MECHANICAL INSTALLATION

Installing the HI 4050 Weight Controller in a Panel

Step 1. Make sure that all Electrostatic Discharge (ESD) precautions are taken before and during installation.

Step 2. Use the provided template to make the hole pattern in the panel door or cover. (Part # 0578-0071-01)

Step 3. Use a phillips head screwdriver and install the five (5) 6-32 x 1/2 inch screws that fasten the bezel to the panel. (See Fig. 3) Use a torque screwdriver and torque each screw to 10 inch/lb. DO NOT OVERTIGHTEN!

Step 4. Thread the four (4) threaded rods through the appropriate holes in the panel and into the bezel. For the retrofit you don’t have to place the rods through the holes. (See Fig. 4)

Step 5. Hand tighten each rod until you can no longer turn the rod. Do not force the rods or use pliers of any kind.

Step 6. Put the Display cable and connector through the 1.25-inch hole in the panel door or cover and plug the display connector into the display header in the bezel. (See Fig. 3)

Step 7. Gently slide the electronic enclosure onto the threaded rods while making sure the display cable glides easily into the enclosure and does not kink. Move the electronic enclosure toward the panel until it stops. (See Fig. 3)

Step 8. Thread the four (4) 6-32 thumb screws onto the threaded rods until tight. Do not use pliers on the thumb screws.

FIG. 1 PANEL HOLE DIMENSIONS

FIG. 2 PANEL HOLE DIMENSIONS (RETROFIT)

Step 1. Make sure that all Electrostatic Discharge (ESD) precautions are taken before and during installation.

Step 2. Use the provided template to make the hole pattern in the panel door or cover. (Part # 0578-0071-01)

FIG. 3 PANEL MOUNT INSTALLATION

FIG. 4 RETROFIT PANEL MOUNT INSTALL FOR HI 2151/30 & HI 2110

DIN Rail Installation HI 4050 Weight Controller

Step 1. Snap the DIN rail mounting feet into any of the two holes on the front panel of the electronic enclosure. (See Figs. 5 & 6)

FIG. 5 DIN RAIL MOUNTING FOOT
FIG. 6 VERTICAL AND HORIZONTAL ORIENTATION

Step 2. When installing firmly push the mounting feet until you hear a snapping sound. The snap means they are mounted correctly.

Step 3. After installation give each mounting foot a little tug to make sure they are seated correctly.

NOTE: There are several horizontal and vertical mounting options. It is highly recommended that at least two mounting feet be used per enclosure.

Step 4. To mount the enclosure onto a DIN rail. Place the mounting feet on the DIN Rail and firmly press down until the mounting feet snap onto the rail.

Step 5. To remove the mounting feet use a finger on the clip and gently pull up on the tab.

NOTE: For Remote Display installation please see Chapter 3, Installation, of the HI 4050 User’s Guide.

LOAD POINT INSTALLATION

FIG. 7 REAR PANEL

C2® Load Point Connection

Cable color code for C2 Load Points (left to right facing the rear panel):

- Shield - Ground Wire
- C2 - Violet
- C2+ - Grey
- EXC - Black
- SEN - Brown
- SIG - White
- SIG+ - Green
- SEN+ - Blue
- EXC+ - Red

Step 1. Remove the factory installed jumpers from the terminal block if you are connecting an 8 wire cable from the junction box. (See Fig. 8)

Step 2. Connect the cable (Recommended load cell cable: Hardy Instruments Part # 6020-0001) wires to the Weigh Scale Input-terminal block according to the cable color chart.

Step 3. Plug the terminal block into the Weigh Scale Input connector on the rear panel.

Step 4. For more information concerning C2 Load Point connection, consult Chapter 3, Installation, of the HI 4050 User Guide.

Non-C2 Load Point Connection

NOTE: Cable Color Codes vary between vendors, check with your supplier for the Color Code for your Non-C2 load point. Do not connect wires to the -C2 and +C2.

Step 1. Remove the factory installed jumpers from the terminal block if you have a 6-wire load cell cable that includes sense wires from the load cell or junction box.

Step 2. Connect the cable (Recommended load cell cable: Hardy Instruments Part # 6020-0001) wires to the Weigh Scale Input terminal block according to the manufacturer’s specification.

Step 3. Plug the terminal block into the Weigh Scale Input connector on the rear panel.
INPUT POWER WIRING

WARNING: DO NOT PLUG THE POWER CONNECTOR INTO THE HEADER WITH LIVE POWER. TO DO SO WILL RESULT IN PROPERTY DAMAGE AND/OR PERSONAL INJURY.

WARNING: IF A LITHIUM BATTERY IS REPLACED WITH AN INCORRECT TYPE IT MAY CAUSE AN EXPLOSION WHICH WILL CAUSE PROPERTY DAMAGE OR PERSONAL INJURY.

AC Input Power Wiring (-AC)

WARNING: DO NOT OPERATE WITH INCORRECT LINE VOLTAGE. TO DO SO WILL RESULT IN PROPERTY DAMAGE AND/OR PERSONAL INJURY. MAKE SURE THAT THE POWER SOURCE DOES NOT EXCEED 240 VAC.

WARNING: IF AN AUTOMATIC DISCONNECT DEVICE IS USED ON THE AC INPUT WIRES, THE DISCONNECT MUST ACT ON BOTH THE LINE AND NEUTRAL WIRES IN A DOUBLE POLE, DOUBLE THROW ARRANGEMENT I.E. DPDT RELAY. USING OTHER AUTOMATIC DISCONNECT ARRANGEMENTS MAY CAUSE PERSONAL INJURY AND/OR PROPERTY DAMAGE.

• The AC power should be supplied by a “clean” primary line, directly from the power panel. This line should not supply any other equipment, including the feeding unit, and should be supplied with a minimum 10 amp breaker.
• AC Power Input (See Fig. 7)
  Neu (Low)
  Line (HI)
  Earth Ground

Step 1. The HI 4050 is configured with a universal power supply rated from 110 to 240 VAC.
Step 2. Make sure the VAC power is shut off before installing the wires to the connector.
Step 3. Install a 3-wire, minimum 14 AWG power line to the 3-pin terminal block connector. Make sure that the shield is connected to the local Earth Ground connection.

DC Power Input (-DC)

WARNING: DO NOT OPERATE WITH INCORRECT LINE VOLTAGE. TO DO SO WILL RESULT IN PROPERTY DAMAGE AND/OR PERSONAL INJURY. MAKE SURE THAT THE POWER SOURCE DOES NOT EXCEED 24 VDC.

CAUTION: YOU MUST USE A POWER LIMITED DC POWER SUPPLY (CLASS 2) ON THE DC INPUT WIRING.

• The DC power should be supplied by a “clean” primary line, directly from the DC power source.

Step 1. Make sure the VDC power is shut off before installing the wires to the connector.
Step 2. Connect the 24 VDC Voltage wire, Ground wire and Shield wire to the connector that plugs into the DC voltage header at the rear panel. Make sure that the shield is connected to the local Earth Ground connection.
Step 3. Plug the connector into the header at the rear panel. (See Fig. 7)

STARTING THE HI 4050

Step 1. Connect the power connector (AC or DC) to the HI 4050.
Step 2. The Instrument boots up to the Summary Display. (See Fig. 9)

FIG. 9 SUMMARY DISPLAY

Step 3. Press the Enter button to go to the Configuration menus. (See Fig. 10)

FIG. 10 CONFIGURATION DISPLAY