

External Power Connection

Connect to the wall box according to local code. Route power within 6' of the power supply chassis. Refer to the contract-specific Riser Diagram.

Internal Power Connection

Power routes internally to the display after field power is landed. Incoming power is terminated at a Daktronics-provided MNL connector. Each 20 A connector includes 110" of 12 AWG bare wire for connection to incoming power. Each 30 A connector includes 110" of 10 AWG bare wire for connection to incoming power.

There are two options for AC input. Incoming power is terminated at the appropriate Daktronics-supplied harness. Refer to **Figure 1**.

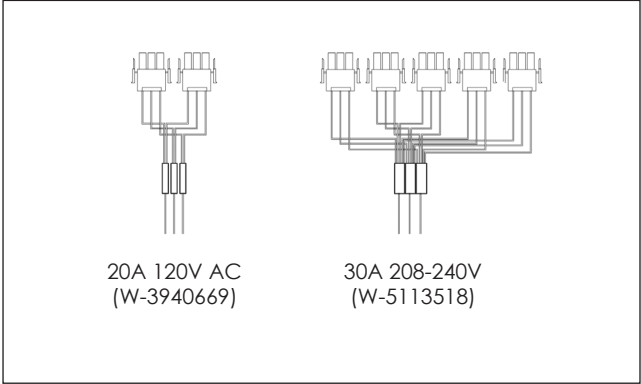


Figure 1: AC Connector Harness Options

The power entrance is shown in **Figure 2**. The power entrance is a harness with a connector on one end that will connect to the panel harness and have splicers to connect the incoming power wires. Use two screws to mount the power entrance to the power entrance location on the bottom of the panel. Refer to **Figure 3**.

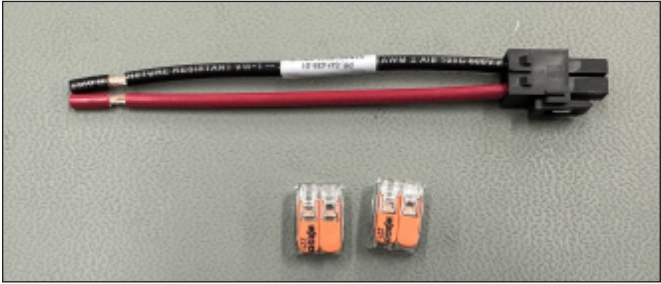


Figure 2: Power Entrance

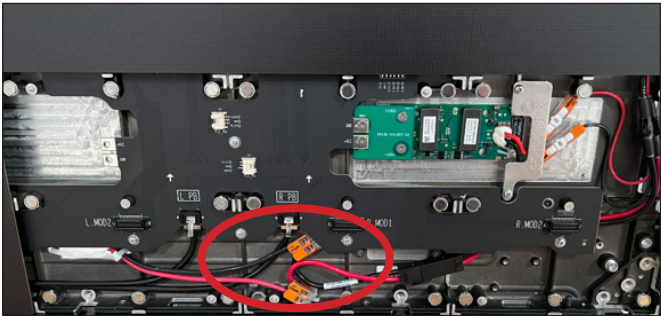


Figure 3: Power Entrance Location

Rectifier Connection

AC input through MNL connectors powers the individual rectifiers. The number of rectifiers needed for each incoming current is detailed in the table below.

Voltage	Rectifiers
20A 120V	2
20A 208V	3
20A 230V	3
30A 208V	5

There is a maximum of 5 rectifiers per power shelf. Rectifiers each share the load to output terminals. If one rectifier were to fail, the rest of the rectifiers will carry the extra load. Refer to **Figure 4** for the locations of rectifiers and output terminals.

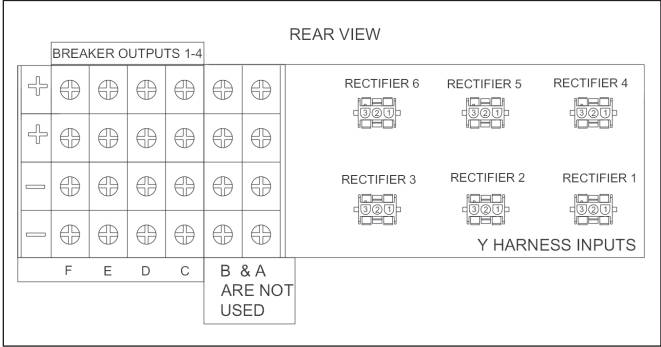


Figure 4: Remote Power Chassis (rear view)

Output Connection

Wire each output terminal using 10 AWG paired wire and either a 1/4" ring terminal or two-hole lug with 1/4" stud hole at 5/8" spacing. Refer to **Figure 5**.

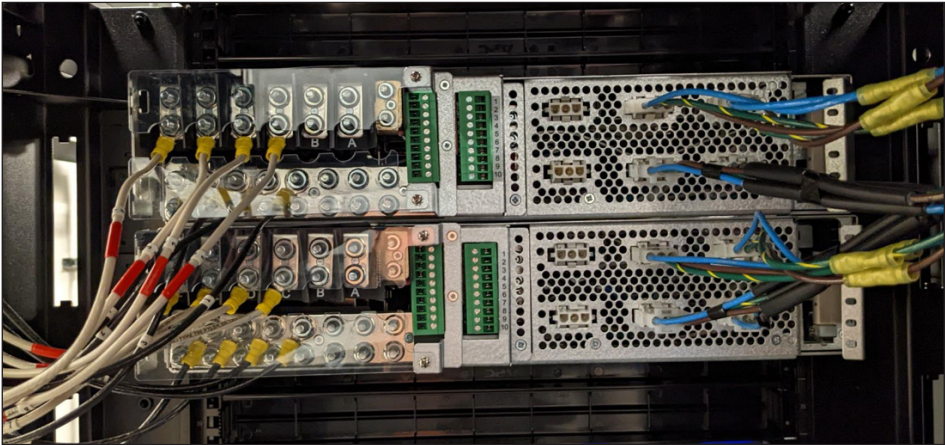


Figure 5: Wired Power Chassis

Route the 10 AWG wire a maximum of 200' to the display. Refer to **Figure 6**.

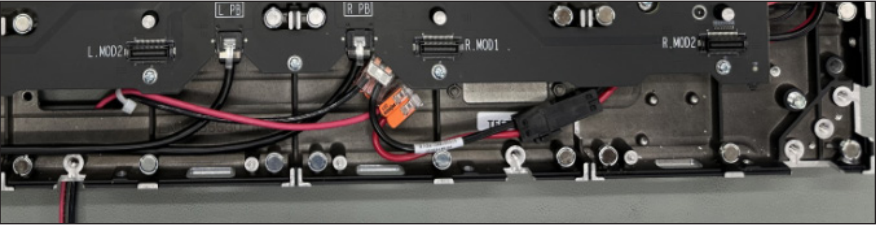


Figure 6: Wired Power Connection at Display

There is a maximum of 9 panels that may be powered by each output terminal. The number of panels that may be powered by each power shelf is determined by the number of rectifiers, as detailed in the table below.

# of Rectifiers	# of Panels
2	9
3	18
4	27
5	36

Eltek Shelf

The Eltek power shelf ships separately from its components. Install the controller and rectifiers, and open the cover to install breakers. The fuses are not used. Refer to **Figure 7** and **Figure 8**.

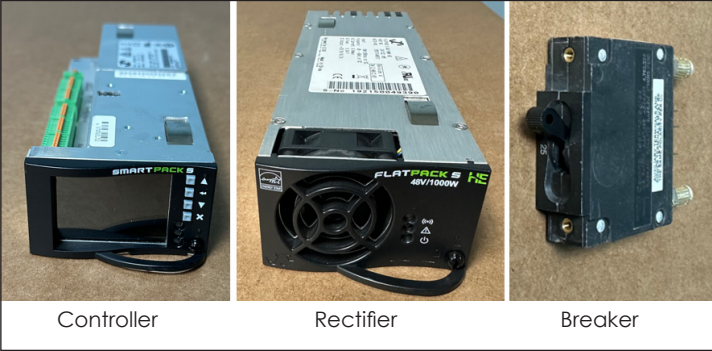


Figure 7: Eltek Components

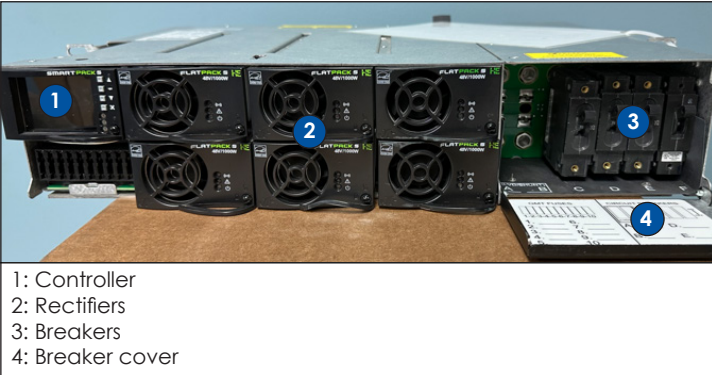


Figure 8: Eltek Shelf with Components