

# Premier Aluminium Distribution Rack

# Hold and secure networking equipment with a cost-effective 2-post rack.

- Hold up to 1000 pounds of equipment.
- 38U and 45U versions available.
- Constructed of strong, lightweight aluminum.
- Choose from mill and black anodized finish versions.



# Premier Aluminum Distribution Rack

Trad	emarks	Used	in t	his	Manual
пич	CITICITY	03C G	111 5	. 1 1 1 2 .	IVIGITAGI

Black Box and the Double Diamond logo are registered trademarks of BB Technologies, Inc.

Any other trademarks mentioned in this manual are acknowledged to be the property of the trademark owners.

## **Preface**

This manual is provided to prevent service personnel from committing an act that results in the risk of fire, electric shock, or injury to persons. Only trained service personnel should receive, unpack, and assemble the Premier Aluminum Distribution Rack. In addition, only trained service personnel should install equipment in the racks.

## Safety Symbols Used in this Manual

This manual provides general safety guidelines to be observed during installation, operation, and maintenance of the Premier Aluminum Distribution Rack.



WARNING: Failure to follow directions in the warning could result in injury to persons or loss of life.



CAUTION: Failure to follow directions in the caution could result in damage to equipment or storage data.

### **Safety Considerations**



WARNING: Improper handling and use of the Premier Aluminum Distribution Rack could result in equipment damage, serious injury, or possible death.

Only trained service personnel should be used to assemble the rack. Also, be sure you have a sufficient number of service personnel. Do not attempt to move the rack by yourself.

Only UL® listed ITE (Information Technology Equipment) units should be installed inside the Premier Aluminum Distribution Rack.

Be sure to read and follow all individual manufacturer equipment manuals for safety and installation instructions.

Proper spacing is required when installing electrical equipment to avoid electrical shock. Maintain minimum spacing between the accessories and components and the computer enclosure assembly for safe operation of the equipment when installed in accordance with the National Electric Code ANSI/NFPA 70-1999.

The ambient temperature operating range for the Premier Aluminum Distribution Rack and accessories is +50 to  $+95^{\circ}$  F (+10 to  $+35^{\circ}$  C).

The non-operating temperature is -4 to  $+140^{\circ}$  F (-20 to  $+60^{\circ}$  C).

Receiving, Unpacking, and Removing the Premier Aluminum Distribution Rack

Inspect for damage and report any before receiving. Unpack the rack by carefully removing the corrugated carton and corners. Avoid damaging the rack when removing packaging.



WARNING: Only trained service personnel should be used to remove the rack from the boxes. Also, be sure you have a sufficient number of service personnel. Do not attempt to move the rack by yourself.



WARNING: Be careful when moving the rack before installation. Sudden stops and starts, excessive force, obstructed routes, and uneven floor surfaces may cause the rack to topple over.



WARNING: Only install equipment after the Premier Aluminum Distribution Rack has been properly secured to the floor. Do not move the Premier Aluminum Distribution Rack while loaded.

Rated or maximum load capacity for the Premier Aluminum Distribution Rack is 1000 pounds when bolted to the floor.

To maintain a uniform distribution of the mechanical load in the Premier Aluminum Distribution Rack, load the heaviest equipment first.

#### Floor Installation

Once the location on the floor has been determined, inspect the floor surface. The floor must be flat and square in the horizontal and vertical plane to ensure the Premier Aluminum Distribution Rack is installed correctly.



WARNING: Improper handling and use of the Premier Aluminum Distribution Rack could result in equipment damage, serious injury, or possible death..



WARNING: Only install equipment after the Premier Aluminum Distribution Rack has been properly secured to the floor. Do not move the Premier Aluminum Distribution Rack while loaded.

## Masonry Floor Surface

For a masonry floor surface, the installer must provide all the appropriate hardware.

#### Power

When using PDUs, each PDU should be connected to a committed branch circuit that is rated fo the continuous load of all the equipment connected. When not using a PDU, each piece of equipment should be connected to a dedicated branch circuit.

#### **Protective Grounding**

A main protective grounding lug is provided



WARNING: To avoid injury to persons or loss of life, ground each racvk individually to the dedicated branch circuit ground.

# Connect the Main Protective Grounding Stud to the Dedicated Branch Circuit Ground

Locate and attach the protective grounding lug to the Premier Aluminum Distribution Rack, and secure set screws. Connect the dedicated branch circuit ground connector to the protective lug.

#### Service

The Premier Aluminum Distribution Rack should be repaired by personnel trained by Black Box, or returned to Black Box for repair or replacement. Contact Black Box Technical Support at 877-877-2269 or go to blackbox.com and click on "Talk to Black Box."

# **Specifications**

Finish/Color	RM155A-R3, RM156A-R3: Aluminum mill;	
	RM161A-R3, RM162A-R3: Black anodized	
Construction	6063-T6 aluminum alloy	
Load Rating	1000 lb. (453.6 kg)	
Size	RM155A-R3, RM161A-R3:	
	72"H(38 U) x 20.31"W x 14"D (182.9 x 51.59 x 35.56 cm);	
	RM156A-R3, RM162A-R3:	
	84"H (45U) x 20.31"W x 14"D (213.4 x 51.59 x 35.56 cm)	

#### Overview

The Premier Aluminum Distribution Rack is used to hold networking and data transmission equipment. It's made of strong, light-weight aluminum. Four models are available: The RM155A-R3 is 6-feet (1.8-m) high with a mill finish; the RM166A-R3 is 7-feet (2.1-m) high with a mill finish; the RM161A-R3 is a 6-foot (1.8-m) rack with a black finish; and the RM162A-R3 also has a black finish, but it's 7-feet (2.1-m) high.

The rack's rails are EIA-310 standard 12-24 tapped for quick installation. Product arrives unassembled.

#### What's Included

- (2) vertical upright channels
- (2) base angles
- (2) top angles
- (12) ½"-13 x 1 hex bolts
- (12) 1/2" lock washers
- (50) #12-24 x ½" long screws
- This user's manual

## Tools You Will Need

- ¾"socket or wrench
- Level or carpenter's square
- Ground lug

# Assembly

Step #1. Attach the top angles to the vertical upright channels.

- a. Lay the vertical upright channels on edge so the tapped holes face you and the floor. Be sure the open sides of the upright channel face each other as shown in Figure 1.
- b. Align the holes in the top angle with the corresponding holes in the vertical uprights. The formed leg of the top angle should be facing toward you.
- c. Install two hex head bolts and lock washers. Finger-tighten only.
- d. Turn over the vertical upright assembly (rotate it 180 degrees) and repeat steps b and c, being sure to finger-tighten only.

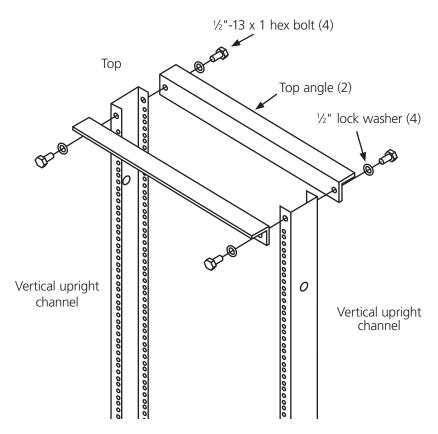


Figure 1. Step #1: Connecting the upright channels to the top angles.

Step #2. Attach the base angles to the vertical upright channels.

- a. Leaving the vertical upright channels on edge, align the holes in the base with the corresponding holes in each upright channel. The long leg of the base should be facing you.
- b. Install using four hex head bolts and lock washers. Finger-tighten only.
- c. Turn over the vertical upright assembly (rotate it 180 degrees) and repeat steps a and b, being sure to finger-tighten only.

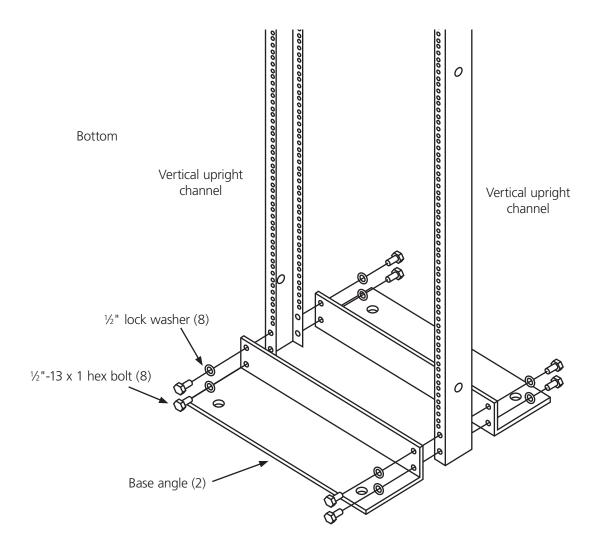


Figure 2. Step #2: Connecting the upright channels to the base angles.

Step #3. Final tightening.

- a. Stand the rack upright.
- b. Square the unit using a level or carpenter's square.
- c. Tighten all bolts using a socket or wrench.

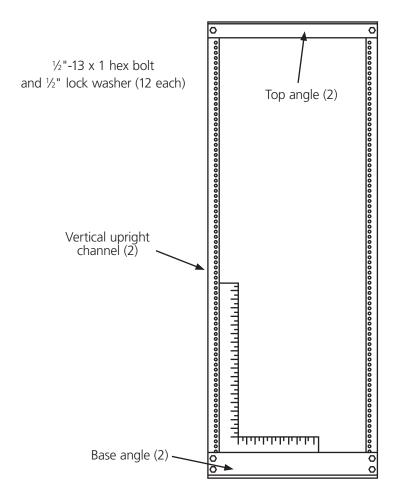


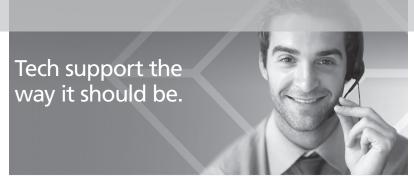
Figure 3. Step #3: Squaring the unit and tightening the bolts.

Step #4. Secure the rack to the floor. All racks should be bolted to the floor, or to an equally stabilzing and secure surface.

Step #5. Install the main protective earthing lug with a  $\#12-24 \times 1/2$ " screw at the main ground symbol located at the base of the upright on the #12-24 tapped hole.

Step #6. You can now install equipment and panels in your rack.

# Black Box Tech Support: FREE! Live. 24/7.



Great tech support is just 60 seconds away at 877-877-2269 or blackbox.com.



#### **About Black Box**

Black Box Network Services is your source for an extensive range of networking and infrastructure products. You'll find everything from cabinets and racks and power and surge protection products to media converters and Ethernet switches all supported by free, live 24/7 Tech support available in 20 seconds or less.

<sup>©</sup> Copyright 2016. All rights reserved.

rm155a-r3\_user\_rev2