*IQ plus® 350 Digital Weight Indicator*

# Analog Output Option

PN 43381

## IQ plus 350 Analog Output Module Installation

To install or replace the analog output module, ensure power to the indicator is disconnected, then place the indicator face-down on an antistatic work mat. Remove the screws that hold the backplate to the enclosure body. Loosen all in-use cord grips then lift the backplate away from the enclosure and set it aside.

⚠ **Caution** — *Use a wrist strap to ground yourself and protect components from electrostatic discharge (ESD) when working inside the indicator enclosure.*

Mount the analog output module on its standoffs in the location shown in Figure 1 and plug the module input into connector J5 on the IQ plus 350 board. Connect output cable to the analog output module as shown in Table 1, then reassemble the enclosure as described on page 2.

| Pin | Signal |
|-----|--------------|
| 1 | + Current Out |
| 2 | – Current Out |
| 3 | + Voltage Out |
| 4 | – Voltage Out |

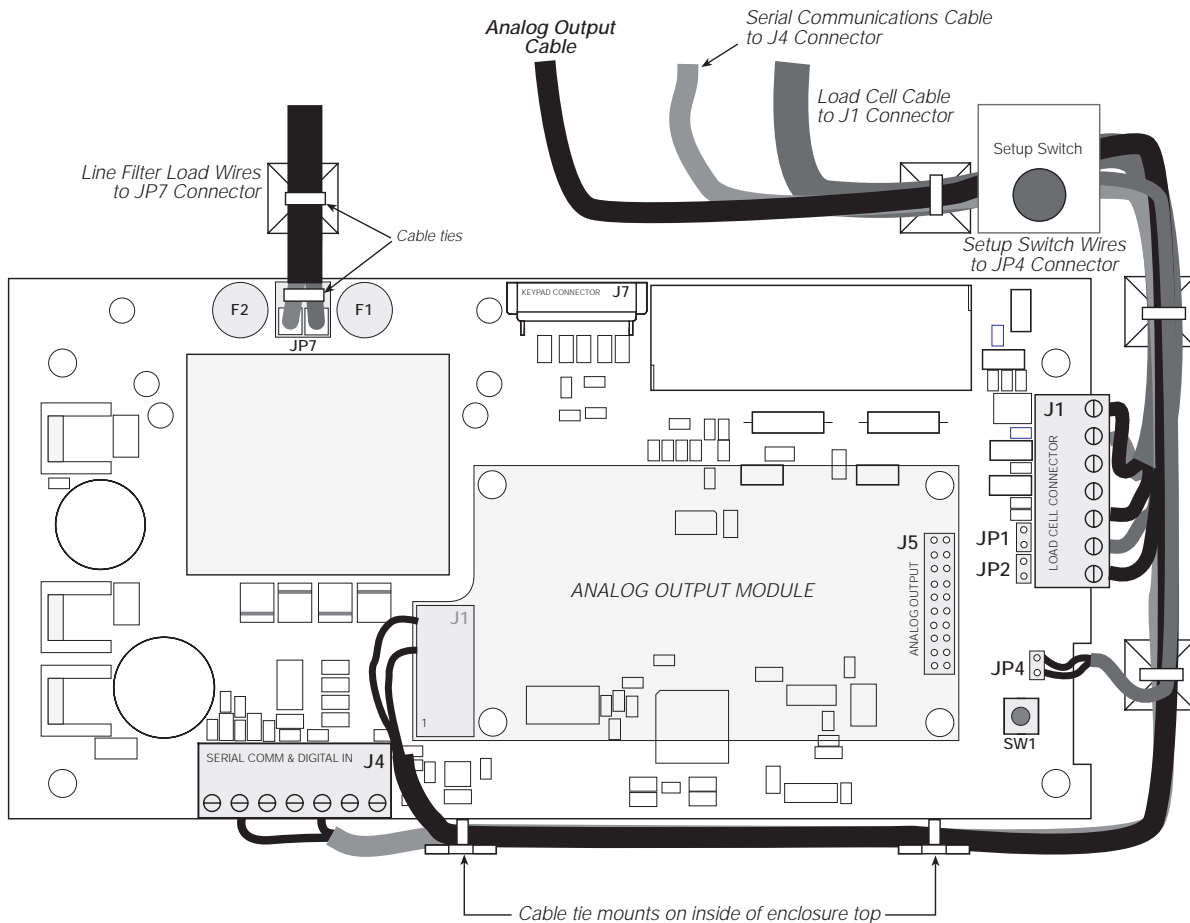*Table 1. Analog Output Module Pin Assignments*



*Figure 1. Analog Output Module Installation and Wiring on IQ plus 350 Board*

## Enclosure Reassembly

Once cabling is complete, position the backplate over the enclosure and reinstall the backplate screws. Use the torque pattern shown in Figure 2 to prevent distorting the backplate gasket. Torque screws to 15 in-lb (1.7 N-m).
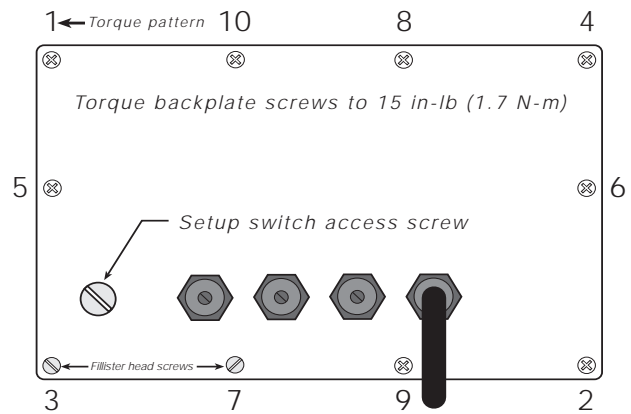


*Figure 2. IQ plus 350 Enclosure Backplate*

## Analog Output Calibration

The following calibration procedure requires a multimeter to measure voltage or current output from the analog output module.

**NOTE:** *The analog output must be calibrated **after** the indicator itself has been configured and calibrated.*
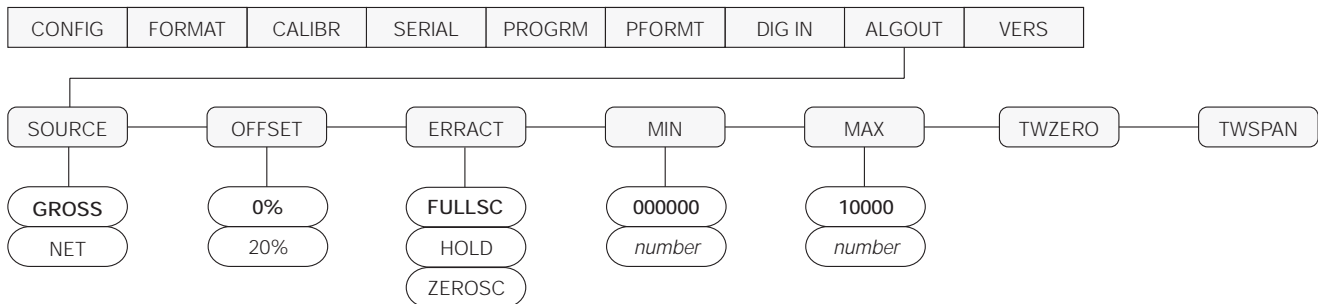


*Figure 3. Analog Output Menu*

1. Enter setup mode and go to the ALGOUT menu (see Figure 3).

   • Set OFFSET to 0% for 0–10 V output, 20% for 4–20 mA output

   • Set MIN to lowest weight value to be tracked by the analog output

   • Set MAX to highest weight value to be tracked by the analog output

   To enter MIN and MAX values, use the ◁ and ▷ keys to select the digit; use △ and ▽ to increment or decrement the value.

2. Connect multimeter to analog output:

   • For voltage output, connect voltmeter leads to pins 3 and 4

   • For current output, connect ammeter leads to pins 1 and 2

3. Adjust zero calibration: Scroll to the TWZERO parameter. Check voltage or current reading on multimeter. Press and hold △ or ▽ to adjust the zero value up or down.

4. Adjust span calibration: Scroll to the TWSPAN parameter. Check voltage or current reading on multimeter. Press and hold △ or ▽ to adjust the span value up or down.

5. Final zero calibration: Return to the TWZERO parameter and verify that the zero calibration has not drifted. Press and hold △ or ▽ to re-adjust the zero value as required.

6. Return to normal mode. Analog output function can be verified using test weights.