# Time-Saving Tips

- 1. Locate installation parts and tools behind the bottom-left display door. Refer to the graphic in **Step 2** under **Display Installation (p.1)**.
- 2. Do as much preparatory work on the ground while displays are easily accessible.
  - Move mounting components to the approximate location of the structure's uprights. The display's center is clearly marked for easy
  - Assemble the web camera to arm supplied with the display.
  - Assemble webcam arm to the display.
  - Evenly distribute splice plates.

# **Required Tools**

### Daktronics-Provided Tools (located behind labeled doors)

- Black cable ties
- L-handle hex head wrench: 1/2"
- Splice wrench

T-handle hex head wrench: 1/." Torx bit: T20

### **Customer-Provided Tools**

- Bucket truck: Customer must provide until final proof of performance
- Cordless drill
- Crane
- Drill bits
- Flat-head screwdriver
- Fish tape
- Hex head wrenches: Various sizes
- Ladder: 6', 8', 10'
- Laptop

- Pry bar
- Phillips screwdriver
- Ratchet tie-downs/come along
- Socket and open end wrench:  $1-\frac{1}{16}$
- Socket and open end wrench: 3/4"
- Socket extension: 3"
- Socket set
- Taglines
- Tape measure
- Torque Allen wrench: 1/,"
- Utility knife

# **Display Installation**

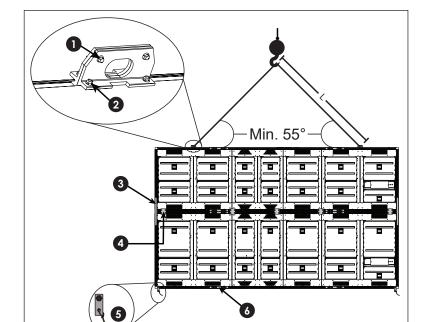
**Note:** This installation procedure assumes a multisection display. For a single-section display, follow Steps 1-4 and then skip to Step 16.

- 1. Verify that the lift eyes are installed and the lift eye bolts and set bolts are in place.
- 2. Attach the crane to the lift eyes in the top section.
  - a. The angle on the lift eye straps must be greater than 55° from horizontal.
  - **b.** For sections with more than two lift eyes, a spreader beam must be attached to each lift eye. Each lift eye must have its own strap.

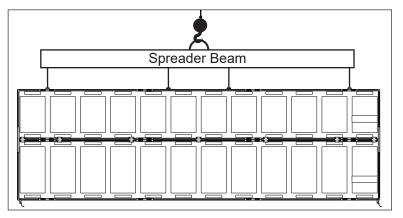


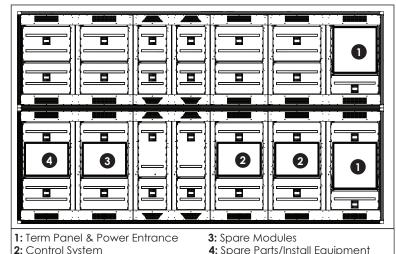






1: Lift Eye Bolts 3: Vertical Splice Tube\* 5: Tag Line Tie Off 4: Flat Splice Plate\* 6: Mounting Clamp \*Multi-section displays only





3. Remove the shipping hardware from the top section.



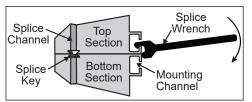




- 4. Lift the top section off of the truck.
- 5. Use a  $\frac{7}{12}$  wrench to remove the bolts that hold the lift eyes together and to the bottom section of the display. Slide the two pieces of the lift eye past each other and lift them out of the channel. Place the lift eyes in the spare parts location for future use.
- 6. Lower the top section on to the bottom section.

Note: Do not move vertical splice tubes into place until after the top section is secured to the bottom section to avoid damage during assembly.

7. Ensure the splice key is properly engaged into the splice channel, and use the supplied splice wrench to align the display sections.





- 8. Evenly distribute the flat splice plates along the rear of the display. Ensure there is a flat splice plate near each end of the display.
  - If the LEDs are more than 1/4 of an LED out of alignment, adjust until properly aligned.

directions between splices.

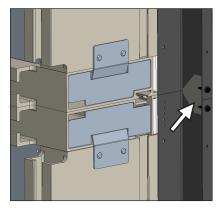
LED Alignment

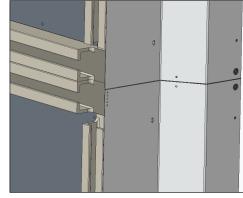
Verify LEDs align in all

- **9.** Position bolts so they can slide easily into place once the plate is in position. Slide into channels to secure the top half to the bottom half.
- **10.** Use an impact wrench with an  $1-\frac{1}{16}$ " socket to loosen the bolts that hold the vertical splice tube in the bottom section. Consult the Shop Drawing for more information.
- 11. Slide the vertical splice tube so it is split evenly between the display sections as shown. Tighten the hardware to 75-100 ft-lbs.
- 12. Repeat Steps 10-11 for all vertical splice tubes.



13. Attach the border splice plates inside the rear border flanges using supplied Tek screws (left image below). Note that displays with border covers do not require these splice plates (right image below).

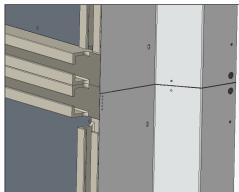




- 14. Connect the signal and power splice cables between the display sections. Refer to **Electrical Installation (p.2)** for more information.
- 15. Remove the shipping hardware from the bottom display section.
- 16. If needed, relocate the ISP enclosure to the alternate location to avoid structural interference when installed.
- 17. Install the webcam and webcam arm.
- 18. Connect the webcam cable and green grounding cable to the rear of the display.
- 19. Lift the display to the structure.
- 20. Lower the display until it rests on all the display ledger brackets.

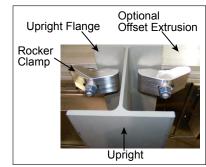
#### **Important Notes:**

- Make sure structure uprights are plumb and level with one another.
- Make sure there are no obstructions between mounts and structure.
- Make sure there are no obstructions on the display mounting surface of the I-beam.
- The display must rest completely and firmly on each ledger bracket.
- 21. Slide all the rocker clamps over until they engage the upright flanges.
- **22.** Tighten all of the nuts on the rocker clamps or the offset extrusion bolts to 75-100 ft-lbs.









Note: If the backer channel for the rocker clamp or the optional offset extrusion aligns with an opening in the display perimeter, shift the entire display left or right until the backer channel is at least 1" from the opening.



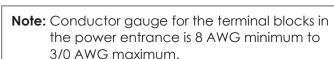
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- 23. Place and tighten all remaining mounting assemblies to 75 ft-lbs.
- 24. Remove the crane support, and disconnect the tag lines.
- 25. Locate the top lift eye covers, when equipped, that are fixed to the border cover for shipping. Use supplied Tek screws for installation.

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### **Electrical Installation**

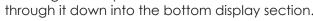
- 1. Refer to the display Riser Diagram for site-required power.
- 2. Run conduit from the main distribution panel (provided by customer) to the display power entrance(s) marked on the cabinet.
- 3. Loosen the two screws that secure the power entrance cover and lift it off of the power entrance.
- 4. Feed power cable through the conduit into the power entrance, and connect per the wiring diagram label on the enclosure.



- **5.** Verify indicators on top of surge suppressors are green.
- 6. Verify the breaker for the Backlit ID is off unless there is a backlit ID.
- 7. Replace and secure the power entrance cover.

## Power/Signal Splicing (Multi-Section Displays)

- 1. Remove the far-right access doors on both the top and bottom display sections.
- 2. Locate the PVC coupler in the bottom of the top section.
- Remove the cables from the PVC coupler, insert it into the holes between sections, and route signal and power\* cables



- 4. Remove the cover from the bottom section term panel.
  - \*For DB Displays Only: Connect the four power splice cables to the mating power interconnect iacks.





