Interface Converter Rack (8-Card)
11 Card Rack-DC

Contents

1. Specifications

Capacity —   RM060: 8 cards
RM062A: 11 cards

Power —   RM060: From the PS085 power supply:
   Primary: 115 VAC or 230 VAC ±10%, switch-selectable, 50/60 Hz ±5%;
   Secondary: 18.4 VAC center tapped, 8 amps;
RM062A: From the central office's battery supply through the PS087 power
  supply:
    Primary: 48 VDC;
    Secondary: +12 VDC at 8.6 amps and –12 VDC at –4.3 amps

Fuse —   Replaceable 2A, 250V slow-blow 3AG style

Temperature —   RM060: –4 to 140°F (–20 to 60°C);
RM062A: 0 to 140˚F (–17 to 60˚C)

Humidity —   0 to 95% relative, non-condensing

Dimensions —   8.8"H x 19"W x 12"D (22.4 x 48.3 x 30.5 cm)

Weight —   RM060: 20.5 lb. (9.3 kg) including power supply; 10.3 lb. (4.7 kg) power
  supply only
RM062A: 15.1 lb. (6.9 kg) including power supply; 3.8 lb. (1.7 kg) power
  supply only

2. Introduction

With an 8-Card Interface Converter Rack (RM060) or 11-Card Rack-DC (RM062A), you can install multiple cards in a standard 19-inch (48.3-cm) rack. The Rack uses a low-voltage bus to distribute power to the installed cards. Special features include a hinged front panel, easily removable power supply, combination faceplate/pulltab on each card that positively locks the card in position, and cable-support brackets supplied with certain cards to allow removal and replacement of the card without requiring the cables to be detached from the Rack.

Figure 2-1 on the next page contains front views of the two Racks with installed cards, and Fig. 2-2 on page 6 shows the rear views of the Racks. Figure 2-3 on page 6 shows the top views of the Racks.

Figure 2-4 on page 7 shows the front view of the power supplies alone, and Fig. 2-5 on page 7 shows the rear views of the power supplies.

Power Bus to distribute AC voltage to installed cards

FRM
GRD AC1 AC2 SIG
GND

P1

J1 J2 J3 J4 J5 J6 J7 J8

RM060

Power Bus to distribute DC voltage to installed cards

P1

RM062A
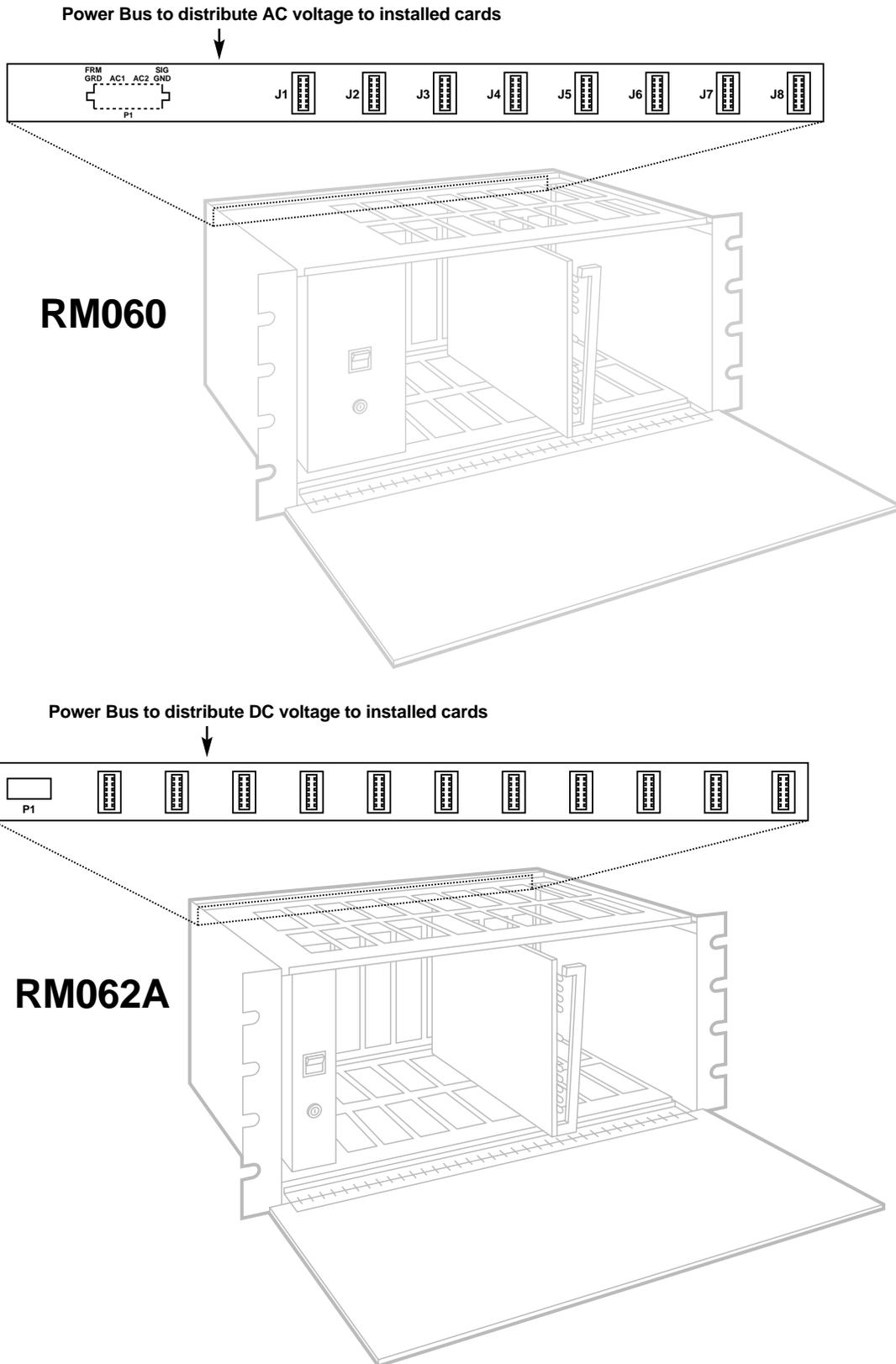
Fig. 2-1. Front views of the Racks with installed cards.

RM060

RM062A

Supplied power cable

115/230 VAC slide switch

AC power inlet

Supplied power cable

48 VDC input
Terminal strip
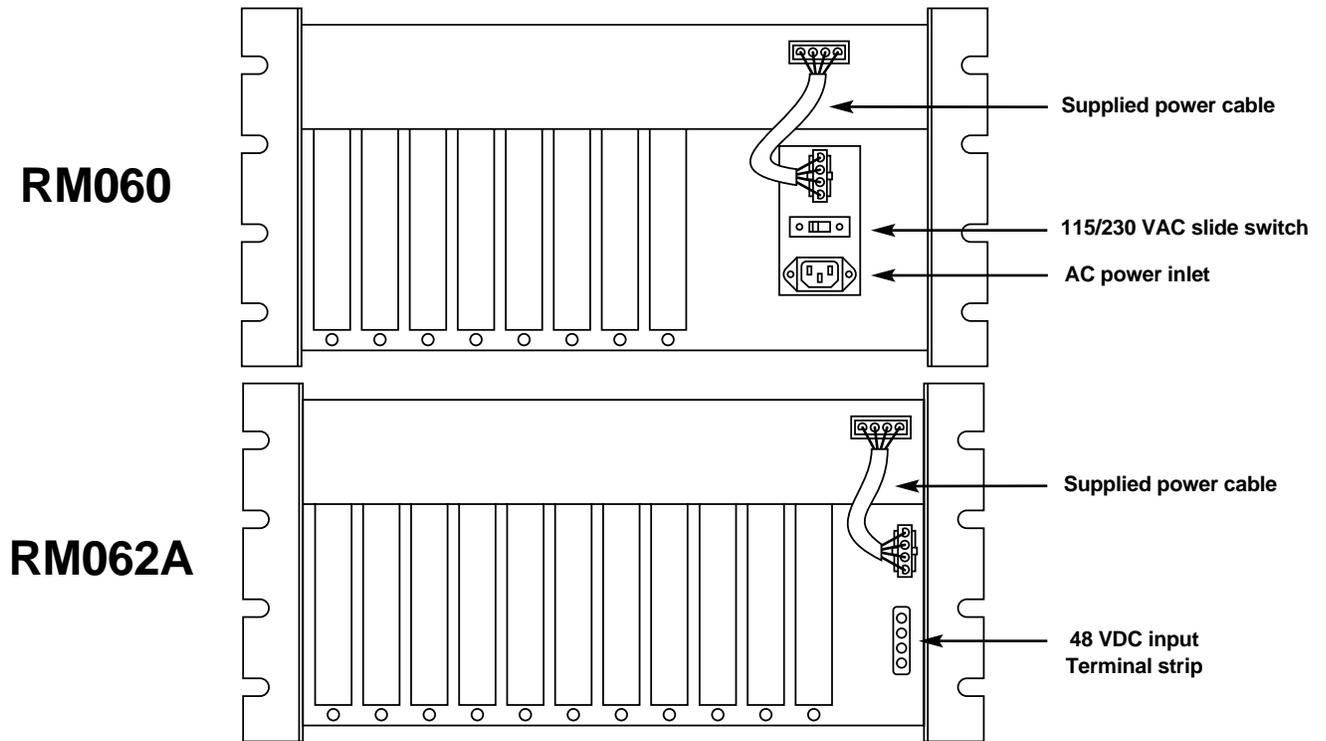
Fig. 2-2. Rear views of the Racks.

RM060

16.20"

12.5"

RM062A

16.20"

12.5"

**Fig. 2-3. Top views of the Racks.**

Fuse
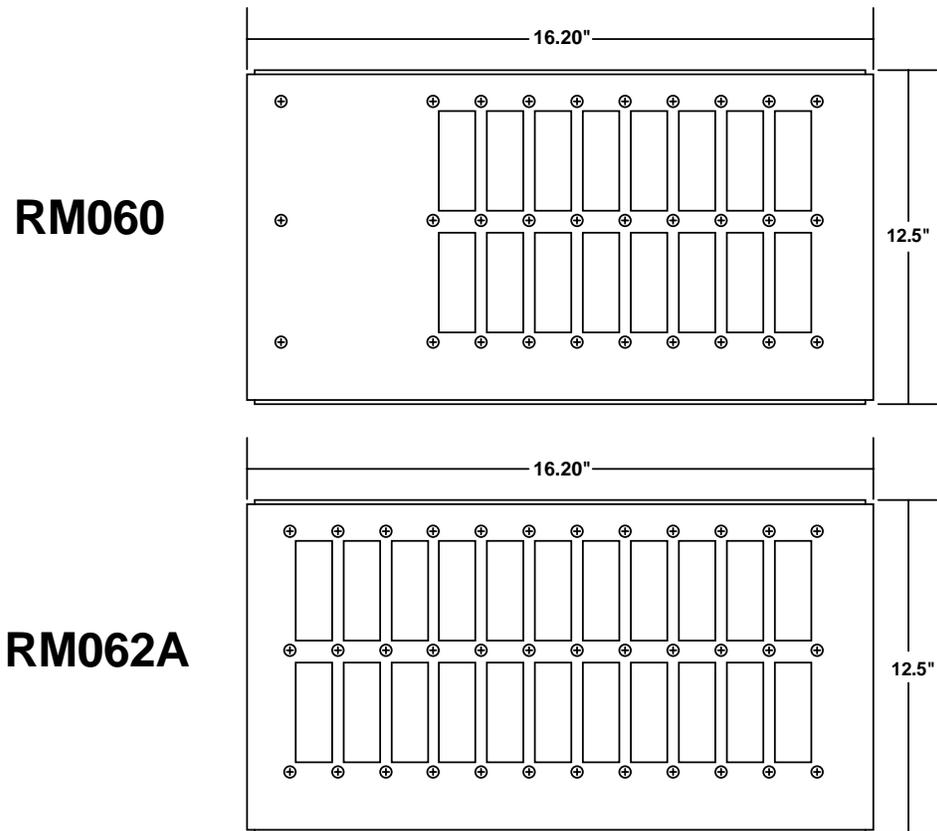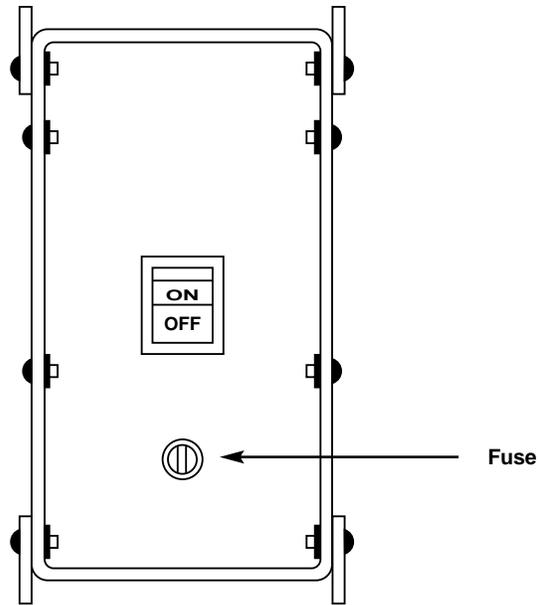
Fig. 2-4. Front view of the Racks' power supplies, part numbers PS085 and PS087.

RM060

Power supply PS085
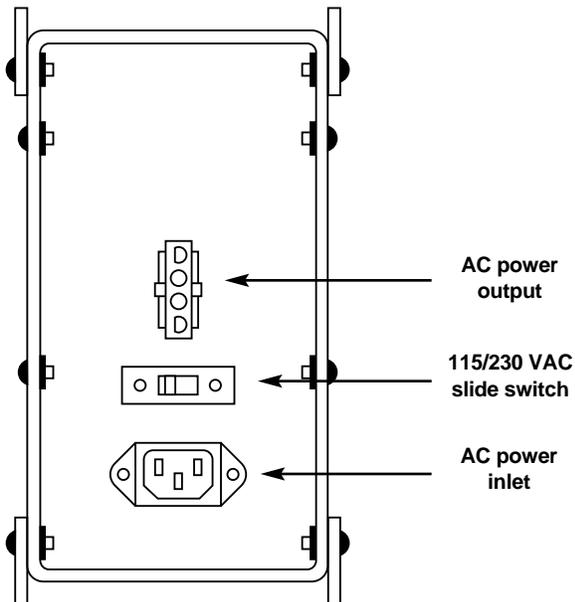
RM062A

Power supply PS087

AC power output

115/230 VAC slide switch

AC power inlet

DC power output

48 VDC input Terminal strip
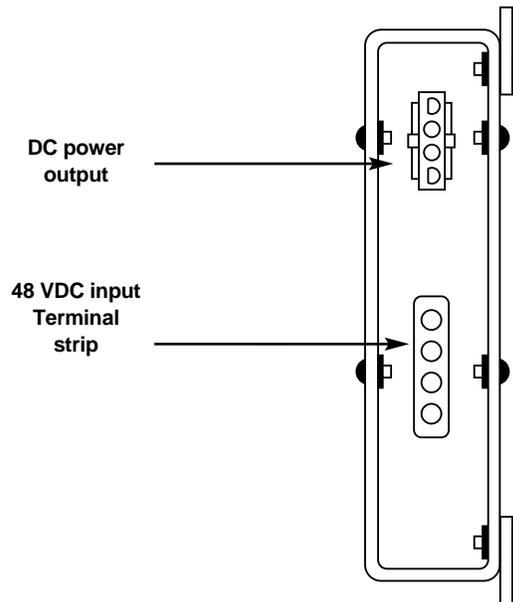
Fig. 2-5. Rear views of the power supplies.

3. Installation

Follow these steps to install the Rack and the cards it will contain.

1. With a Phillips-head screwdriver, remove the screws from the power-supply case.

2. To install the power supply in the Rack, take the four 6 x 32 x ¼ screws and four #6 lockwashers supplied with the power supply and rethread the screws through the backplane of the Rack.

3. Run the included cable (see Figure 3-1 below) from the power supply to the power-distribution bus. Refer to Fig. 2-2 on page 6.
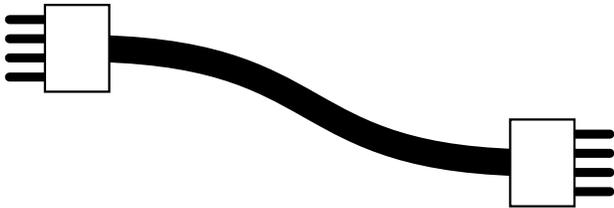
Fig. 3-1. Power cable.

4. If cable-support brackets were supplied with any of the cards you'll be installing in the Rack, attach the brackets to the back of the Rack using one 4 x 40 x ⅜ screw, also supplied with the cards. Do not tighten the screw completely at this time; the cable-support bracket must be able to move slightly in position. Make sure to tighten these screws after cables and cards are completely installed. See Fig. 3-2. Make sure that the screw locks are pointing out of the back of the rack, as shown in Fig. 3-3.
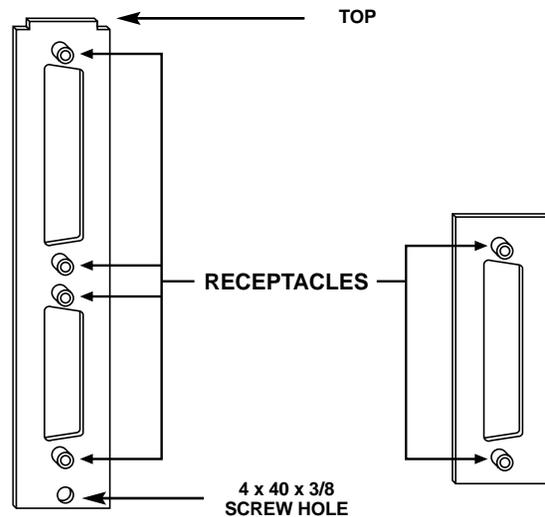


Fig. 3-2. Cable-support brackets.
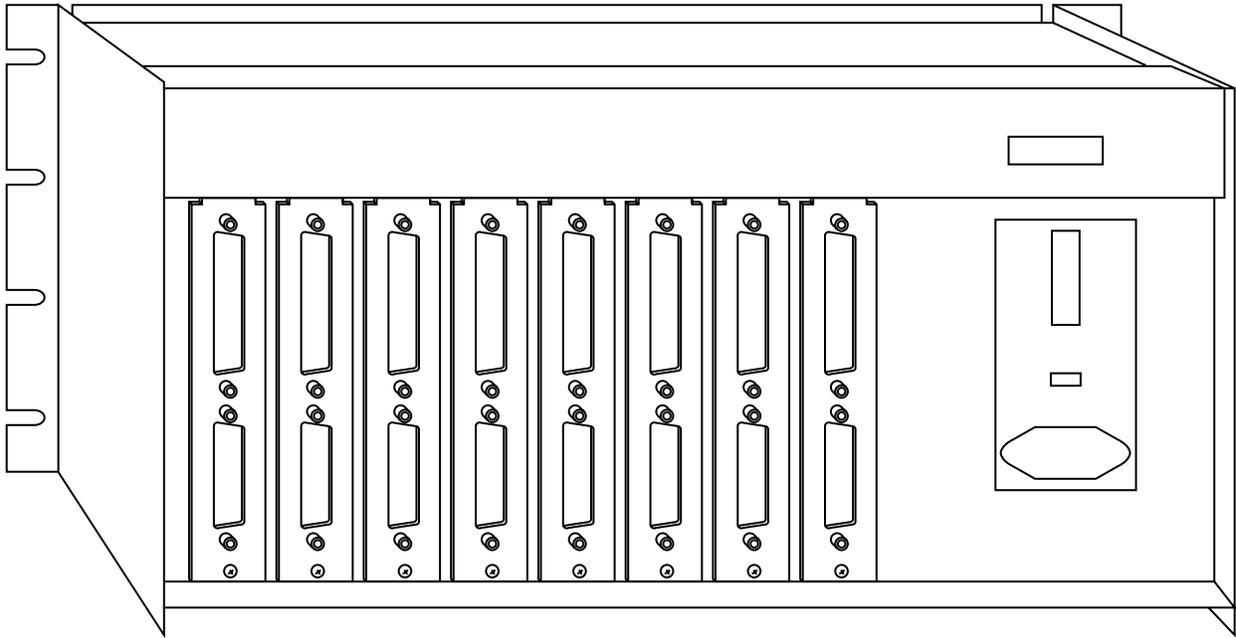
Fig. 3-3. Back of Rack with Cable-Support Brackets Installed.

5. Mount the Rack in your equipment bay with four standard mounting screws (not supplied).

6. Remove the female screw locks from the back of each card.

7. Slide each card into place in the rack. Be certain that the lower end of the faceplate/ pulltab seats properly in the groove along the front of the Rack's card cage near the front-panel hinge as shown in **Fig. 3-4**.
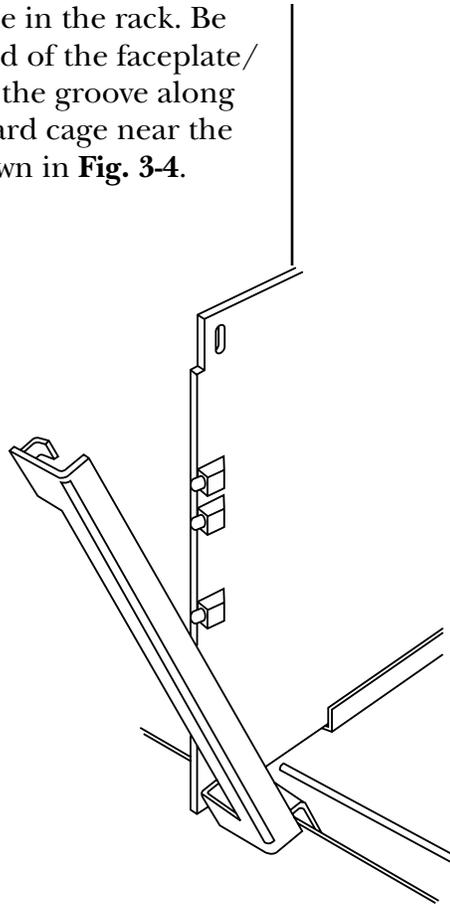
Fig. 3-4. Seating the Lower End of the Faceplate in the Groove on the Bottom Front of the Rack.

8. Without bumping the card's LEDs, push the top of the lever of the locking tab on the upper end of the faceplate/pulltab into the small slot on the card as shown in **Fig. 3-5**.
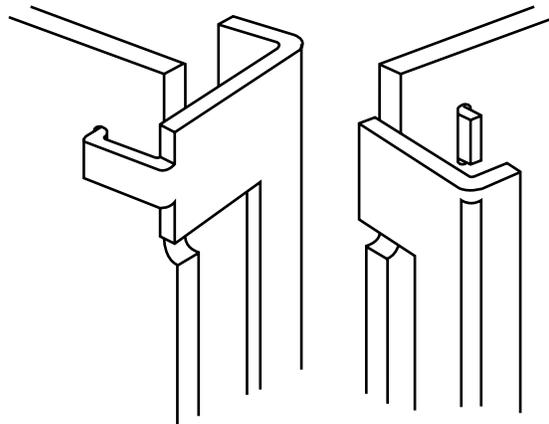
Fig. 3-5. Placing the Top of the Faceplate in the Locking Tab.

9. Attach your interconnect cables to the cable-support bracket and tighten the screw on the cable-support bracket securely. If the card does not come with a cable-support bracket, then attach the interconnect cables directly to the M-block connectors on the card. **Fig. 3-6** shows the cables attached to the brackets.
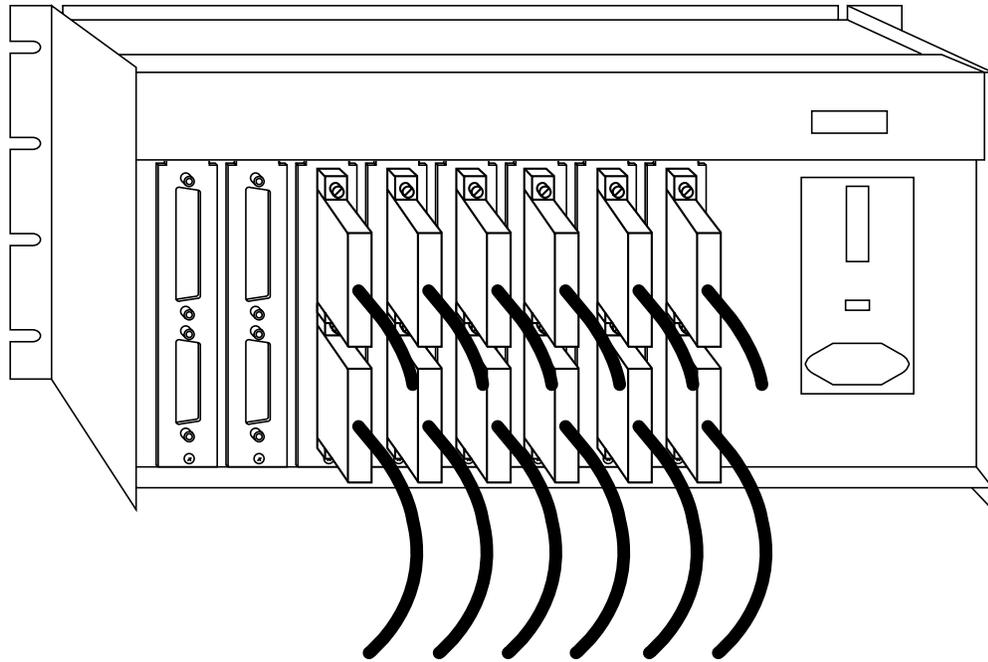
Fig. 3-6. Back View of the Rack with the Cables Attached.

10. **RM060 only:** Check the position of the voltage-selection switch on the power supply, and set it to the proper voltage for your application. Make sure that the ON/OFF switch is in the OFF position. Connect the AC-power cord to the Rack and to an AC receptacle of the proper voltage.

11. Installation is now complete. You can power on the Rack by moving the ON/OFF switch to the ON position.

4. Troubleshooting

4.1 Calling Black Box

If you determine that your Rack is malfunctioning, *do not attempt to alter or repair the unit.* Contact Black Box Technical Support. The problem may be solvable over the phone.

Before you do, make a record of the history of the problem. We will be able to provide more efficient and accurate assistance if you have a complete description, including:

- the nature and duration of the problem.

- when the problem occurs.

- the components involved in the problem.

- any particular application that, when used, appears to create the problem or make it worse.

4.2 Shipping and Packaging

If you need to transport or ship your Rack:

- Package it carefully. We recommend that you use the original container.

- If you are shipping the Rack for repair, include its power supply. If you are returning the Rack, make sure you include everything you received with the unit. Before you ship, contact Black Box to get a Return Materials Authorization (RMA) number.

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