ET-920 & ET-921 User Manual

Manometer

Please read this user manual thoroughly before using this unit and

keep it properly for future reference.

Contents

1. Safety

Read the following safety information carefully before attempting to operate or service the meter.

Use the meter only as specified in this manual; otherwise, the warranty on this meter will be invalid.

▲ **Environment conditions:**

1) RH≤90% (Non-Condensation)

2) Operating Temperature: 0～40℃

Maintenance and cleaning

1) Repairs or servicing not covered in this manual should only be performed by qualified personnel.

2) Wipe the unit with a dry soft cloth. Do not use solvents or detergents on this instrument.

Safety Symbol

$\mathsf{C}\,\mathsf{E}$ Comply with EMC

2. Introduction

This product is designed to measure differential pressure (the difference between two pressure measurements). It offers 11 units of measure (user selectable): inH2O, psi, bar, mbar, KPa, inHg, mmHg, ozin^2, ftH2O, cmH2O, kgcm^2 and has a differential input that uses convenient quick-disconnect fittings.

3. Specification

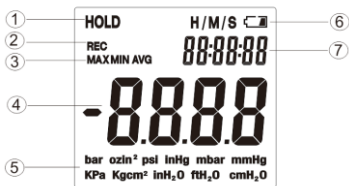| Unit	ET-920		ET-921	
	Range	Resolution	Range	Resolution
inH2O	±55.40	0.1	±138	0.1
Psi	±2.000	0.001	±5.000	0.001
Mbar	±137.8	0.1	±344.7	0.1
KPa	±13.79	0.01	±34.47	0.01
inHg	±0.407	0.01	±1.018	0.01
mmHg	±103.4	0.1	±258.5	0.1
ozin²	±32.00	0.01	±80	1
ftH2O	±4.612	0.01	±11.53	0.01
cmH2O	±140.6	0.1	±351.5	0.1
kgcm²	±0.140	0.001	±0.351	0.001
bar	±0.137	0.001	±0.344	0.001
Maximum Pressure	10 psi		20 psi	
Accuracy	±0.3%FS at 25°C			
Linearity/Hysteresis	±0.1%FS			
Repeatability	±0.25%FS			
Input ports	Two metal 4.5mm barbed for 1/8″ (3.18mm) ID tubing			
Working temperature	0 ~ 40°C/32 ~ 104°F			
Storage temperature	-10 ~ 60°C/14 ~ 140°F			
Over range indication	ERR1 or ERR2			
Power supply	9V battery			

4. Meter Description

①   Pressure input port

②   LCD Display

③   Power ON/OFF button

④   Backlight button

⑤   UNITS button

⑥   HOLD button

⑦   REC button

5. LCD display

①   Data Hold Mode

②   Record Mode

③   Max/Min/AVG Indicator

④   Measuring Readings

⑤   Pressure Units

⑥   Low Battery Indicator

⑦   Elapsed timer

6. Operation steps

6.1 Open battery cover and install a 9-volt battery in the battery compartment. Press ⏻ to start measuring

6.2 Press UNITS button to select the desired unit of measurement.

6.3 Connect tube to the input port(s).

6.4 Start measuring and view the readings on the LCD screen.

Note： Before use and without fittings attached to the meter, it might not be reading zero, please zero it manually before use. (**See 7.5.2 ZERO the meter**)

7. Buttons function

7.1 ⏻ **button:** turn on/off the meter. When the ⏻ button is pressed, the meter performs a short self-test and all icons will be displayed on the LCD for two seconds, before

entering into normal measurement mode.

7.2 ⬡ button: In measurement mode , press this button to turn the backlight on/off.

7.3 ⬡ button: In measurement mode , press ⬡ button to track the maximum (MAX), minimum (MIN) and average (AVG) readings with a time stamp. The elapsed timer is displayed on the upper right-hand corner of the LCD and informs the user of the time a MAX or MIN or AVG reading was recorded. To return to normal operation, press and hold the RECORD button for three seconds.

Note: In RECORD mode, the backlight and the power on/off buttons are the only available functions.

7.4 ⬡ button: Turn the meter on and press ⬡ to select the unit of measurement. There are 11 units of measurement to choose from: bar, ozin², psi, inHg, mbar, mmHg, KPa, Kgcm2, inH2O, ftH2O and cmH2O.

7.5 ⬡ button:

7.5.1 Turn the meter on and press ⬡ button once, the

LCD screen will freeze; press [HOLD] button again to exit HOLD mode.

7.5.2 ZERO the meter: before use and without fittings attached to the meter, press and hold the [HOLD] button for three seconds or until the LCD screen shows "----".

7.6 **Auto Power ON/OFF:** the meter will automatically turn off after approx. 25 minutes of no activity. To disable this feature, while the meter is turned off, press and hold the [HOLD] button while pressing [⏻] button to turn the meter on. Release the [HOLD] button when 'n' appears on the LCD screen. The meter will now remain on until the user turns it off or until the battery weakens.

Note: the Auto Power OFF feature will be reactivated the next time the meter is turned off and then on again.

8. Notes

8.1 Do not use it in high temperature and humidity.

8.2 Remove the battery when the meter is to be stored for long periods

of time to avoid battery leakage.

8.3 Replace new battery when the low battery icon "⊏▭⊐" appears.

9. Displayed Error Codes

The following codes are displayed when the meter encounters an error:

error1 : $Err1$ Pressure input exceeds specified limits.

error2 : $Err2$ Pressure input too low to read.

10. Accessories

① User Manual

② Carry Pouch

③ One "6F22"9V battery

④ 2pcs of ϕ 4.5mm metal barbed for tubing

⑤ 2pcs of ϕ5.0mm*30mm soft tubing

⑥ 2pcs of ⌀5.0mm*30mm hard tubing

UK DISTRIBUTOR

ATP INSTRUMENTATION LTD
TOURNAMENT WAY
ASHBY DE LA ZOUCH
LEICESTERSHIRE
LE65 2UU

TEL 01530 566800
FAX 01530 560373

WWW.ATP-INSTRUMENTATION.CO.UK