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 connector includes 110" of 12 AWG bare wire for connection to incoming power.

Each power supply chassis will require two (2) 20A circuits or one (1) 30A circuit.

There are four 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. 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

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Rectifier Connection

AC input through MNL connectors powers individual rectifiers. In a 4-rectifier harness, 3 rectifiers are used and 1 is redundant. 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. Refer to Figure 4 for the locations of rectifiers and output terminals.

REAR VIEW									
4	0	0	⊕	0	0	⊕		RECTIFIER 5	RECTIFIER 4
÷	0	Ð	0	0	0	0	RECTIFIER 3 RECTIFIER 2		
	0	0	٢	٢	0	0		RECTIFIER 2	RECTIFIER 1
_	Ð	⊕	⊕	0	0	⊕		Y HARN	IESS INPUTS
	F	E	D	С	B & A ARE NOT USED				

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 5/4" spacing. Refer to **Figure 5**.



Figure 5: Wired Power Chassis



There is a maximum of 6 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	6
3	12
4	18
5	24

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

Figure 6: Wired Power Connection at Display

