

Installation

1. Mount the display into the sign structure using the provided holes in the mounting flange. Alternate holes can be drilled into the mounting flange if needed. Refer to **Figure 1** and **Figure 2**.

Note: Do not drill holes into the display face. This will void the warranty.

2. Use appropriate screws or other hardware to secure the sign to the structure.

Note: The display is front ventilated. Do not block the display face. This may void the display warranty.

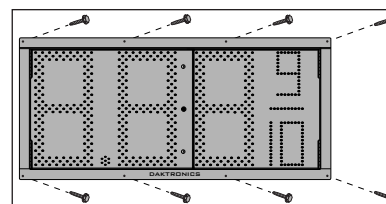


Figure 1: Securing Digit Cabinet

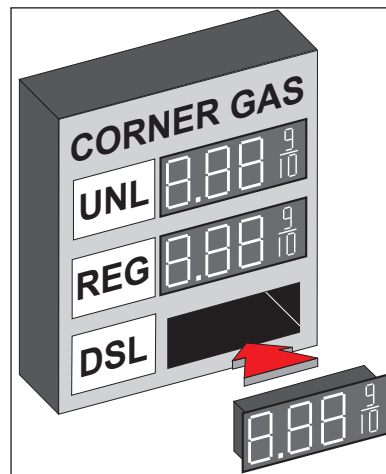


Figure 2: Inserting Digits into Cabinet

Grounding

FL-3000 and FL-4500 series displays do not require a local earth ground electrode.

The displays still require a safety ground from the electrical service panel for the primary power wires to comply with national electric codes.

Power Installation

Install Daktronics Fuelight™ displays using a two wire plus ground circuit. The ground from the circuit must be connected to the ground bus bar or green wire attached to the grounding stud within each Fuelight display. Refer to **Figure 3**. Do not connect neutral to ground at the disconnect or at the display, this would violate electrical codes and void the warranty. Use a disconnect so that all ungrounded conductors can be disconnected.

To connect power to the display:

1. Route the power cable into the display through one of the knockouts on the display's backsheet.
2. Use wire nuts or other appropriate hardware to connect power wires - hot (black) and neutral (white) - to the power supply harness or pigtail. Refer to **Figure 3** and **Figure 4**.

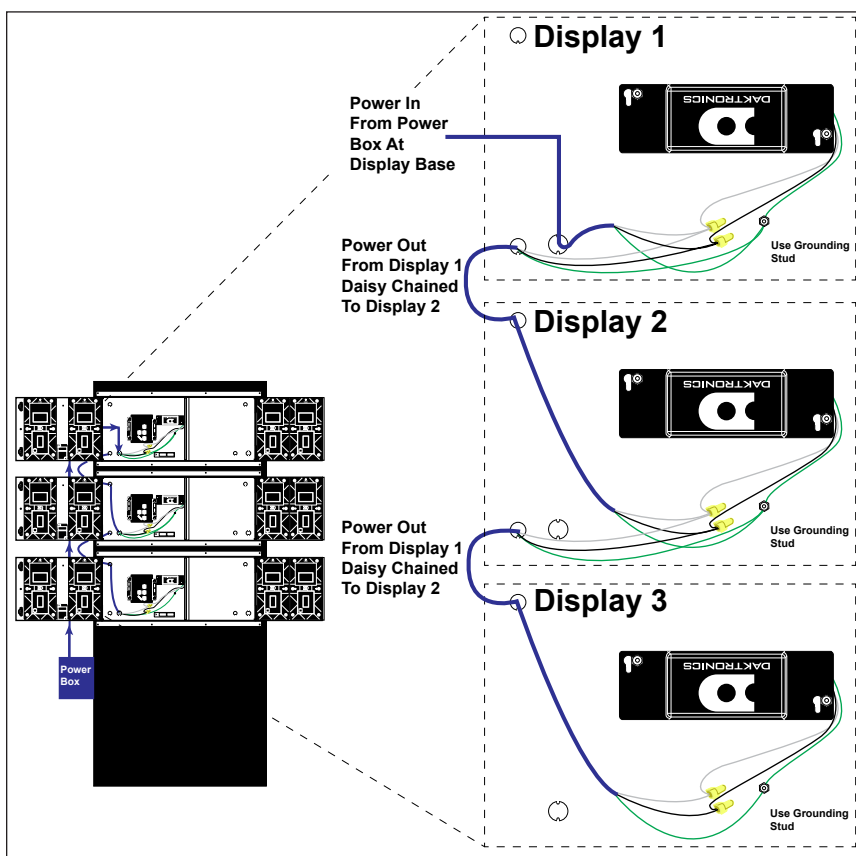


Figure 3: Proper Grounding for Multiple Fuelight Displays

3. Connect supply power ground wire to the grounding stud. Refer to **Figure 4**.

Note: Verify the power supply ground wire is connected to the grounding stud.

Display Interconnections

Signal travels from the host driver jack J9 to additional display drivers through the Line-to-Line cable. Line-to-line connections are made using jacks J9 and J10 on the driver.

The preferred cable routing has signal leaving each driver from jack J9 and entering the next driver on jack J10

Each time you connect the line-to-line cable to J9, you must also connect the drain wire to the upper-left stud that holds the driver in place.

1. Use provided knockouts on the back of the display for signal entrance and exit. Refer to **Figure 5**.

2. Install the provided bushing at the knockout location.

3. Connect the provided line-to-line cable, shown in **Figure 6**, to host driver jack J9. The host driver can be identified by having the communication option attached to jack J16.

4. Place the drain wire of the line-to-line cable on the upper-left stud that holds the driver in place. Refer to **Figure 7**.

5. Place the 6-32 nut on the stud and tighten it with a 5/16" nut driver. Refer to **Figure 8**.

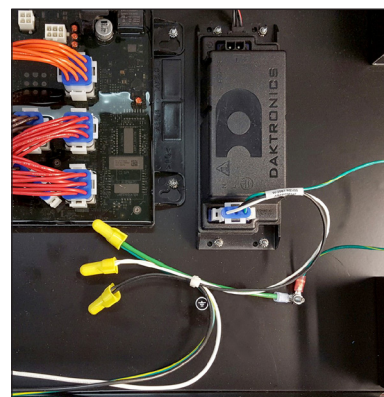


Figure 4: Power Connection With Grounding Stud

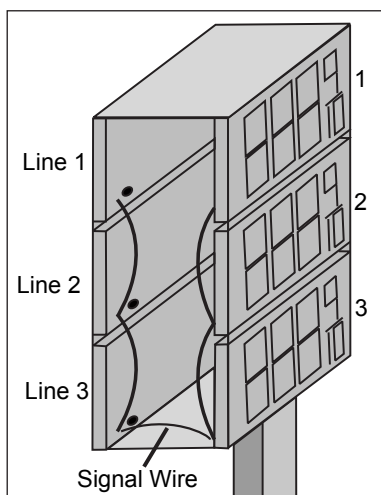


Figure 5: Line-to-Line Details



Figure 6: Line-to-Line Cable

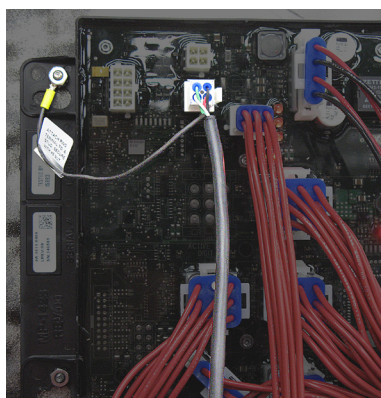


Figure 7: Installed Line-to-Line Cable with Drain Wire

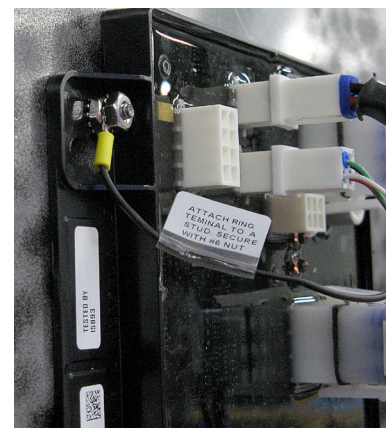


Figure 8: Installed Drain Wire

- Route the provided line-to-line cable from the host driver jack J9 to the next client display driver, connecting to jack J10. Refer to **Figure 9**.
- Run cable through the knockouts located on the display's backsheet and be sure to use the provided cable bushings that snap into place.
- Repeat until all displays are connected.

Note: Do not connect the last display driver back to the host.

Additional Information

Important Notes:

- Route cables at least 6 inches away from interfering sources like ballasts, florescent light bulbs, power sources, any type of motor, etc.
- Pull excess cable into the display cabinet, coil cable, zip tie it together and carefully place coil inside the display cabinet.

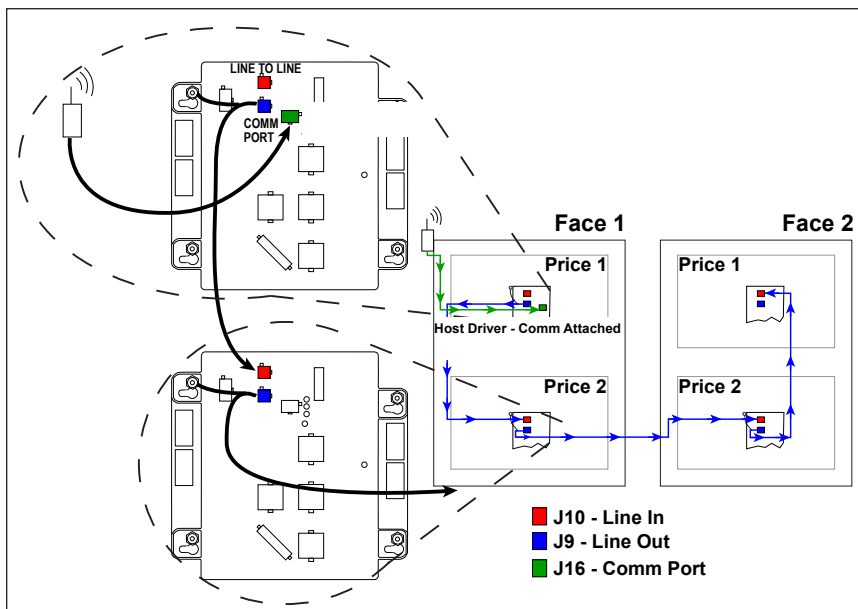


Figure 9: Line-to-Line Cable Installation

For additional support information or communications installation information, visit www.daktronics.com/support.

Installing a Cash/Credit Display

A rectangular opening must be provided to accommodate the Cash/Credit™ display. Consult the shop drawing for cutout dimensions.

- Lift displays into the support structure. **Figure 10** shows a display being inserted into a support structure.

Note: Daktronics assumes no liability for display damage or injury resulting from incorrect setup or incorrect lifting methods.

- Drill through the front flanges of the cabinet to attach the display to the base structure using appropriate hardware for site conditions. Refer to **Figure 11**. Actual site demands will dictate variances and appropriate mounting methods.

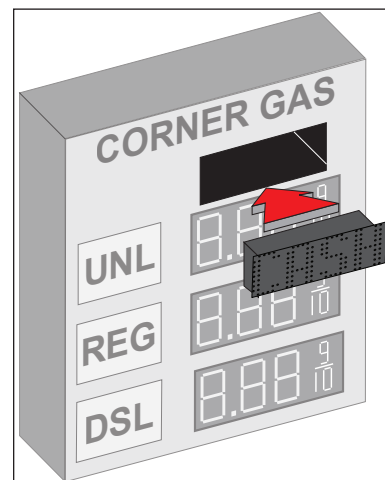


Figure 10: Inserting Display Into Cabinet

Access Internal Cash/Credit Display Components

The door of Cash/Credit displays is secured by a screw (two screws secure the door on 2H displays).

- Use a Phillips-head screwdriver to loosen the screw.
- Open the door using the knob attached to the display face.

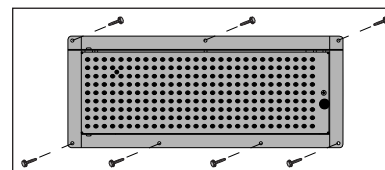


Figure 11: Secure Display in Sign Structure

3. The power supply is attached inside the cabinet to the display's backsheet, as shown in **Figure 12**, and its location varies between display sizes.

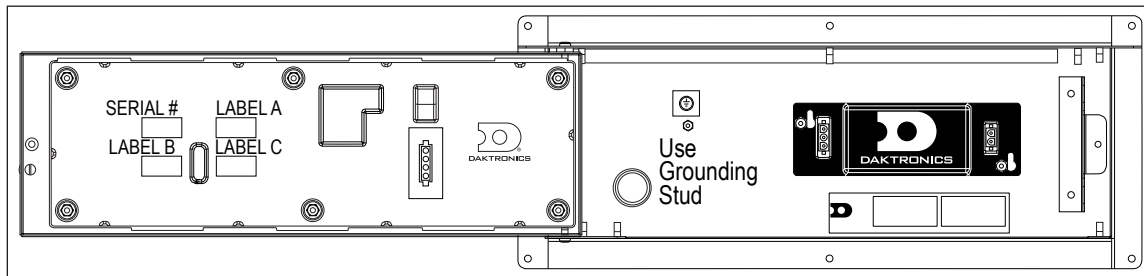


Figure 12: Internal Component Locations

Grounding

Cash/Credit displays do not require a local earth ground electrode.

The displays still require a safety ground from the electrical service panel for the primary power wires to comply with national electric codes.

Cash/Credit Display Power Installation

Install Daktronics Cash/Credit displays using a two-wire plus ground circuit. The ground from the circuit must be connected to the grounding stud within each Cash/Credit display. Do not connect neutral to ground at the disconnect or at the display, this would violate electrical codes and void the warranty. Use a disconnect so that all ungrounded conductors can be disconnected.

To connect power to the display, complete the following steps:

1. Route power cable into the display through one of the knockouts on the display's backsheet.
2. Use wire nuts or other appropriate hardware to connect power wires to the power supply harness or pigtail. Refer to **Figure 13**.
3. Connect supply power ground wire to the grounding stud. Refer to **Figure 13**.

Note: Verify the power supply ground wire is connected to the grounding stud.

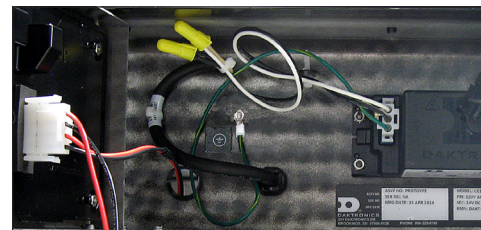


Figure 13: Power Connection

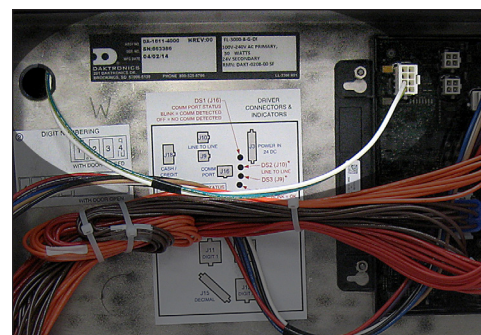


Figure 14: Cash/Credit Display Connection to Driver

Connect Cash/Credit Display to the Fuelight Driver

Connect the 8 position Mate-N-Lok plug of harness W-2709 from the cash/credit module to jack J18 on a Fuelight driver. Refer to **Figure 14**.