

# *IQ plus® 510/710 Digital Weight Indicators*

## Relay Rack Option

PN 45408

Use the following procedure to install the IQ plus 510/710 relay rack option:

1. 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.



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

2. Assemble relays onto the relay board (4-channel) or boards (8-channel).
3. Install standoffs onto the studs on the indicator backplate. Mount U-brackets on the standoffs, place protective shield on top of brackets, place protective shield on top of brackets, and secure with kep nuts (see Figure 3 on page 2).

4. For IQ plus 710 indicators using output relays, remove connector J8 from the CPU board and wire the relay board to the connector as shown in Figure 1.

For IQ plus 510 or 710 input relays, remove connectors J7 and J8 from the CPU board and wire as shown in Figure 2.

**NOTE:** For indicators using Rev. 1 CPU boards, digital input and output connections are made to the interface board. See the IQ plus 510/710 Interface Board addendum, PN 46204, for connector information.

5. Loosen cord grips and route cables for external equipment into the enclosure as shown in Figure 3 on page 2. Attach cables to relay board as shown in Figure 1 or Figure 2.

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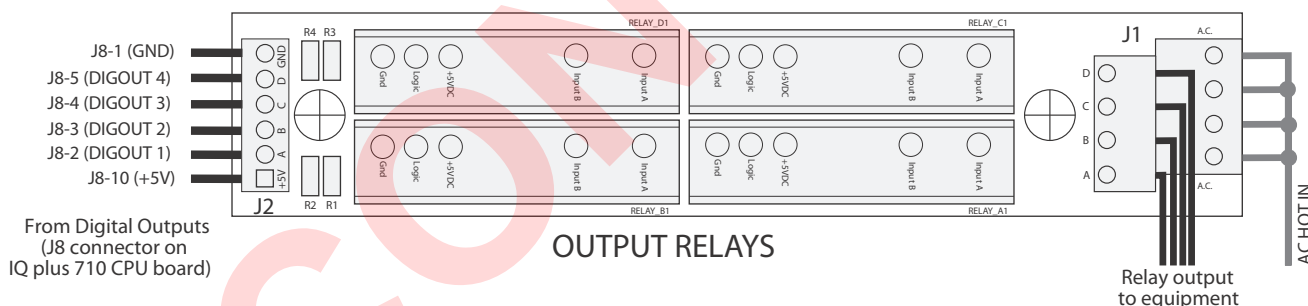


Figure 1. IQ plus 710 Output Relay Wiring

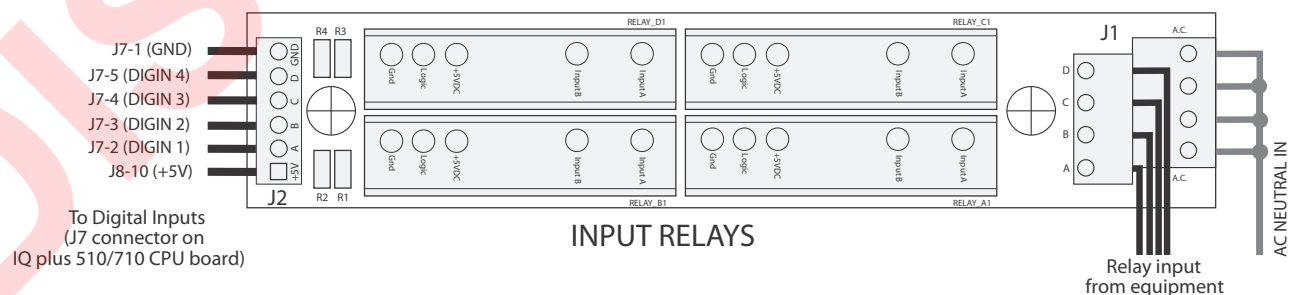


Figure 2. IQ plus 510/710 Input Relay Wiring

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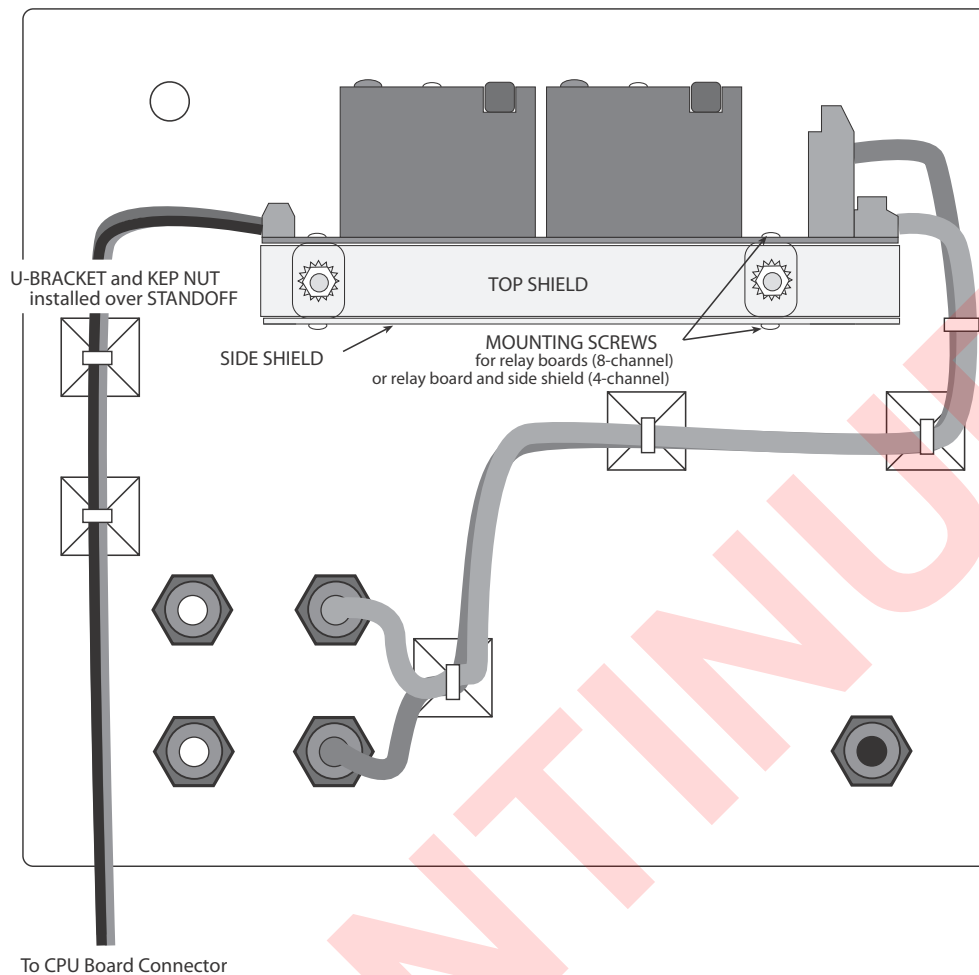


Figure 3. Indicator Backplate, Showing Installed 4-Channel Relay Rack, Mounting Hardware, and Cable Routing

6. For 4-channel (single-board) relay options, mount the relay board to the U-brackets as shown in Figure 3 and secure with two of the screws provided. Use the remaining two screws to attach the second protective shield to the opposite side of the U-bracket.

For 8-channel (two-board) options, mount the second relay board to the U-brackets in place of the second protective shield.

7. Reinstall wired connector (J8, or J7 and J8) to the indicator CPU board.
8. Use cable ties and mounts to secure cabling to the inside of the indicator enclosure as shown in Figure 3.
9. Position backplate over the enclosure and reinstall the backplate screws. Use the torque pattern shown in Figure 4 to prevent distorting the backplate gasket. Torque backplate screws to 10 in-lb (1.13 N-m).
10. Ensure no excess cable is left inside the enclosure and tighten cord grips. Make cable connections to external equipment as required.
11. See the indicator *Installation Manual* for

information about configuring digital inputs and outputs.

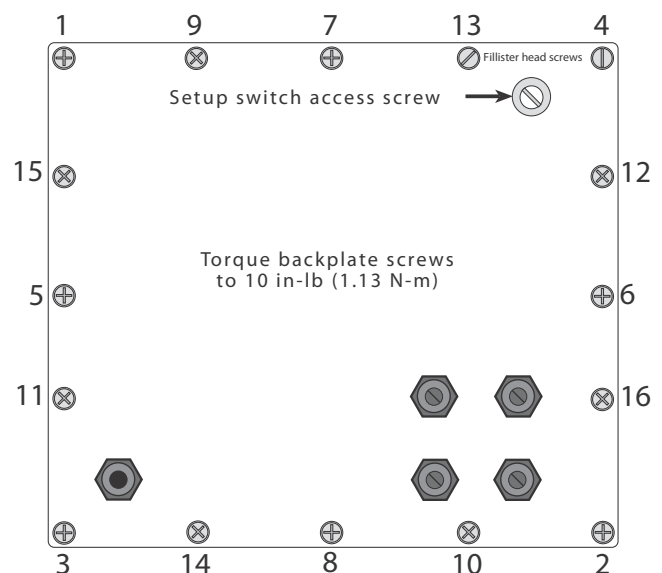


Figure 4. Torque Pattern for Backplate Screws