

## COPPER / FIBER MANAGER RACK INSTALLATION INSTRUCTIONS PX101425

Standard Release A March 2008

### UPON RECEIPT OF YOUR *Copper / Fiber Manager Rack*

Great care has been taken to insure that your *Copper / Fiber Manager Rack* arrives safely. If upon receipt any damage is noted, the carrier should be notified immediately to file a damaged freight claim.

The *Copper / Fiber Manager Rack* is shipped unassembled\*\*. An assembly hardware package is provided in order to assemble the unit.

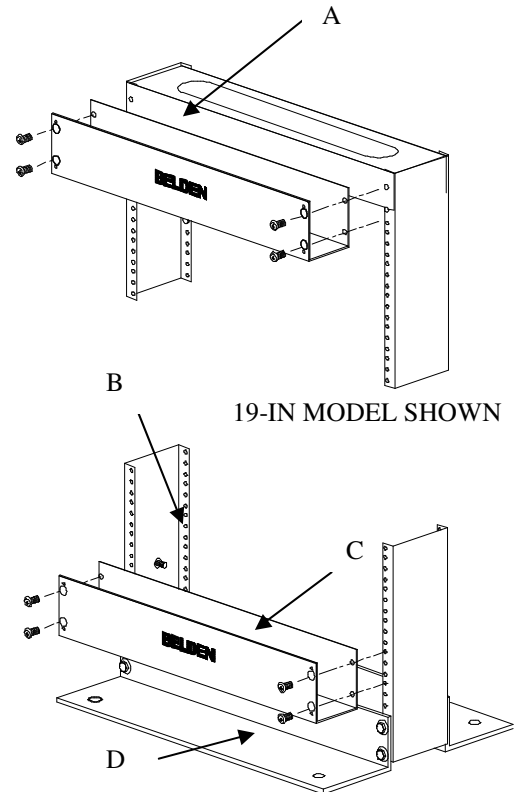
Refer to pages 5 to 9 for assembly instructions for the optional *Copper or Fiber Vertical Cable Management Channel*.

### COMPONENTS (Knockdown)

QTY.	PART	DESCRIPTION
1	A	RACK TOP CHANNEL
2	B	FRAME CHANNEL *
2	C	HORIZONTAL TROUGH**
2	D	FLOOR ANGLE

\* The 19-in. model frame channels are symmetrical and tapped front and rear. The 23-in. model comes with one right and left rails and tapped in the front only.

\*\* **Welded** model is shipped already assembled except items "C" comes apart.



Voir PX101463 pour la version française du guide d'installation.

## ASSEMBLY HARDWARE

### QTY. DESCRIPTION

12	10-32 (23") / 12-24 (19") x 1/2" PAN HEAD SCREW W/ LOCKWASHER (for Horizontal Cable Trough)
8	3/8-16 x 1 HEX BOLT (for Bottom Frame Floor Angle)
8	3/8 LOCKWASHER (for Bottom Frame Floor Angle)
8	FLAT WASHER (for Bottom Frame Floor Angle)
2	KEP NUT 1/4 in. (for Grounding Stud)
2	1/4 in. EXT TOOTH LOCKWASHER (for Grounding Stud)

### ORDERING NUMBER

NUMBER	PART	MODEL	TYPE	COLOR
AX101178	RACK	KNOCKDOWN	19"	BLACK
AX101179	RACK	WELDED	19"	BLACK
AX101254 *	RACK	KNOCKDOWN	19"	GREY
AX100930	RACK	KNOCKDOWN	23"	GREY
AX100931 *	RACK	KNOCKDOWN	23"	BLACK
AX100932	VERT. CHANNEL	FIBER	-	GREY
AX100933	VERT. CHANNEL	FIBER	-	BLACK
AX101180	VERT. CHANNEL	COPPER	-	BLACK
AX101181	HORI. TROUGH	FIBER / COPPER	19"	BLACK
AX101182	HORI. TROUGH	FIBER / COPPER	19"	GREY
AX101182	HORI. TROUGH	FIBER / COPPER	23"	GREY
AX101183	HORI. TROUGH	FIBER / COPPER	23"	BLACK

### ❖ ON ORDER ONLY

Note: *Copper / Fiber Manager Rack* are supplied with (2) Horizontal Troughs



**CAUTION:** *The Copper / Fiber Management Rack should be anchored securely to the floor in order to minimize the potential of accidentally tipping the unit during equipment installation. The bottom frame mounting angles are provided with four 3/4" holes to permit anchoring.*

*The following tools are required for assembling the Copper / Fiber Manager Rack:*

- Phillips screwdriver;
- 9/16" open or adjustable wrench;
- 5/16" nut driver, open or adjustable wrench;
- T-square or level.

## ASSEMBLY

*Note: Steps A to D are not required for Welded Model.*

- Locate both frame channels and place them parallel on the floor, approximately 24 inches apart. The frame channels are stamped on the lower inside surface with 'R' or 'L' on the 23-in. model. The 19-in. model frame channels are symmetrical.
- Position the rack top channel between the frame channels at the top, and use the #10-32 (23-in.) or #12-24 (19-in.) x 1/2" pan head screws to attach the parts. See Fig. 2. Do not tighten the hardware at this time.
- Attach one bottom frame floor angle at the base of the two channels, and use the 3/8-16 hardware to attach the bottom frame floor angle to the channels. Do not tighten this hardware at this time.
- Turn the unit over and attach the rear bottom frame floor angle with 3/8-16 hardware, and add the #10-32 or #12-24 hardware to attach the rack top loosely to the frame channels.
- Raise the unit and loosen the front four 10-32 or 12-24 x 1/2" pan head screws at the top. Provide approx. 1/4" of thread. Assemble the top Horizontal Trough onto the 10-32 or 12-24 hardware and tighten.
- Using a T-square or level, align the rack unit and tighten the 10-32 or 12-24 and 3/8 hardware.
- Attach the bottom horizontal cable trough at the lowest four hole positions on the frame channels with 10-32 or 12-24 x 1/2" pan head screws.

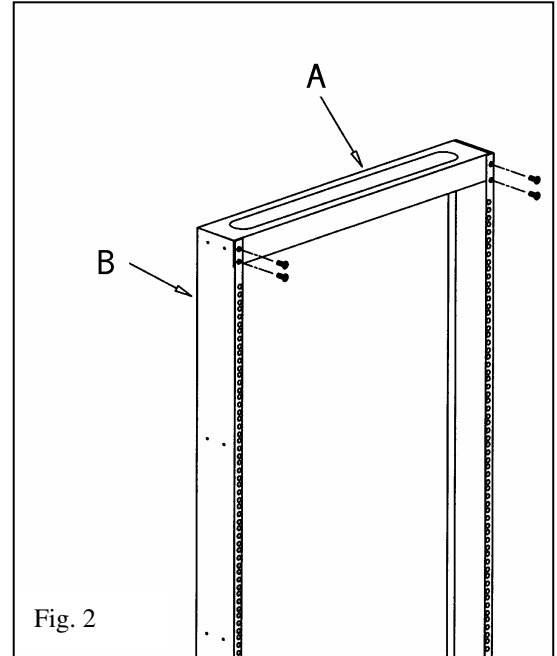


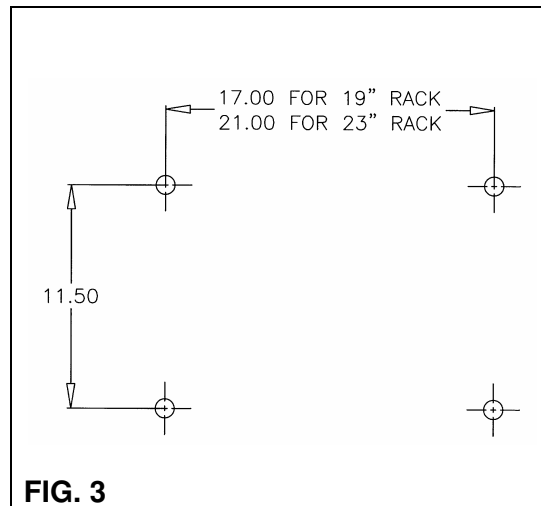
Fig. 2

## EQUIPMENT INSTALLATION

Your *Copper / Fiber Manager Rack* is provided with two mounting rails with a standard 5/8"-5/8"-1/2" rack spacing pattern of tapped #10-32 (19") or #12-24 (23") holes. For ease of panel and equipment alignment from rail to rail, arrows are stamped every 7.00" (four 1.75" rack units) on the face of the rail on the 23-po model and both sides on the 19-po model.

## MOUNTING HOLE PATTERN

To secure the *Copper / Fiber Manager Rack* to the floor, drill holes as per the pattern shown in Fig. 3.



## GROUNDING STUD

1/4-20 x 1/2" long Grounding Studs are provided centered inside the left and right frame channels at a location 6" up from the bottom. A 1/4-20 hex nut with a captive external tooth lock washer (Kep nut) and a loose 1/4" external tooth lock washer is provided for attachment of ground lug (not supplied). The loose lock washer is to be installed under the ground log and the lock washer/nut assembly used to secure the ground lug in place.

# INSTALLATION INSTRUCTIONS

## *Vertical Cable Management Channel*

### (Copper Application)

**AX101180 - BLACK**

### UPON RECEIPT OF *YOUR Vertical Cable Management Channel*

Great care has been taken to insure that your *Vertical Cable Management Channel* arrives safely. If upon receipt any damage is noted, the carrier should be notified immediately to file a damaged freight claim.

The *Vertical Cable Management Channel* is mounted to the side of a Copper / Fiber Manager Rack (not shown in this illustration). The *Vertical Cable Management Channel* is shipped unassembled. An assembly hardware package is provided in order to assemble the unit.

### COMPONENTS

QTY.	PART	DESCRIPTION
2	A	MAGNET BRACKET
1	B	VERTICAL TROUGH
1	C	VERTICAL PLATE
1	D	DOOR WELDMENT

### ASSEMBLY HARDWARE

QTY.	DESCRIPTION
6	MS 10-32 X 3/8" TRUSS HD
8	#6-32 ACORN NUTS

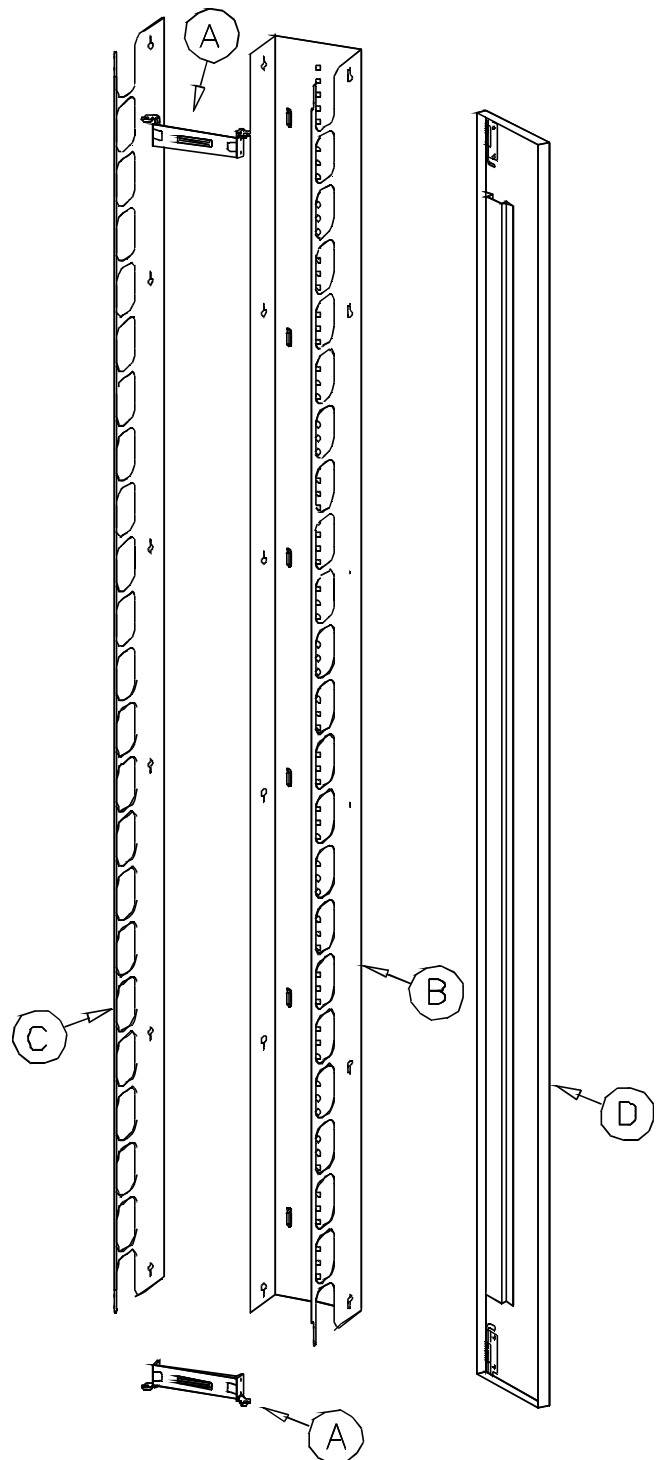


FIG. 1

## ASSEMBLY

The following tools are required for assembling the Vertical Cable Management Channel:

- Phillips screwdriver;
- 5/16" open or adjustable wrench.

- A. The *Vertical Cable Management Channel* is attached to the *frame channels*. The *vertical plate* is symmetrical and may be mounted on either side of the Communication Rack. Loosely insert one #10-32 x 3/8" truss head screw into the uppermost tapped hole on the middle (outside holes used for fiber model) of the *frame channel*, leaving at least 1/8" of threads exposed. In the same fashion, add a second screw directly below the first. Hang the *vertical plate* on the two screws by passing them through the upper two key ways on the *vertical plate*. See figure 2. **Note: The upper and lower threaded studs point away from the rack.**

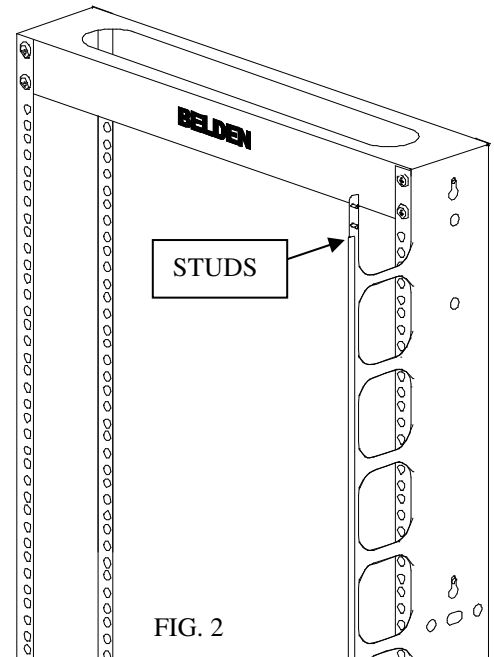


FIG. 2

- B. Hang the *Vertical trough* on the same two screws. Add the other #10-32 screws and tighten.
- C. Attach one *magnet bracket* to the studs at the top of the *Vertical Cable Manager*, using the #6-32 acorn nuts. See figure 3. Attach the lower *magnet bracket* in the same manner.
- D. The *vertical cable manager door* is attached by inserting the lower hinge pin into the pivot hole on the *magnet bracket*. Move the spring loaded pin on the upper hinge and insert into the upper *magnet bracket*.

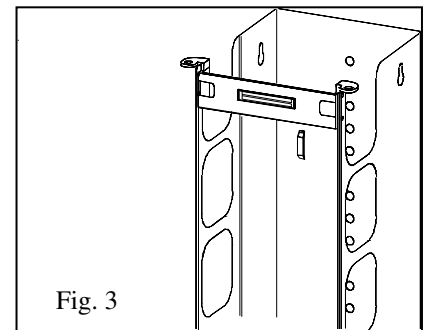


Fig. 3

# INSTALLATION INSTRUCTIONS

## *Vertical Cable Manager Channel*

### (Fiber Application)

**AX100932 - GREY**  
**AX100933 - BLACK**

### UPON RECEIPT OF YOUR *Vertical Cable Management Channel*

Great care has been taken to insure that your Vertical Cable Management Channel arrives safely. If upon receipt any damage is noted, the carrier should be notified immediately to file a damaged freight claim.

The *Vertical Cable Management Channel* is mounted to the side of a Copper / Fiber Manager Rack (not shown in this illustration). The *Vertical Cable Management Channel* is shipped unassembled. An assembly hardware package is provided in order to assemble the unit.

### COMPONENTS

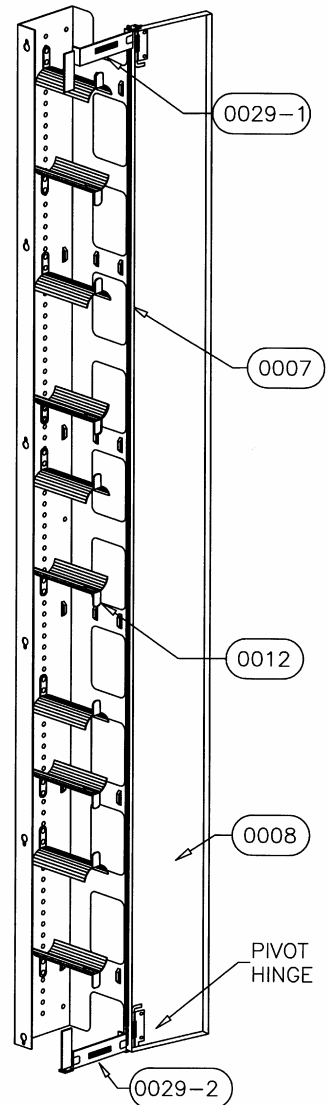
QTY.	PART	DESCRIPTION
1	0007	VERTICAL CABLE CHANNEL
1	0008	DOOR
1	0029-1	MAGNET BRACKET -1
1	0029-2	MAGNET BRACKET -2
10	0012	CABLE GUIDE

### ASSEMBLY HARDWARE

QTY.	DESCRIPTION
8	#6-32 ACORN NUT (for Magnet Brackets)
22 <sup>1</sup>	TUFLOK <sup>®</sup> FASTENER (for Cable Guides)
6	10-32 x 3/8" TRUSS HEAD SCREW (for Vertical Cable Manager)
20 <sup>2</sup>	FLAT WASHER (for Cable Guide)

<sup>1</sup> Two (2) spares TUFLOK<sup>®</sup> fasteners are supplied.

<sup>2</sup> Use Flat Washer (if required) to stiffen the Cable Guides.



VERTICAL MANAGER

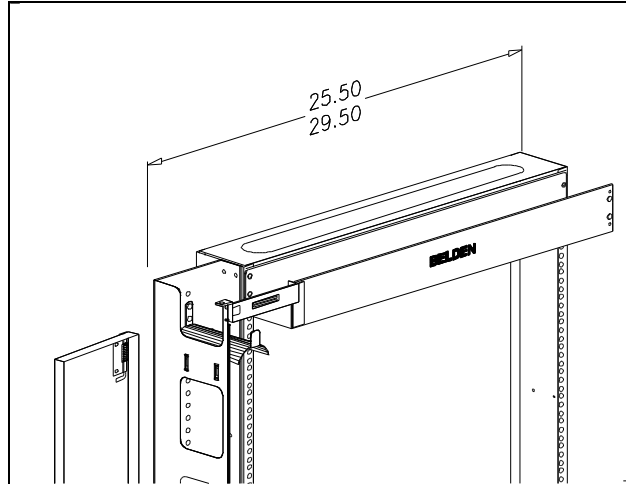
## **ASSEMBLY** (SEE FIGURE 1 AND 2 FOR MORE DETAILS.)

*The following tools are required for assembling the Vertical Cable Management Channel:*

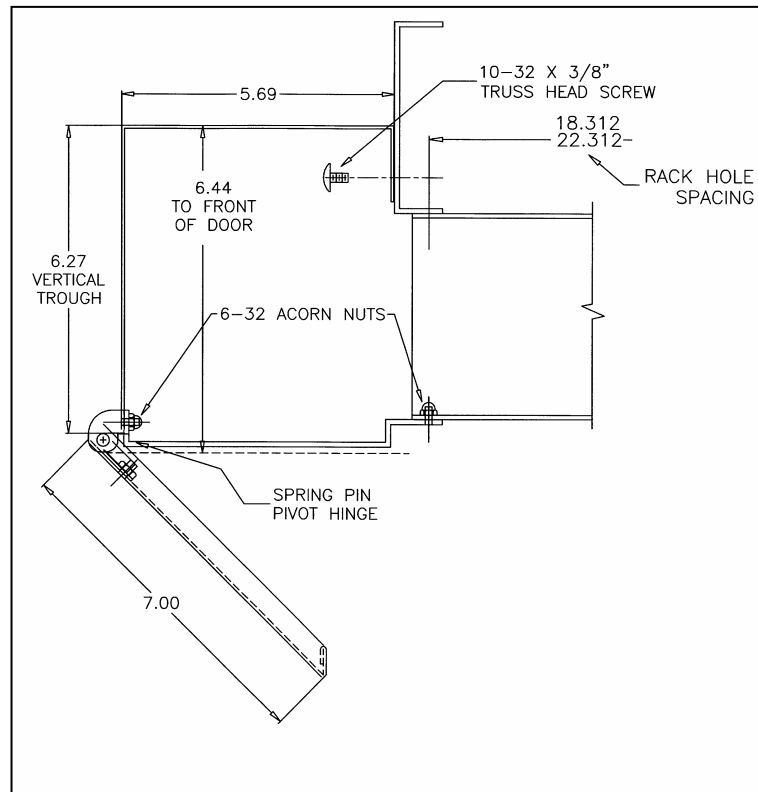
- Phillips screwdriver;
  - 5/16" open or adjustable wrench.
- A. The *Vertical Cable Management Channel* is symmetrical and may be mounted at the front or rear, on either side of the *Copper / Fiber Manager Rack*. Loosely insert one 10-32 x 3/8" truss head screw into the uppermost tapped hole on the side (middle holes used for the copper model) of the frame channel, nearest the top horizontal trough, leaving at least 1/8" of threads exposed. In the same fashion, add a second screw directly below the first. Hang *the Vertical Cable Management Channel* on the 2 screws by passing them through the upper (2) key ways on the *Vertical Cable Management Channel*. Add the other #10-32 truss head screws and tighten.
- B. Attach one magnet bracket to the two studs at the top of the *Vertical Cable Management Channel*, using the 6-32 acorn nuts. Insert the other end of the magnet bracket into the two smaller holes on the top horizontal trough, and attach with two #6-32 acorn nuts. See figure 1 and 2. Attach the lower magnet bracket in the same manner.
- C. The *Vertical Cable Management Channel* door is attached by inserting the lower hinge pin into the pivot hole on the magnet bracket. Move the spring loaded pin on the upper hinge and insert into the upper magnet bracket.
- D. If both vertical cable channels are to be assembled on the same frame channel, note three alignment holes to one side of the vertical row of holes. Use three TUFLOK<sup>®</sup> fasteners to hold the front and rear in line.

## **CABLE MANAGEMENT**

The cable guides may be used as needed to prevent exceeding minimum radius when installing fiber optic cable and also as slack cable take-up spools. The cable guides are applied by inserting the plastic TUFLOK<sup>®</sup> fasteners through the holes in the cable guides and into the holes in the vertical cable channel locked in place by pushing the head in until seated flush in the fastener flange. To relocate the cable guides, the fastener can be removed with a Phillips head screwdriver, and the cable guides can be removed or relocated to another position. The cable guide may be installed with the radius facing either up or down.



**Figure 1**



**Figure 2 – Top View**