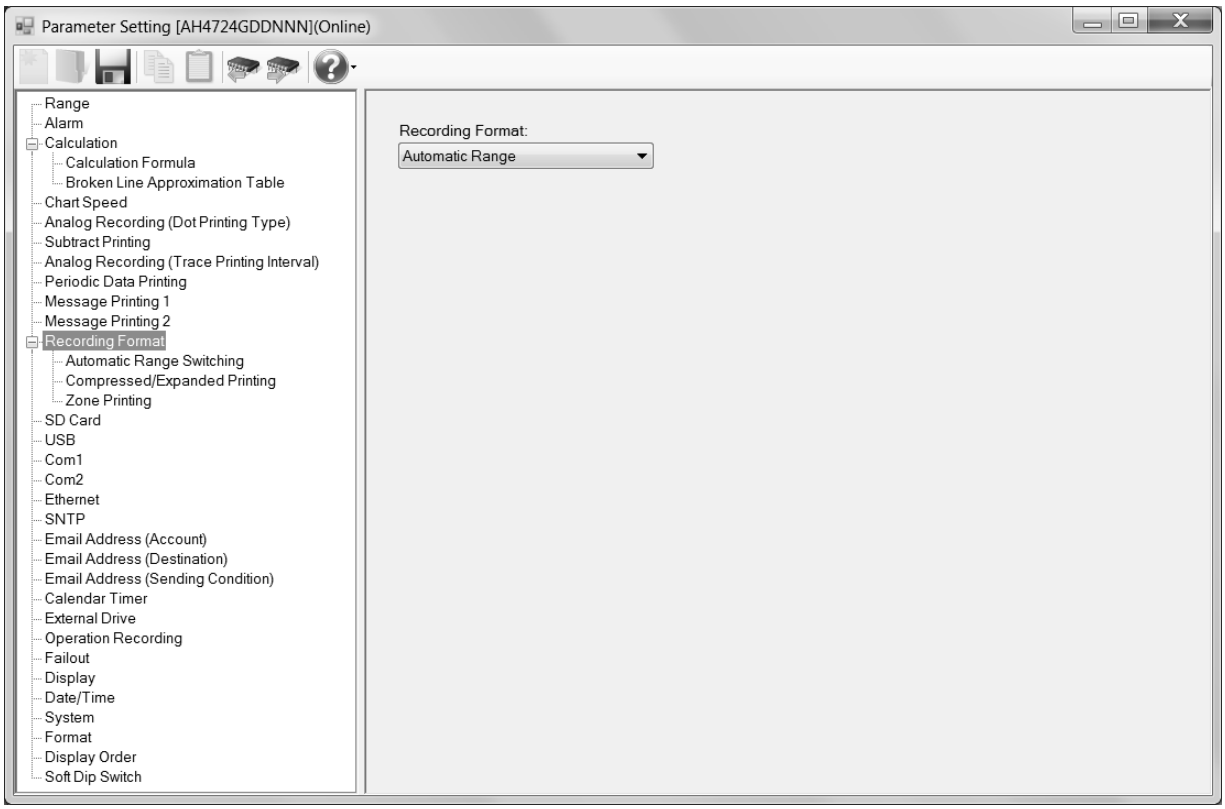
You can configure the following parameters in the message printing 2 settings.

[Message Printing 2 Settings "MsgPrt2" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>Message
"Message"</td><td><u>For SR100</u>
Set the number of characters to be printed using up to 40 characters
<u>For SR200</u>
Set the number of characters to be printed using up to 72 characters</td><td>Available characters (one byte):
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789+-*/%^().,_:;<>=![]¥μΩ^{23}
Available characters (special characters):
°C, μ, Ω, ^{2}, ^{3}
(refer to section 6-1-2)</td></tr>
<tr><td>5mm Feeding
"5mm Feed"</td><td>Select the feeding before printing a message
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>No Feed</td><td>No</td></tr>
<tr><td>Feed</td><td>Yes</td></tr>
</table></td><td></td></tr>
<tr><td>Color
"Color"</td><td>Select the message print color
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>Red</td><td>Red</td></tr>
<tr><td>Black</td><td>Black</td></tr>
<tr><td>Blue</td><td>Blue</td></tr>
<tr><td>Green</td><td>Green</td></tr>
<tr><td>Brown</td><td>Brown</td></tr>
<tr><td>Purple</td><td>Purple</td></tr>
</table></td><td>Setting is only available for multi-point type.</td></tr>
</table>

6-6-16. Recording Format Settings "PrtForm"

- The recording format settings are displayed to enable you to edit them.
- When you select [Automatic Range] or [Automatic Range (Overlap)] in [Recording Format], the automatic range switching (printing) settings (refer to section 6-6-17) is required. When you select [Compressed/Expanded Printing] and [Zone Printing], the compressed/expanded printing settings (refer to section 6-6-18) and zone printing settings (refer to section 6-6-19) are required, respectively.
  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

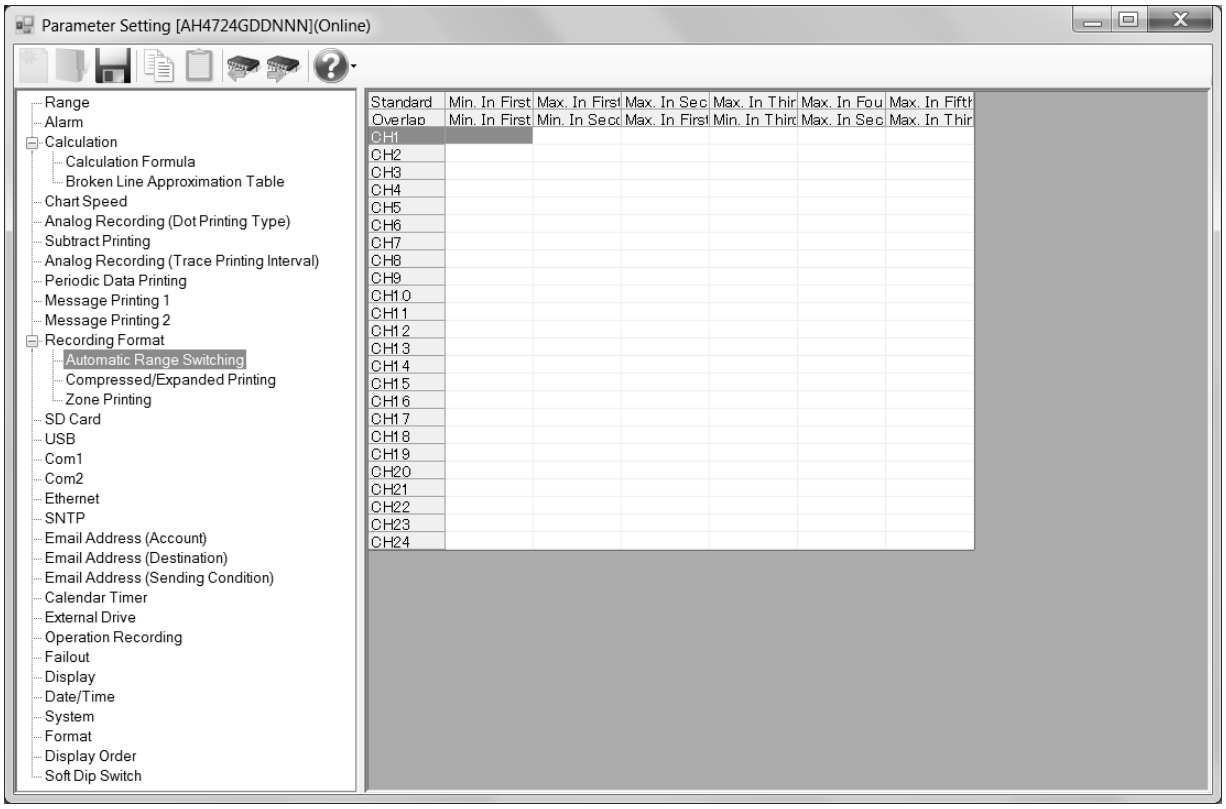
You can configure the following parameters in the recording format settings.

[Recording Format Settings "PrtForm" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>Recording Format
"Printing Format"</td><td>Select the recording format
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>Standard</td><td>Standard</td></tr>
<tr><td>Automatic Range</td><td>Auto Range Normal</td></tr>
<tr><td>Compressed/Expanded Printing</td><td>Comp.&Exp.Print</td></tr>
<tr><td>Zone Printing</td><td>Zone Print</td></tr>
<tr><td>Automatic Range (Overlap)</td><td>Auto Range Overlap</td></tr>
</table></td><td></td></tr>
</table>

6-6-17. Automatic Range Switching (Printing) Settings "A.Range"

- The automatic range switching (printing) settings are displayed in the table format to enable you to edit them.
- The columns of the table present the setting parameter types, and the rows present the automatic range switching types (Standard and Overlap) and channel numbers.
- There are two types, "automatic range (standard)" where the minimum-to-maximum ranges do not overlap, and "automatic range (overlap) where they overlap.
- The number of the displayed channels varies depending on the device model.
  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

You can configure the following parameters in the automatic range switching (printing) settings.

[Automatic Range Switching (Printing) Settings "A.Range" Parameter List]

Setting parameter	Function	Remarks
"Auto Range ON/OFF"	Enable or disable the auto range settings Software screen: Use the following maximum and minimum range settings Device screen: ON / OFF	Switch ON (enter a value) or OFF (none) using the minimum and maximum setting parameters for each range.
Min. In First Range "1st Min"	Set the minimum value of the first range	-30000 to 99999 The decimal location changes according to the one of the scale Upper row: Automatic range switching (standard) Lower row: Automatic range switching (overlap)
Max. In First Range "1st Max"	Set the maximum value of the first range	
Max. In Second Range "2nd Max"	Set the maximum value of the second range	
Max. In Third Range "3rd Max"	Set the maximum value of the third range	
Max. In Fourth Range "4th Max"	Set the maximum value of the forth range	
Max. In Fifth Range "5th Max"	Set the maximum value of the fifth range	

2. Copy and paste operations for automatic range switching (printing) setting

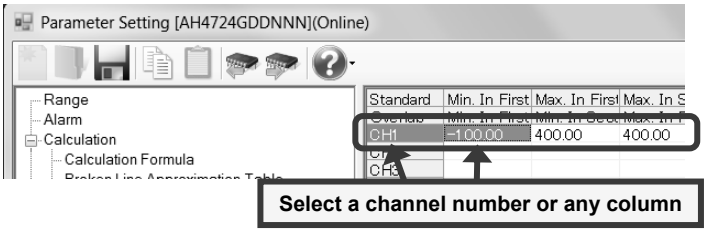
For the automatic range switching (printing) setting, you can copy and paste parameters per one channel number (parameters belonging to one channel number).

<How to copy/paste>

(1) Select the copy source

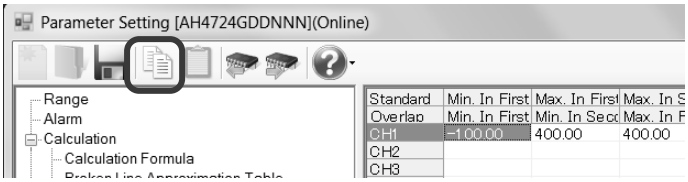
Click to select a channel number or any column to copy from.

* You can copy parameters per one channel number. That means you cannot select multiple channel numbers to copy the parameters at a time.



(2) Click the [Copy] button

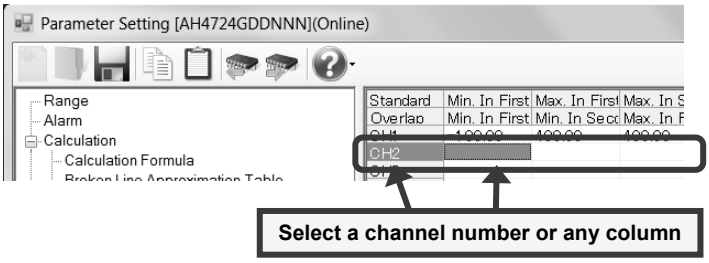
Click the [Copy] button from the tool bar to copy the selected parameters.



(3) Select the paste destination

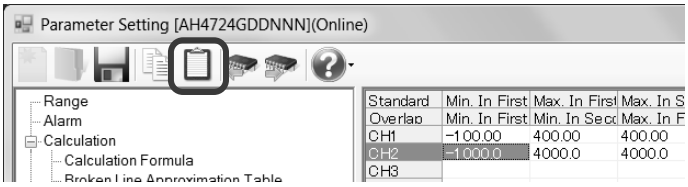
Click to select a channel number or any column to paste to.

* You can paste the parameters to one channel number. That means you cannot select multiple channel numbers to paste the parameters at a time.



(4) Click the [Paste] button

Click the [Paste] button from the tool bar to paste the parameters to the selected location.

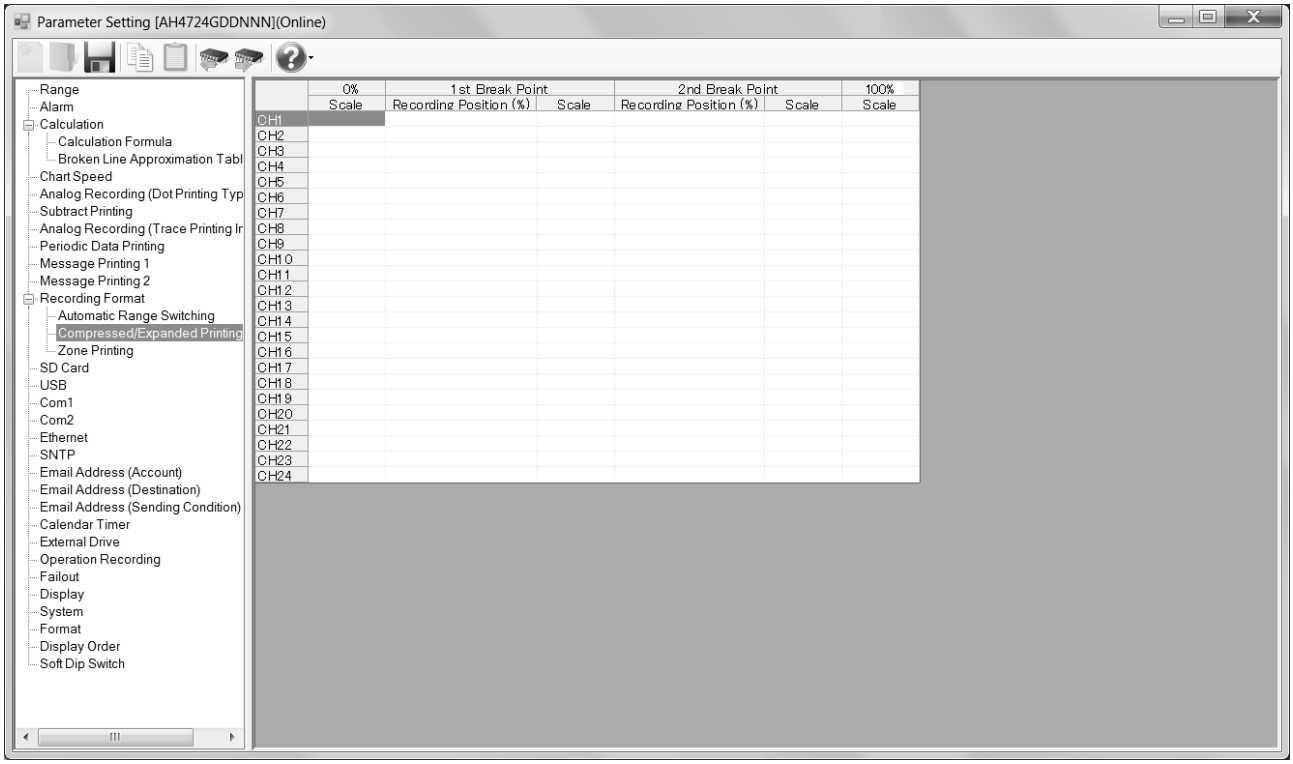


Remarks "Keeping copied data" and "Copy/paste unit"

- The copied parameters are kept after a paste operation until the [Copy] button is clicked the next time. Note that, if you move to another setting item in the edit panel after a copy operation, the copied parameters are lost.
- You cannot copy or paste per setting parameter. The copy or paste operation can be used by one channel number.

6-6-18. Compressed/Expanded Printing Settings "Cmp&Exp"

- The settings for the compressed/expanded printing settings are displayed in the table format to enable you to edit them.
- The columns of the table present the setting parameter types, and the rows present the channel numbers.
- The number of the displayed channels varies depending on the device model.
  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

You can configure the following parameters in the compressed/expanded printing settings.

[Compressed/Expanded Printing Settings "Cmp&Exp" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>0%Scale
"SCALE-0"</td><td>Specify the recording scale for the recording position (0%)<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>-</td></tr><tr><td>-30000 to 99999</td><td>-30000 to 99999</td></tr></table></td><td>The decimal location changes according to the one of the scale</td></tr>
<tr><td>1st Break Point Recording Position (%)
"POS-1st"</td><td>Specify the recording point for the first break point in proportion to the span (%)<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>-</td></tr><tr><td>1 to 99</td><td>1 to 99</td></tr></table></td><td></td></tr>
<tr><td>1st Break Point Scale
"SCALE-1st"</td><td>Specify the recording scale for the first break point</td><td>See the remarks of "0% Scale " for details</td></tr>
<tr><td>2nd Break Point Recording Position (%)
"POS-2nd"</td><td>Specify the recording point for the second break point in proportion to the span (%)<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>-</td></tr><tr><td>1 to 99</td><td>1 to 99</td></tr></table></td><td></td></tr>
<tr><td>2nd Break Point Scale
"SCALE-2nd"</td><td>Specify the recording scale for the second break point</td><td>See the remarks of "0% Scale " for details</td></tr>
<tr><td>100%Scale
"SCALE-100"</td><td>Specify the recording scale for the recording position (100%)</td><td>-30000 to 99999
See the remarks of "0% Scale " for details</td></tr>
</table>

2. Copy and paste operations for compressed/expanded printing setting

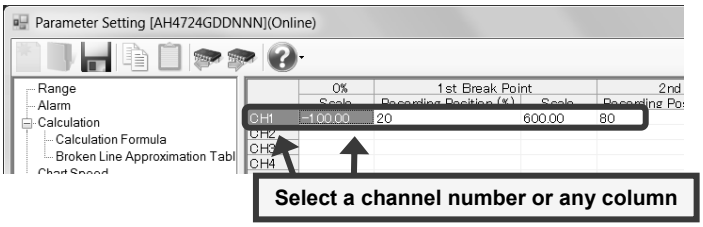
For the compressed/expanded printing setting, you can copy and paste parameters per one channel number (parameters belonging to one channel number).

<How to copy/paste>

(1) Select the copy source

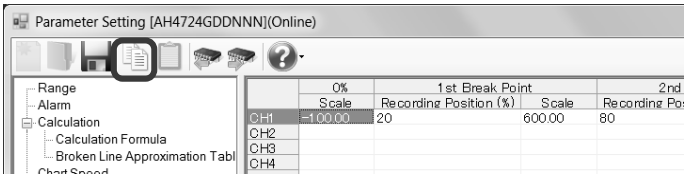
Click to select a channel number or any column to copy from.

* You can copy a parameter per one channel number. That means you cannot select multiple channel numbers to copy the parameter at a time.



(2) Click the [Copy] button

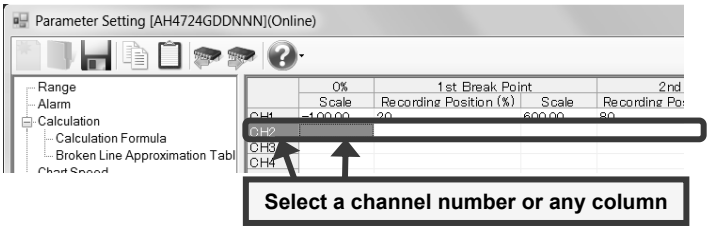
Click the [Copy] button from the tool bar to copy the selected parameters.



(3) Select the paste destination

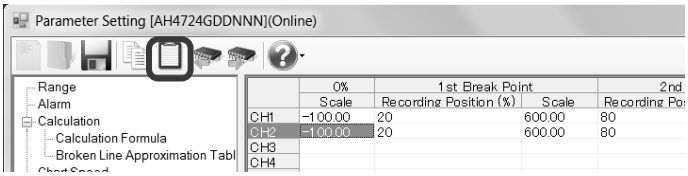
Click to select a channel number or any column to paste to.

* You can paste a parameter to one channel number. That means you cannot select multiple channel numbers to paste the parameter at a time.



(4) Click the [Paste] button

Click the [Paste] button from the tool bar to paste the parameters to the selected location.

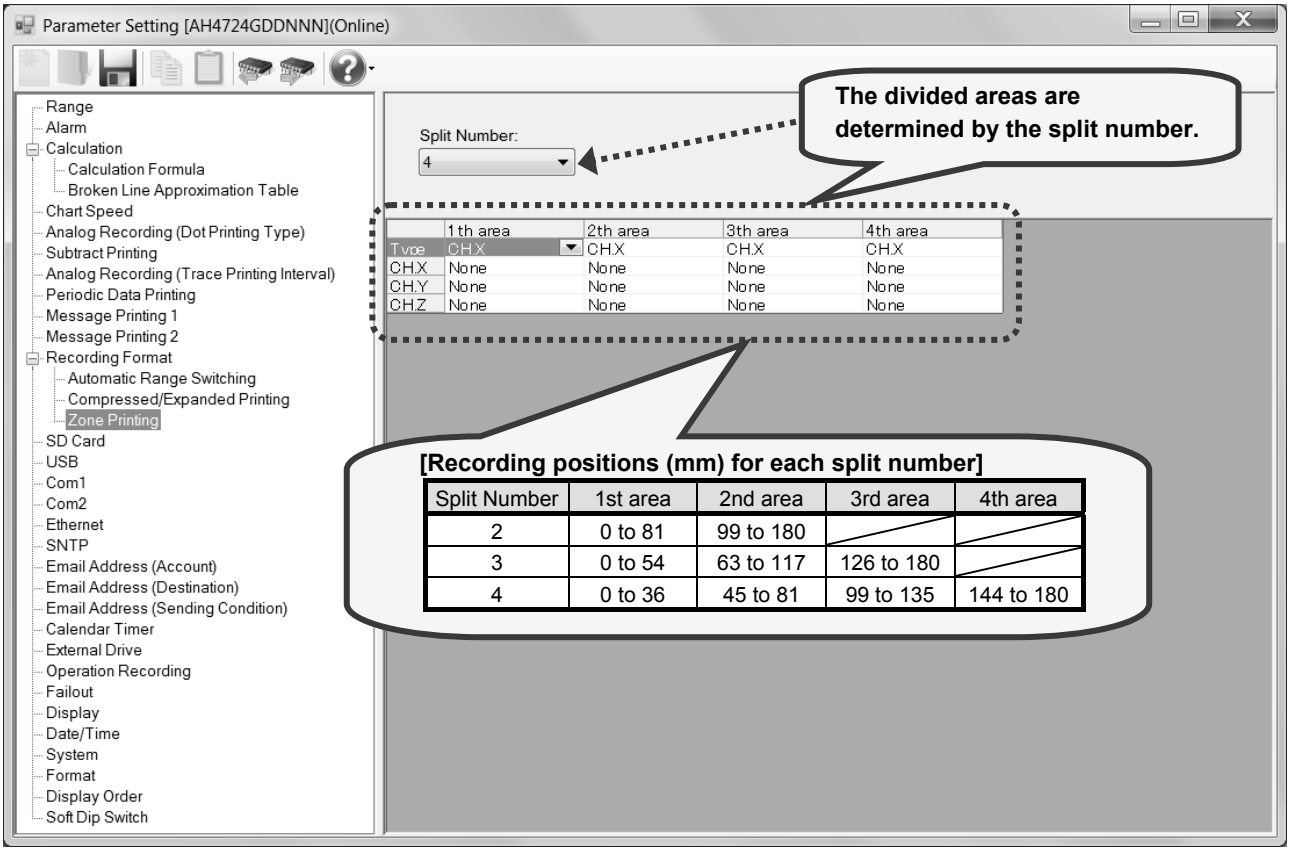


Remarks "Keeping copied data" and "Copy/paste unit"

- The copied parameters are kept after a paste operation until the [Copy] button is clicked the next time. Note that, if you move to another setting item in the edit panel after a copy operation, the copied parameters are lost.
- You cannot copy or paste per setting parameter. The copy or paste operation can be used by one channel number.

6-6-19. Zone Printing Settings "ZonePrt"

- The split number settings of zone printings are displayed in the table format to enable you to edit them.
- Specify the number of divided areas in [Split Number] above the table. The columns of the table present the types of divided areas, and the rows present the setting parameter types.
  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

You can configure the following parameters in the zone printing settings.

[Zone Printing Settings "Zoneprt" Parameter List]

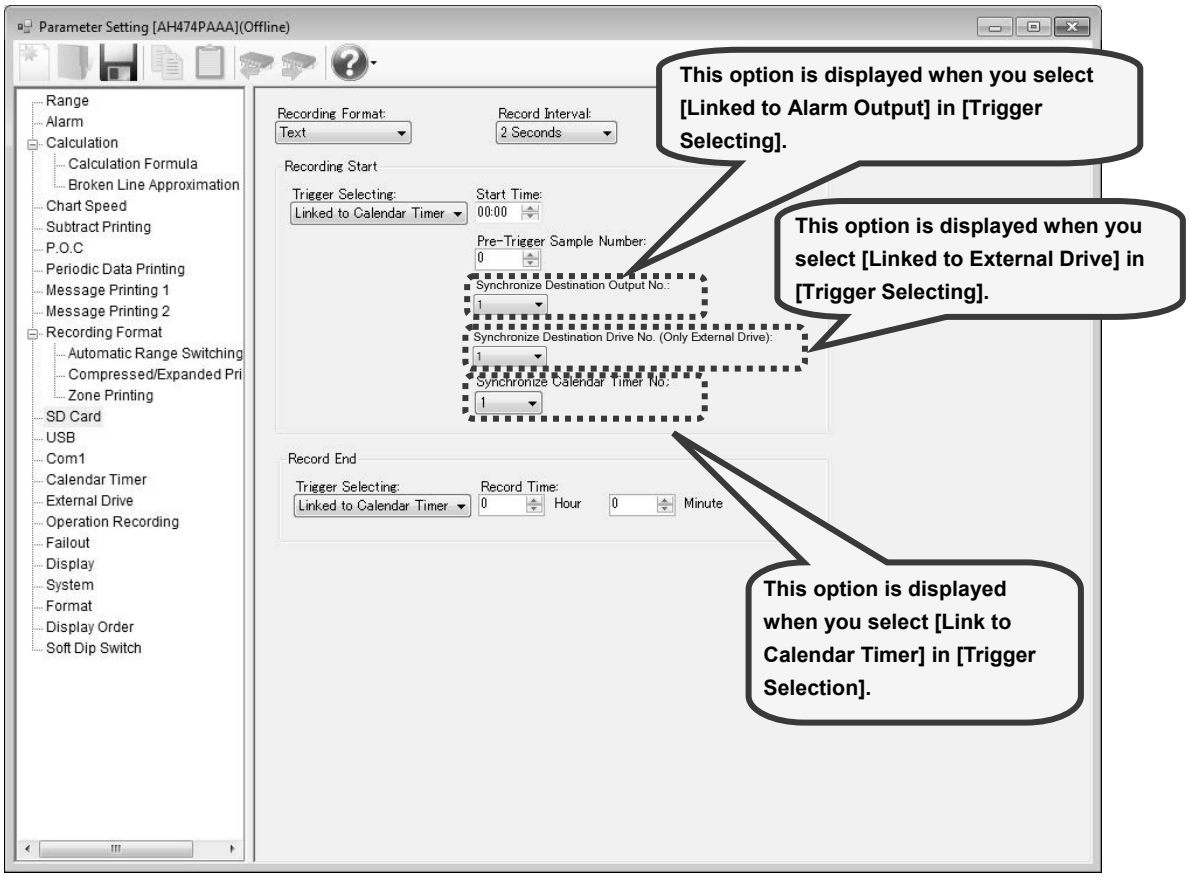
<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>Split Number
"Zone"</td><td>Specify the split number for the zone printing
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>2 to 4</td><td>2 to 4</td></tr></table></td><td>For SR100, the split number is fixed to 2</td></tr>
<tr><td>Type
"Type"</td><td>Area setting format
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>CH.X</td><td>CH.X</td></tr><tr><td>CH.X/CH.Y</td><td>CH.X/CH.Y</td></tr><tr><td>CH.X-CH.Y</td><td>CH.X-CH.Y</td></tr><tr><td>CH.X/CH.Y/CH.Z</td><td>CH.X/CH.Y/CH.Z</td></tr><tr><td>CH.X-CH.Y/CH.Z</td><td>CH.X-CH.Y/CH.Z</td></tr><tr><td>CH.X/CH.Y-CH.Z</td><td>CH.X/CH.Y-CH.Z</td></tr></table></td><td><u>CH.X</u>
Dot CH.X in the specified area
<u>CH.X/CH.Y</u>
Dot CH.X and CH.Y in the specified area
<u>CH.X-CH.Y</u>
Dot CH.X - CH.Y in the specified area
<u>CH.X/CH.Y/CH.Z</u>
Dot CH.X, CH.Y, and CH.Z in the specified area
<u>CH.X-CH.Y/CH.Z</u>
Dot CH.X - CH.Y and CH.Z in the specified area
<u>CH.X/CH.Y-CH.Z</u>
Dot CH.X and CH.Y - CH.Z in the specified area</td></tr>
<tr><td>CH.X
CH.Y
CH.Z</td><td><table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>-</td><td>-</td></tr><tr><td>1 to 24</td><td>1 to 24</td></tr></table></td><td>The number of the displayed channels varies depending on the device model.</td></tr>
</table>

Remarks **CH selection**

Channels selected for no areas are skipped.

6-6-20. SD Card Settings "SD CARD"

- The SD card settings are displayed to enable you to edit them.
  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

You can configure the following parameters in the SD card settings.

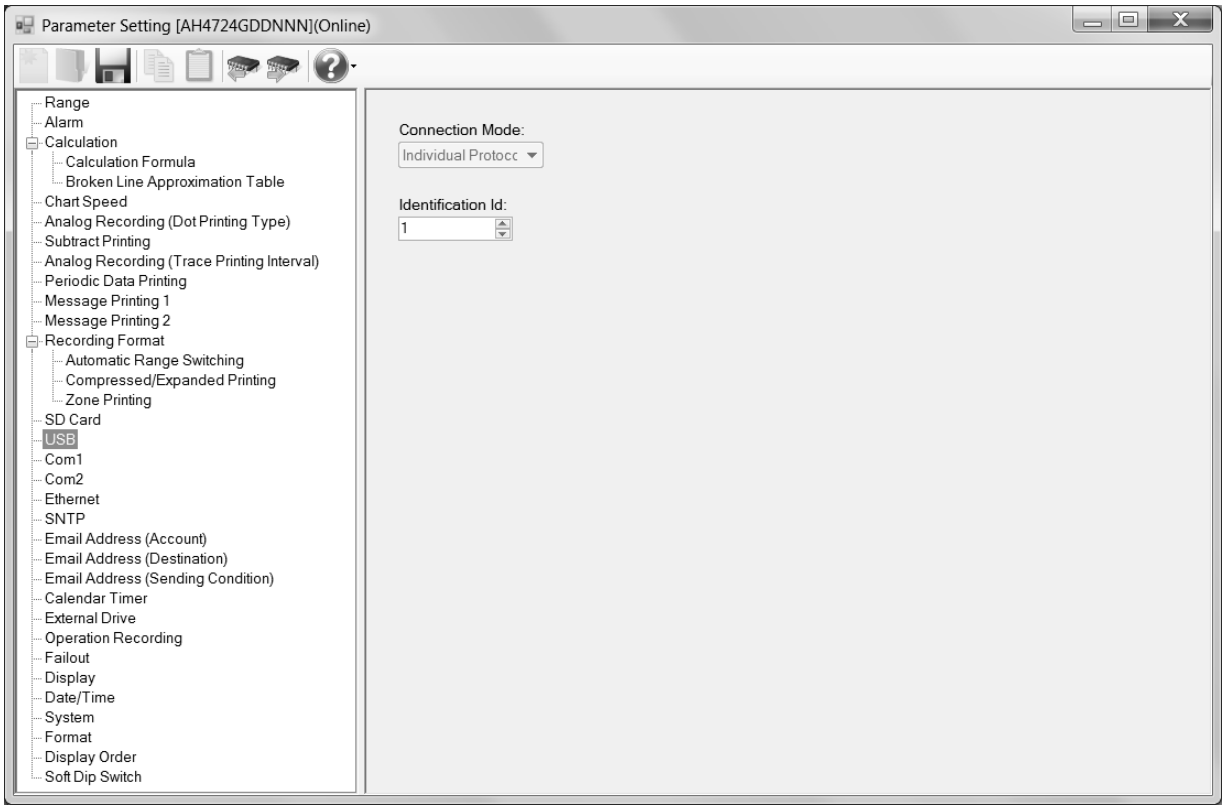
[SD Card Settings "Recording data-Saving" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>Recording Format
"Format"</td><td>Select the recording format of the SD card
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>Binary</td><td>Binary</td></tr>
<tr><td>Text</td><td>Text</td></tr>
<tr><td>Binary (Floating Decimal Point)</td><td>Binary (float)</td></tr>
<tr><td>Text (Floating Decimal Point)</td><td>Text (float)</td></tr>
</table></td><td></td></tr>
<tr><td>Record Interval
"Interval"</td><td>Select the recording interval of the SD card
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>1 Second, 2 Seconds, (3 Seconds), (4 Seconds), (5 Seconds), (6 Seconds), 10 Seconds, (15 Seconds), (16 Seconds), 20 Seconds, 30 Seconds, 1 Minute, 2 Minutes, 3 Minutes, 5 Minutes, 10 Minutes, 15 Minutes, 20 Minutes, 30 Minutes, 60 Minutes, Dot-Interval</td><td>1sec, 2sec, (3sec), (4sec), (5sec), (6sec), 10sec, (15sec), (16sec), 20sec, 30sec, 1min, 2min, 3min, 5min, 10min, 15min, 20min, 30min, 60min, Dot-Interval</td></tr>
</table>
Values in parentheses: The recording interval options vary depending on the number of inputs and recording method.</td><td><u>In case of 6 inputs, pen type</u>
[3 Seconds], [5 Seconds], and [15 Seconds] are displayed
([4 Seconds], [6 Seconds], and [16 Seconds] are not displayed)
<u>In case of 12 and 24 inputs</u>
[4 Seconds], [6 Seconds], and [16 Seconds] are displayed
([3 Seconds], [5 Seconds], and [15 Seconds] are not displayed)</td></tr>
</table>

<table>
<tr><td>Recording Start Trigger Selecting "Start TRG."</td><td>Select the trigger to start the recording<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>None</td></tr><tr><td>Key</td><td>Key ([REC+FUNC1])</td></tr><tr><td>Specified Time</td><td>StartTime</td></tr><tr><td>Linked to Alarm Output</td><td>Alarm</td></tr><tr><td>Linked to External Drive</td><td>EX</td></tr><tr><td>Linked to Chart</td><td>Chart</td></tr><tr><td>Linked to Chart End</td><td>Chart End</td></tr><tr><td>Linked to Calendar Timer</td><td>Timer</td></tr></table></td><td></td></tr>
<tr><td>Start Time "StartTime"</td><td>Specify the recording start time if you select [Specified Time] "StartTime" in [Trigger Selecting] "Start TRG."<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>00 to 23 (Hour)</td><td>00 to 23 Hour</td></tr><tr><td>00 to 59 (Minute)</td><td>00 to 59 Min</td></tr></table></td><td></td></tr>
<tr><td>Pre-Trigger Sample Number "PreTrigger"</td><td>The specified number of previous samples are recorded together to the SD card when starting the recording<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>0 to 10</td><td>0 to 10</td></tr></table></td><td></td></tr>
<tr><td>Record End Trigger Selecting "End TRG."</td><td>Select the trigger to end the recording<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Key</td><td>Key ([REC+FUNC1])</td></tr><tr><td>Specified Time</td><td>Rec.time</td></tr><tr><td>Linked to Alarm Output</td><td>Alarm</td></tr><tr><td>Linked to External Drive</td><td>EX</td></tr><tr><td>Linked to Chart</td><td>Chart</td></tr><tr><td>Linked to Chart End</td><td>Chart End</td></tr><tr><td>Linked to Calendar Timer</td><td>Timer</td></tr></table></td><td></td></tr>
<tr><td>Record Time "Rec.time"</td><td>Specify the record time if you select [Specified Time] "Rec.time" in [Trigger Selecting] "End TRG."<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>00 to 99 hours</td><td>00 to 99 Hour</td></tr><tr><td>00 to 59 minutes</td><td>00 to 59 Min</td></tr></table></td><td></td></tr>
<tr><td>Synchronize Destination Output No. "Relay No."</td><td>Specify the linking alarm output No. if you select [Linked to Alarm Output] “Alarm” in [Recording Start/End Trigger Selecting] “Start TRG/End TRG”.<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>-</td></tr><tr><td>1 to 24</td><td>1 to 24</td></tr><tr><td>Dummy Output</td><td>99</td></tr></table></td><td>The displayed number varies depending on the device model.</td></tr>
<tr><td>Synchronize Destination Drive No. (Only External Drive) "EX No."</td><td>Specify the linking external drive No. if you select [Linked to External Drive] “EX” in [Recording Start/End Trigger Selecting] “Start TRG/End TRG”.<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>0</td></tr><tr><td>1 to 20 (multi-point type)</td><td>1 to 20 (multi-point type)</td></tr><tr><td>1 to 10 (pen type)</td><td>1 to 10 (pen type)</td></tr></table></td><td>The displayed number varies depending on the device model or recording method.</td></tr>
<tr><td>Synchronize Destination Calendar Timer No. “Timer No.”</td><td>Specify the linking calendar timer No. if you select [Linked to Calendar Timer] “Timer” in [Recording Start/End Trigger Selecting] “Start TRG/End TRG”.<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>0</td></tr><tr><td>1 to 5</td><td>1 to 5</td></tr></table></td><td></td></tr>
<tr><td>Overwrite mode "Overwrite"</td><td>Specify the overwrite mode "enable" or "disable".<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Overwrite</td><td>Overwrite</td></tr></table></td><td>Check box operation
☑ Check box marked: Enable (On)
☐ Blank check box: Disable (Off)</td></tr>
</table>

6-6-21. USB Engineering Port Settings "USB"

- The USB engineering port settings are displayed to enable you to edit them.
  * When using this software, set [Mode] to [BULK] and [USB ID] to [1] on the connected device.
  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

You can configure the following parameters in the USB engineering port settings.

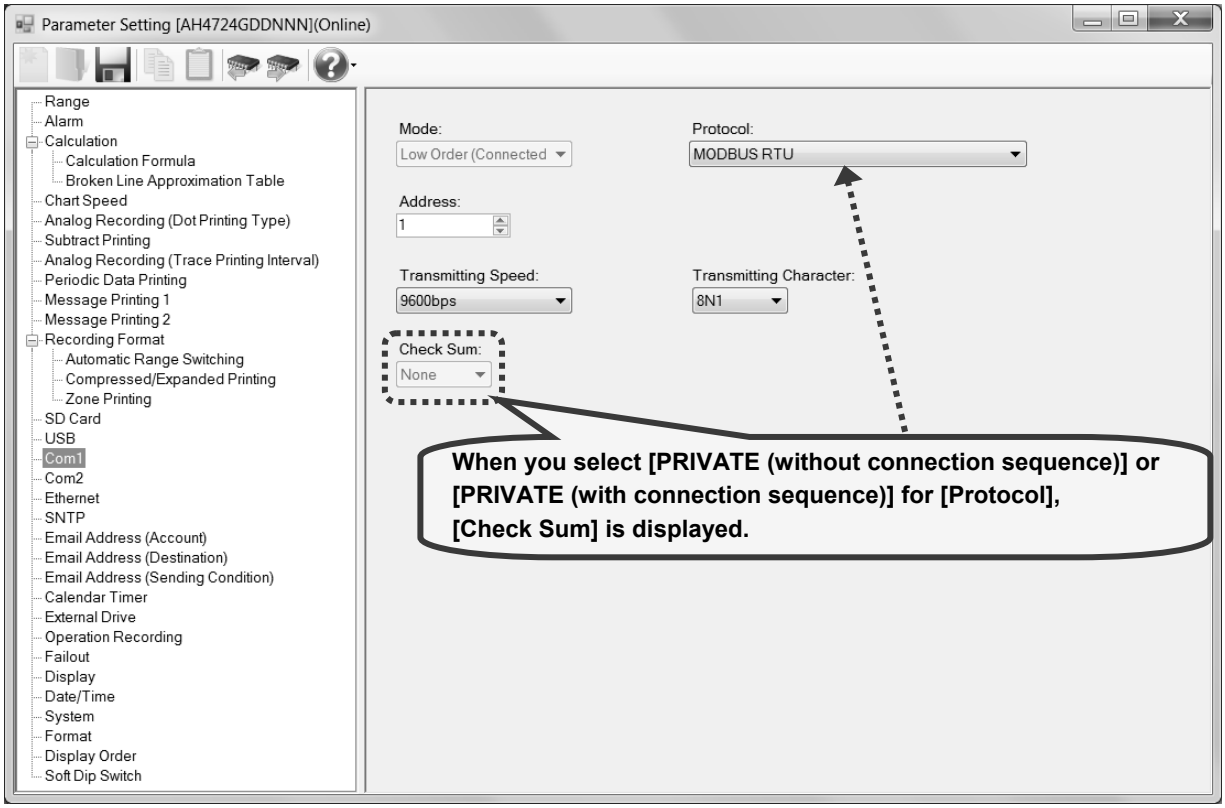
[USG Engineering Port Settings "USB" Parameter List]

Setting parameter	Function	Remarks
Connection Mode "Mode"	Select the connection mode Software screen: Individual Protocol / Device screen: BULK	[Individual Protocol] is displayed but cannot be selected.
Identification Id "USB ID Address"	The USB identification address when you select the individual protocol [BULK] in the connection mode [Mode] Software screen: 1 to 5 / Device screen: 1 to 5	

6-6-22. COM1 (Communication) Settings "COM1"

- The COM1 (communication) settings are displayed to enable you to edit them.
- You can edit these settings depending on the communication method (refer to the table * 1 in section 6-1-5 for multi-point type and the table * 1 in section 6-1-6 for pen type).

  * Refer to the instruction manual of the device and the manual for communication interface for more details on the settings.



1. Parameter setting

You can configure the following parameters in the COM1 (communication) settings.

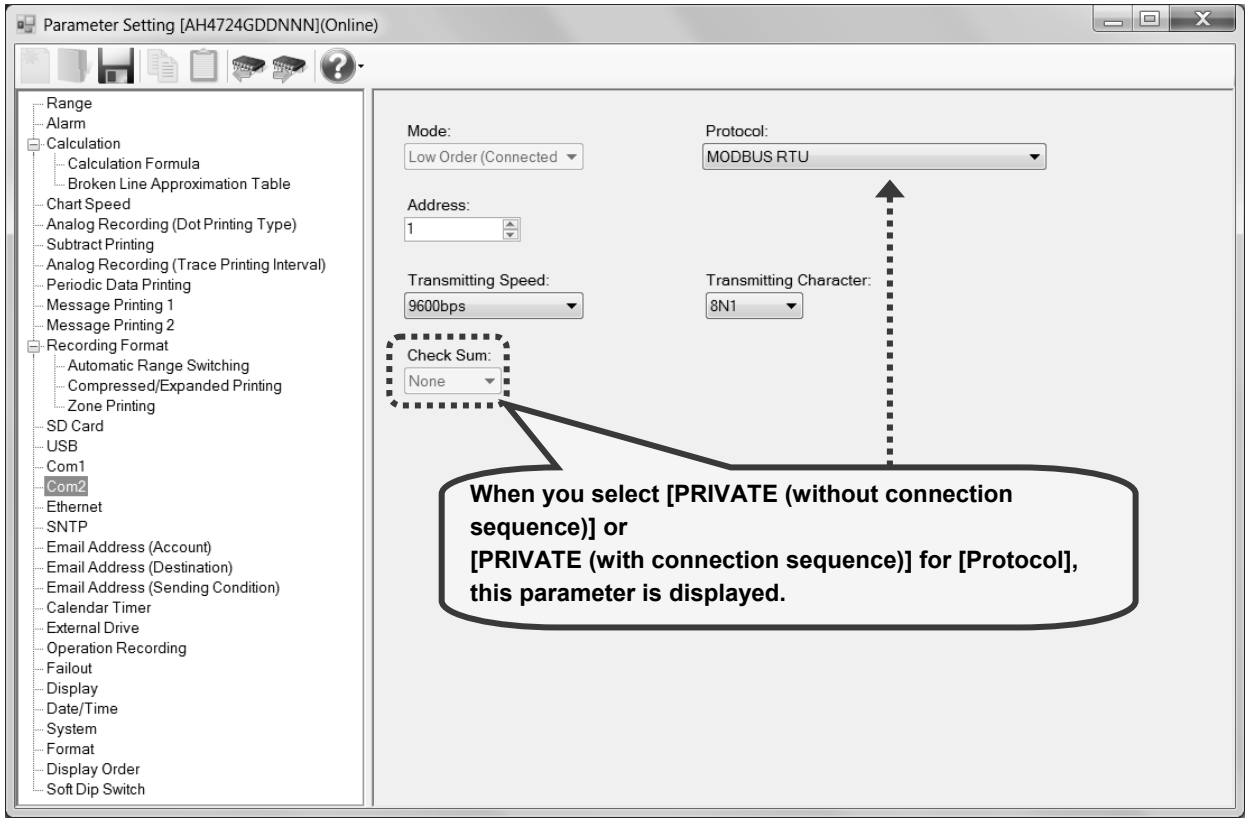
[COM1 (Communication) Settings "COM1" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>Mode
"Mode"</td><td>Select "Low Order" (the device is low order) or "High Order" (the device is high order) for the communication mode
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Low Order (Connected to PC)</td><td>Low (To PC etc…)</td></tr></table></td><td>"Low Order (Connected to PC)" is displayed, but cannot be selected.</td></tr>
<tr><td>Protocol
"Protocol"</td><td>Select the communications protocol
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>MODBUS RTU</td><td>MODBUS RTU</td></tr><tr><td>MODBUS ASCII</td><td>MODBUS ASCII</td></tr><tr><td>PRIVATE1 *1</td><td>PRIVATE1 *1</td></tr><tr><td>PRIVATE2 *2</td><td>PRIVATE2 *2</td></tr></table></td><td>*1: PRIVATE1 (without connection sequence)
*2: PRIVATE2 (with connection sequence)</td></tr>
<tr><td>Address
"Address"</td><td>Set the communication address of this instrument
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>01 to 99</td><td>01 to 99</td></tr></table></td><td></td></tr>
<tr><td>Transmitting Speed
"Baudrate"</td><td>Set the communication speed*
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>1200, 2400, 4800,
9600, 19200, 38400</td><td>1200, 2400, 4800,
9600, 19200, 38400</td></tr></table></td><td>* PRIVATE: 1200, 2400, 4800, 9600bps
MODBUS: 9600, 19200, 38400bps
This changes to "9600" when the protocol is changed to PRIVATE from MODBUS or vice versa.</td></tr>
<tr><td>Transmitting Character
"Character"</td><td>Set the transmitting character*
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>7E1, 7E2, 7O1, 7O2,
8N1, 8N2, 8E1, 8E2, 8O1, 8O2</td><td>7E1, 7E2, 7O1, 7O2,
8N1, 8N2, 8E1, 8E2, 8O1, 8O2</td></tr></table></td><td>* All options are displayed except for the following protocol
MODBUS RTU: Only 8N1, 8N2, 8E1, 8E2, 8O1, and 8O2 are displayed</td></tr>
<tr><td>Check Sum
"Check SUM"</td><td>Select whether or not to add checksum code*
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>OFF</td></tr><tr><td>Exists</td><td>ON</td></tr></table></td><td>* Available only when the protocol is set to "PRIVATE (without connection sequence)" or "PRIVATE (with connection sequence)"</td></tr>
</table>

6-6-23. COM2 (Communication) Settings "COM2"

- The COM2 (communication) settings are displayed to enable you to edit them.
- You can edit these settings depending on the communication method (refer to the table * 1 in section 6-1-5 for multi-point type and table * 1 in section 6-1-6 for pen type).

  * Refer to the instruction manual of the device and the manual for communication interface and option for more details on the settings.



1. Parameter setting

You can configure the following parameters in the COM2 (communication) settings.

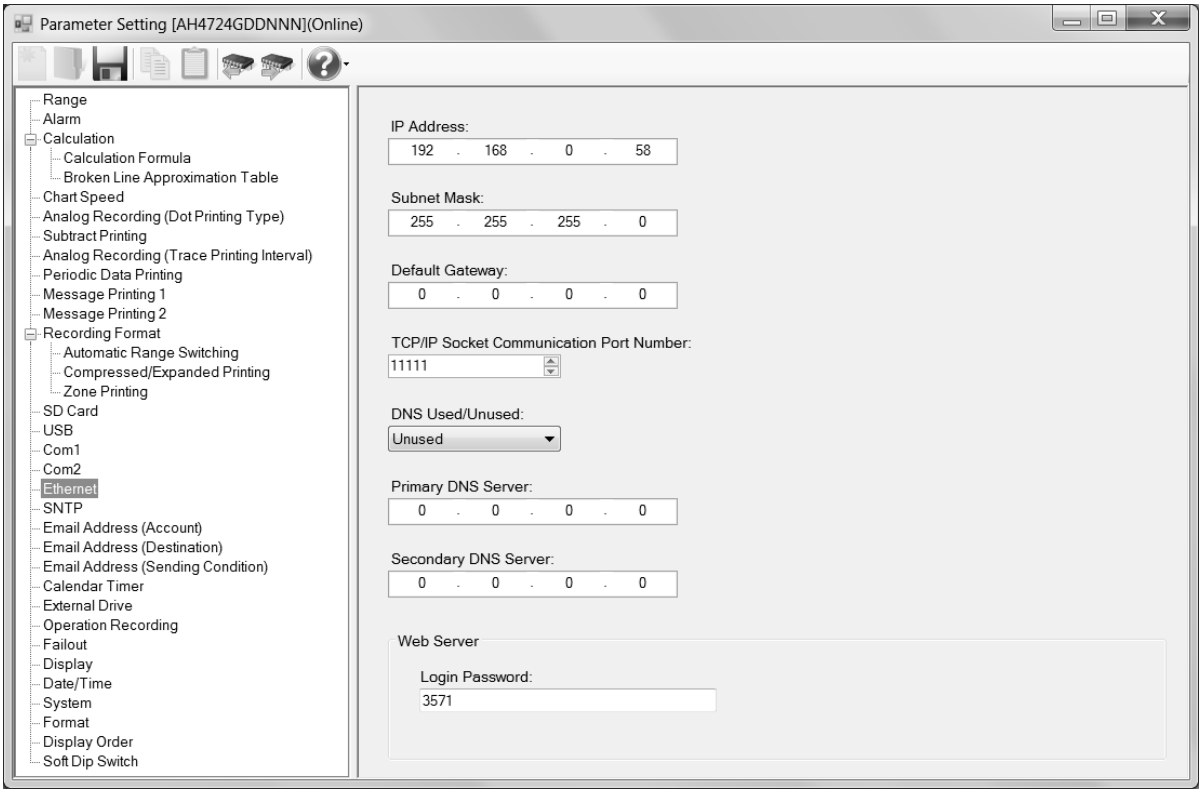
[COM2 (Communication) Settings "COM2" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>Mode
"Mode"</td><td>Select "Low Order" (the device is low order) or "High Order" (the device is high order) for the communication mode
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Low Order (Connected to PC)</td><td>Low (To PC etc…)</td></tr></table></td><td>"Low Order (Connected to PC)" is displayed, but cannot be selected.</td></tr>
<tr><td>Protocol
"Protocol"</td><td>Select the communications protocol
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>MODBUS RTU</td><td>MODBUS RTU</td></tr><tr><td>MODBUS ASCII</td><td>MODBUS ASCII</td></tr><tr><td>PRIVATE1 *1</td><td>PRIVATE1 *1</td></tr><tr><td>PRIVATE2 *2</td><td>PRIVATE2 *2</td></tr></table></td><td>*1: PRIVATE1 (without connection sequence)
*2: PRIVATE2 (with connection sequence)</td></tr>
<tr><td>Address
"Address"</td><td>Set the communication address of this instrument
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>01 to 99</td><td>01 to 99</td></tr></table></td><td></td></tr>
<tr><td>Transmitting Speed
"Baudrate"</td><td>Set the communication speed*
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>1200, 2400, 4800,
9600, 19200, 38400</td><td>1200, 2400, 4800,
9600, 19200, 38400</td></tr></table></td><td>*PRIVATE: 1200, 2400, 4800, 9600bps
MODBUS: 9600, 19200, 38400bps
This change to "9600" when the protocol is changed to PRIVATE from MODBUS or vice versa.
Fixed at “9600” when the mode is set as high order.</td></tr>
<tr><td>Transmitting Character
"Character"</td><td>Set the transmitting character*
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>7E1, 7E2, 7O1, 7O2,
8N1, 8N2, 8E1, 8E2, 8O1, 8O2</td><td>7E1, 7E2, 7O1, 7O2,
8N1, 8N2, 8E1, 8E2, 8O1, 8O2</td></tr></table></td><td>*All options are displayed except for the following protocol
MODBUS RTU: Only 8N1, 8N2, 8E1, 8E2, 8O1, and 8O2 are displayed
Fixed at “8N1” when the mode is set as high order.</td></tr>
<tr><td>Check Sum
"Check SUM"</td><td>Select whether or not to add checksum code*
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>OFF</td></tr><tr><td>Exists</td><td>ON</td></tr></table></td><td>*Available only when the protocol is set to "PRIVATE (without connection sequence)" or "PRIVATE (with connection sequence)"</td></tr>
</table>

6-6-24. Ethernet Settings "Ether"

- The Ethernet settings are displayed to enable you to edit them.
- You can edit these settings depending on the communication method (refer to the table * 1 in section 6-1-5 for multi-point type and table * 1 in section 6-1-6 for pen type).

  * Refer to the instruction manual of the device and the manual for communication interface for more details on the settings.



1. Parameter setting

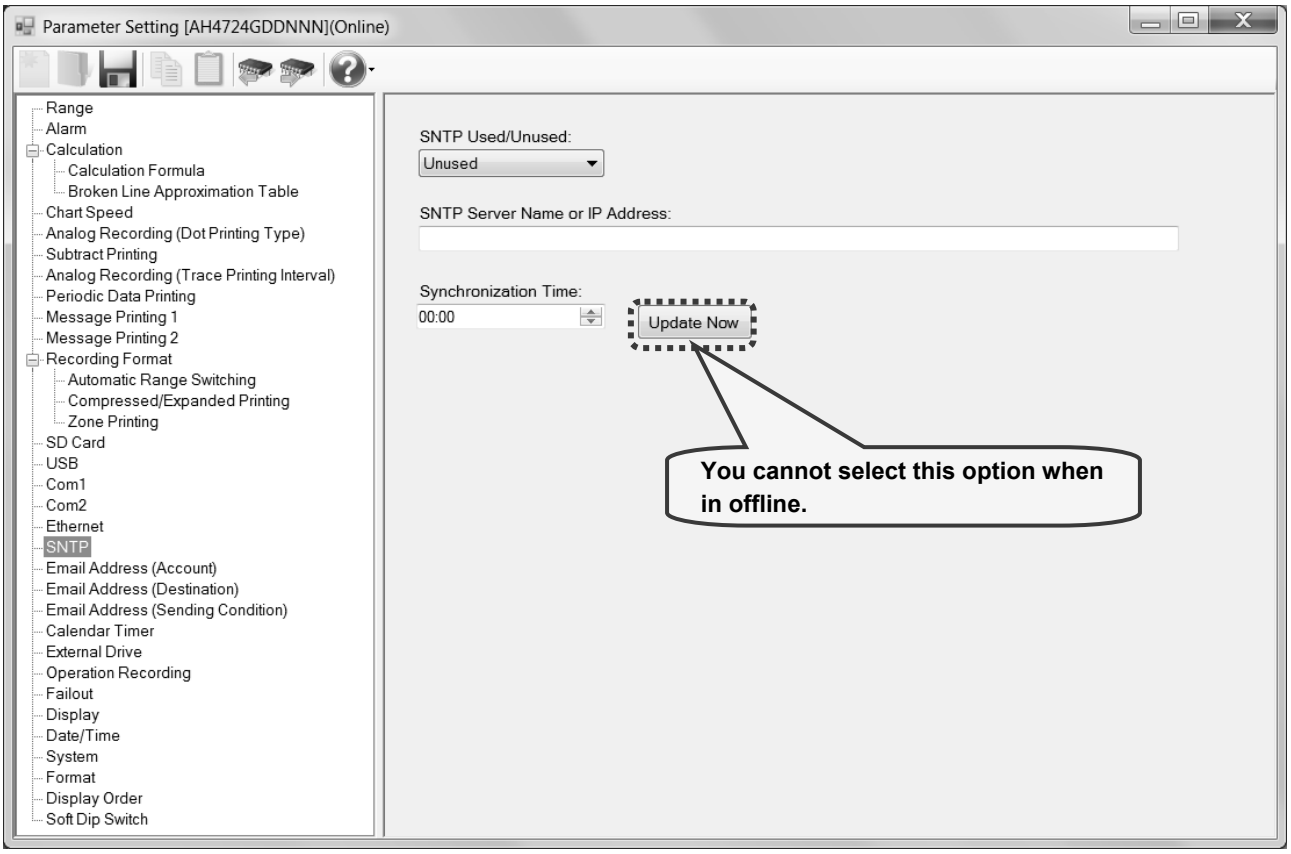
You can configure the following parameters in the Ethernet settings.

[Ethernet Settings "Ether" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>"MAC Address"</td><td>Ethernet MAC address set in this device
(Not displayed on the software screen. Only displayed on the device screen.)</td><td>Setting impossible</td></tr>
<tr><td>IP Address
"IP Address"</td><td>Set the IP address<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>0.0.0.0 to 255.255.255.255</td><td>0.0.0.0 to 255.255.255.255</td></tr></table></td><td></td></tr>
<tr><td>Subnet Mask
"Subnet Mask"</td><td>Set the subnet mask<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>0.0.0.0 to 255.255.255.255</td><td>0.0.0.0 to 255.255.255.255</td></tr></table></td><td></td></tr>
<tr><td>Default Gateway
"Default Gateway"</td><td>Set the default gateway address of the network used<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>0.0.0.0 to 255.255.255.255</td><td>0.0.0.0 to 255.255.255.255</td></tr></table></td><td></td></tr>
<tr><td>TCP/IP Socket Communication Port Number
"Port No."</td><td>Set the port number used for TCP/IP socket communication with the high-order<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>0 to 65535</td><td>0 to 65535</td></tr></table></td><td></td></tr>
<tr><td>DNS Used/Unused
"DNS ON/OFF"</td><td>Select whether or not to use DNS (domain name server)<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Unused</td><td>OFF</td></tr><tr><td>Used</td><td>ON</td></tr></table></td><td>When DNS is not used, set the IP address
When DNS is used, set the name of the SNTP, SMTP, or other server</td></tr>
<tr><td>Primary DNS Server
"Primary Server"</td><td>Set the primary DNS server<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>0.0.0.0 to 255.255.255.255</td><td>0.0.0.0 to 255.255.255.255</td></tr></table></td><td></td></tr>
<tr><td>Secondary DNS Server
"Secondary Server"</td><td>Set the secondary DNS server<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>0.0.0.0 to 255.255.255.255</td><td>0.0.0.0 to 255.255.255.255</td></tr></table></td><td></td></tr>
<tr><td>Login Password
"Password"</td><td>Set a password consisting of up to 32 characters (one byte) used for setting on the Web</td><td>Available characters (one byte):
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789 (refer to section 6-1-2)</td></tr>
</table>

6-6-25. SNTP Settings "SNTP"

- The SNTP settings are displayed to enable you to edit them.
- You can edit these settings depending on the communication method (refer to the table * 1 in section 6-1-5 for multi-point type and table * 1 in section 6-1-6 for pen type).
  * Refer to the instruction manual of the device and the manual for communication interface for more details on the settings.



1. Parameter setting

You can configure the following parameters in the SNTP settings.

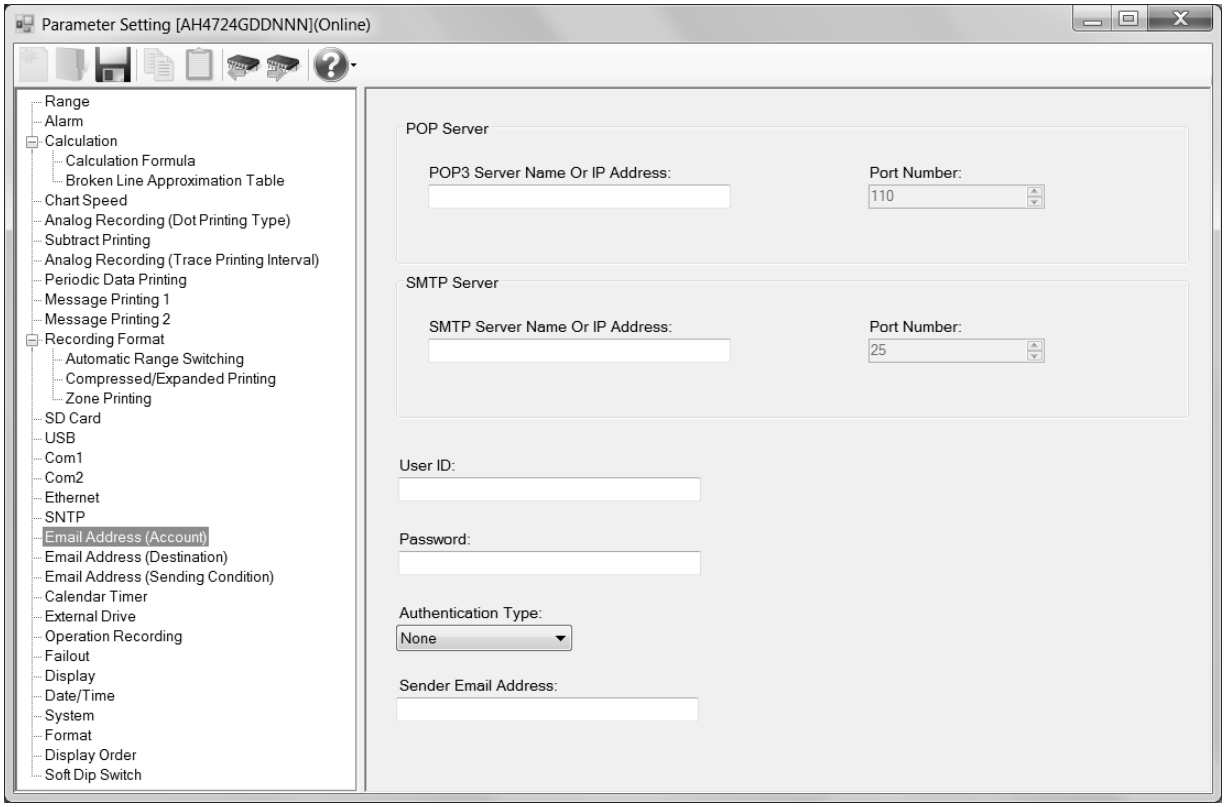
[SNTP Settings "SNTP" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>SNTP Used/Unused
"ON/OFF"</td><td>Set whether or not to use the time setting function by SNTP
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Unused</td><td>OFF</td></tr><tr><td>Used</td><td>ON</td></tr></table></td><td></td></tr>
<tr><td>SNTP Server Name or IP Address
"Server"</td><td>Set the name or IP address of the SNTP server using up to 32 characters (one byte)</td><td>When DNS is used, set the server name
When DNS is not used, set the IP address of the server
Available characters (one byte):
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789+-*/%^().,_:;<>=![]¥
(refer to section 6-1-2)</td></tr>
<tr><td>Synchronization Time
"Std.TIME"</td><td>Set the reference time for query
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>00 to 23 (Hour)</td><td>00 to 23 Hour</td></tr><tr><td>00 to 59 (Minute)</td><td>00 to 59 Min</td></tr></table></td><td></td></tr>
</table>

6-6-26. Email Address (Account) Settings "E-mail Account"

- The email address (account) settings are displayed to enable you to edit them.
- You can edit these settings depending on the communication method (refer to the table * 1 in section 6-1-5 for multi-point type and table *1 in section 6-1-6 for pen type).

  * Refer to the instruction manual of the device and the manual for communication interface for more details on the settings.



1. Parameter setting

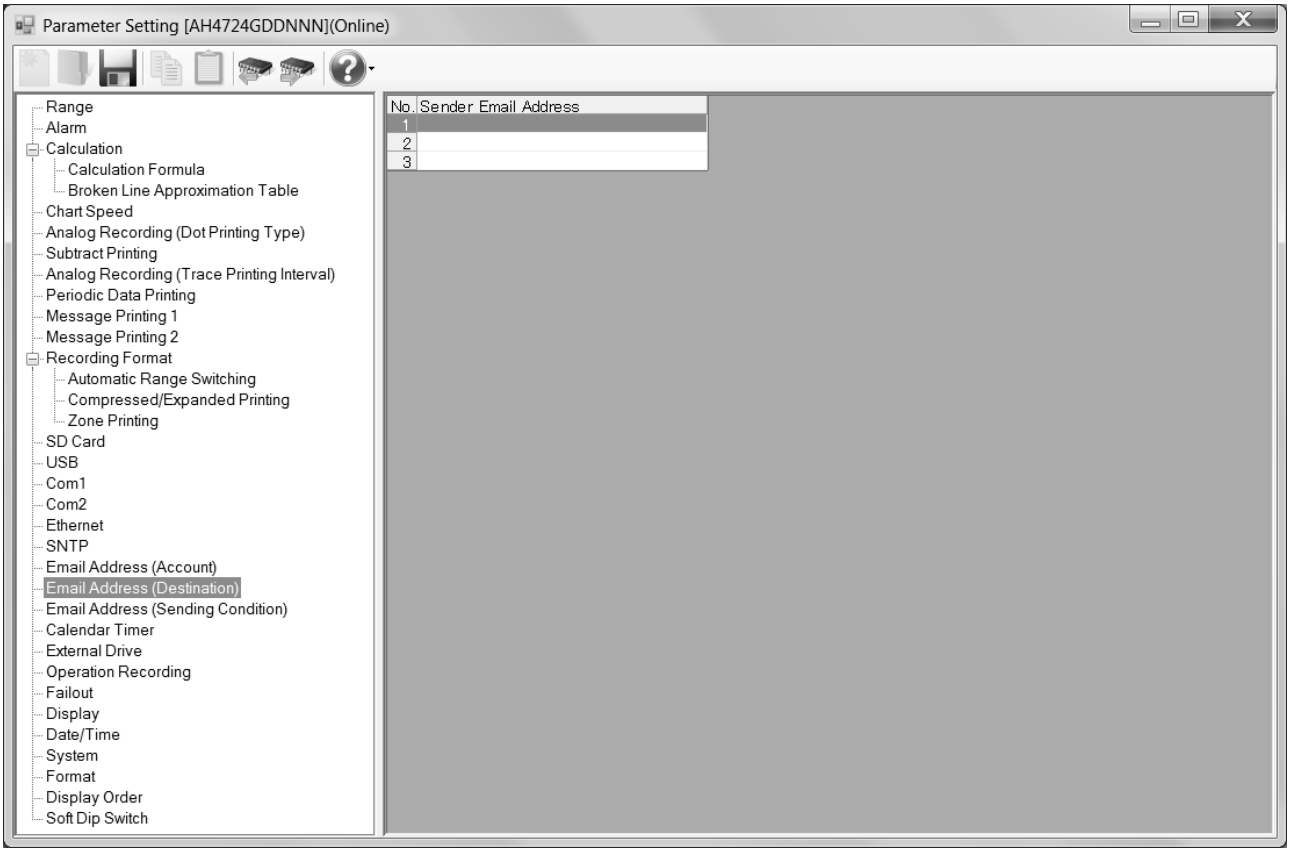
You can configure the following parameters in the email address (account) settings.

[Email Address (Account) Settings "E-mail Account" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>POP3 Server Name Or IP Address
"POP3 Server"</td><td>Set the name or IP address of the server used for POP3 authentication using up to 32 characters (one byte)</td><td>When DNS is used, set the server name
When DNS is not used, set the IP address of the server
Available characters (one byte):
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz0123456789
+-*/%^().,_:;<>=![]¥ (refer to section 6-1-2)</td></tr>
<tr><td>Port Number "POP3 Port"
(POP3 server side)</td><td>Set the port number of the POP3 server
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>0 to 65535</td><td>0 to 65535</td></tr></table></td><td>110 for standard server</td></tr>
<tr><td>SMTP Server
"SMTP Server"</td><td>Set the name or IP address of the SMTP server using up to 32 characters (one byte)</td><td>When DNS is used, set the server name
When DNS is not used, set the IP address of the server
The available characters are the same as those of the [POP3 Server Name Or IP Address] setting parameter</td></tr>
<tr><td>Port Number "SMTP Port"
(SMTP server side)</td><td>Set the port number of the SMTP server
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>0 to 65535</td><td>0 to 65535</td></tr></table></td><td>25 for standard server</td></tr>
<tr><td>User ID "User ID"</td><td>Set the Email account using up to 32 characters (one byte)</td><td>Available characters (one byte):
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz0123456789+-._@
(refer to section 6-1-2)</td></tr>
<tr><td>Password "Password"</td><td>Set the Email password using up to 32 characters (one byte)</td><td>The available characters are the same as those of the [POP3 Server Name Or IP Address] setting parameter</td></tr>
<tr><td>Authentication Type
"Authentication"</td><td>Authentication type used for accessing the transmission server
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>None</td></tr><tr><td>POP</td><td>POP</td></tr><tr><td>APOP</td><td>APOP</td></tr></table></td><td></td></tr>
<tr><td>Sender Email Address
"Sender address"</td><td>Set the sender Email address using up to 32 characters (one byte)</td><td>The available characters are the same as those of the [User ID] setting parameter</td></tr>
</table>

6-6-27. Email Address (Destination) Settings "E-mail Address"

- The email address (destination) settings are displayed to enable you to edit them.
- The columns of the table represent the destination Email addresses, and the rows represent the Email address numbers.
- You can edit these settings depending on the communication method (refer to the table * 1 in section 6-1-5 for multi-point type and table * 1 in section 6-1-6 for pen type).
  * Refer to the instruction manual of the device and the manual for communication interface for more details on the settings.



1. Parameter setting

You can configure the following parameters in the email address (destination) settings.

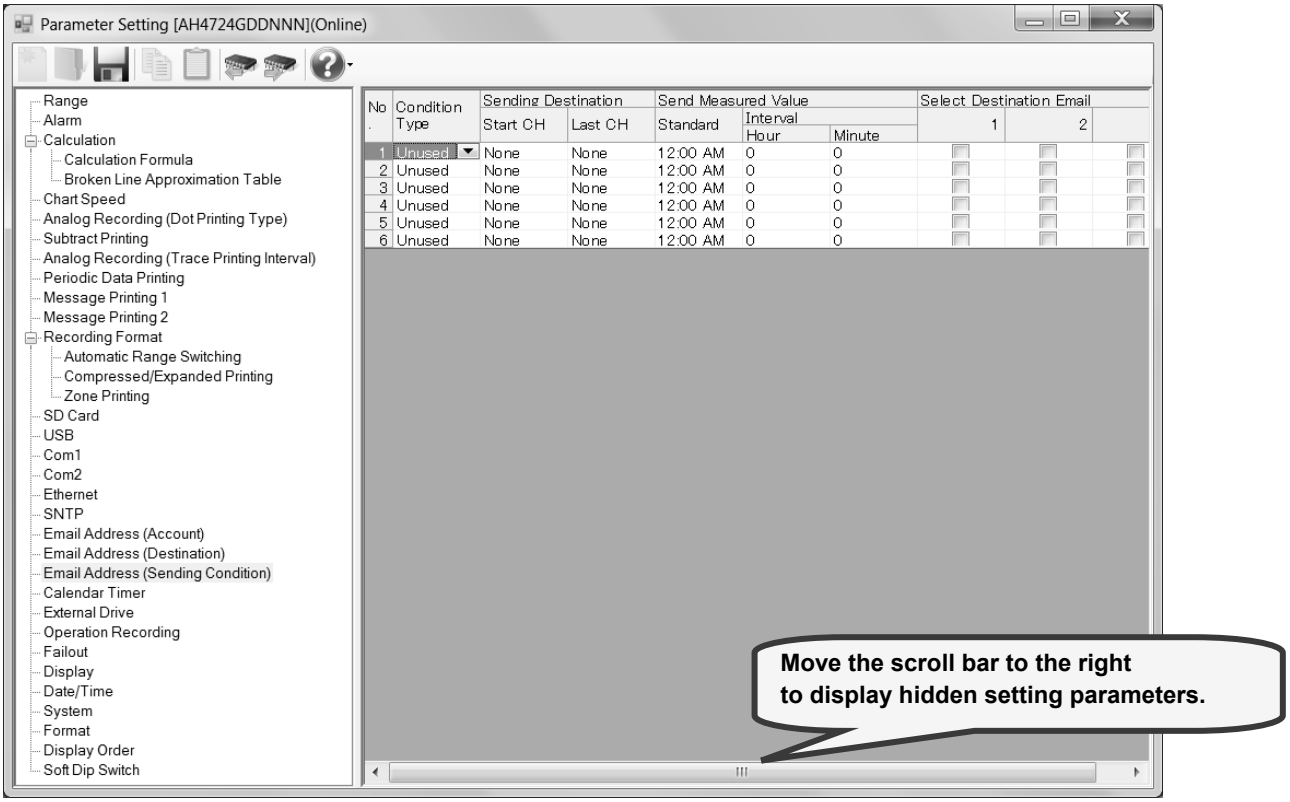
[Email Address (Destination) Settings "E-mail Address" Parameter List]

Setting parameter	Function	Remarks
Destination Email Address "Address"	Set the Email destination address using up to 32 characters (one byte)	Available characters (one byte): ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz0123456789+- ._@ (refer to section 6-1-2)

6-6-28. Email Address (Sending Condition) Settings "E-mail Condition"

- The email address (sending condition) settings are displayed to enable you to edit them.
- You can edit these settings depending on the communication method (refer to the table * 1 in section 6-1-5 for multi-point type and table * 1 in section 6-1-6 for pen type).

  * Refer to the instruction manual of the device and the manual for communication interface for more details on the settings.



1. Parameter setting

You can configure the following parameters in the email address (sending condition) settings.

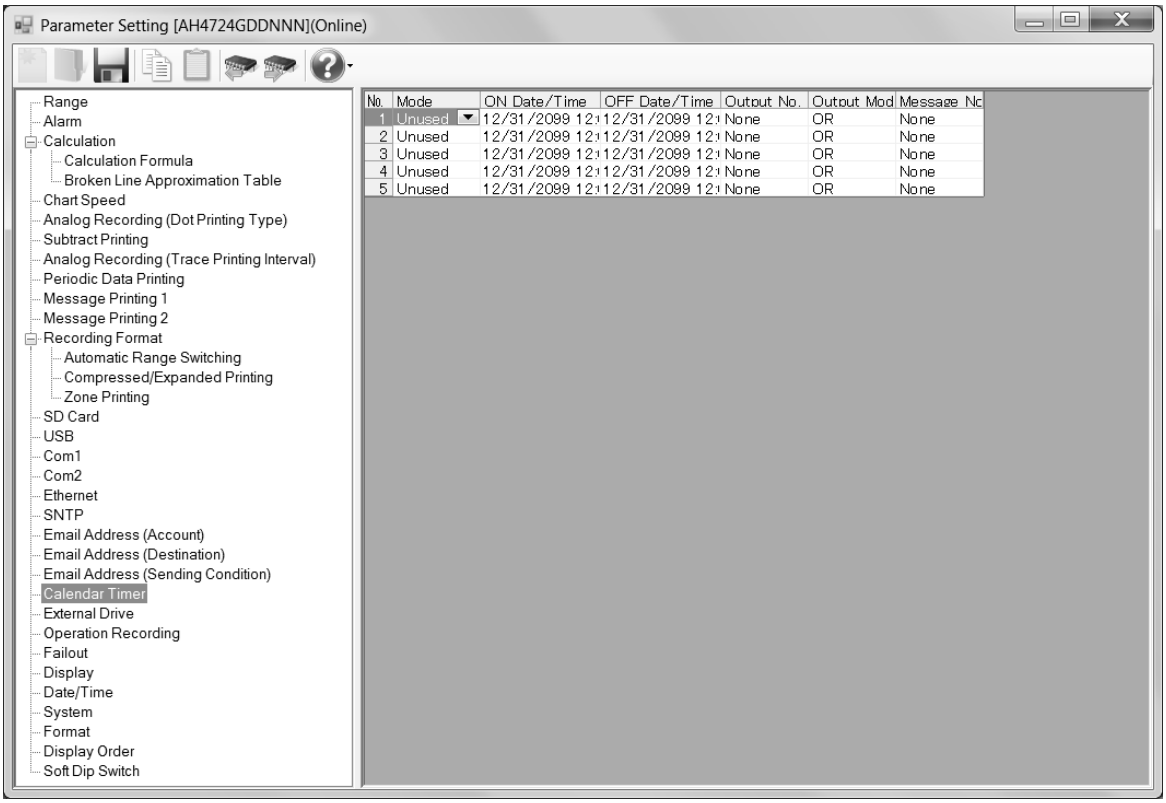
[Email Address (Sending Condition) Settings "E-mail Condition" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>Condition Type
"Condition"</td><td>Select the condition type for sending Email
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Unused</td><td>None</td></tr><tr><td>When Alarm Occurred</td><td>Alarm</td></tr><tr><td>Set Time (Send Measured Value)</td><td>Interval</td></tr><tr><td>System Event</td><td>Fail</td></tr></table></td><td></td></tr>
<tr><td>Sending Destination Start CH, Last CH
"Target CH"</td><td>Set the start CH and last CH of the target CHs to send Email when an alarm for measured data or a specific CH occurs
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>(Start CH) None</td><td>From *</td></tr><tr><td>(Start CH) 1 to 24</td><td>From 1 to 24</td></tr><tr><td>(Last CH) None</td><td>To *</td></tr><tr><td>(Last CH) 1 to 24</td><td>To 1 to 24</td></tr></table></td><td>The number of the displayed channels varies depending on the device model.</td></tr>
<tr><td>Send Measured Value Standard Time
"Std.TIME"</td><td>Set the reference time for sending the measured data
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>00 to 23 (Hour)</td><td>00 to 23 Hour</td></tr><tr><td>00 to 59 (Minute)</td><td>00 to 59 Min</td></tr></table></td><td></td></tr>
<tr><td>Interval Hour, Minutes
"Interval"</td><td>Set the interval for sending the measured data
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>0 to 24 hours</td><td>00 to 24 Hour</td></tr><tr><td>0 to 59 minute</td><td>00 to 59 Min</td></tr></table></td><td></td></tr>
<tr><td>Select Destination Email Address
"Address No."</td><td>Select the destination to send Email based on conditions
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>1</td><td>No.1</td></tr><tr><td>2</td><td>No.2</td></tr><tr><td>3</td><td>No.3</td></tr></table></td><td>Select up to three from the destination addresses set in the Email address (destination) by checking their address numbers (refer to section 6-6-27)</td></tr>
</table>

6-6-29. Calendar Timer Settings "Timer"

- The calendar timer settings are displayed to enable you to edit them.

  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

You can configure the following parameters in the calendar timer settings.

[Calendar Timer Settings "Timer" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>Mode
"Mode"</td><td>Select the timer type
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Unused</td><td>None</td></tr><tr><td>ON Time</td><td>ON</td></tr><tr><td>ON/OFF Time</td><td>ON&OFF</td></tr></table></td><td></td></tr>
<tr><td>ON Date/Time
"Timer ON"</td><td>Set the date and time when turning ON the alarm output or printing message
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>2000 to 2099 (Year)</td><td>2000 to 2099 Year</td></tr><tr><td>1 to- 12 (Month)</td><td>1 to 12 Month</td></tr><tr><td>1 to 31 (Day)</td><td>1 to 31 Day</td></tr><tr><td>00 to 23 (Hour)</td><td>00 to 23 Hour</td></tr><tr><td>00 to 59 (Minute)</td><td>00 to 59 Min</td></tr></table></td><td></td></tr>
<tr><td>OFF Date/Time
"Timer OFF"</td><td>Set the date and time when turning OFF the alarm output
The displays on the software and device screens are the same as those of the [On Date/Time] setting parameter</td><td></td></tr>
<tr><td>Output No.
"Relay No."</td><td>Specify the output destination (relay No.) when the timer is ON
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>-</td></tr><tr><td>1 to 24</td><td>1 to 24</td></tr><tr><td>Dummy Output</td><td>99</td></tr></table></td><td>The number varies depending on the device model.</td></tr>
<tr><td>Output Mode
"And/Or"</td><td>Select the connection method to the output destination when the timer is ON
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>OR</td><td>Or</td></tr><tr><td>AND</td><td>And</td></tr></table></td><td></td></tr>
<tr><td>Message No.
"Message No."</td><td>Specify the message No. to be printed when the timer is turned on
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>-</td></tr><tr><td>1 to 20</td><td>1 to 20</td></tr></table></td><td></td></tr>
</table>

2. Copy and paste operations for calendar timer setting

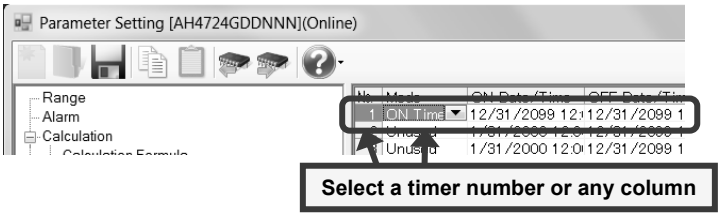
For the calendar timer setting, you can copy and paste parameters per timer number (parameters belonging to one timer number).

<How to copy/paste>

(1) Select the copy source

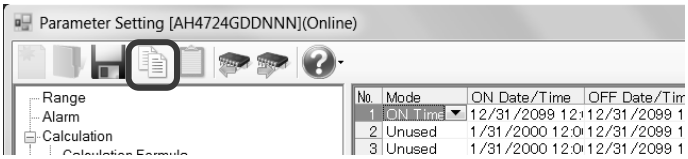
Click to select a timer number or any column to copy from.

* You can copy parameters per one timer number. That means you cannot select multiple timer numbers to copy the parameters at a time.



(2) Click the [Copy] button

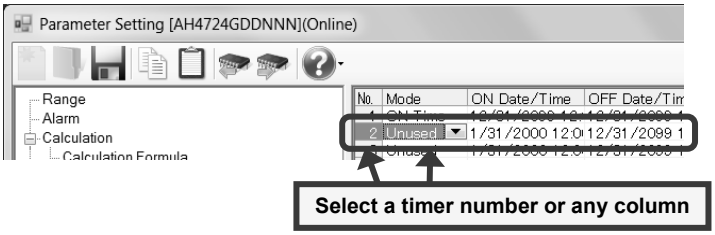
Click the [Copy] button from the tool bar to copy the selected parameters.



(3) Select the paste destination

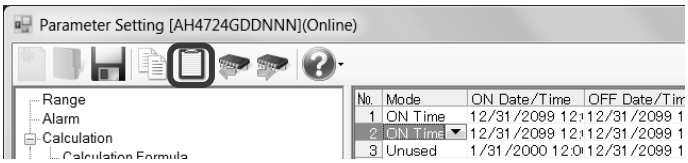
Click to select a timer number or any column to paste to.

* You can paste the parameters to one timer number. That means you cannot select multiple timer numbers to paste the parameters at a time.



(4) Click the [Paste] button

Click the [Paste] button from the tool bar to paste the parameters to the selected location.

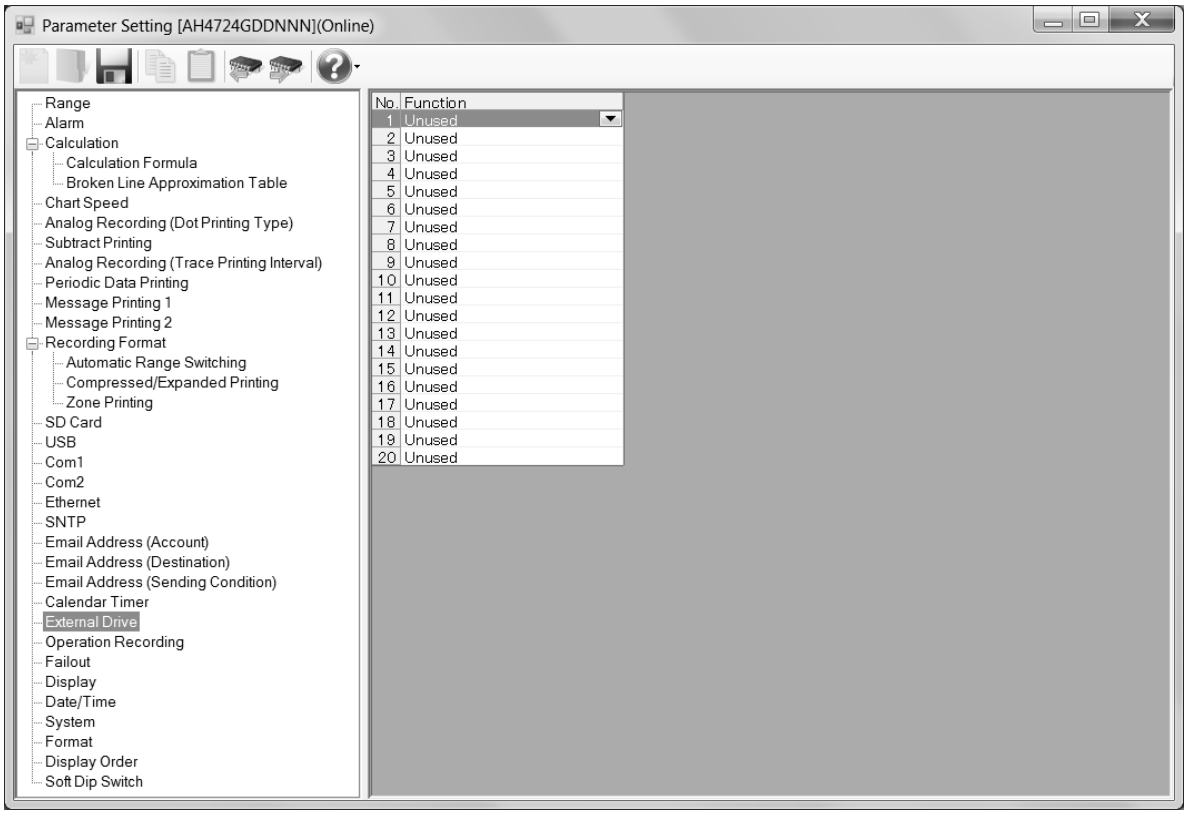


Remarks "Keeping copied data" and "Copy/paste unit"

- The copied parameters are kept after a paste operation until the [Copy] button is clicked the next time. Note that, if you move to another setting item in the edit panel after a copy operation, the copied parameters are lost.
- You cannot copy or paste per setting parameter. The copy or paste operation can be used by one timer number.

6-6-30. External Drive Settings "Dig Inp"

- The settings for the external drive are displayed in the table format to enable you to edit them.
- The columns of the table represent the functions, and the rows represent the external drive numbers.
- You can edit these settings depending on the alarm output + external drive method (refer to the table * 1 in section 6-1-5 for multi-point type and table * 1 in section 6-1-6 for pen type).
- The number of the displayed external drive numbers varies depending on the device model.
  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

You can configure the following parameters in the external drive settings.

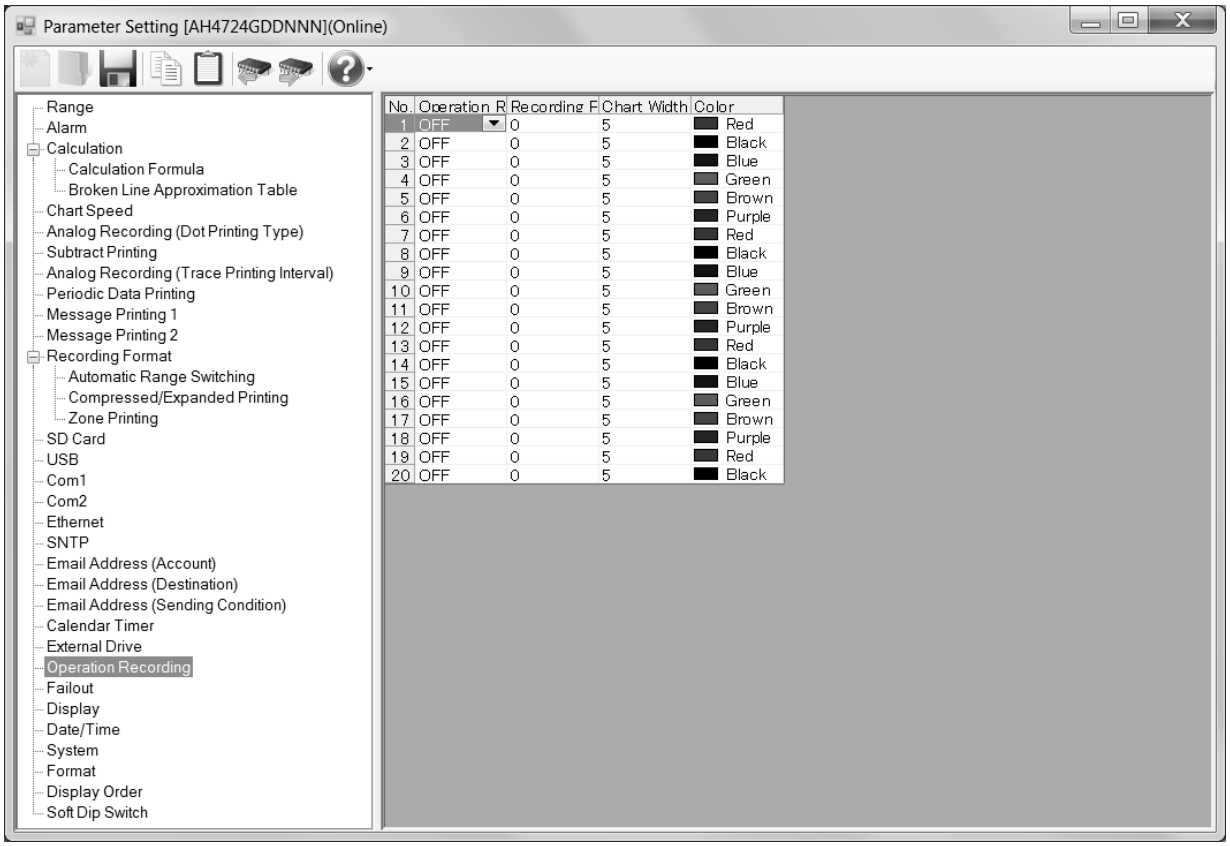
[External Drive Settings "Dig Inp" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>Function
"Mode"</td><td>Allocate functions to the given external drive terminal numbers
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>Unused</td><td>None</td></tr>
<tr><td>Chart Speed *1</td><td>ChartSpeed *1</td></tr>
<tr><td>Message (1,2) *2</td><td>Message 1, 2 *2</td></tr>
<tr><td>Message (1,2,3,4,5) *3</td><td>Message 1 to 5 *3</td></tr>
<tr><td>Data Printing</td><td>DataPrint</td></tr>
<tr><td>List 1 Printing - List 3 Printing</td><td>ListPrint 1 to ListPrint 3</td></tr>
<tr><td>Integration Reset (Batch)</td><td>INT-Reset(All)</td></tr>
<tr><td>Message 1 Printing - Message 20s Printing</td><td>Message 1 to Message 20</td></tr>
</table></td><td><u>To select [Chart Speed]</u>
The external drive No. 1 and No. 2 must be set to "Chart Speed".
*1 If both the external drives No.1 and No.2 are not set, the chart speed selection does not work.
<u>To select [Message (1,2)]</u>
The external drive No. 1 and No. 2 must be set to "Message (1,2)".
*2 If both the external drives No.1 and No.2 are not set, the message (1,2) selection does not work.
<u>To select [Message (1,2,3,4,5)]</u>
The external drive No. 1 to No. 4 must be set to "Message (1,2,3,4,5)".
*3 If all of the external drives No.1 to No.4 are not set, the message (1,2,3,4,and 5) selection does not work.</td></tr>
</table>

6-6-31. Operation Recording Settings "Ope.Rec"

* If using this function in multi-point type, do not set “Chart Synchronization” in Analog Recording (Trace Printing Interval) Settings “Dot.Int” (refer to section 6-6-10). If it is set to “Chart Synchronization”, this function is disabled.

- The settings for the external drive are displayed in the table format to enable you to edit them.
- The columns of the table present the setting parameter types, and the rows present the external drive numbers.
- You can edit these settings depending on the alarm output + external drive method (refer to the table * 1 in section 6-1-5 for multi-point type and table * 1 in section 6-1-6 for pen type).
- The number of the displayed external drive numbers varies depending on the device model.
  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

You can configure the following parameters in the operation recording settings.

[Operation Recording Settings "Ope.Rec" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>Operation Recording
"ON/OFF"</td><td>Specify whether the operation recording is turned on or off
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>OFF</td><td>OFF</td></tr><tr><td>ON</td><td>ON</td></tr></table></td><td></td></tr>
<tr><td>Recording Position (%)
"Position"</td><td>Set the recording position for input OFF status in proportion to the chart zero span (%)
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>0 to 90</td><td>0 to 90</td></tr></table></td><td></td></tr>
<tr><td>Chart Width (Mm)
"Width"</td><td>Set the recording position for input ON status by the chart zero span (millimeters) from the input OFF recording position
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>1 to 10</td><td>1 to 10</td></tr></table></td><td></td></tr>
<tr><td>Color
"Color"</td><td>Select the color for recording
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Red</td><td>Red</td></tr><tr><td>Black</td><td>Black</td></tr><tr><td>Blue</td><td>Blue</td></tr><tr><td>Green</td><td>Green</td></tr><tr><td>Brown</td><td>Brown</td></tr><tr><td>Purple</td><td>Purple</td></tr></table></td><td>Setting is only available for multi-point type.</td></tr>
</table>

2. Copy and paste operations for operation recording setting

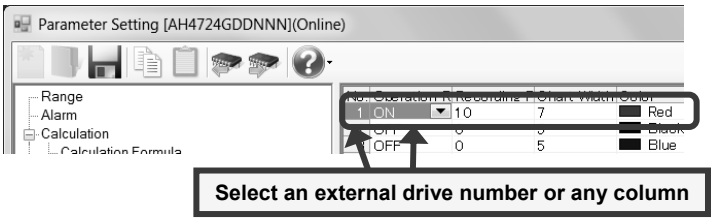
For the operation recording setting, you can copy and paste parameters per external drive number (parameters belonging to one external drive number).

<How to copy/paste>

(1) Select the copy source

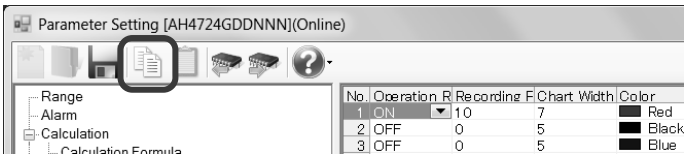
Click to select an external drive number or any column to copy from.

* You can copy parameters per one external drive number. That means you cannot select multiple external drive numbers to copy the parameters at a time.



(2) Click the [Copy] button

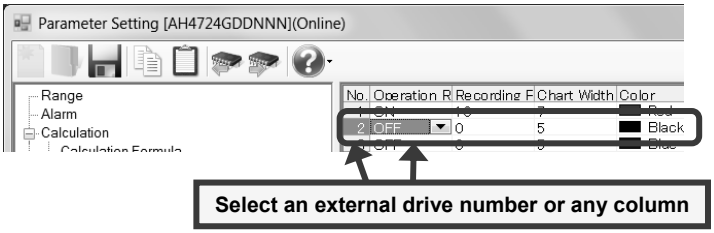
Click the [Copy] button from the tool bar to copy the selected parameters.



(3) Select the paste destination

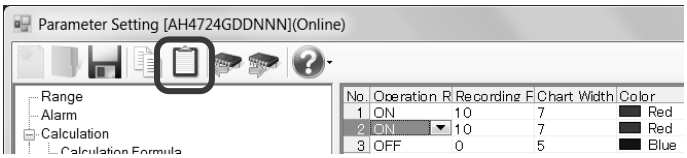
Click to select an external drive number or any column to paste to.

* You can paste the parameters to one external drive number. That means you cannot select multiple external drive numbers to paste the parameters at a time.



(4) Click the [Paste] button

Click the [Paste] button from the tool bar to paste the parameters to the selected location.

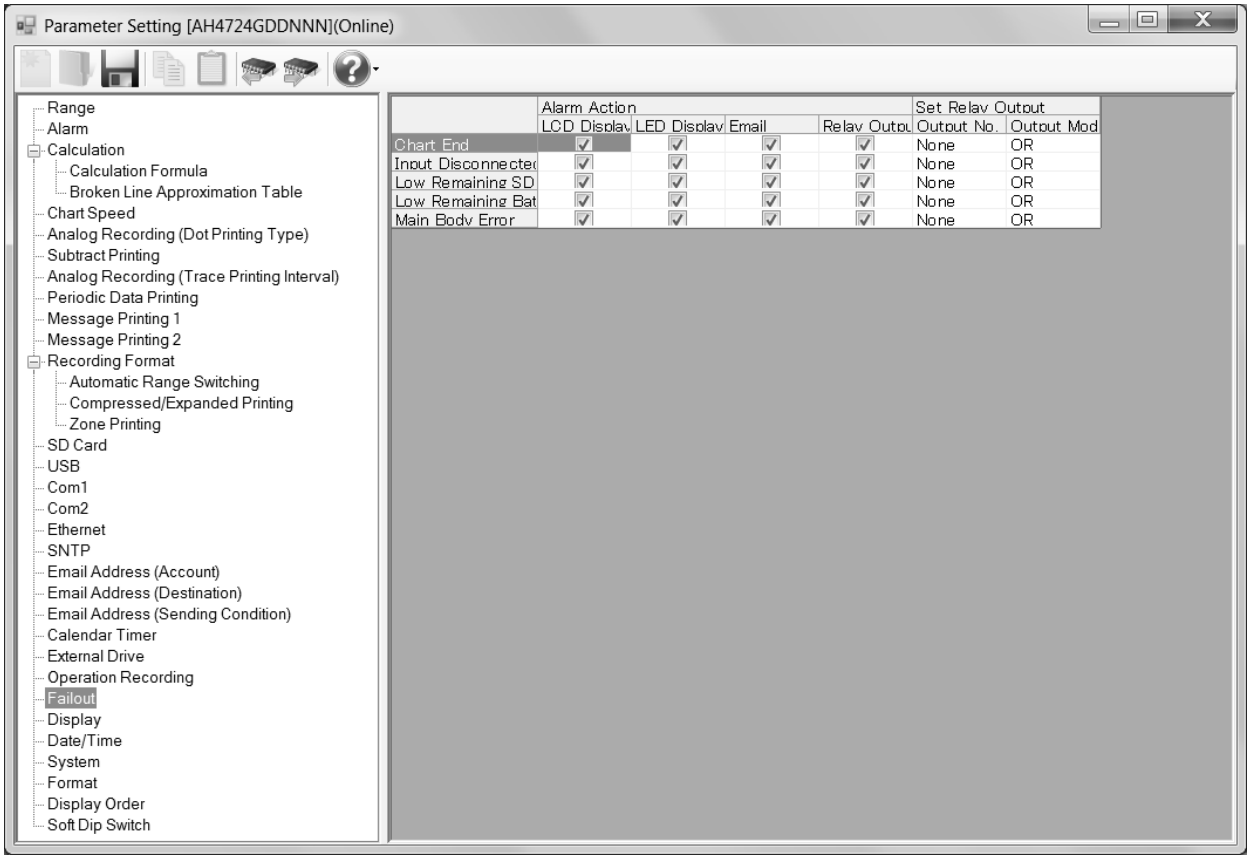


Remarks "Keeping copied data" and "Copy/paste unit"

- The copied parameters are kept after a paste operation until the [Copy] button is clicked the next time. Note that, if you move to another setting item in the edit panel after a copy operation, the copied parameters are lost.
- You cannot copy or paste per setting parameter. The copy or paste operation can be used by one external drive number.

6-6-32. Failout Settings "FailOut"

- The settings for the failout are displayed in the table format to enable you to edit them.
- The columns of the table represent the setting parameter types, and the rows represent the event types for failout.
  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

You can configure the following parameters in the failout settings.

[Failout Settings "FailOut" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>Chart End
"Chart End"</td><td>Set the alarm action at detection of chart end
Use the check boxes for selection
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>LCD Display</td><td>LCD</td></tr><tr><td>LED Display</td><td>LED</td></tr><tr><td>Email</td><td>E-mail</td></tr><tr><td>Relay output</td><td>Relay</td></tr></table></td><td rowspan="3">Check box operation:
☑ Checked...Display
☐ Unchecked...Do not display

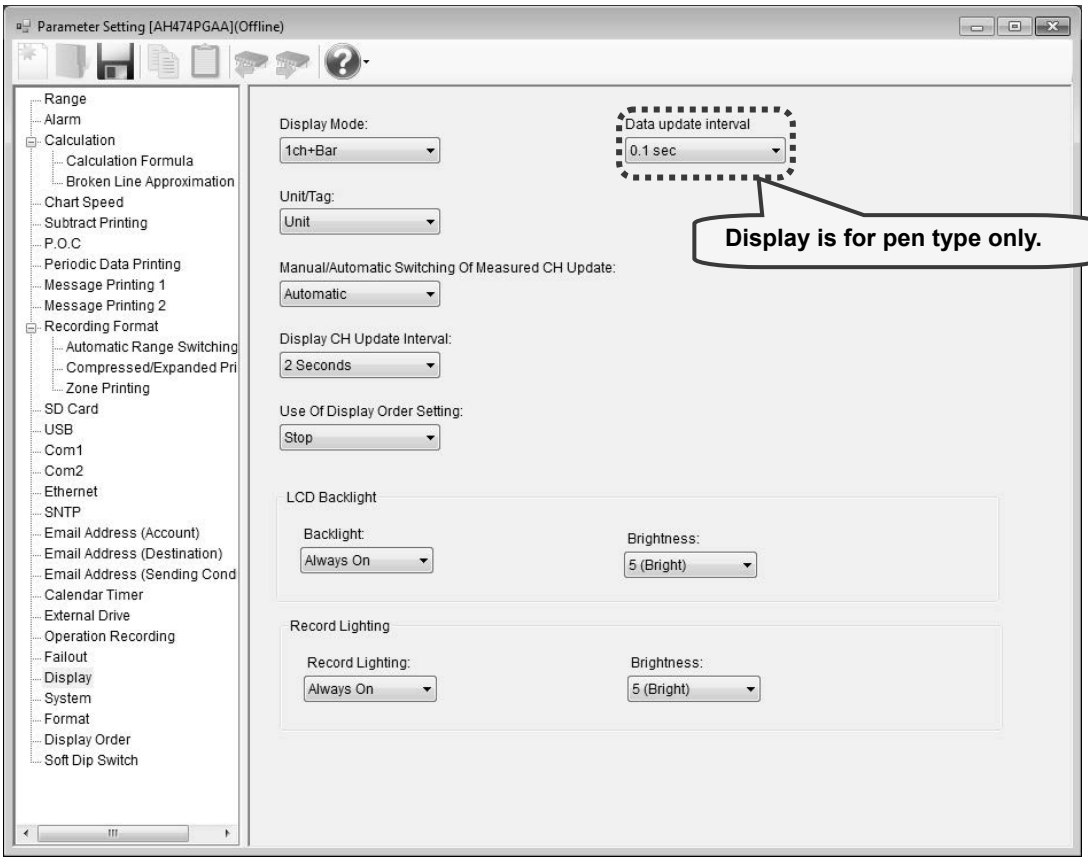
.</td></tr>
<tr><td>Input Disconnected
"Burn"</td><td>Set the alarm action at detection of input disconnection
Use the check boxes for selection
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>LCD Display</td><td>LCD</td></tr><tr><td>LED Display</td><td>LED</td></tr><tr><td>Email</td><td>E-mail</td></tr><tr><td>Relay output</td><td>Relay</td></tr></table></td></tr>
<tr><td>Low Remaining SD Card Memory
"SD Card"*</td><td>Set the alarm action at detection of SD card low capacity
Use the check boxes for selection
<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>LCD Display</td><td>LCD</td></tr><tr><td>LED Display</td><td>LED</td></tr><tr><td>Email</td><td>E-mail</td></tr><tr><td>Relay output</td><td>Relay</td></tr></table></td></tr>
</table>

<table>
<tr>
<td>Low Remaining Battery Power For Backup
"Battery"</td>
<td>Set the alarm action at detection of backup battery low level
Use the check boxes for selection
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>LCD Display</td><td>LCD</td></tr>
<tr><td>LED Display</td><td>LED</td></tr>
<tr><td>Email</td><td>E-mail</td></tr>
<tr><td>Relay output</td><td>Relay</td></tr>
</table>
</td>
<td rowspan="2">Check box operation:
☑ Checked...Display
☐ Unchecked...Do not display</td>
</tr>
<tr>
<td>Main Body Error
"System Error"</td>
<td>Set the alarm action at detection of main body error
Use the check boxes for selection
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>LCD Display</td><td>LCD</td></tr>
<tr><td>LED Display</td><td>LED</td></tr>
<tr><td>Email</td><td>E-mail</td></tr>
<tr><td>Relay output</td><td>Relay</td></tr>
</table>
</td>
</tr>
<tr>
<td>Set Relay Output Output No.
"Relay No."</td>
<td>• Set the alarm output destination No. at detection of chart end
• Set the alarm output destination No. at detection of input disconnection
• Set the alarm output destination No. at detection of SD card low capacity
• Set the alarm output destination No. at detection of backup battery low level
• Set the alarm output destination No. at detection of main body error
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>None</td><td>-</td></tr>
<tr><td>1 to 24</td><td>1 to 24</td></tr>
<tr><td>Dummy Output</td><td>99</td></tr>
</table>
</td>
<td>The number varies depending on the device model.</td>
</tr>
<tr>
<td>Set Relay Output Output Mode
"And/Or"</td>
<td>• Select the connection method of the alarm output destination at detection of chart end
• Select the connection method of the alarm output destination at detection of input disconnection
• Select the connection method of the alarm output destination at detection of SD card low capacity
• Select the connection method of the alarm output destination at detection of backup battery low level
• Select the connection method of the alarm output destination at detection of main body error
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>OR</td><td>Or</td></tr>
<tr><td>AND</td><td>And</td></tr>
</table>
</td>
<td></td>
</tr>
</table>

6-6-33. Display Settings "Display"

- The display settings are displayed to enable you to edit them.

  * Refer to the instruction manual of the device for more details on the settings.



*The Screen is for pen type.

1. Parameter setting

You can configure the following parameters in the display settings.

[Display Settings "Display" Parameter List]

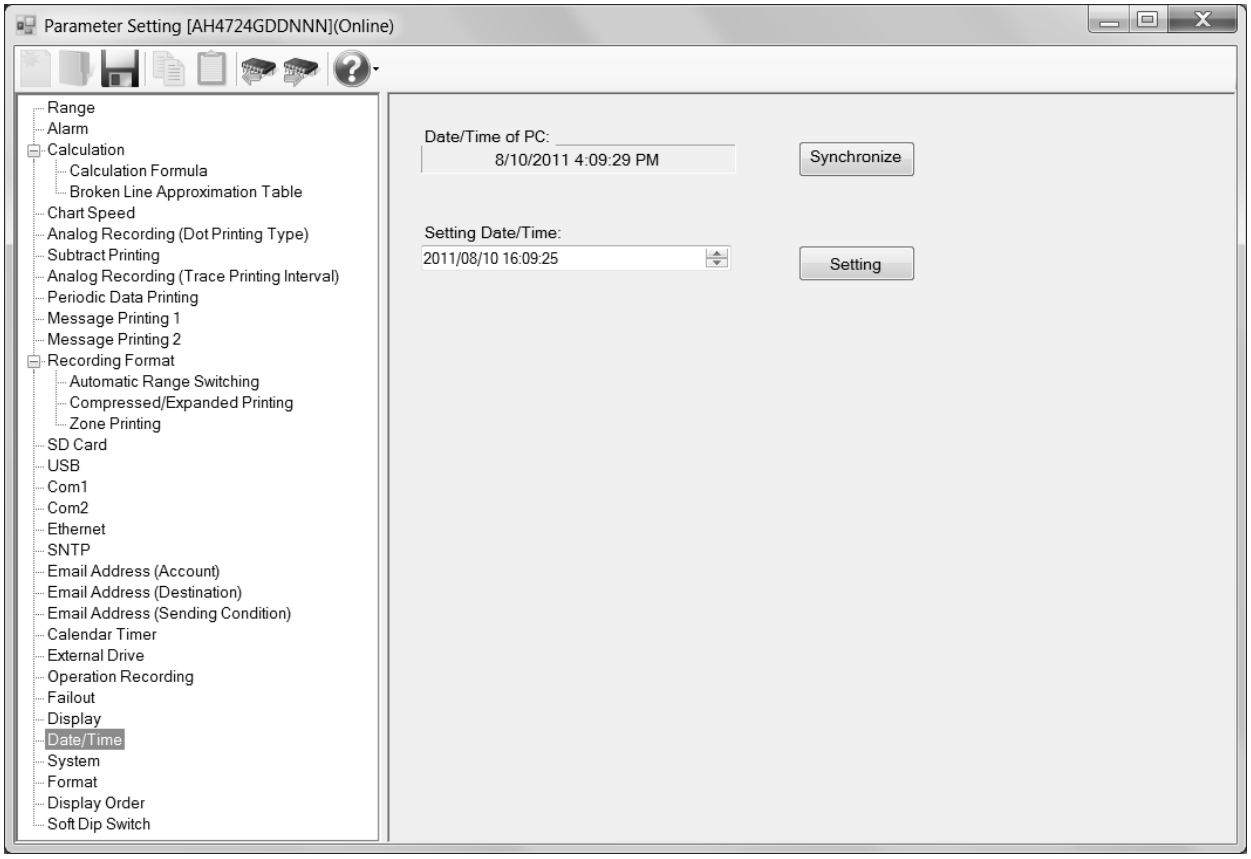
Setting parameter	Function	Remarks
Display Mode "Display Mode"	Select the number of CHs and the information displayed simultaneously on a single screen	*1: Settings is available depending on the device model for multi-point type. *2: Settings is available depending on the device model for pen type.

Software screen		Device screen	
1ch Expand		01CH	
1ch + Bar		01CH + Bar	
6ch + Tag	*1	06CH +Tag	*1
6ch Batch	*1	06CH	*1
12ch Batch	*1	12CH	*1
24ch Batch	*1	24CH	*1
2ch	*2	02CH	*2
2ch + Bar	*2	02CH + Bar	*2
3ch	*2	03CH	*2
3ch + Bar	*2	03CH + Bar	*2
4ch	*2	04CH	*2
4ch + Bar	*2	04CH + Bar	*2
Indicator	*2	Indicator	*2

<table>
<tr>
<td>Unit/Tag
"Unit/Tag"</td>
<td>Select whether unit or tag you want to display
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>Unit</td><td>Unit</td></tr>
<tr><td>Tag</td><td>Tag</td></tr>
<tr><td>Tag and Unit *1</td><td>Both *1</td></tr>
</table>
</td>
<td>*1: Setting of Tag and Unit is only available at pen type. 3CH, 3CH + Bar, 4CH, 4CH + Bar Display Mode are only valid. For 1 pen type and 2 pen type, [*] is displayed and setting is disabled.</td>
</tr>
<tr>
<td>Manual/Automatic Switching Of Measured CH Update
"Auto/Const"</td>
<td>Select either manual (with keys) or automatic (with update interval) for displayed CH update
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>Manual</td><td>Const</td></tr>
<tr><td>Automatic</td><td>Auto</td></tr>
</table>
</td>
<td></td>
</tr>
<tr>
<td>Display CH Update Interval
"CH-Update Interval"</td>
<td>Set the update interval of the displayed CHs
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>Synchronized With Dots *1</td><td>Synchro *1</td></tr>
<tr><td>1 Second</td><td>1sec</td></tr>
<tr><td>2 Seconds</td><td>2sec</td></tr>
<tr><td>3 Seconds</td><td>3sec</td></tr>
<tr><td>5 Seconds</td><td>5sec</td></tr>
<tr><td>10 Seconds</td><td>10sec</td></tr>
<tr><td>30 Seconds</td><td>30sec</td></tr>
</table>
</td>
<td>*1: Setting is only available for multi-point type.</td>
</tr>
<tr>
<td>Use Of Display Order Setting
"Display-order"</td>
<td>Select whether to display the measured values in the CH No. order (OFF) or in an arbitrary order (ON)
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>Stop</td><td>OFF</td></tr>
<tr><td>Do</td><td>ON</td></tr>
</table>
</td>
<td></td>
</tr>
<tr>
<td>Display DATA Update Interval
“DATA-Update Interval”</td>
<td>Set the update interval of the DATA.
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>0.1 Second</td><td>0.1s</td></tr>
<tr><td>0.2 Second</td><td>0.2s</td></tr>
<tr><td>0.5 Second</td><td>0.5s</td></tr>
<tr><td>1 Second</td><td>1s</td></tr>
</table>
</td>
<td>Setting is only available for pen type.</td>
</tr>
<tr>
<td>Backlight
"Display Backlight"</td>
<td>Select ON or AUTO for the LCD backlight
With AUTO selected, the LCD backlight is turned off after no operations for three minutes
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>Always On</td><td>ON</td></tr>
<tr><td>Automatic</td><td>AUTO</td></tr>
</table>
</td>
<td></td>
</tr>
<tr>
<td>Brightness
"Display Backlight Level"</td>
<td>Select the brightness of the backlight
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>1 (Dark)</td><td>1</td></tr>
<tr><td>2</td><td>2</td></tr>
<tr><td>3</td><td>3</td></tr>
<tr><td>4</td><td>4</td></tr>
<tr><td>5 (Bright)</td><td>5</td></tr>
</table>
</td>
<td>Degree of brightness:
1 < 5
(Dark) (Bright)</td>
</tr>
<tr>
<td>Record Lighting
"Chart Illumination"</td>
<td>Select ON, OFF, or AUTO for the chart illumination
With AUTO selected, the record lighting is turned off after no operations for three minutes
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>Always On</td><td>ON</td></tr>
<tr><td>OFF</td><td>OFF</td></tr>
<tr><td>Automatic</td><td>AUTO</td></tr>
</table>
</td>
<td></td>
</tr>
<tr>
<td>Brightness
“Chart Illumination Level”</td>
<td>Select the brightness of the Chart Illumination.
<table>
<tr><th>Software screen</th><th>Device screen</th></tr>
<tr><td>OFF</td><td>0</td></tr>
<tr><td>1 (Dark)</td><td>1</td></tr>
<tr><td>2</td><td>2</td></tr>
<tr><td>3</td><td>3</td></tr>
<tr><td>4</td><td>4</td></tr>
<tr><td>5 (Bright)</td><td>5</td></tr>
</table>
</td>
<td>Degree of brightness:
OFF < 1 < 5
(Off) (Dark) (Bright)</td>
</tr>
</table>

6-6-34. Date/Time Settings "Date"

- The date/time settings are displayed to enable you to edit them.
- For online, you can edit these settings (for multi-point type/pen type).
  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

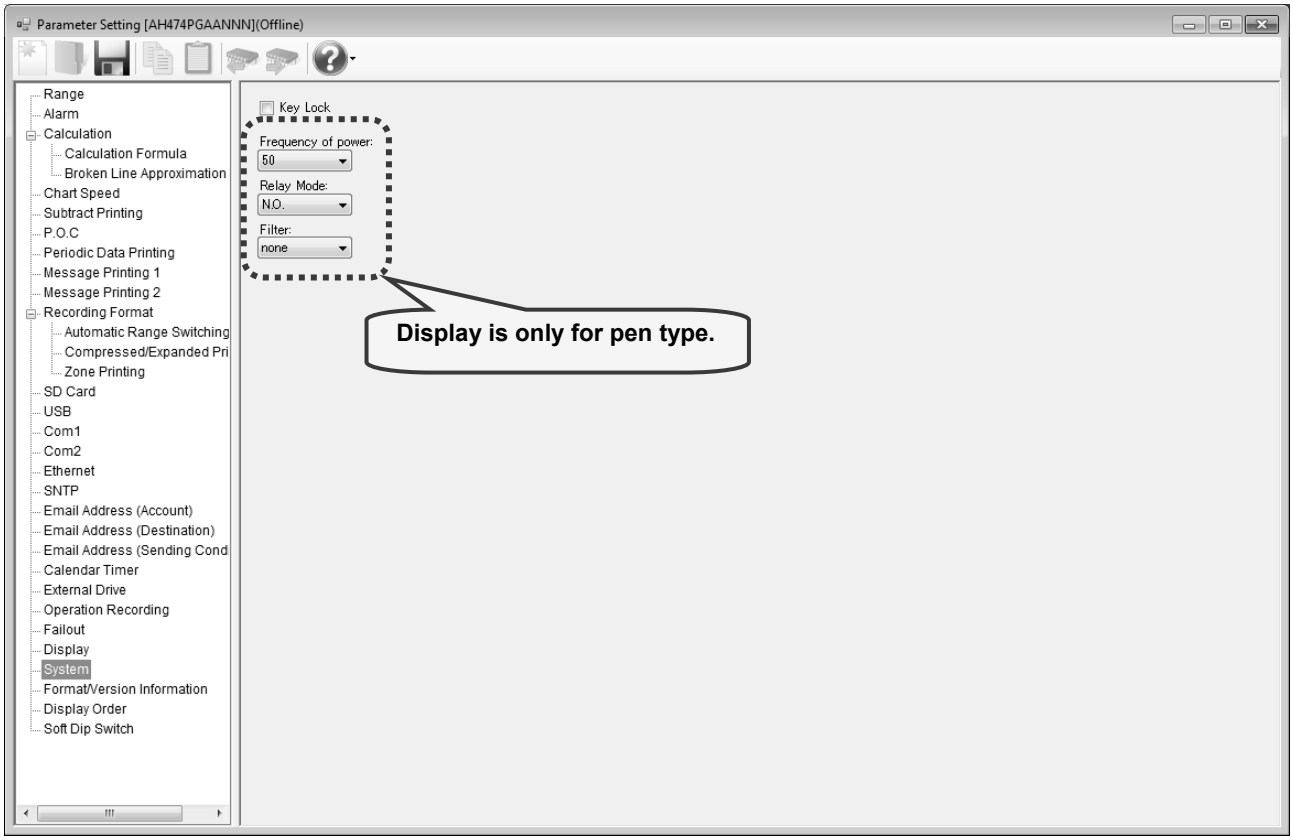
You can configure the following parameters in the date/time settings.

[Date/Time Settings "Date" Parameter List]

Setting parameter		Function	Remarks
Date/Time of PC		Display the date/time of the PC	Click the [Synchronize With PC] button to set the date/time of PC at that time to the connected device.
Setting Date/Time	"Year"	Set the year Software screen: 2000 to 2099 / Device screen: 2000 to 2099	After entering the date/time, click the [Setting] button to set the specified date/time to the connected device.
	"Month"	Set the month Software screen: 1 to 12 / Device screen: 1 to 12	
	"Day"	Set the day Software screen: 1 to 31 / Device screen: 1 to 31	
	"Hour"	Set the hour Software screen: 00 to 23 / Device screen: 00 to 23	
	"Min"	Set the minute Software screen: 00 to 59 / Device screen: 00 to 59	
	"Sec"	Set the second Software screen: 00 to 59 / Device screen: 00 to 59	

6-6-35. System Settings "System"

- The system settings are displayed to enable you to edit them.
  * Refer to the instruction manual of the device for more details on the settings.



*The screen is for pen type.

1. Parameter setting

You can configure the following parameters in the system settings.

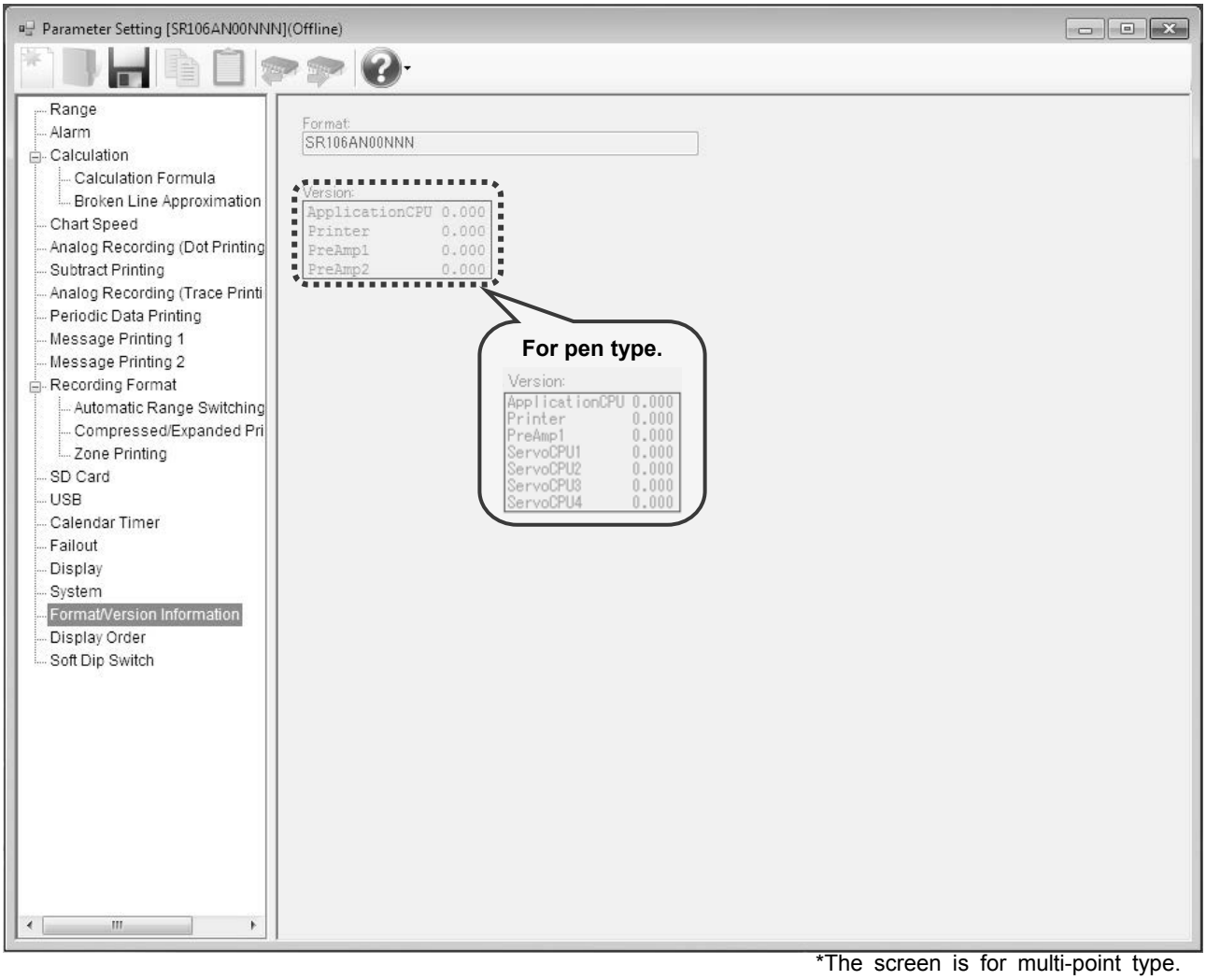
[System Settings "System" Parameter List]

<table>
<tr><th>Setting parameter</th><th>Function</th><th>Remarks</th></tr>
<tr><td>Key Lock
"Key Lock"</td><td>Disable the keys to change settings
Use the check boxes for selection
* If you enable [Key Lock], the settings of all items cannot be changed on the device. However, you can see the settings.</td><td>Check box operation:
☑ Checked...Enable key lock
☐ Unchecked...Disable key lock
When in online, the setting is sent to the device when the check box ☑ is checked.</td></tr>
<tr><td>Frequency of Power
“Frequency of Power”</td><td>Set the power frequency.<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>50</td><td>50Hz</td></tr><tr><td>60</td><td>60Hz</td></tr></table></td><td>Setting is only available for pen type.</td></tr>
<tr><td>Relay Mode
“Relay Mode”</td><td>Set the alarm output mode.<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>Excitation</td><td>Norm.Close (excitation)</td></tr><tr><td>None excitation</td><td>Norm.Open (none excitation)</td></tr></table></td><td>Setting is only available for pen type.</td></tr>
<tr><td>Filter
“Filter(Preamp)”</td><td>Set the strength of the filter.<table><tr><th>Software screen</th><th>Device screen</th></tr><tr><td>None</td><td>0</td></tr><tr><td>1 to 10</td><td>1 to 10</td></tr></table></td><td>Setting is only available for pen type.</td></tr>
</table>

* On the software screen, "Initialize" for clearing the memory as well as the following setting parameters: "Adjust of Rec position" for disabling/enabling the zero or span adjustment for dot printing position, and "Input Correction" for disabling/enabling the input correction setting which are displayed on device screen are not displayed.

6-6-36. Format/Version Display

• The format and the software version of each CPU (preamplifier, printer and application etc.) of the device are displayed.



*The screen is for multi-point type.

1. Parameter setting

The format and version parameter displays the following.

[Format/Version Display Parameter List]

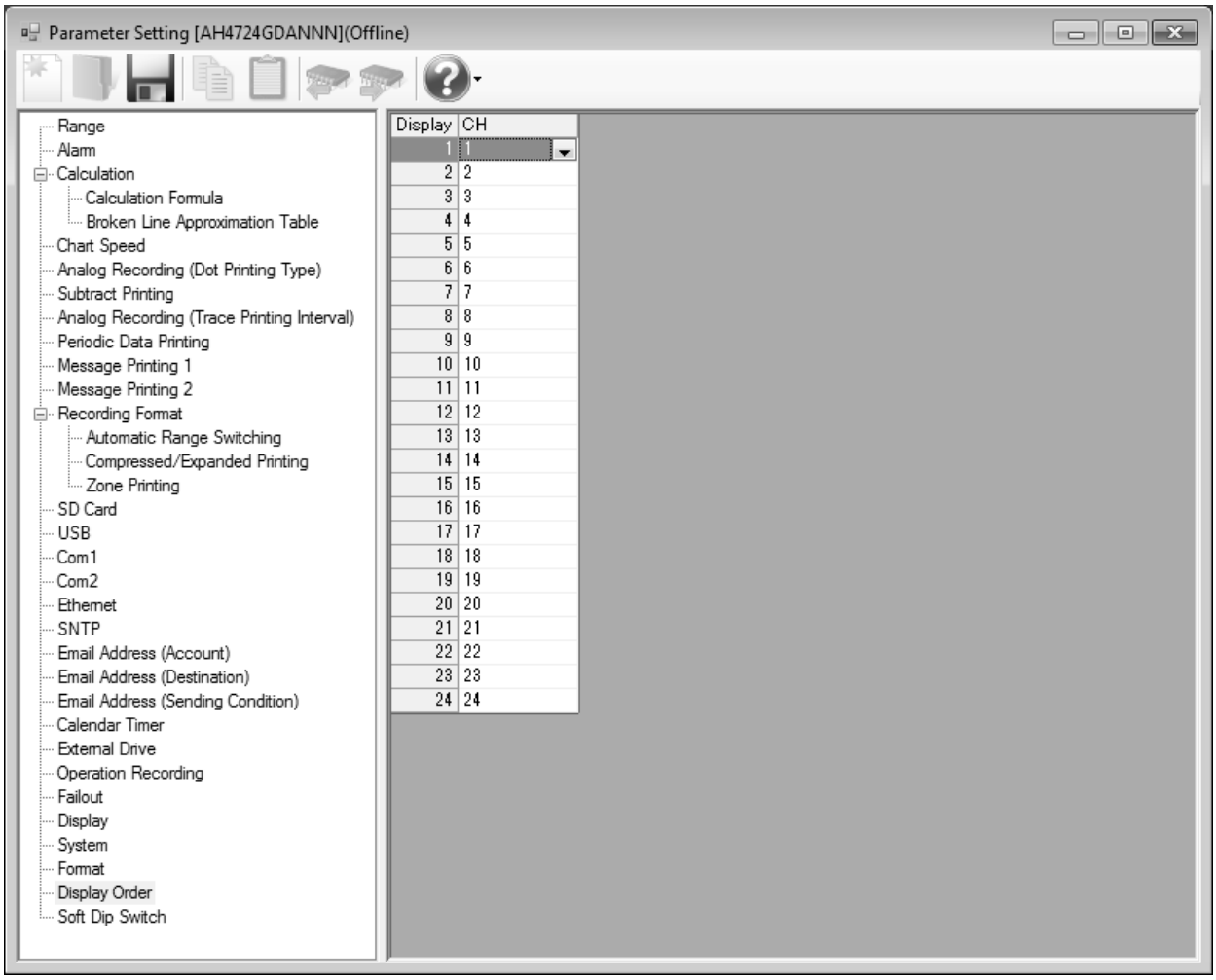
Setting parameter	Function	Remarks
Format "TYPE"	Display the model code of the device	You can check the model code in "SysInfo" on the device.
Version	Display the version of the device Software screen / Device screen ApplicationCPU / A,E Printer / P PreAmp1 / I1 PreAmp2 *1 / I2 *1 ServoCPU1 *2 / S1 *2 ServoCPU2 *2 / S2 *2 ServoCPU3 *2 / S3 *2 ServoCPU4 *2 / S4 *2	You can check the model code in "SysInfo" on the device. *1: Display is only for multi-point type. *2: Display is only for pen type.

* On the software screen, the following setting parameters: the serial number of the device "No.", the MAC address of this instrument with Ethernet option "MAC Adr.", the additional information "SP", the status information of system error "System Value", the alarm unit application software version "ALM1-ALM4" clock backup battery voltage "Battery" which are displayed on the system information display "SysInfo" of the device screen are not displayed.

6-6-37. Display Order Settings "D.Order"

- The settings for the display order are displayed in the table format to enable you to edit them.
- The columns of the table represent the channel numbers, and the rows represent the display order numbers.
- The numbers of the displayed channels vary depending on the device model.

  * Refer to the instruction manual of the device for more details on the settings.



1. Parameter setting

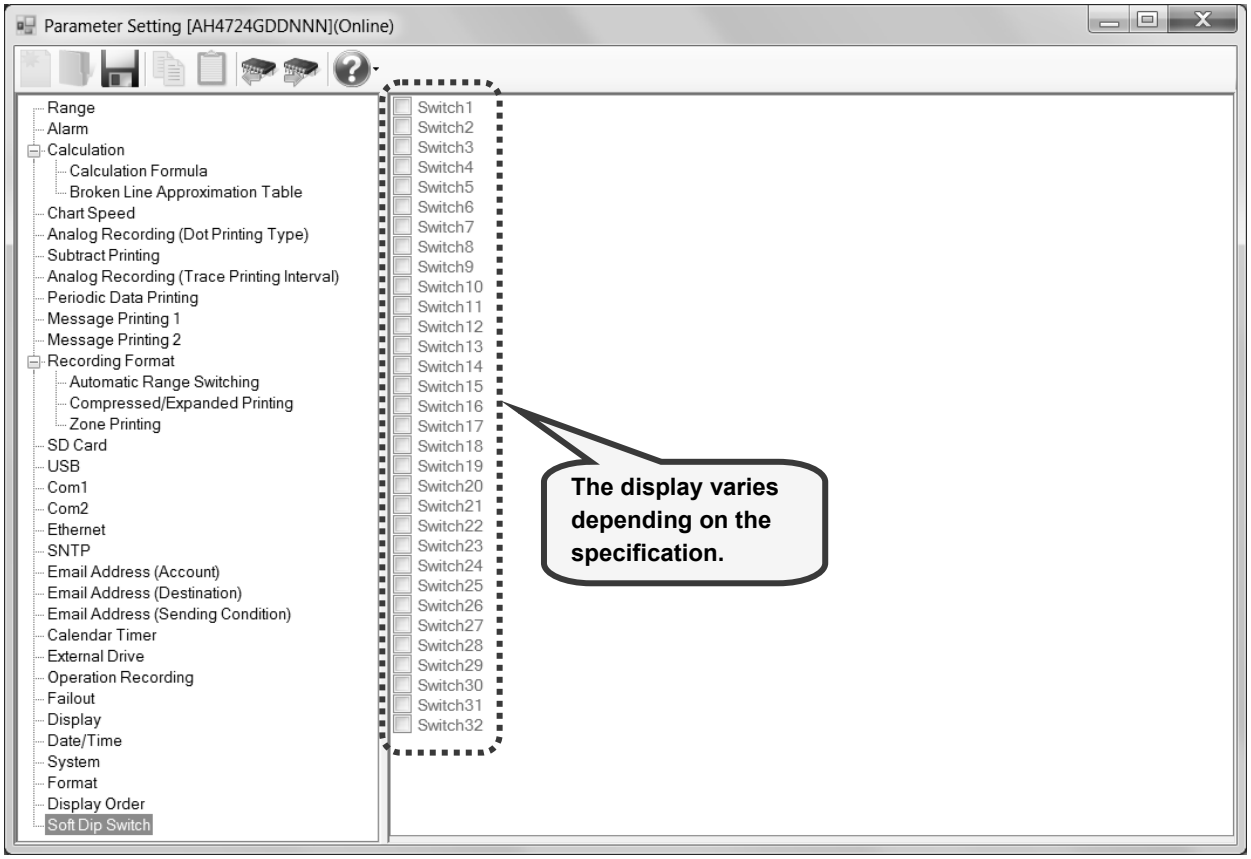
You can configure the following parameters in the display order settings.

[Display Order Settings "D.Order" Parameter List]

Setting parameter	Function	Remarks
CH "CH No."	Set the CH No. to be updated (displayed) Software screen: None; Device screen: - Software screen: 1 to 24; Device screen: 1 to 24	None: Skipped when the 1CH display is set on the device, or blank when the multiple CH display is set The number of the displayed channels varies depending on the device model.

6-6-38. Soft Dip Switch Settings

- The [Soft Dip Switch] settings are displayed.



6-7. Operation of Help Screen

On any screen, click the [Help] button to show the instruction manual. Refer to it as requirement.

<Procedure>

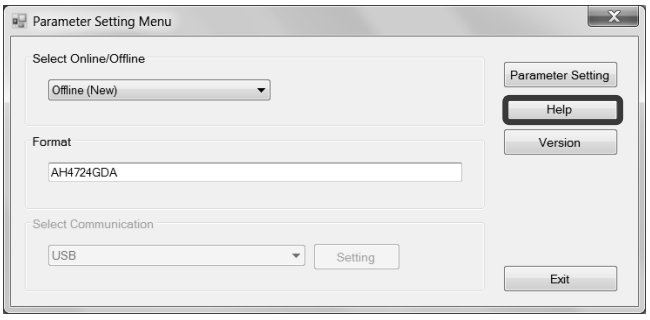
(1) Open the Parameter Setting Menu screen or the Parameter Setting screen

Open the Parameter Setting Menu screen (refer to section 6-2) or the Parameter Setting screen (refer to section 6-6).

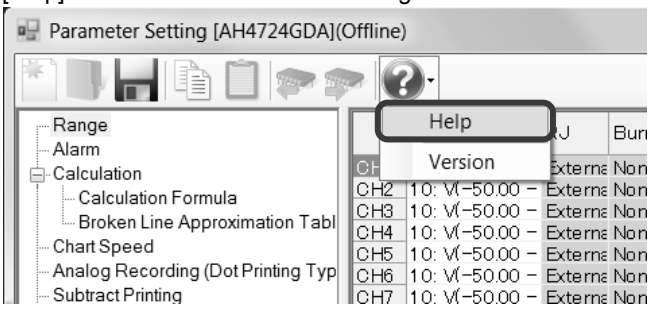
(2) Click the [Help] button

Click the [Help] button on the Parameter Setting Menu screen or the Parameter Setting screen.

- [Help] button on the Parameter Setting Menu screen



- [Help] button on the Parameter Setting screen



(3) Display the instruction manual

The instruction manual is displayed in Internet Explorer.

6-8. Operation of Version Check Screen

On any screen, click the [Version] button to show the version of this software.
When contacting us about the software, please provide this version number.

<Procedure>

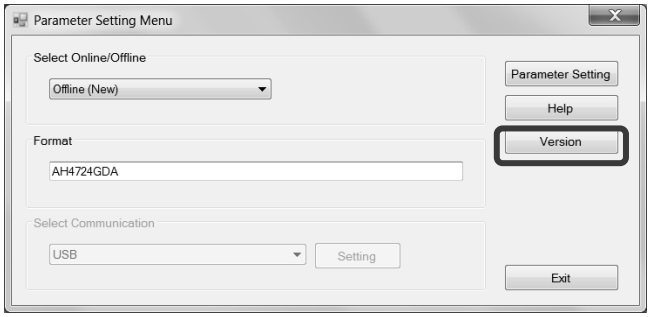
(1) Open the Parameter Setting Menu screen or the Parameter Setting screen

Open the Parameter Setting Menu screen (refer to section 6-2) or the Parameter Setting screen (refer to section 6-6).

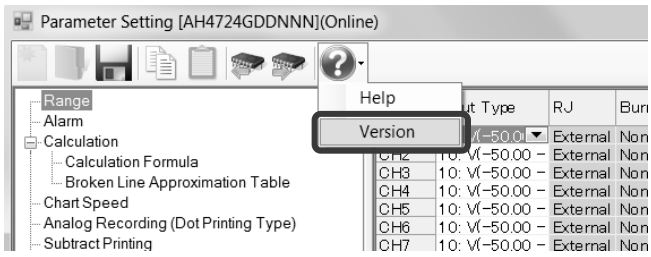
(2) Click the [Version] button

Click the [Version] button on the Parameter Setting Menu screen or the Parameter Setting screen.

- [Version] button on the Parameter Setting Menu screen



- [Version] button on the Parameter Setting screen



(3) Display the version information of the setting software

The Version Information Of Setting Software screen is displayed. When contacting us, please provide the version number.

7. Glossary

This section describes some terms used in this instruction manual.

No.	Terms	Description
1	parameter	Setting parameter.
2	format	Code representing the device model.
3	overflow value	Value indicating that the upper limit of the range is exceeded. It is 32767.
4	communication adapter	Software component used for data transmission and reception.
5	USB driver	Tool, which is installed to a PC in advance, allowing you to perform data communication with a device connected to the PC with a USB cable.

8. Troubleshooting

This section describes problems with operations or functions of the software and their possible causes and remedies.

No.	Symptom	Cause/Remedy
1	Installation does not complete correctly.	Confirm that there is enough free hard disk space (refer to section 2-2).
2	The software does not start.	The installation might not be completed correctly. Uninstall and then reinstall the software, and check if the software can be started.
3	Parameters cannot be set.	Check if the format is correct.
4	The parameters of the connected device cannot be read.	(1) Check if [Online] is selected in [Select Online/Offline] (refer to section 6-2-3). (2) Check if the wiring is correct (refer to the instruction manual of the device). (3) Check if the connection cable breaks. (4) Check if the communication setting is correct (refer to section 6-3, 6-4, and 6-5).
5	Edited parameters cannot be written to the device.	(1) Check if the wiring is correct (refer to the instruction manual of the device). (2) Check if the connection cable breaks.
6	The software has been operating correctly, but suddenly a malfunction occurs.	Exit the software, and then start it again. * If the software exits due to an unexpected error, unsaved data would not be backed up. Please set it again.
7	A communication error occurs when connecting via USB.	Disconnect the USB cable and then re-connect it.

Terms and Conditions

We would like to express our appreciation for your purchase and use of Azbil Corporation's products.
You are required to acknowledge and agree upon the following terms and conditions for your purchase of Azbil Corporation's products (system 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

Azbil Corporation's 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 Azbil Corporation's product has any failure attributable to azbil during the aforementioned warranty period, Azbil Corporation 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 azbil product
(noncompliance with conditions, environment of use, precautions, etc. set forth in catalogs, specifications, instruction manuals, etc.);
(2) Failure caused for other reasons than Azbil Corporation's product;
(3) Failure caused by any modification or repair made by any person other than Azbil Corporation or Azbil Corporation's subcontractors;
(4) Failure caused by your use of Azbil Corporation's 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 Azbil Corporation's shipment did not allow Azbil Corporation to predict; or
(6) Failure that arose from any reason not attributable to Azbil Corporation, 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 Azbil Corporation shall not be liable for any damages, including direct, indirect, special, incidental or consequential damages in connection with or arising out of Azbil Corporation's products.

2. Ascertainment of suitability

You are required to ascertain the suitability of Azbil Corporation's 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 Azbil Corporation 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 azbil is constantly making efforts to improve the quality and reliability of Azbil Corporation's products, there exists a possibility that parts and machinery may break down.
You are required to provide your Equipment with safety design such as fool-proof design, *1 and fail-safe design*2 (anti-flame propagation design, etc.), whereby preventing any occurrence of physical injuries, fires, significant damage, and so forth. Furthermore, fault avoidance, *3 fault tolerance,*4 or the like should be incorporated so that the said Equipment can satisfy the level of reliability and safety required for your use.

*1. A design that is safe even if the user makes an error.
*2. A design that is safe even if the device fails.
*3. Avoidance of device failure by using highly reliable components, etc.
*4. The use of redundancy.

3. Precautions and restrictions on application

Azbil Corporation's products other than those explicitly specified as applicable (e.g. azbil Limit Switch For Nuclear Energy) shall not be used in a nuclear energy controlled area (radiation controlled area).
Any Azbil Corporation's products shall not be used for/with medical equipment.
The products are for industrial use. Do not allow general consumers to install or use any Azbil Corporation's product.
However, azbil products can be incorporated into products used by general consumers. If you intend to use a product for that purpose, please contact one of our sales representatives.
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 azbil 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, fault avoidance, fault tolerance, and other kinds of protection/safety circuit design on your own responsibility to ensure 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 Azbil Corporation's 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
* Facilities/applications associated directly with billing

(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

4. Precautions against long-term use

Use of Azbil Corporation's 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 Azbil Corporation's products for a period exceeding ten (10) years unless otherwise stated in specifications or instruction manuals.

5. Recommendation for renewal

Mechanical components, such as relays and switches, used for Azbil Corporation's 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 Azbil Corporation's products every 5 to 10 years unless otherwise specified in specifications or instruction manuals.
System products, 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 Azbil Corporation's 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 Azbil Corporation's 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 azbil 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 Azbil Corporation's 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 system products, field instruments, we may not be able to undertake parts replacement for similar reasons.

9. Scope of services

Prices of Azbil Corporation's products do not include any charges for services such as engineer dispatch service.
Accordingly, a separate fee will be charged in any of the following cases:

(1) Installation, adjustment, guidance, and attendance at a test run
(2) Maintenance, inspection, adjustment, and repair
(3) Technical guidance and technical education
(4) Special test or special inspection of a product under the conditions specified by you

Please note that we cannot provide any services as set forth above in a nuclear energy controlled area (radiation controlled area) or at a place where the level of exposure to radiation is equivalent to that in a nuclear energy controlled area.

azbil

Specifications are subject to change without notice. (09)

[Selling agency]

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