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# User's Guide



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# PM1000

# Plug On Display



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The information contained in this document is believed to be correct, but OMEGA Engineering, Inc. accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

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

**PM1000 Series Plug-On Display**  
**Operating Instructions**

**1. Application**

The PM1000 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 (PM1001 option only).

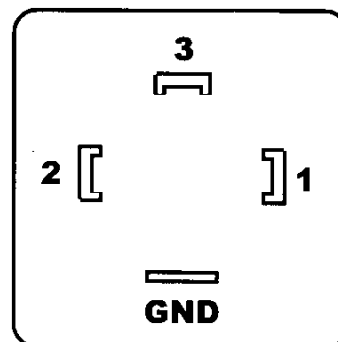
**2. Mechanical Installation**

The PM1000 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**

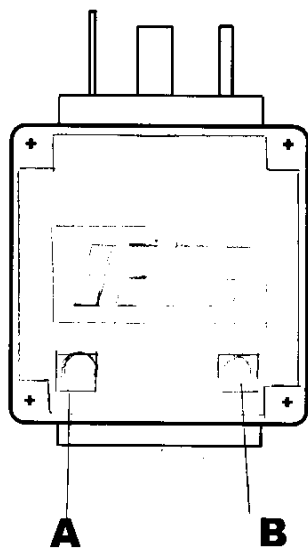
Connect the plug-on display to the transmitter as shown in the wiring diagram below.

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.



**To make settings:  
 Loosen the four  
 Phillips screws on the  
 display and remove  
 the cover.**

The PM1000 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.

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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.

## WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of 13 months from date of purchase. OMEGA's Warranty adds an additional one (1) month grace period to the normal one (1) year product warranty to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

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