6.0 Digital Panel Meters and Attachable Indicators

The 907.50.900 digital panel meters are designed to accept a 4-20 mA 2-wire signal. These meters are available with several options.

-The **built-in excitation** provides an 18VDC 60 mA supply source to power the transmitter. This option eliminates the need for a separate power supply in the 4-20 mA current loop. It also simplifies wiring as only two wires are required to connect the transmitter to the meter.

-The **peak/valley** option commits the highest and lowest measured pressures to memory for later recall by the operator.
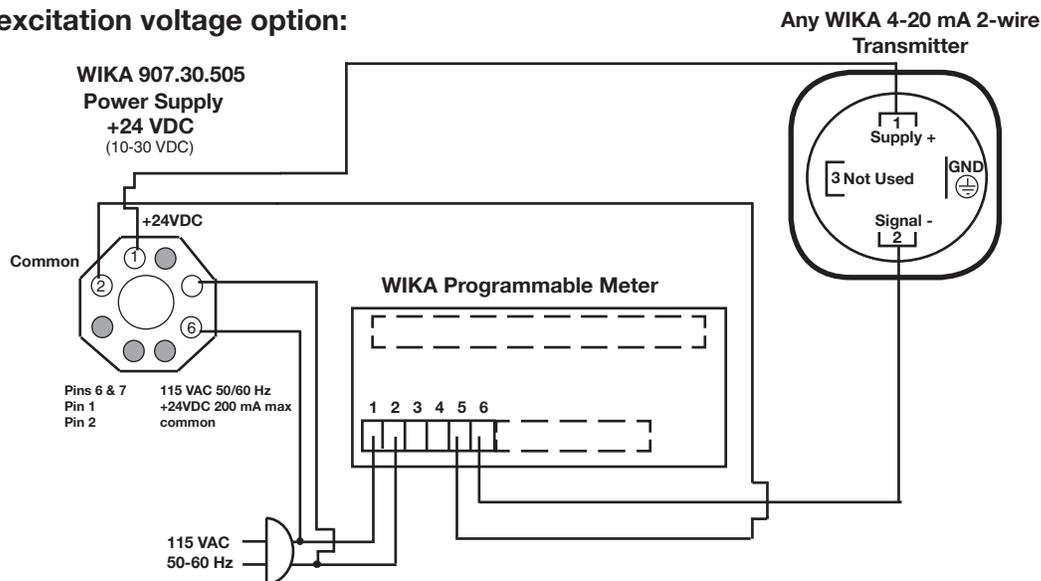
-Dual relays can be independently programmed by the user to activate warning lights or audible alerts or to start and stop pumps to maintain a predetermined pressure.

-The **serial communications** option allow for connection to computers for remote control, changing meter programs, and other functions. The meters are addressable, allowing up to 99 meters to be connected to an RS-232 port.
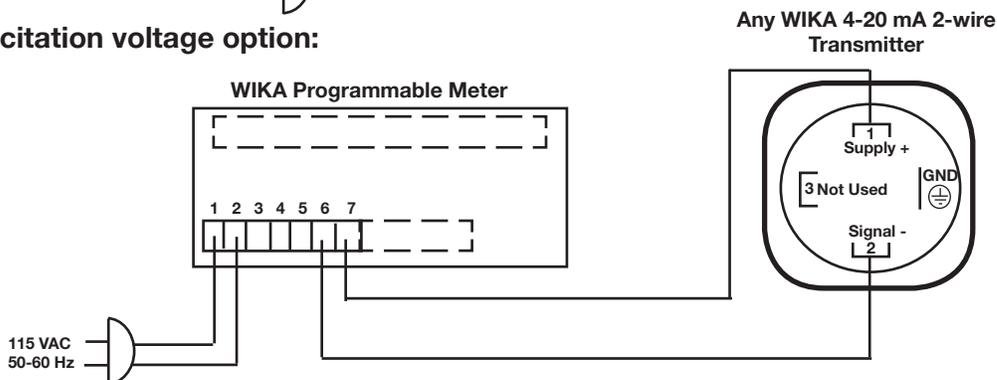
-A **retransmitted analog 4-20 mA output** can be used to provide a signal to chart recorders or other controllers. It is fully user programmable and can be set for reverse output where the maximum pressure = 4 mA and zero pressure = 20 mA.

Wiring for the meters with and without the built-in excitation voltage option is shown below:

Attachable Loop Powered Digital Indicator

Specifications

Programming Instructions

Display
Type: 0.4" high LCD
Programmable display range: -1999 to +1999

Accuracy
$\leq$ 0.2% of span

Programmable Range
4-20 mA can be assigned any display value within the display range. Both scaling points are individually adjustable using push buttons inside the case.

Power
Loop powered - no additional power supply required
Voltage drop: 3 VDC
Maximum current rating: 60 mA

Environmental
Operating temperature: +32 to +122^{0}F (0 to +50^{0}C)
Storage temperature: -22 to +176^{0}F (-30 to +80^{0}C)
Temperature effects: 0.1% of span per 18^{0}F (10^{0}C)
Humidity: 90%, non-condensing

CE Conformity
Interference emission per EN 50 081-1
Interference immunity per EN 50 082-2

Construction
Case ABS plastic
Viewing window: polycarbonate

Dimensions (inches)
1.9 x 1.9 x 1.4 deep

Weight
Approx. 3 oz.

1.) Remove four cover screws and remove cover
2.) Press the "P" key. Display shows "dP".
3.) Press the "Up" or "Down" key to select the desired decimal place position.
4.) Press the "P" key twice. Display shows "An 4".
5.) Press the "Up" or "Down" key to set display to zero or other 4mA display point.
6.) Press the "P" key twice. Display shows "An 20".
7.) Press the "Up" or "Down" key to set the maximum range of the transmitter.
8.) Press the "P" key twice. Display shows "L1".
9.) Press the "Up" key to activate the error code display (display shows "1") or the "Down" key to disable error codes (display shows "0")

Error Codes: under range: Display shows "F1"
                 over range: Display shows "F2"

10.) Press the "P" key. Display shows "FILt". A digital filter is available to improve the readability of the display for applications undergoing rapid pressure changes. To set the digital filtering, press the "Up" or "Down" key to adjust the update rate of the display.

Display	Time delay
" 0"	0.2 s
" 1"	0.5 s
" 2"	1.0 s
" 3"	1.5 s

11.) Press the "P" key to return to the display mode

Down Key   P Key   Up Key