



# DWYER 1207A


## QUICK REFERENCE GUIDE


### ANALYZER FEATURES AND KEYPAD

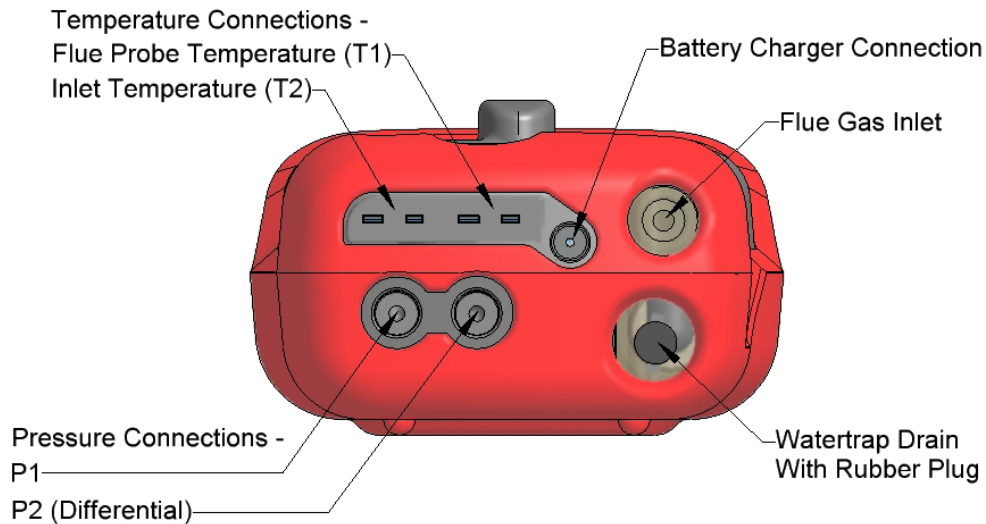


 **ON / OFF**  
Turns the analyzer ON / OFF

 **PUMP / CAL PRESSURE**  
Turns the pump ON / OFF  
Press for 2+ seconds to zero the pressure sensor

 **PRINT / BACKLIGHT**  
Press to print "live" or "frozen" data. Press again to abort.  
Press for 2+ seconds to switch backlight & torch ON / OFF

 **LINE SELECT / FREEZE**  
Press to select active line on display as indicated by LED's  
Press for 2 seconds to "HOLD"  
Press longer to "LOG"





## BEFORE USING ANY ANALYZER CHECK THAT:

- Calibration date has not expired
- Particle filter is not dirty inside
- Water trap and flue probe hose are empty of water
- Water trap is fitted correctly to the analyzer including the drain plug
- Flue probe hose is connected properly to the flue gas inlet
- Flue probe temperature plug is connected into T1 connection


*Please read the Safety Warnings in the User Manual*

## USING THE ANALYZER

With the flue probe in fresh air at the same temperature as the boiler inlet air press . The analyzer will auto-calibrate for 20 to 30 seconds and then a set of readings will be displayed. In fresh air the O<sub>2</sub> reading should be 20.9% ± 0.1% and the CO reading should be zero. Check the battery status by selecting “Bat” on the rotary switch and select the correct fuel via the “menu” – See Using the Menu.

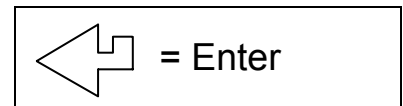
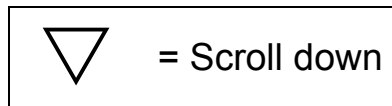
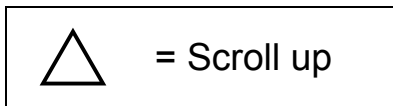
Insert the tip of the probe into the center of the flue. After approximately 60 seconds the readings should stabilize. A printout can be produced if required by pressing .

## SETTING UP THE DISPLAY

Any four parameters can be displayed simultaneously. Press  to move the line select LED to the line you wish to change, then use the rotary switch to select the new parameter you require. To change other lines just repeat the procedure.

# USING THE MENU

Select "Menu" on the rotary switch and navigate using the function buttons...



MAIN MENU	SUB MENU	OPTIONS / COMMENTS
SETUP	SET FUEL	NAT GAS, L OIL, PROPANE, BUTANE, LPG, PELLETS
	N ← C → G	Select the combustion efficiency calculation required ~ N = nett eff, G = gross eff, C = for condensing boilers
	SET TIME	Uses "Military" time. 7am = 07:00, 7pm = 19:00
	SET DATE	North American users, select MM-DD-YY then set the date
	C ← → F	°C, °F
	PPM ← → MG	PPM, MG/M <sup>3</sup>
	O2 REF	NO, YES
	LANGUAGE	Various languages
PRESSURE	SMOOTH	OFF = fast response. ON = slow response.
	RESOLVE	HIGH, LOW, selects the number of decimal places
	PS UNITS	InH <sub>2</sub> O, mmH <sub>2</sub> O, Pa, kPa, PSI, mmHg, hPa, mBar
STORE	VIEW	View logged readings
	AUTO STO	See DWYER 1207A REPORTS page
	DEL ALL	NO, YES
REPORT		See DWYER 1207A REPORTS page
SCREEN	CONTRAST	Factory setting is 04
	AUX	Normally set to display the current fuel type
	HEADER	Sets printout header, 2 lines, 20 characters per line
SERVICE	CODE	Leave set at "0000"

To EXIT the MENU at any time simply move the rotary switch to any position other than "Menu". Any changes that have not been "entered" will be ignored.

# DWYER 1207A REPORTS

## AUTO STORE ~ (stores up to 255 tests)


From the menu select STORE, AUTO STORE, YES.  
Set the time interval (in seconds) between logs.  
The analyzer starts logging as soon as you exit the menu and stops when you select STORE, AUTO STORE, NO.

To view the results select STORE, VIEW, then enter the log number required. Use the rotary dial and line selector to view the readings as normal. Use scroll up/down to view other log numbers.


To delete select DEL ALL, YES


## PRESSURE ~ (stores up to 8 tests)

From the menu select REPORT, PRESSURE, TEST.



Press the  key to zero the pressure sensor.

CONNECT the pressure hose to pressure connection P1.

Press  to start the 1 minute stabilization period.

Press  again to start the 2 minute tightness test.


To view the results select REPORT, PRESSURE, VIEW.

Use scroll  /  to view other log numbers.



To exit press . To delete select DEL ALL, YES

## TEMPERATURE ~ (stores up to 8 tests)

From the menu select REPORT, TEMP, TEST.  
CONNECT the thermocouples, "flow" to Tf, "return" to Ti.

Press  once to view readings and once more to log.

To view the results select REPORT, TEMP, VIEW.



Use scroll  /  to view other log numbers.

To exit press . To delete select DEL ALL, YES

## ROOM CO ~ (stores up to 8 tests)

From the menu select REPORT, ROOM CO, TEST.  
The pump will run and the analyzer will log the CO reading every minute for 15 minutes.

To view the results select REPORT, ROOM CO, VIEW.

Use scroll  /  to view other log numbers.

Use  to view each reading within the ROOM CO TEST.

To exit use rotary switch. To delete select DEL ALL, YES

TEST	11
DATE	11/01/09
TIME	16:27:32
FUEL	NATU GAS
O2 %	9.3
CO2 %	6.6
CO ppm	21
FLUE °F	148.6
INLT °F	-OC-
NETT °F	125.8
EFF (N)	92.5
PRS INWG	0.001
LOSSES %	7.5
XAIR %	80.1
CO/CO2	0.003

## TIGHTNESS TEST

LOG 05  
TIME 15:40 11/01/09  
PRS\_1 INWG 20.110  
PRS\_2 INWG 19.998  
DURATION MINS 3:00

.....  
Customer

.....  
Appliance

etc.

## TEMP TEST

LOG 02  
TIME 16:37 11/01/09  
FLOW °F 48.3  
RETURN °F 39.7  
NETT °F 8.6

etc.

## ROOM CO TEST

LOG 01  
TIME 09:20 11/01/09

TEST	CO ppm
0	00
1	02
14	02
15	01
MAXIMUM CO	02

etc.

To print a displayed REPORT hold the  key for 2+ seconds.