

USER MANUAL

RM050A-R3, RM051A-R3

ULTRA WALLMOUNT RACKS

24/7 TECHNICAL SUPPORT AT 1.877.877.2269 OR VISIT BLACKBOX.COM

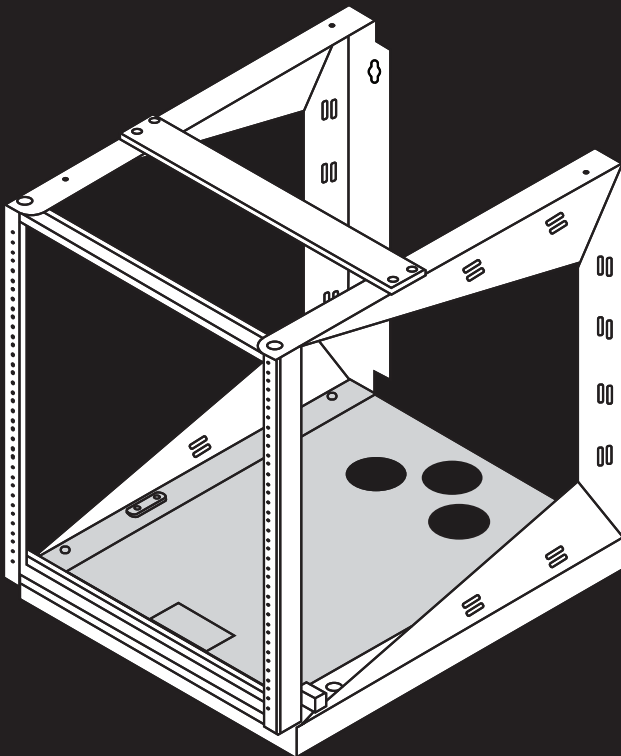


TABLE OF CONTENTS

PREFACE	3
Safety Symbols Used in this Manual	3
Safety Considerations.....	3
1. SPECIFICATIONS	4
1.1 Dimensions	4
1.2 General Specifications.....	4
1.3 RM050A-R3 Drawings.....	5
1.4 RM051A-R3 Drawings	8
2. OVERVIEW	11
2.1 Introduction.....	11
2.2 Features	11
2.3 What's Included.....	11
2.4 Service.....	11
3. MOUNTING INSTRUCTIONS	12
3.1 Receiving, Unpacking and Removing the Ultra Wallmount Rack from the Carton	12
3.2 Wood Studded Wall.....	12
3.3 Masonry Wall Surface.....	12
3.4 Loading Equipment	13
3.5 Power.....	13
3.6 Protective Grounding	13
3.6.1 Connecting the Main Protective Grounding Stud to the Dedicated Branch Circuit Grounding Conductor	13
3.6.2 Connecting the Main Protective Grounding Stud to the Protective Bonding Conductors.....	13
APPENDIX: DISCLAIMER/TRADEMARKS	12
A.1 Disclaimer	12
A.2 Trademarks Used in this Manual.....	12



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 Ultra Wallmount Rack. In addition, only trained service personnel should install equipment in the rack.

SAFETY SYMBOLS USED IN THIS MANUAL

This manual is provided to prevent service personnel from committing an act that results in the risk of fire, electric shock, or injury.



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 Ultra Wallmount Rack could result in equipment damage, serious injury, or possible death.

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

Only UL® Listed ITE units should be installed in the Ultra Wallmount 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 Ultra Wallmount Rack 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 Ultra Wallmount Rack and accessories is +50 to +95° F (+10 to +35° C). The non-operating temperature is -4 to +140° F (-20 to +60° C).

CHAPTER 1: SPECIFICATIONS

1.1 DIMENSIONS

Table 1-1 lists specifications for the rack shown in Figures 1-1 through 1-10.

TABLE 1-1. DIMENSIONS SPECIFICATIONS

PART NUMBER	# OF RACK UNITS (RU)	HEIGHT	WIDTH	DEPTH
RM050A-R3	11	23.57" (59.86 cm)	19.8" (50.3 cm)	25" (63.5 cm)
RM051A-R3	19	35.57" (90.34 cm)	19.8" (50.3 cm)	25" (63.5 cm)

1.2 GENERAL SPECIFICATIONS

TABLE 1-2. GENERAL SPECIFICATIONS

CABLE TYPE	DESCRIPTION
Cable Openings (Bottom Plate)	3" (7.62 cm) diameter
Certifications	UL® certified to UL2416
Construction	Baseplate: 14-gauge steel; Sides: 11-gauge steel; Rails: 11-gauge steel
Finish	Black powder coat
Grounding	Ground studs located on rear and middle sections
Mounting Hardware	1/4" diameter
Rail Type	12-24 tapped
Temperature Tolerance	Operating: +50 to +95° F (+10 to +35° C); Non-operating: -4 to +140° F (-20 to +60° C)



CHAPTER 1: SPECIFICATIONS

1.3 RM050A-R3 DRAWINGS

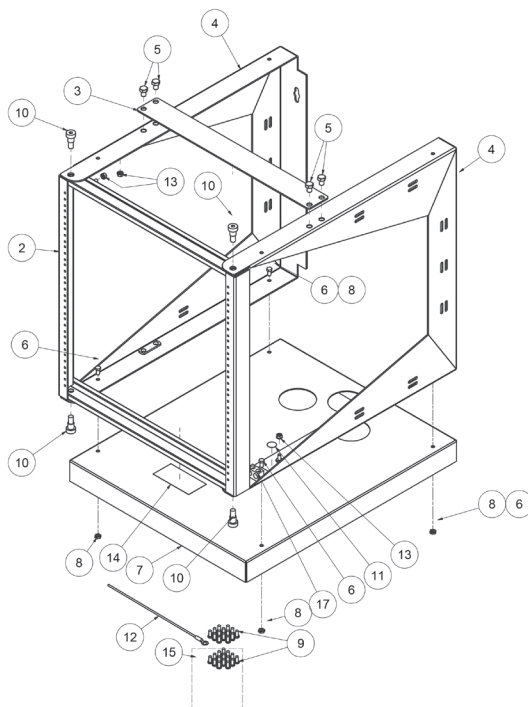


FIGURE 1-1. RM050A-R3

TABLE 1-3. RM050A-R3 COMPONENTS

NUMBER IN FIGURE 1-1	QUANTITY	DESCRIPTION
2	1	21.313" H reinforced swing frame, weldment
3	1	Top/bottom brace
4	2	21.633" H x 25" D swing rack side – weldment
5	4	Bolt 3/8"-16 X 1/2" hex head or 2 RBZ
6	4	Bolt 1/4-20 x 1/2" L hex head
7	1	Swing rack base plate
8	4	Nut, 1/4-20, steel, grade 2, RBZ
9	30	Screw 12-24 x 1/2" L PPH T23 RBZ (equipment installation)
10	4	Screw socket head 3/8"-16 plain
11	1	Ground label, 1/2" dia., ED & D, SL-01
12	1	Ground wire, 11"L (stripped)
13	4	Nut M6 kepps tooth nut RBZ
14	1	Labels UL
15	1	Bag, 3 x 5 orange, heat seal with hardware "DO NOT DISCARD"
16	1	Black Box Ultra Wallmount Racks User's manual
17	1	2S2/0" 2/0-14 AWG, and flex wire G-K w/mm2 class 5, 2 barrel, aluminum or copper wire, CU9AL, 90C temp. single 1/4 bit mnt, UL and CSA

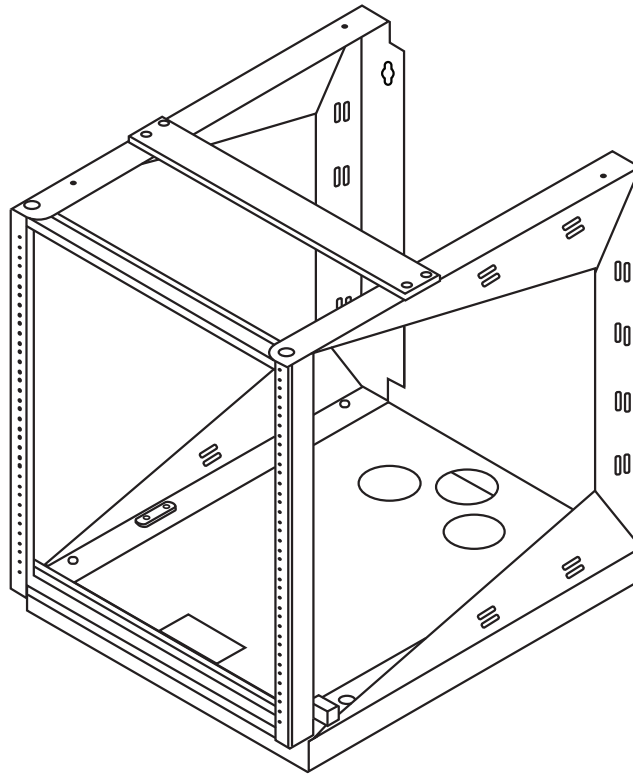


FIGURE 1-2. RM050A-R3 ASSEMBLED VIEW

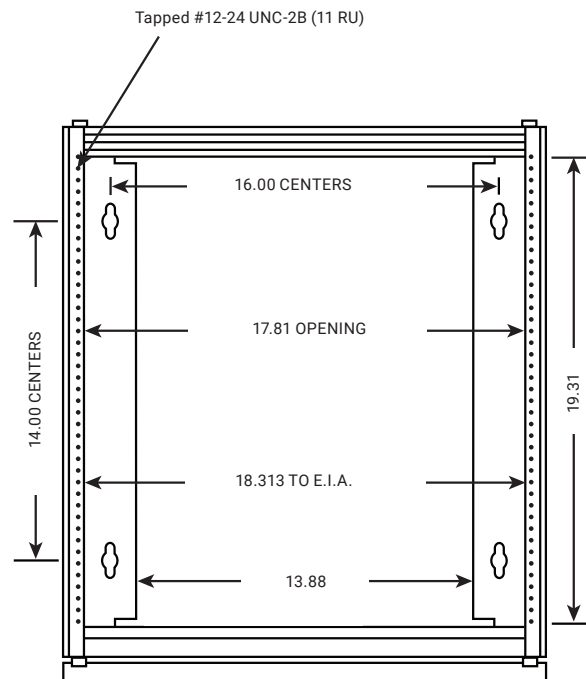


FIGURE 1-3. RM050A-R3 FRONT VIEW

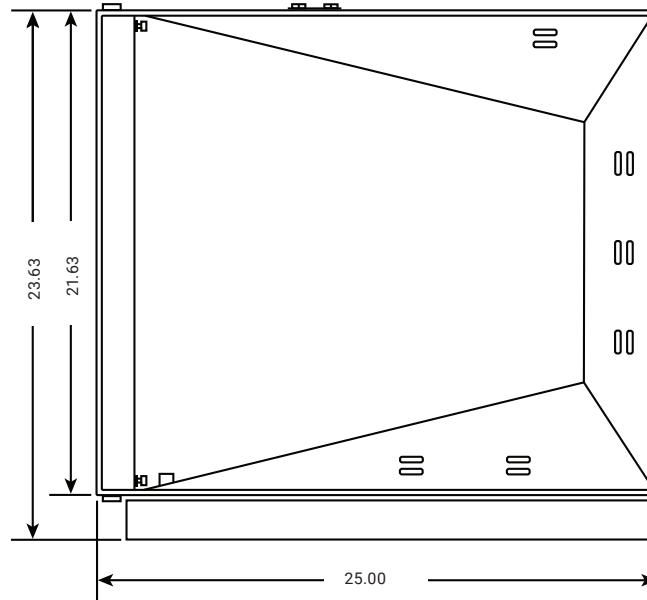


FIGURE 1-4. RM050A-R3 RIGHT SIDE VIEW

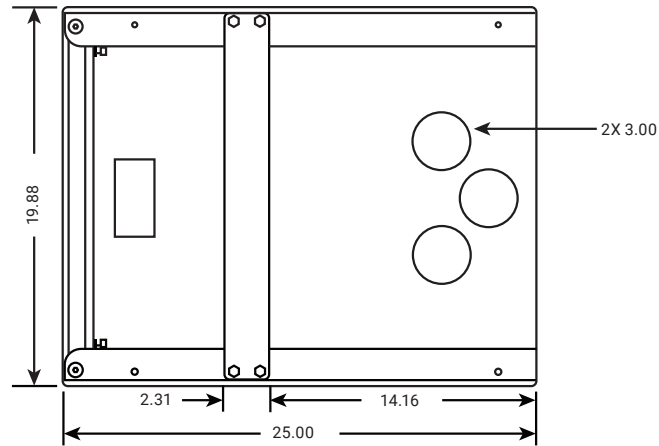


FIGURE 1-5. RM050A-R3 TOP VIEW

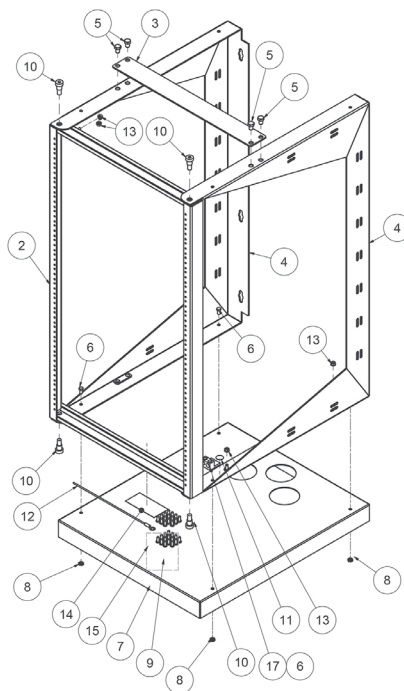
CHAPTER 1: SPECIFICATIONS**1.4 RM051A-R3 DRAWINGS**

FIGURE 1-6. RM051A-R3

TABLE 1-4. RM051A-R3 COMPONENTS

NUMBER IN FIGURE 1-6	QUANTITY	DESCRIPTION
2	1	35.313" H reinforced swing frame, weldment
3	1	Top/bottom brace
4	2	35.633" H x 25" D swing rack side – weldment
5	4	Bolt 3/8"-16 X 1/2" hex head or 2 RBZ
6	4	Bolt 1/4-20 x 1/2" L hex head
7	1	Swing rack base plate
8	4	Nut, 1/4-20, steel, grade 2, RBZ
9	50	Screw 12-24 x 1/2" L PPH T23 RBZ (equipment installation)
10	4	Screw socket head 3/8"-16 plain
11	1	Ground label, 1/2" dia., ED & D, SL-01
12	1	Ground wire, 11"L (stripped)
13	4	Nut M6 kepps tooth nut RBZ
14	1	Labels UL
15	1	Bag, 3 x 5 orange, heat seal with hardware "DO NOT DISCARD"
16 (not pictured)	1	Black Box Ultra Wallmount Racks User's manual
17	1	2S2/0" 2/0-14 AWG, and flex wire G-K w/mm2 class 5, 2 barrel, aluminum or copper wire, CU9AL, 90C temp. single 1/4 bit mnt, UL and CSA

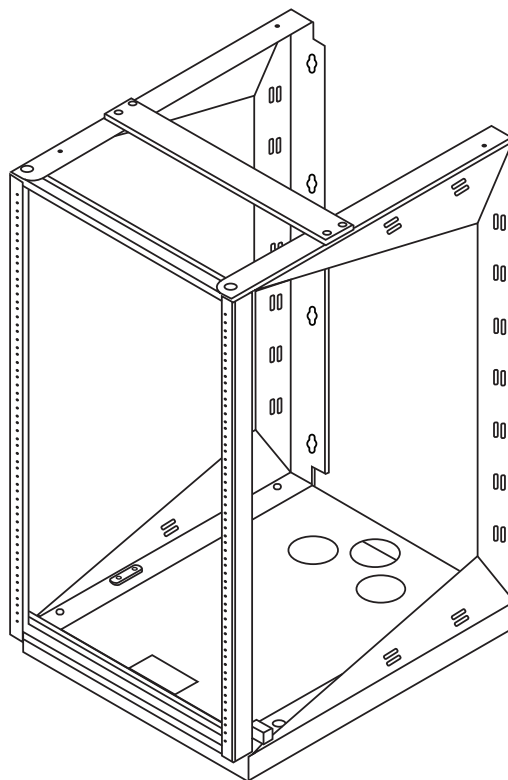


FIGURE 1-7. RM051A-R3 ASSEMBLED VIEW

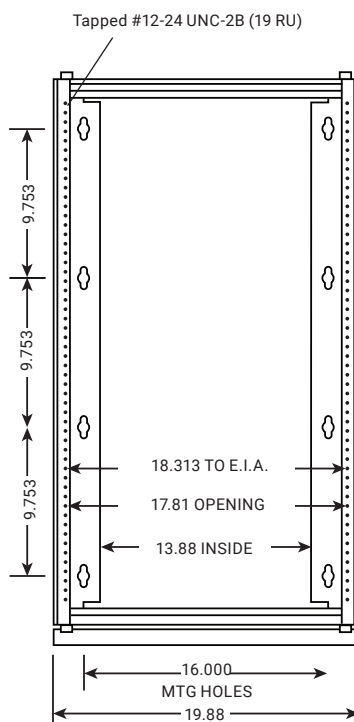


FIGURE 1-8. RM051A-R3 FRONT VIEW

CHAPTER 1: SPECIFICATIONS

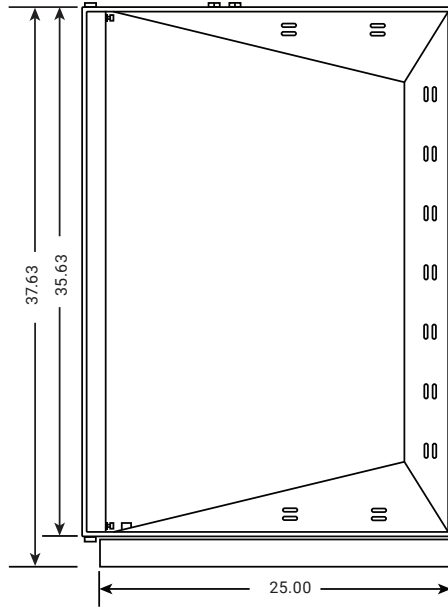


FIGURE 1-9. RM051A-R3 RIGHT SIDE VIEW

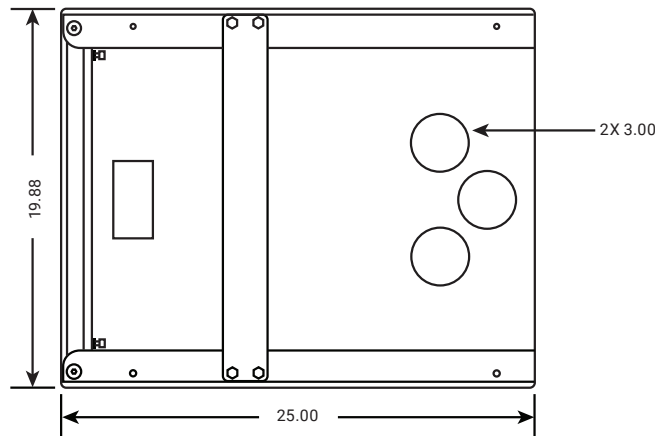


FIGURE 1-10. RM051A-R3 TOP VIEW

CHAPTER 2: OVERVIEW

2.1 INTRODUCTION

Ultra Wallmount Racks are designed to securely hold 19" rackmount equipment, networking equipment, phone equipment, etc. in tight spaces or closets.

2.2 FEATURES

- ◆ 25" depth provides plenty of room to open and close the rack, even when fully loaded with patch panels, hubs, or routers.
- ◆ Reinforcement base plate.
- ◆ Welded steel frame.
- ◆ Can be reversed to open left or right.

2.3 WHAT'S INCLUDED

Your package should include the following items. If anything is missing or damaged, please contact Black Box Technical Support at 877-877-2269 or info@blackbox.com.

- ◆ Swing rack base plate
- ◆ Top/bottom brace
- ◆ (4) $\frac{3}{8}$ "-16 x $\frac{1}{2}$ " hex head bolts, black
- ◆ (4) socket head shoulder set screws
- ◆ (4) $\frac{1}{4}$ "-20" x $\frac{1}{2}$ " hex head screws
- ◆ (4) $\frac{1}{4}$ "-20" keps nuts with external tooth lock washer
- ◆ (2) swing rack sides
- ◆ (1) swing frame
- ◆ (30) 12-24 mounting screws
- ◆ Bonding and grounding system with (1) ground jumper

2.4 SERVICE

The Ultra Wallmount 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 info@blackbox.com

CHAPTER 3: MOUNTING INSTRUCTIONS

3.1 RECEIVING, UNPACKING AND REMOVING THE RACK FROM THE CARTON

Inspect for damage and report damage if there is damage before receiving. Refer to Section 2.3 for what's included in the package.

Unpack the rack by carefully removing the corrugated carton and corners. Avoid damaging the enclosure when removing packaging.



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



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

3.2 WOOD STUDDED WALL

Once the location on the wall has been determined, inspect the wall surface. The wall must be flat and square in the horizontal and vertical plane to ensure the Ultra Wallmount Rack closes correctly. If the wall is not flat and square, you might need to use shims.

Wood studded wall mounting instructions apply to a 2" x 4" wood stud wall with $\frac{3}{4}$ " plywood.

You can mount the back section to the wall and secure it with $\frac{3}{8}$ "-2" lag bolts (not included) and washers (not included).



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

3.3 MASONRY WALL SURFACE

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

CHAPTER 3: MOUNTING INSTRUCTIONS

3.4 LOADING EQUIPMENT



WARNING: Only install equipment after the Ultra Wallmount Rack has been properly secured and mounted to the wall.

Maximum Load Capacity

The rated or maximum load capacity for the RM050A-R3 is 75 pounds, and the maximum load capacity for the RM051A-R3 is 100 pounds. To maintain uniform distribution of the mechanical load in the rack, load the heaviest equipment first at the bottom and the lighter units at the top.

3.5 POWER

When using power distribution units (PDUs), each PDU should be connected to a committed branch circuit that is rated for the continuous load of all the connected equipment.

When not using a PDU, each piece of equipment should be connected to a dedicated branch circuit.

3.6 PROTECTIVE GROUNDING

A main protective grounding stud and grounding studs are provided along with grounding jumper wires that electrically bond the swing frame doors to one of the swing rack sides.



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

3.6.1 CONNECTING MAIN PROTECTIVE GROUNDING STUD TO THE DEDICATED BRANCH CIRCUIT GROUNDING CONDUCTOR

Connect the dedicated branch circuit ground conductor to the main protective grounding stud located at the rear of one of the swing rack sides.

3.6.2 CONNECTING MAIN PROTECTIVE GROUNDING STUD TO THE PROTECTIVE BONDING CONDUCTORS

Connect the swing frame to the grounding stud located at the front of one swing rack side using a listed ring or closed-loop terminal.

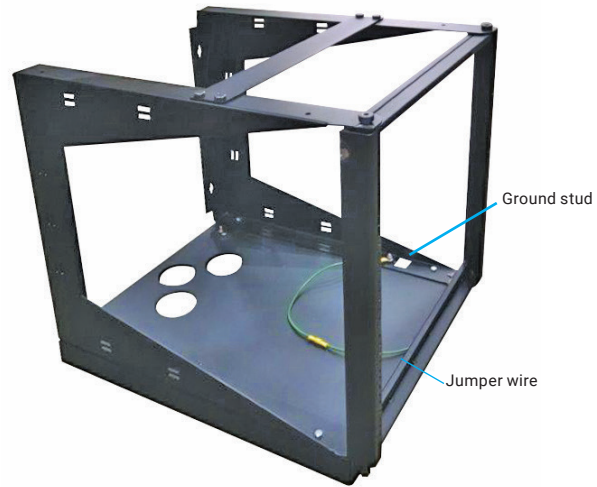


FIGURE 3-1. ULTRA WALLMOUNT RACK WITH JUMPER WIRE AND GROUND STUDS

APPENDIX: DISCLAIMER/TRADEMARKS

A.1 DISCLAIMER

Black Box Corporation shall not be liable for damages of any kind, including, but not limited to, punitive, consequential or cost of cover damages, resulting from any errors in the product information or specifications set forth in this document and Black Box Corporation may revise this document at any time without notice.

A.2 TRADEMARKS USED IN THIS MANUAL

Black Box and the Black Box logo type and mark are registered trademarks of Black Box Corporation.

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



**NEED HELP?
LEAVE THE TECH TO US**

**LIVE 24/7
TECHNICAL
SUPPORT**

1.877.877.2269

