#### **MECHANICAL INSTALLATION**

# Installing the HI 4060 Rate Controller in a Panel

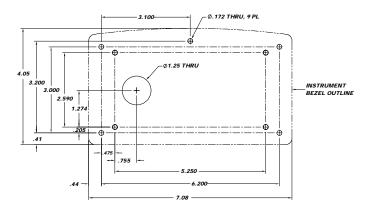


FIG. 1 PANEL HOLE DIMENSIONS

- Step 1. Make sure that all Electrostatic Discharge (ESD) precautions are taken before and during installation.
- Step 2. Use the attached template to make the hole pattern in the panel door or cover. (See Attached)

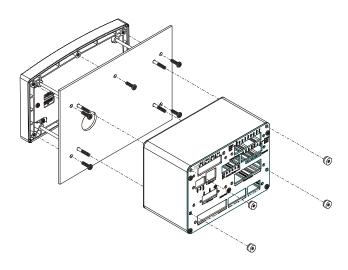


FIG. 2 PANEL MOUNT INSTALLATION

- 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 screw driver and torque each screw to 10 inch/pounds. 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 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.

### **DIN Rail Installation HI 4060 Rate 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)

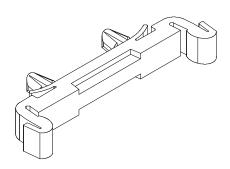
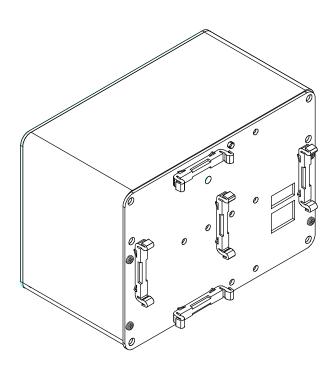


FIG. 3 DIN RAIL MOUNTING FOOT



- 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.

NOTE: For Remote Display installation please see Chapter 3, Installation, of the HI 4060 User's Guide.

# LOAD POINT INSTALLATION

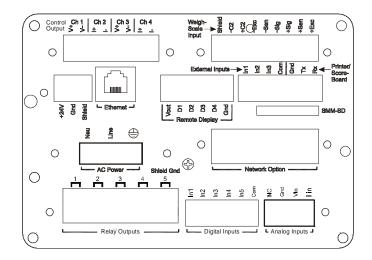


FIG. 5 REAR PANEL

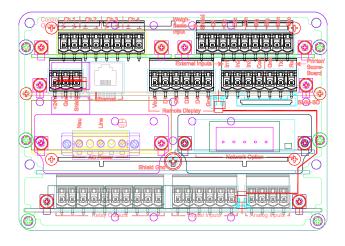


FIG. 6

# 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+

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)

Red

- Step 2. Connect the cable (Recommended load cell cable: Hardy Instruments Prt. # 6020-0001) wires to the Channel terminal block according to the cable color chart.
- Step 3. Plug the terminal block into the Channel connector on the rear panel.
- Step 4. For more information concerning C2 Load Point connection, consult the HI 4060 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 jumper from the terminal block if you have 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 Prt. # 6020-0001) wires to the Channel 1 terminal block according to the Non-C2 cable color chart, or per manufacturers specification.
- Step 3. Plug the terminal block into the Channel 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)

- Step 1. The HI 4060 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.

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)
- Step 4. Apply VDC power to the unit.

#### **STARTING THE HI 4060**

- Step 1. Connect the power connector (AC or DC) to the HI 4060.
- Step 2. The Instrument boots up to the Summary Display. (See Fig. 9)

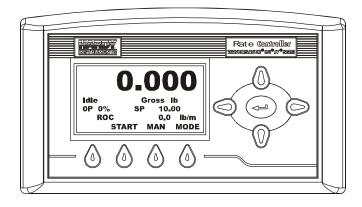


FIG. 7 SUMMARY DISPLAY

Step 3. Press the Enter button to go to the Configuration menus. (See Fig. 8)

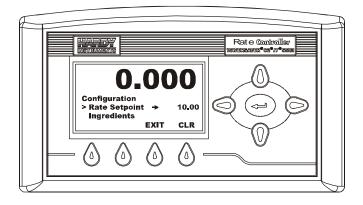


FIG. 8 CONFIGURATION DISPLAY

• Use the HI 4060 Rate Controller User Guide for Configuration, Operation and Troubleshooting instructions.



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#### **MECHANICAL INSTALLATION**

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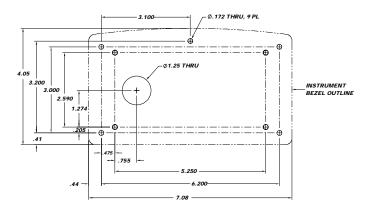


FIG. 1 PANEL HOLE DIMENSIONS

- Step 1. Make sure that all Electrostatic Discharge (ESD) precautions are taken before and during installation.
- Step 2. Use the attached template to make the hole pattern in the panel door or cover. (See Attached)

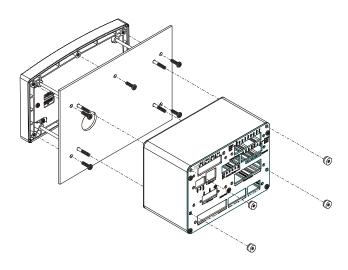


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- Step 3. Use a phillips head screwdriver and install the five (5) 6-32 x 1/2 inch screws that fasten the bezel to the panel. (See Fig. 3) Use a torque screw driver and torque each screw to 10 inch/pounds. DO NOT OVERTIGHTEN!
- Step 4. Thread the four (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 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.

### **DIN Rail Installation HI 4060 Rate 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)

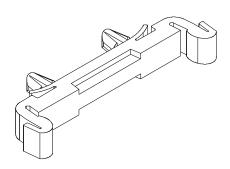
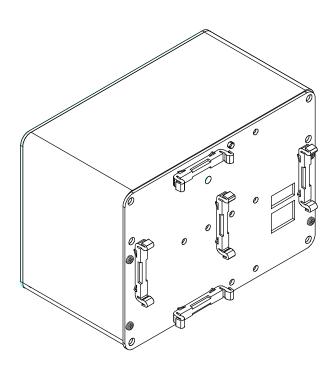


FIG. 3 DIN RAIL MOUNTING FOOT



- 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.

NOTE: For Remote Display installation please see Chapter 3, Installation, of the HI 4060 User's Guide.

# LOAD POINT INSTALLATION

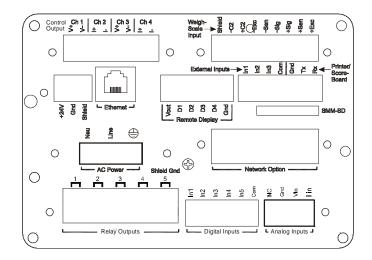


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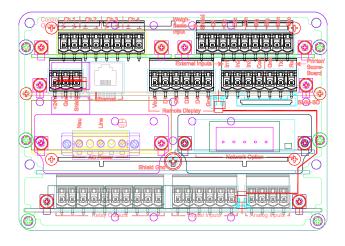


FIG. 6

# 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+

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)

Red

- Step 2. Connect the cable (Recommended load cell cable: Hardy Instruments Prt. # 6020-0001) wires to the Channel terminal block according to the cable color chart.
- Step 3. Plug the terminal block into the Channel connector on the rear panel.
- Step 4. For more information concerning C2 Load Point connection, consult the HI 4060 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.
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- Step 3. Plug the terminal block into the Channel connector on the rear panel.

### **INPUT POWER WIRING**

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- 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.
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- Step 3. Plug the connector into the header at the rear panel. (See Fig. 7)
- Step 4. Apply VDC power to the unit.

#### **STARTING THE HI 4060**

- Step 1. Connect the power connector (AC or DC) to the HI 4060.
- Step 2. The Instrument boots up to the Summary Display. (See Fig. 9)

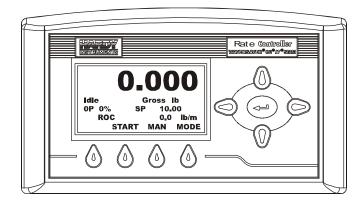


FIG. 7 SUMMARY DISPLAY

Step 3. Press the Enter button to go to the Configuration menus. (See Fig. 8)

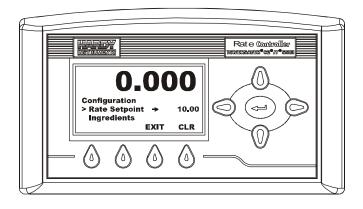


FIG. 8 CONFIGURATION DISPLAY

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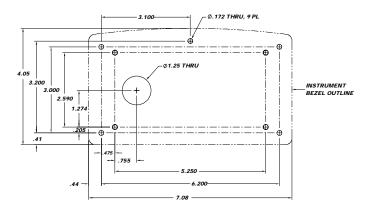


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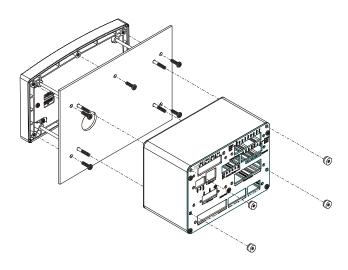


FIG. 2 PANEL MOUNT INSTALLATION

- 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 screw driver and torque each screw to 10 inch/pounds. DO NOT OVERTIGHTEN!
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### **DIN Rail Installation HI 4060 Rate 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)

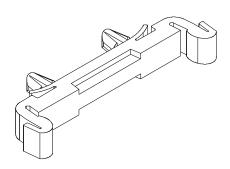
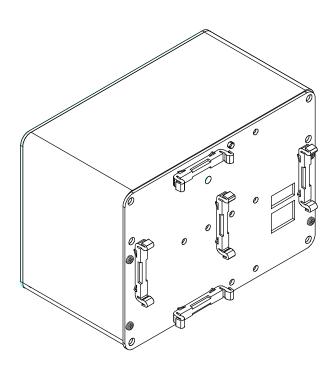


FIG. 3 DIN RAIL MOUNTING FOOT



- Step 2. When installing firmly push the mounting feet until you hear a snapping sound. The snap means they are mounted correctly.
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- NOTE: There are several horizontal and vertical mounting options. It is highly recommended that at least two mounting feet be used per enclosure.
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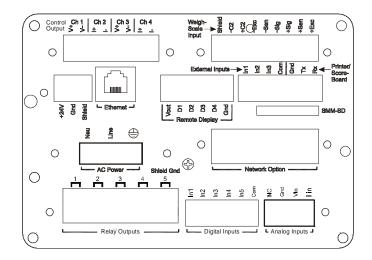


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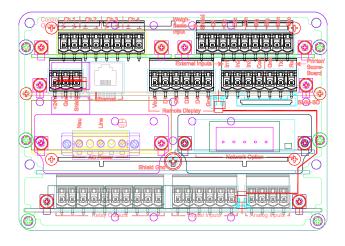


FIG. 6

# C2® Load Point Connection

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- Step 4. For more information concerning C2 Load Point connection, consult the HI 4060 User Guide.

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- 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.
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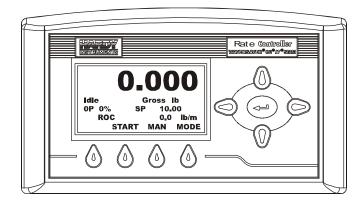


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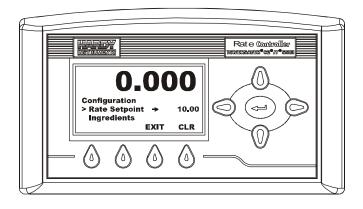


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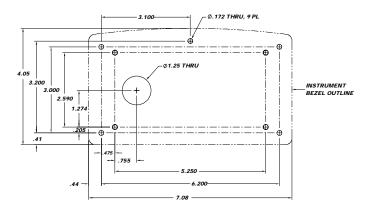


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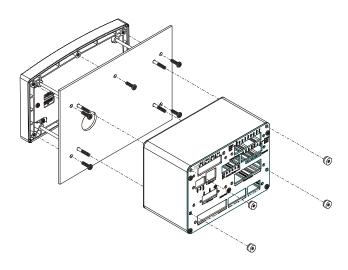


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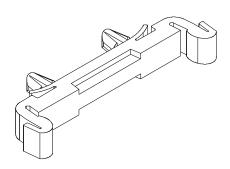
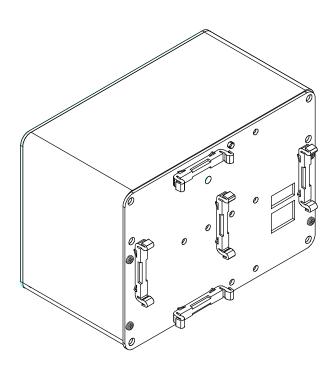


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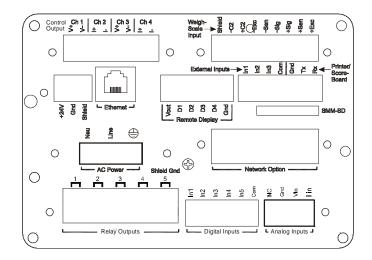


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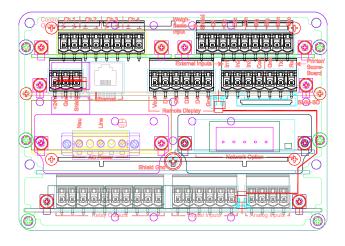


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Shield Ground Wire C2-Violet C2+Grey EXC-Black SEN-Brown SIG-White SIG+ Green SEN+ Blue

EXC+

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)

Red

- Step 2. Connect the cable (Recommended load cell cable: Hardy Instruments Prt. # 6020-0001) wires to the Channel terminal block according to the cable color chart.
- Step 3. Plug the terminal block into the Channel connector on the rear panel.
- Step 4. For more information concerning C2 Load Point connection, consult the HI 4060 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 jumper from the terminal block if you have 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 Prt. # 6020-0001) wires to the Channel 1 terminal block according to the Non-C2 cable color chart, or per manufacturers specification.
- Step 3. Plug the terminal block into the Channel 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)

- Step 1. The HI 4060 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.

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)
- Step 4. Apply VDC power to the unit.

#### **STARTING THE HI 4060**

- Step 1. Connect the power connector (AC or DC) to the HI 4060.
- Step 2. The Instrument boots up to the Summary Display. (See Fig. 9)

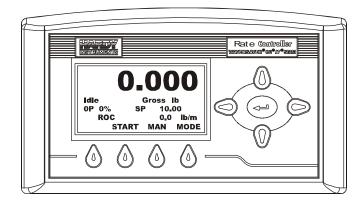


FIG. 7 SUMMARY DISPLAY

Step 3. Press the Enter button to go to the Configuration menus. (See Fig. 8)

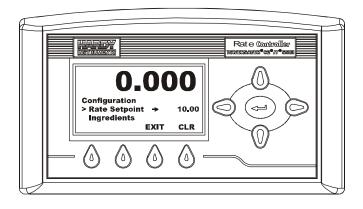


FIG. 8 CONFIGURATION DISPLAY

 Use the HI 4060 Rate Controller User Guide for Configuration, Operation and Troubleshooting instructions.



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#### **MECHANICAL INSTALLATION**

# Installing the HI 4060 Rate Controller in a Panel

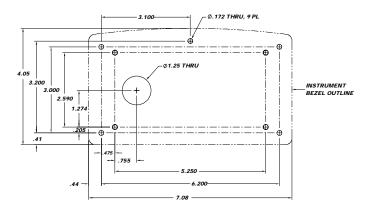


FIG. 1 PANEL HOLE DIMENSIONS

- Step 1. Make sure that all Electrostatic Discharge (ESD) precautions are taken before and during installation.
- Step 2. Use the attached template to make the hole pattern in the panel door or cover. (See Attached)

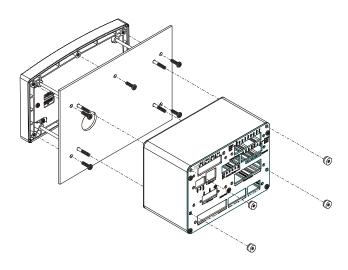


FIG. 2 PANEL MOUNT INSTALLATION

- 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 screw driver and torque each screw to 10 inch/pounds. 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 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.

### **DIN Rail Installation HI 4060 Rate 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)

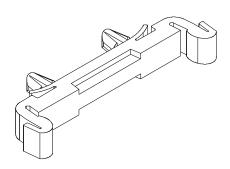
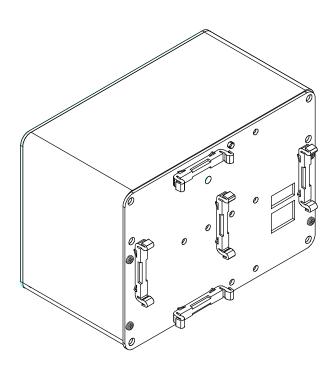


FIG. 3 DIN RAIL MOUNTING FOOT



- 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.

NOTE: For Remote Display installation please see Chapter 3, Installation, of the HI 4060 User's Guide.

# LOAD POINT INSTALLATION

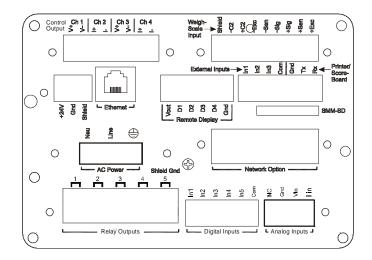


FIG. 5 REAR PANEL

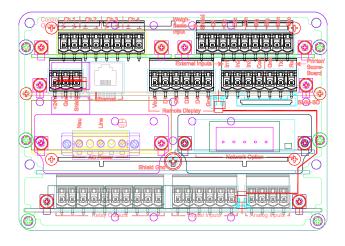


FIG. 6

# 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+

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)

Red

- Step 2. Connect the cable (Recommended load cell cable: Hardy Instruments Prt. # 6020-0001) wires to the Channel terminal block according to the cable color chart.
- Step 3. Plug the terminal block into the Channel connector on the rear panel.
- Step 4. For more information concerning C2 Load Point connection, consult the HI 4060 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 jumper from the terminal block if you have 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 Prt. # 6020-0001) wires to the Channel 1 terminal block according to the Non-C2 cable color chart, or per manufacturers specification.
- Step 3. Plug the terminal block into the Channel 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)

- Step 1. The HI 4060 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.

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)
- Step 4. Apply VDC power to the unit.

#### **STARTING THE HI 4060**

- Step 1. Connect the power connector (AC or DC) to the HI 4060.
- Step 2. The Instrument boots up to the Summary Display. (See Fig. 9)

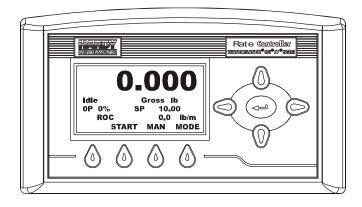


FIG. 7 SUMMARY DISPLAY

Step 3. Press the Enter button to go to the Configuration menus. (See Fig. 8)

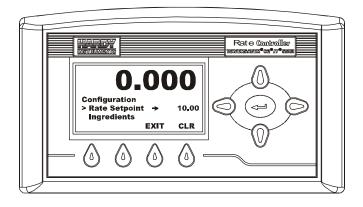


FIG. 8 CONFIGURATION DISPLAY

• Use the HI 4060 Rate Controller User Guide for Configuration, Operation and Troubleshooting instructions.



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#### **MECHANICAL INSTALLATION**

# Installing the HI 4060 Rate Controller in a Panel

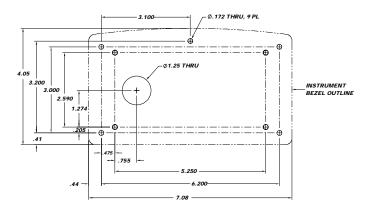


FIG. 1 PANEL HOLE DIMENSIONS

- Step 1. Make sure that all Electrostatic Discharge (ESD) precautions are taken before and during installation.
- Step 2. Use the attached template to make the hole pattern in the panel door or cover. (See Attached)

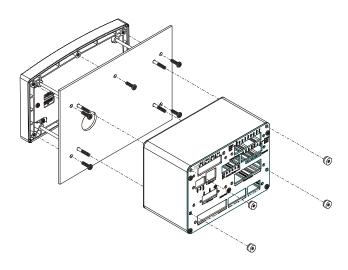


FIG. 2 PANEL MOUNT INSTALLATION

- 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 screw driver and torque each screw to 10 inch/pounds. 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 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.

### **DIN Rail Installation HI 4060 Rate 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)

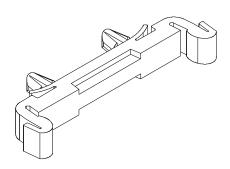
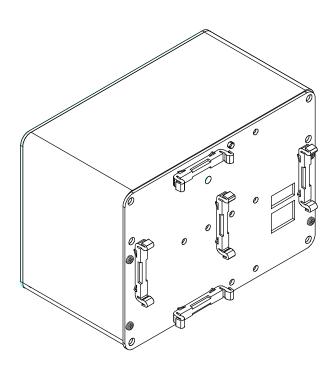


FIG. 3 DIN RAIL MOUNTING FOOT



- 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.

NOTE: For Remote Display installation please see Chapter 3, Installation, of the HI 4060 User's Guide.

# LOAD POINT INSTALLATION

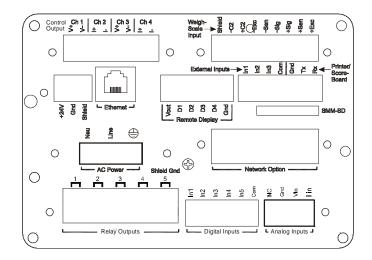


FIG. 5 REAR PANEL

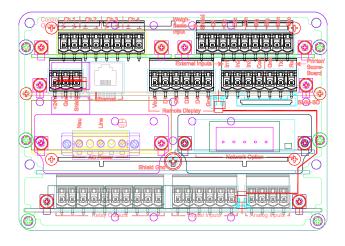


FIG. 6

# 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+

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)

Red

- Step 2. Connect the cable (Recommended load cell cable: Hardy Instruments Prt. # 6020-0001) wires to the Channel terminal block according to the cable color chart.
- Step 3. Plug the terminal block into the Channel connector on the rear panel.
- Step 4. For more information concerning C2 Load Point connection, consult the HI 4060 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 jumper from the terminal block if you have 6 wire load cell cable that includes sense wires from the load cell or junction box.
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- Step 3. Plug the terminal block into the Channel 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)

- Step 1. The HI 4060 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.

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.
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- Step 3. Plug the connector into the header at the rear panel. (See Fig. 7)
- Step 4. Apply VDC power to the unit.

#### **STARTING THE HI 4060**

- Step 1. Connect the power connector (AC or DC) to the HI 4060.
- Step 2. The Instrument boots up to the Summary Display. (See Fig. 9)

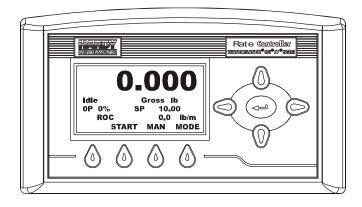


FIG. 7 SUMMARY DISPLAY

Step 3. Press the Enter button to go to the Configuration menus. (See Fig. 8)

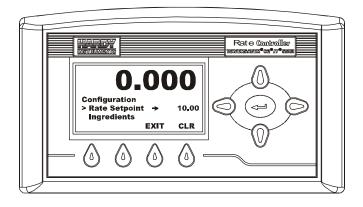


FIG. 8 CONFIGURATION DISPLAY

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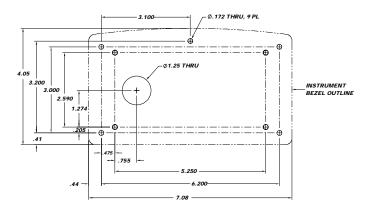


FIG. 1 PANEL HOLE DIMENSIONS

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- Step 2. Use the attached template to make the hole pattern in the panel door or cover. (See Attached)

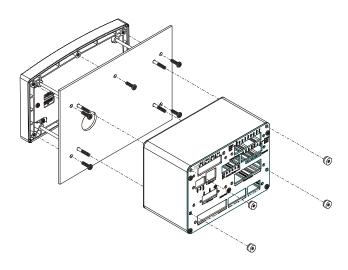


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- Step 3. Use a phillips head screwdriver and install the five (5) 6-32 x 1/2 inch screws that fasten the bezel to the panel. (See Fig. 3) Use a torque screw driver and torque each screw to 10 inch/pounds. DO NOT OVERTIGHTEN!
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### **DIN Rail Installation HI 4060 Rate 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)

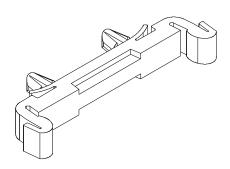
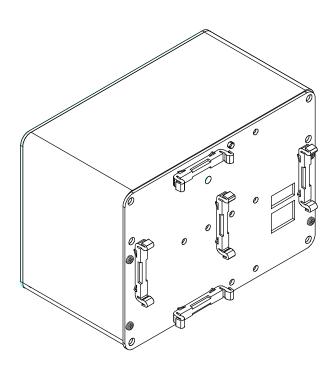


FIG. 3 DIN RAIL MOUNTING FOOT



- Step 2. When installing firmly push the mounting feet until you hear a snapping sound. The snap means they are mounted correctly.
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- NOTE: There are several horizontal and vertical mounting options. It is highly recommended that at least two mounting feet be used per enclosure.
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NOTE: For Remote Display installation please see Chapter 3, Installation, of the HI 4060 User's Guide.

# LOAD POINT INSTALLATION

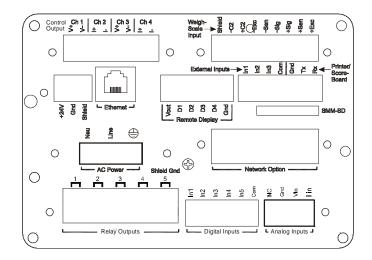


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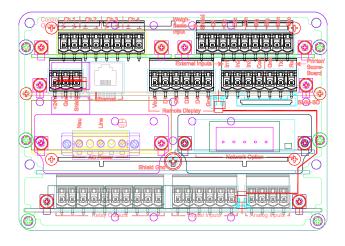


FIG. 6

# C2® Load Point Connection

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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)

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- Step 2. Connect the cable (Recommended load cell cable: Hardy Instruments Prt. # 6020-0001) wires to the Channel terminal block according to the cable color chart.
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- Step 4. For more information concerning C2 Load Point connection, consult the HI 4060 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.
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- Step 3. Plug the terminal block into the Channel connector on the rear panel.

### **INPUT POWER WIRING**

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- AC Power Input (See Fig. 7)

- Step 1. The HI 4060 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.
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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)
- Step 4. Apply VDC power to the unit.

#### **STARTING THE HI 4060**

- Step 1. Connect the power connector (AC or DC) to the HI 4060.
- Step 2. The Instrument boots up to the Summary Display. (See Fig. 9)

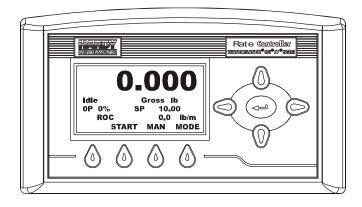


FIG. 7 SUMMARY DISPLAY

Step 3. Press the Enter button to go to the Configuration menus. (See Fig. 8)

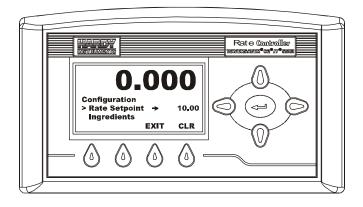


FIG. 8 CONFIGURATION DISPLAY

• Use the HI 4060 Rate Controller User Guide for Configuration, Operation and Troubleshooting instructions.



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#### **MECHANICAL INSTALLATION**

# Installing the HI 4060 Rate Controller in a Panel

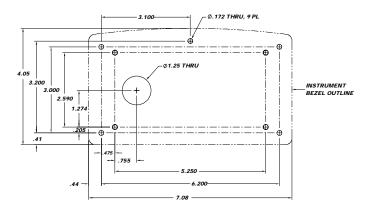


FIG. 1 PANEL HOLE DIMENSIONS

- Step 1. Make sure that all Electrostatic Discharge (ESD) precautions are taken before and during installation.
- Step 2. Use the attached template to make the hole pattern in the panel door or cover. (See Attached)

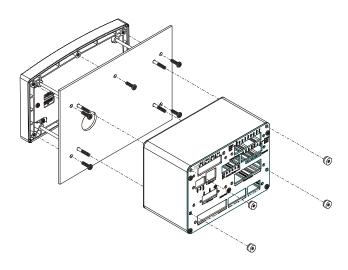


FIG. 2 PANEL MOUNT INSTALLATION

- 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 screw driver and torque each screw to 10 inch/pounds. 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 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.

### **DIN Rail Installation HI 4060 Rate 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)

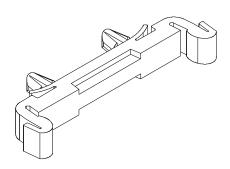
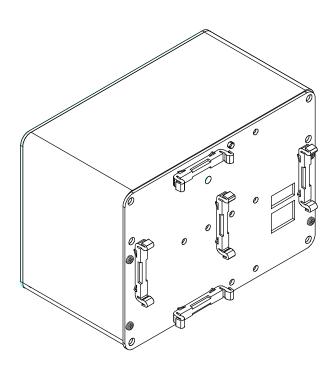


FIG. 3 DIN RAIL MOUNTING FOOT



- 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.

NOTE: For Remote Display installation please see Chapter 3, Installation, of the HI 4060 User's Guide.

# LOAD POINT INSTALLATION

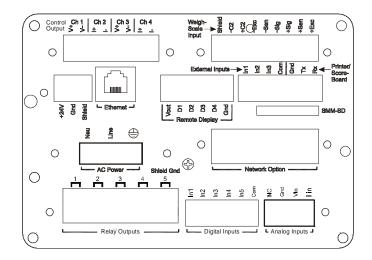


FIG. 5 REAR PANEL

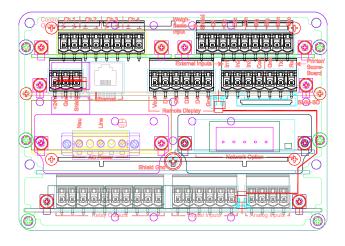


FIG. 6

# 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+

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)

Red

- Step 2. Connect the cable (Recommended load cell cable: Hardy Instruments Prt. # 6020-0001) wires to the Channel terminal block according to the cable color chart.
- Step 3. Plug the terminal block into the Channel connector on the rear panel.
- Step 4. For more information concerning C2 Load Point connection, consult the HI 4060 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 jumper from the terminal block if you have 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 Prt. # 6020-0001) wires to the Channel 1 terminal block according to the Non-C2 cable color chart, or per manufacturers specification.
- Step 3. Plug the terminal block into the Channel 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)

- Step 1. The HI 4060 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.

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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)
- Step 4. Apply VDC power to the unit.

#### **STARTING THE HI 4060**

- Step 1. Connect the power connector (AC or DC) to the HI 4060.
- Step 2. The Instrument boots up to the Summary Display. (See Fig. 9)

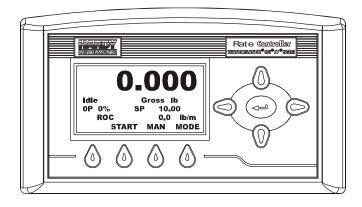


FIG. 7 SUMMARY DISPLAY

Step 3. Press the Enter button to go to the Configuration menus. (See Fig. 8)

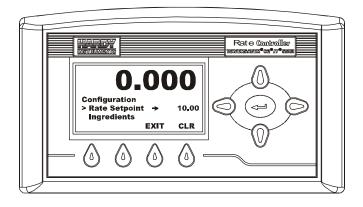


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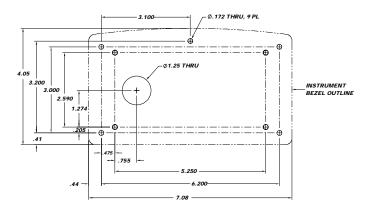


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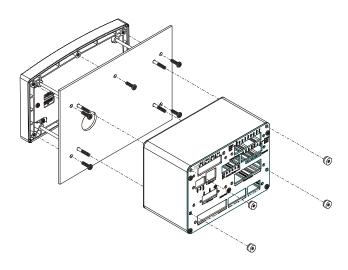


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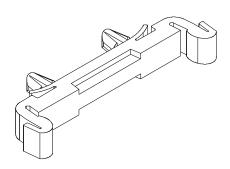
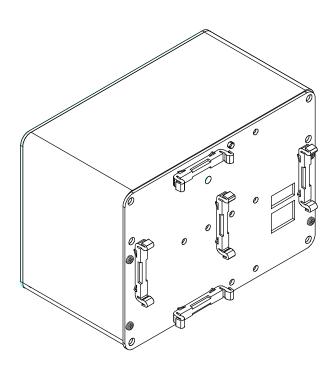


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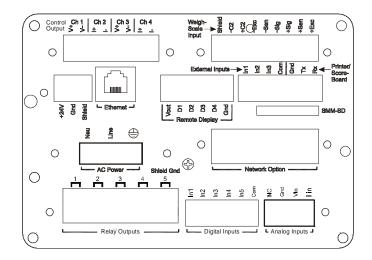


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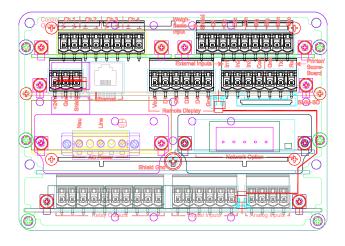


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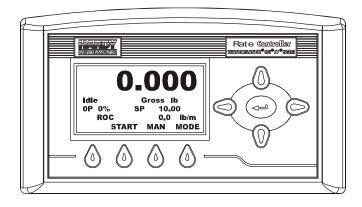


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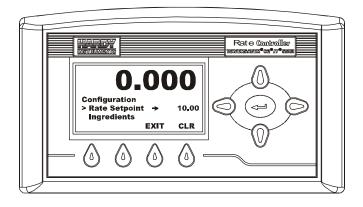


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