

Analog Output Card Installation Instructions

PN 85659

420 Plus Enclosure Disassembly

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. Lift the backplate away from the enclosure and set it aside.

420HE Enclosure Disassembly

Ensure power to the indicator is disconnected, then place the indicator on an antistatic work mat. Unhook the draw latches and open the indicator.

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

NOTE: Ensure jumpers JP1 and JP2 are in position 2 (POS2) on the analog output board as shown in Figure 1.

Mount the analog output module on its standoffs in the location shown in Figure 1 and plug the module input into connector J9 on the CPU board. Connect output cable to the analog output module as shown in Table 1, then reassemble the enclosure.

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

Table 1. Analog Output Module J1 Pin Assignments

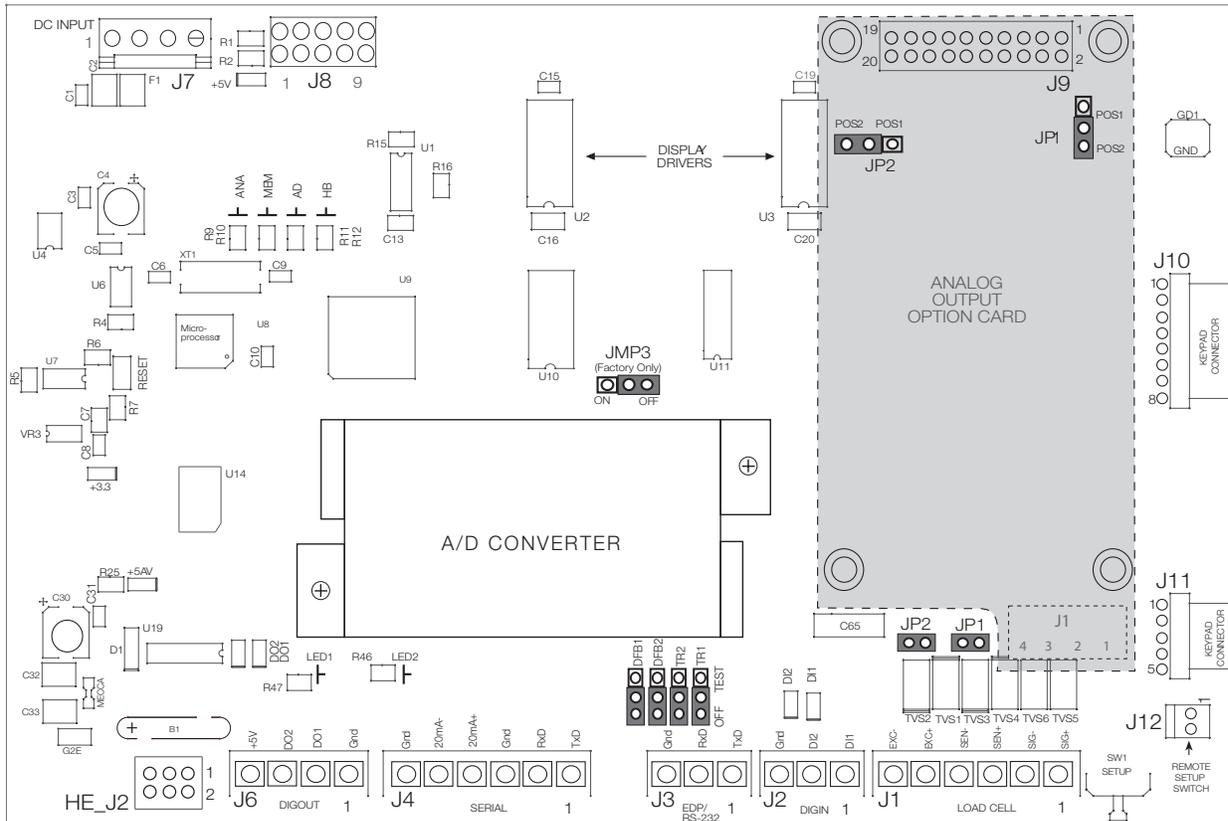


Figure 1. Analog Output Module Installation on CPU Board

420 Plus 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).

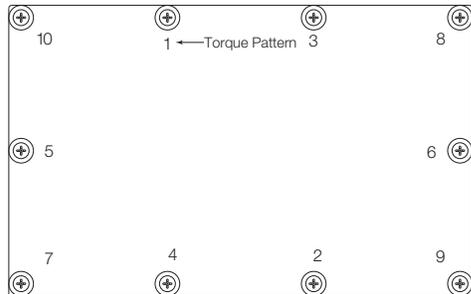


Figure 2. 420 Plus Backplate Torque Pattern

420HE Enclosure Reassembly

Once cabling is complete, close the front cover of the indicator and hook the draw latches.

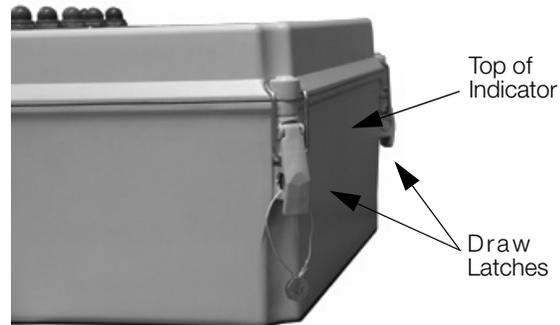


Figure 3. 420HE Enclosure Assembly

Analog Output Calibration

The following calibration procedure requires a multimeter to measure voltage or current output from the analog output module. No test weights are required for calibration.

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

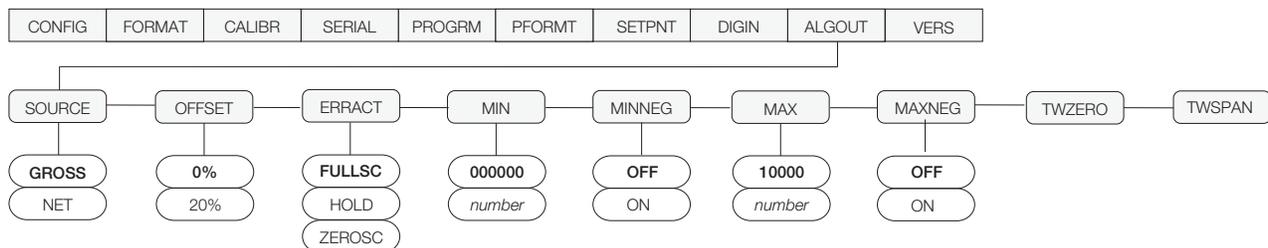


Figure 4. Analog Output Menu

- Enter setup mode and go to the *ALGOUT* menu (see Figure 4).
 - 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 the numeric keypad or the ▲ and ▼ to increment or decrement the value.
- Connect multimeter to analog output:
 - For voltage output, connect voltmeter leads to pins three and four
 - For current output, connect ammeter leads to pins one and two
- 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.
- 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.
- 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.
- Return to normal mode. Analog output function can be verified using test weights.