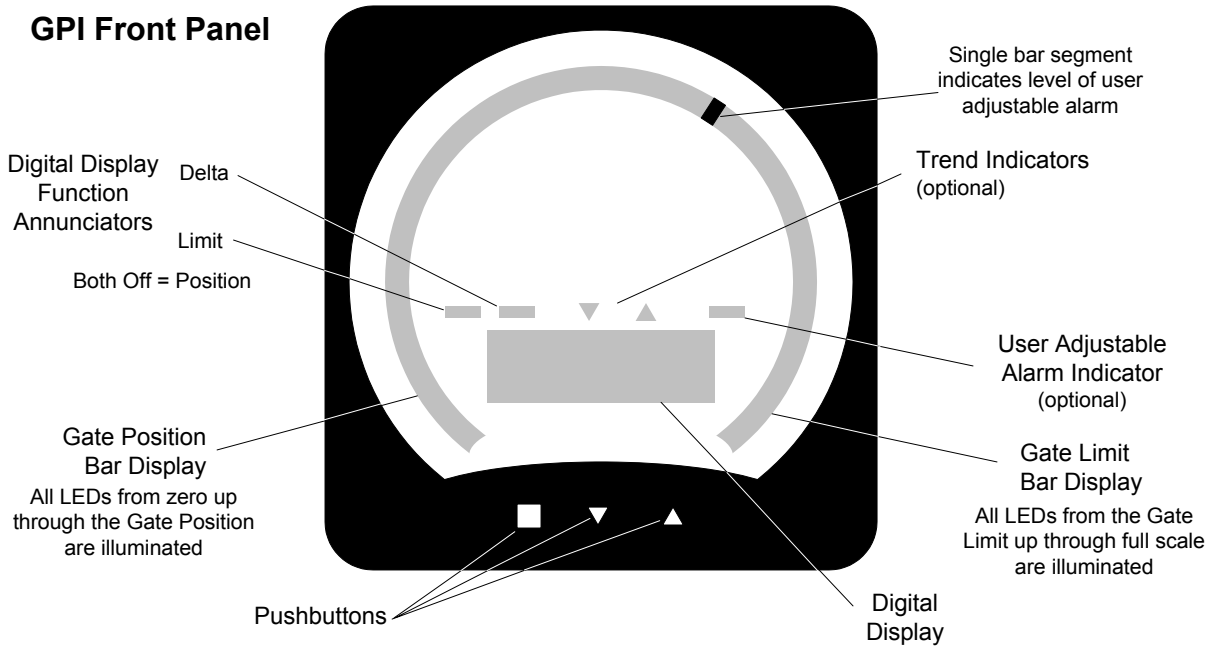
Gate Position Indicator

Supplement to Bargraph Tricolor Owners Manual

The Gate Position Indicator is a specialized Tricolor BarGraph with dual signal inputs for simultaneous display of Gate Position and Gate Limit. The GPI also provides a precise digital readout of either signal or their difference. Bar colors for position and limit are user selectable (red, green or yellow). Overlap defaults to the third color. Two relay outputs are available. One is tied to the gate limit value. The second is user adjustable and indicated by front panel annunciators. Optional trend LEDs show the last direction of gate movement.



The following changes apply to sections of the general Bargraph Tricolor Owners Manual.

2 Setup

In Normal Operation, the red pushbutton performs the Enter/Save operation. The Up button toggles the digital display between Position, Limit and Delta (Gate Limit minus Gate Position). The Down button is inoperative.

2.1 Operator Setup

Alarm 1 adjustment is inoperative.
Alarm 2 views or adjusts the user settable alarm parameters.
Alarm 3 and Alarm 4 are not available.

2.2 Supervisor Setup

Alarm 3 and Alarm 4 are not available.
Bar Form is preset to Bottom Zero and is not adjustable.
Bar Zero and Bar Full functions are not available.
Bar Fill is fixed at TriColor mode.

Color 1 (COL1) sets the color for the Gate Position bar display. Press Up or Down buttons to cycle between red, green and yellow.
Color 2 (COL2) sets the color for the Gate Limit bar display. Press Up or Down buttons to select from the remaining two colors. Overlap between the two displays defaults to the third color.

Table, Specific Gravity, Update Rate and Signal Source functions are not available.

3 GPI Calibration

Follow these steps for field calibration of each channel:

1. Apply an input signal corresponding to the zero scale value (e.g. 4ma on a 4-20ma scale).

2. Adjust the zero trimpot on the bottom of the unit (VR2 for Position input, VR3 for Limit input) until the digital display shows the zero scale reading (e.g. 0 for a 0-100% scale). It may be necessary to push the Up button to view that channel in the digital display.

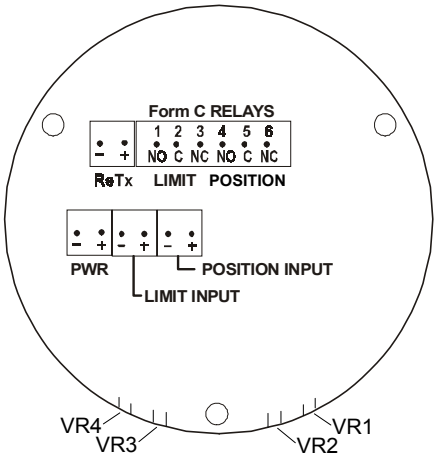
3. Apply an input signal corresponding to the full scale value (e.g. 20ma on a 4-20ma scale).

4. Adjust the gain trimpot (VR1 for Position input, VR4 for Limit input) until the digital display shows the full scale reading (e.g. 100 for a 0-100% scale).

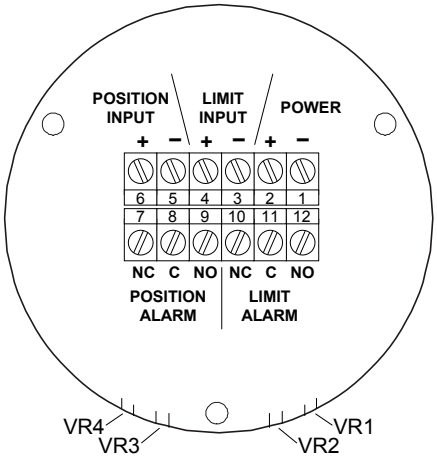
5. Repeat steps 1-4 for the other input channel. The channels can be calibrated in either order.

4 Terminal Assignments

Plug-in screw terminals (standard):



Screw terminal strips (option T):



7 Specifications

Bar Display
50 segment LED, 2% resolution

BG-241	285°
BG-261/281	270°

Digital Display

5 digit	-9999 to 20000
Resolution	0.01% of full scale
BG-241	0.4" high (10.16mm)
BG-261/281	0.8" high (20.32mm)

Differential DC Input

Accuracy	0.3% of full scale
Input Overload	200%
Impedance	2MΩ for DCV 250Ω for 4-20mA
Response Time	<600ms, zero to full scale

Temperature

Operation	0° to 50°C, <95% RH (non-condensing)
Storage	-40° to 85°C

Setpoints
2 SPDT (form C) relays. NO contact 5A resistive @250V AC or 28V DC. NC contact 3A resistive @250V AC or 28V DC.
Hysteresis 0.00-10.00% FS or latching.
Time Delay 0-10 sec.

Power
120/240V AC ±15%, 50/60/400Hz (13VA)
12, 24, 28, 48, 125 or 250V DC ±10% (8W)

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