

For your safety, please read the following before use.

- ⑥ Please use a separate route for the sensor product wiring and keep separate from any other power or high voltage wiring to avoid noise interruption.
- ⑦ If cable is longer than 100 meters and 0.3mm² cable, please use shielded wire as the output wire.

Diagram of the Mindman digital pressure gauge interface with labels:

- OUT 1 LCD
- Type
- Lock Indicator
- (▲) Button
- Setting Button
- 3 1/2 Digit LCD
- OUT 2 LCD
- Pressure Unit
- (▼) Button

※ MP801, MP802, MP805
Please use Port B for high-pressure side and
Port A for low-pressure side.

F. THE MAX. & MIN. DISPLAY MODE

* This data shows the max. (min.) pressure detected when power supplied

Power on 0.5sec. : LCD ON

0.5sec. : NPN or PNP

0.5sec. : Measurement Unit

0.5sec. : "---" displayed

Press **[SET]** more than 3 sec.
until the "0" is shown.
Do not perform zero reset with
pressure apply to ports A and B.
The range that can be reset to
zero is within $\pm 3\%$ F.S.

C. ADJUSTMENT METHOD

Example of base port setting

Port A is within 3.20 kPa and Port B is within 1.4 kPa.

Differential pressure of Port A as base port : shown. ($1.40 - 3.20 = - 1.80$)

Differential pressure of Port B as base port : shown. ($3.20 - 1.40 = 1.80$)

Absolute value of differential pressure between Port A and B as base port : shown. ($| 1.40 - 3.20 | = 1.80$)

D. OPERATION CHART

1. Hysteresis mode

Set the sensor ON point "H" and hysteresis "h".
(Notice: Please set "h" value equal or higher than
2 to avoid "Error")
H: Sensor ON
H-h: Sensor OFF

A is lower limit value of window comparator mode.
b is upper limit value of window comparator mode.
(It can not be set $A > b$.)

E. CHANGE OUTPUT TYPE

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graph TD
    Start([Start]) -- "Press [SET] + [▲] buttons" --> Out1OpenL[OUT 1 Normal open  
ou1]
    Out1OpenL <-->|Alternatively| Out1OpenR[OUT 1 Normal open  
no]
    Out1OpenL -- "Use [▼] or [▲] button to select" --> Out1CloseL[OUT 1 Normal close  
ou2]
    Out1CloseL <-->|Alternatively| Out1CloseR[OUT 1 Normal close  
no]
    Out1CloseL -- "Press [SET] button" --> End([End])
  
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Press [SET] + [▲] buttons

OUT 1 Normal open

Alternatively

Use [▼] or [▲] button to select

OUT 1 Normal close

Alternatively

Press [SET] button

End

F. THE MAX. & MIN. DISPLAY MODE

I. KEY LOCK / UNLOCK MODE

【NOTE:】
Use key lock mode to prevent unauthorized or accidental tampering with the switch setting.

J. POWER-SAVE MODE

- ⦿ During Power-Save mode, the main display will turn off if no buttons is pressed after 30 seconds.
- ⦿ During Power-Save mode, the output LCD may not synchronize with the output. It is normal and will not affect output operation.
- ⦿ Press any button to turn-on main display temporarily.

Measure mode

No button operation for 30 seconds

Press any button

Power-Save mode

(Main display will flash "SLP")

Error code	Error Type	Error Condition	Troubleshooting
E 1	OUT 1 excess load current error	Load current is more than 125mA	Turn power off and check the cause of overload current or lower the current load under 125mA, then restart.
E 2	OUT 2 excess load current error	Load current is more than 125mA	Turn power off and check the cause of overload current or lower the current load under 125mA, then restart.
E 3	Zero point setting error	During zero point setting, ambient pressure is over 53% F.S.	Change input pressure to ambient pressure and perform zero reset again.
E 4	System error	Internal error	Turn power off, and then restart. If error condition remains, please return to factory for inspection.
F 1	Applied pressure error	Supply pressure is exceed the upper limit of pressure setting.	Upper limit of differential pressure.
F 2	Applied pressure error	Supply pressure is exceed the lower limit of pressure setting.	Adjust the pressure within setting pressure range.

L. DIMENSIONS / OPTIONAL PARTS DIMENSIONS

① Pressure sensor

② Mounting bracket

③ Panel Mounting

Unit:mm

M. OUTPUT CIRCUIT WIRING DIAGRAMS

MP8□ - 031 - M5
2 PNP + Analog Output (4~20mA)

DC (+) (Brown)
Analog Output (Orange)
OUT1 (Black)
OUT2 (White)
DC (-) (Blue)
DC 12 - 24V

N. ORDERING INFORMATION

M P 8 **0 1** - **0 1 0** - M 5

Pressure Range

01 : -100~1000 Pa
02 : -0.20~2.00 kPa
05 : -0.50~5.00 kPa
11 : -1000~1000 Pa
12 : -2.00~2.00 kPa
15 : -5.00~5.00 kPa

Output Specifications

010 : 2 NPN output + Analog output (1 ~ 5V)
011 : 2 NPN output + Analog output (4 ~ 20mA)
030 : 2 PNP output + Analog output (1 ~ 5V)
031 : 2 PNP output + Analog output (4 ~ 20mA)

Optional Parts

MP-A20 : Mounting bracket
MP-A21 : Mounting bracket
MP-B2 : Panel adapter
MP-C2 : Panel adapter + Front protective lid

O. SPECIFICATIONS