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# User's Guide



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# PM1001

# Plug On Display

with adjustable set point



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**WARNING:** These products are not designed for use in, and should not be used for, patient-connected applications.

## PM1001 Plug-On Display Operating Instructions

### 1. Application

The PM1001 plug-on display is a universal local display suitable for use with any 4-20mA, 2 wire, transmitters. The transmitter must be fitted with a DIN43650 type connector. Then the plug-on display is simply plugged in between the transmitter connector plug and socket; it is then ready for operation. Removing the front cover of the display will reveal 2 programming buttons. These are used to input the desired settings for the following parameters: zero, scale, decimal point position, damping and switching set point.

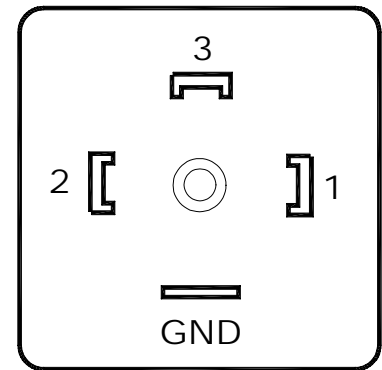
### 2. Mechanical Installation

The PM1001 is simply plugged in between the transmitter connector plug and socket; it is then ready for operation. The display can be rotated through 90° steps as desired, and then fixed into position with the replacement longer screw, supplied with the unit.

### 3. Electrical Installation

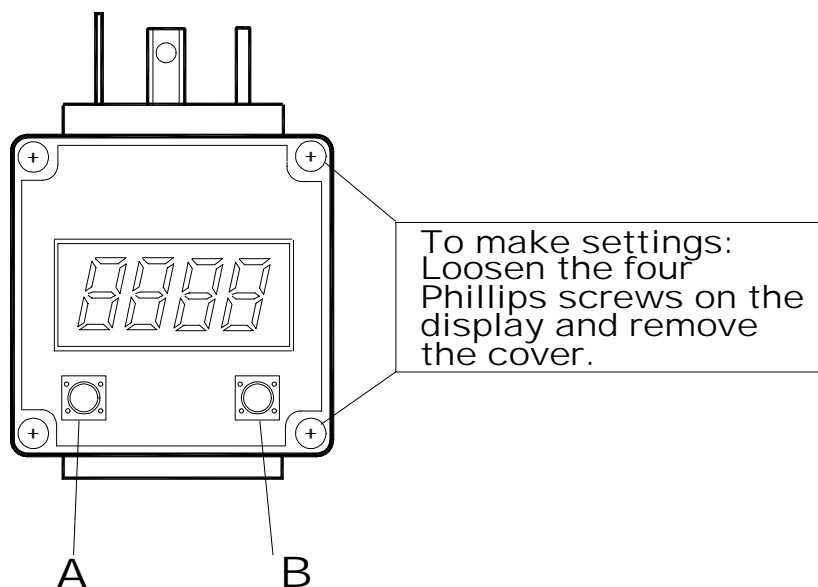
Connect the plug-on display to the transmitter as shown in the wiring diagram below.

Supply	= PIN 1
Signal	= PIN 2
Switching Output	= PIN 3



### 4. Setting

To make any display setting changes first the front cover of the display unit must be removed. To do this remove the 4 Phillips screws retaining the front cover and reveal the 2 programming buttons A & B, which are used to make all the display setting changes. See drawing below.



The PM1001 uses a display menu, controlled by the 2 programming buttons, to assist when editing display settings and options.

Throughout, the general functions of the programming buttons are as follows:

- Press A: Causes a DOWN change in the selected setting.  
And also displays each menu item in turn.
- Press B: Causes an UP change in the selected setting.  
And also displays each menu item in turn.
- Press A & B together: Enters and stores the adjusted setting.  
And also selects the displayed menu item for editing.

#### 4.1 Display Decimal Point selection

Press button B to select menu option: d P is displayed  
Press button A & B together to edit: - . - . is displayed  
Press A to shift decimal point UP: - - . - is displayed  
Press B to shift decimal point DOWN: - . - - is displayed  
Press A & B together to enter and store, and return to menu.

#### 4.2 Display Zero setting

Press button B to select menu option: Z P 4 is displayed  
Press button A & B together to edit: 0.0 is displayed  
(zero for example is 0.0psi)

Press A to increase setting(UP): 0.1 is displayed  
Press B to decrease setting(DOWN): - 0.1 is displayed  
Press A & B together to enter and store, and return to menu.

#### 4.3 Display Span setting

Press button B to select menu option: E P 20 is displayed  
Press button A & B together to edit: 60.0 is displayed  
(span for example is 60.0psi)

Press A to increase setting(UP): 60.1 is displayed  
Press B to decrease setting(DOWN): 59.1 is displayed  
Press A & B together to enter and store, and return to menu.

#### 4.4 Display damping

Press button B to select menu option: F I L t is displayed  
Press button A & B together to edit: 0.5 is displayed  
(damping for example is 0.5 seconds. Note 0.3 seconds is minimum)

Press A to increase setting(UP): 0.4 is displayed  
Press B to decrease setting(DOWN): 0.6 is displayed  
Press A & B together to enter and store, and return to menu.

#### 4.5 Over-range display selection

Press button B to select menu option: H I L O is displayed  
Press button A & B together to edit: o f f is displayed  
(for example over-range option is off)

Press A or B to toggle on/off setting: o n is displayed  
Press A & B together to enter and store, and return to menu.

When over-range option is selected to be on then the following messages are displayed in over/under-range condition:

HI is displayed when transmitter signal is greater than 20mA(Overflow)

LO is displayed when transmitter signal is less than 4mA(Underflow)

Note: When over-range option is off the error code: ErC6 is displayed  
If the display range (-1999 to +1999) is exceeded.

#### 4.6 Set point switch setting

(Point at which the open collector switches, available on PM1001 only)

Press button B to select menu option: S P t is displayed

Press button A & B together to edit: 20.0 is displayed

(set point for example is 40.00psi)

Press A to increase setting(UP): 21.0 is displayed

Press B to decrease setting(DOWN): 19.0 is displayed

Press A & B together to enter and store, and return to menu.

Note: Standard hysteresis value is the entered set point setting minus three display counts. For example, if the set point setting is 20.0psi, then the hysteresis band will be 0.3psi wide.

#### 4.7 Set point switching direction selection

Press button B to select menu option: d i r is displayed

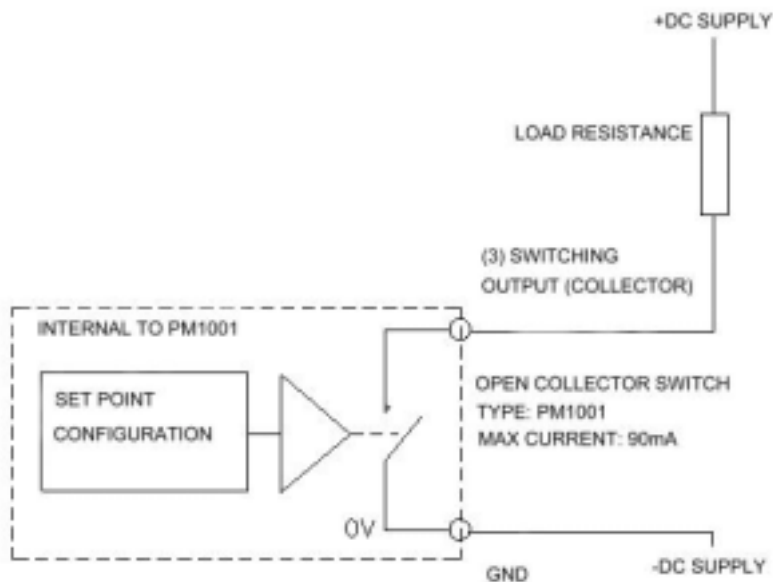
Press button A & B together to edit: d n is displayed

(for example hysteresis band is above set point setting)

Press A or B to toggle up/down setting: u p is displayed

(for example hysteresis band is below set point setting)

Press A & B together to enter and store, and return to menu.



### Switching Detail

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1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
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Product:PM1001

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