BLACK BOX®

# Fiber Rackmount Cabinet

## Fits in a 19" or 23" rack, and supports 6 adapter panels or LGX cassettes.

**Customer Support Information**

Order toll-free in the U.S.: Call 877-877-BBOX (outside U.S. call 724-746-5500) FREE technical support 24 hours a day, 7 days a week: Call 724-746-5500 or fax 724-746-0746 • Mailing address: Black Box Corporation, 1000 Park Drive, Lawrence, PA 15055-1018 • Web site: www.blackbox.com • E-mail: info@blackbox.com

## 1. Specifications

| | |
|---|---|
| Construction | 16-gauge, cold-rolled steel |
| Finish | Black powder coat |
| Dimensions | Without rackmount ears: 3.5"H (2U) x 17"W x 13.8"D (8.9 x 43.2 x 35.1 cm);<br>With rackmount ears: 3.5"H (2U) x 19"W x 13.8"D (8.9 x 48.3 x 35.1 cm) |
| Weight | 16.5 lb. (7.5 kg) |

## 2. Overview

### 2.1 Introduction

The JPM418A-R5 is 2U high, fits in a 19" or 23" rack, and supports 6 adapter panels or LGX Cassettes. Depending upon the number of fiber ports on the adapter panel or cassette, you can have up to 144 fiber optic connections in this rackmount enclosure. It supports standard fiber adapter panels or fiber cassettes, depending upon the installer application.

The fiber rackmount cabinets are constructed of 16-gauge cold-rolled steel, which is compact and rugged enough for many commercial applications. Its black powder-coated finish provides a professional look for any data center and it's also corrosion resistant. The cabinet has a front PLEXIGLAS® locking door, a rear door, a front cable management bar and several entry/exit holes, cable distribution rings, and Kevlar® clamps to support the installer's needs. Sold separately, this enclosure can support up to 4 splice trays inside the chassis. One splice tray can accept up to 12 single-mode fiber splices.

### 2.2 What's Included

Your package should include the following items. If anything is missing or damaged, contact Black Box Technical Support at 724-746-5500.

- Fiber Rackmount Cabinet
- (4) 12-24 cuphead screws
- (4) 10-32 cup-head screws
- (30) 3" (7.6-cm) cable ties
- (4) 4" (10.2-cm) cable ties
- (6) rectangular plastic cable holders

- (2) pairs of black spool rings
- (1) "DANGER" sticker
- (1) locking PLEXIGLAS® door
- (2) mounting brackets
- (4) silver screws for mounting brackets
- (4) washers for mounting brackets
- (1) set of keys
- (1) identification label sticker
- This user's manual

## 3. Installation

1. Attach the two mounting brackets to the cabinet, and secure them with the four silver screws and four washers.

*NOTES:*

*Choose front or center mounting, depending upon your application.*

*Choose 19" or 23" mounting by flipping the mounting brackets.*

2. Using the 10-32 or 12-24 cuphead screws supplied, mount the Fiber Rackmount enclosure to your cabinet.
3. Next, install the enclosure's PLEXIGLAS locking front door. It attaches to the enclosure at the bottom by the piano hinge. Then flip the door upward and use the two plungers on each side to lock.

*NOTE: If you require front patch cable management, install the rectangle plastic holders on the front of the internal tray.*

### Installing Fiber in the Chassis

The installer can use Fiber Adapter Panels or LGX style cassettes in this chassis or a combination of both. Typically, distribution cable is used with fiber adapter panels or MTP® MPO-style connectors fiber trunk assembles are used for LGX cassettes.

### LGX Style Cassettes

1. Open the front PLEXIGLAS door and slide the internal tray forward.
2. On an LGX-style cassette, pull back the two buttons for installation and choose a location on the internal bracket where you want to install the cassette.
3. Load up to 6 LGX cassettes in the chassis depending upon your application.

4. Open the rear metal door with the two thumbscrews and let it hang downward.
5. Connect the MTP MPO-style connectors trunk assembles to the cassette from the rear of the chassis.

*NOTE: Because of amount of fiber stands this enclosure can support, be sure to fit your MTP MPO-style fiber connectors trunk assemblies to the cassette from the rear.*

6. Organize your trunk assemblies with the supplied cable ties.
7. Attach the identification label sticker to the rear door on the inside of the cabinet.

### Distribution Style Fiber Cable

1. Open the front PLEXIGLAS door and slide the internal tray forward.
2. On the fiber adapter panels, pull back the two buttons for installation and choose a location on the internal bracket where you want to install them.
3. Load up to 6 fiber adapter panels in the chassis depending upon your application.
4. Next, open the rear metal door with the two thumbscrews and let it hang downward.
5. Route multi-strand distribution fiber cable (not included) through the rectangular openings on the cabinet's top or bottom, or through the rubber grommets on the side.
6. Use the Kevlar clamp to secure the multi-strand distribution fiber to the cabinet. Loosen the Kevlar clamp's two screws and wrap the cable's Kevlar yarn around the clamp. Tighten the screws to secure the multi-strand distribution fiber to the cabinet.

*NOTE: The Kevlar clamp mounts on the left or right back of the cabinet.*

7. Terminate the fiber optic connectors on the multi-strand distribution fiber cable, or make the splice as needed. (See Figures 1 and 2 for a typical cable installation.) Connect the fiber cable termination to the rear of the fiber adapters panel.

*NOTE: If you need to make fiber splicing inside the chassis, use the Fiber Splice Tray (sold separately).*

8. Organize your trunk assemblies with the cable ties supplied and close the rear door.
9. Attach the identification label sticker to the inside rear door of the cabinet.

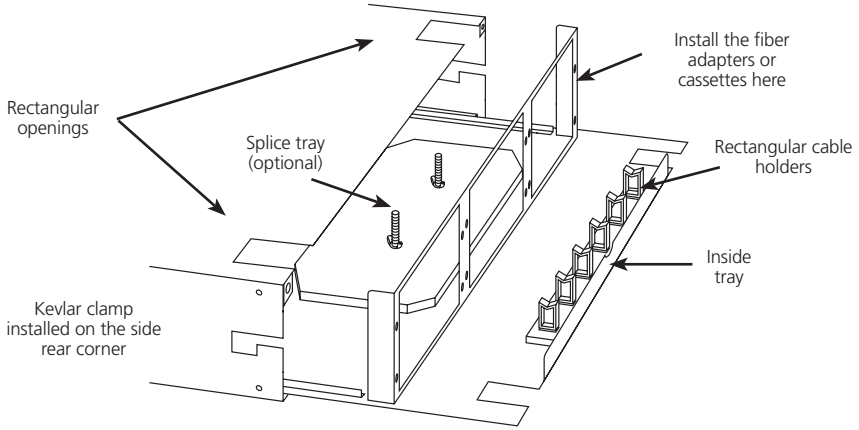


Figure 1. Fiber Rackmount Cabinet with tray pulled out.

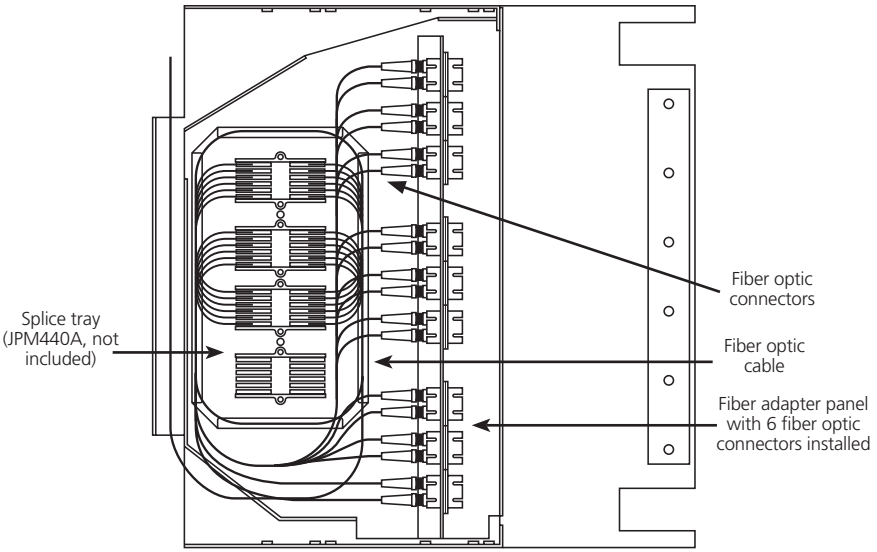


Figure 2. The JPM418A-R5 with three fiber adapter panels visible (up to three more can be stacked beneath the visible ones, for a total of 6 adapter panels). The fiber cable is routed through the splice tray, then terminated via the fiber optic connectors.

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## About Black Box

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