

INSTALLATION INSTRUCTIONS TWO POST DISTRIBUTION RACK



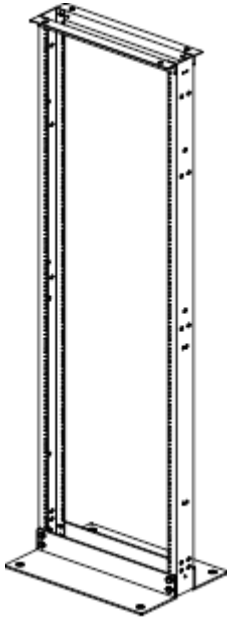
For your safety, upon receipt of your Distribution Rack, read this instruction sheet carefully before starting any installation and assembly.



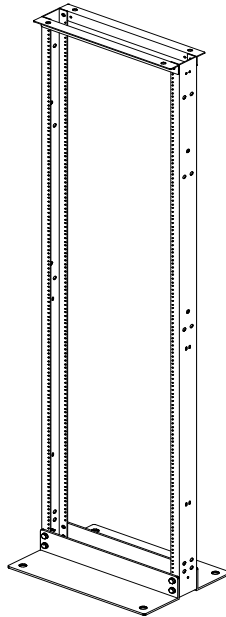
CAUTION:

This Distribution Rack system must be anchored securely to the floor in order to minimize the potential of accidentally tipping the unit during equipment installation. Anchoring and selection of hardware should be performed by qualified personnel only. Anchoring hardware should be a minimum of 5/8 diameter.

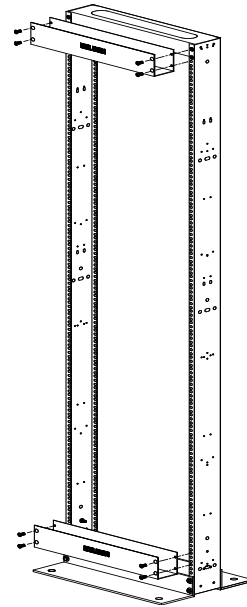
Instructions for the following Belden Racks:



XDR8419-310, XDR8419-312
XDR8423-310, XDR8423-312



BHRR194



AX101178, AX101254
AX100930, AX100931

BELDEN

SENDING ALL THE RIGHT SIGNALS



This product is UL listed and intended to house UL Listed ITE, Audio or Video equipment and must be installed by a qualified professional. This unit is not intended for use as a fire enclosure.

Maximum Load Capacity

XDR Series: 1000 lbs.*

AX Series: 1000 lbs.*

BHRR Series: 1200 lbs.**

*Load evenly distributed

**Max 100 lbs. on top shelf

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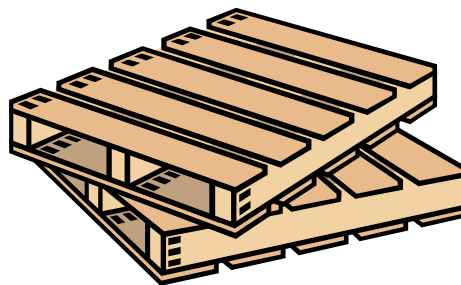


**Before
Un-packaging
your Two Post
Rack read below.**

The distribution rack is shipped unassembled in one package, banded and shrunk wrapped to a skid. An assembly hardware package is provided in order to assemble the unit. In addition, a number of screws are provided for mounting equipment.

Please make sure upon receipt of delivery that your packaging is intact. Inspect the packaging for any noticeable damages. If there is damage, please notify the freight carrier immediately to file a damaged freight claim.

Once you have inspected the packaging for any damage; carefully remove the wrapping and banding from the skid and the packaging from around your rack components and check all items received against the Components below that correspond to the rack series ordered. You will then continue to Page 4 of this Instruction Manual to compare these items with the Components Parts List and the Assembly Hardware List for your specified rack Part Number.



XDR Series Components include:

<u>Part</u>	<u>Description</u>
A	Vertical Post
B	Vertical Post
C	Floor Angles (2)
D	Top Angles (2)

BHRR Series Components include:

<u>Part</u>	<u>Description</u>
A	Vertical Post
B	Vertical Post
C	Floor Angles (2)
D	Top Angles (2)

AX Series Components Include:

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Rev 1 07/06/2010
Rev 2 10/23/2012
Rev 3 08/13/2018

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Part	Description
A	Top Channel
B	Vertical Posts (2)
C	Horizontal Troughs
D	Floor Angles

Before you begin, compare the packaged components received with the components list below to make sure all parts shown are included.

Components Parts List – XDR Series

Ordering Rack Part Number	See Legend For Ref	Equip Mtg Width	Flange Tapping	Mtg Hole Thread Type	Color	Channel Width	Item A(x1)	Item B(x1)	Item C(x2)	Item D(x2)
XDR8419-310	*	19"	Frnt/Rear	10-32	Blk	3"	433-9007	433-9066	433-9009	433-9010
XDR8423-310	*	23"	Frnt/Rear	10-32	Blk	3"	433-9007	433-9066	433-9035	433-9044
XDR8419-312	**	19"	Frnt/Rear	12-24	Blk	3"	433-9008	433-9067	433-9009	433-9010
XDR8423-312	**	23"	Frnt/Rear	12-24	Blk	3"	433-9008	433-9067	433-9035	433-9044

Components Parts List – AX Series

Ordering Rack Part Number	See Legend For Ref	Equip Mtg Width	Flange Tapping	Mtg Hole Thread Type	Color	Channel Width	Item A(x1)	Item B(x2)	Item C(x2)	Item D(x2)
AX101178	‡	19"	Frnt/Rear	12-24	Blk	4"	433-8858	433-7241	456-0021	456-0020
AX101254	‡	19"	Frnt/Rear	12-24	Grey	4"	433-8858-G	433-7241	456-0021	456-0020
AX100930	±	23"	Frnt/Rear	10-32	Grey	4"	456-0004	456-0112	456-0032	456-0010
AX100931	±	23"	Frnt/Rear	10-32	Blk	4"	456-0004	456-0112	456-0032	456-0010

Assembly Hardware List

Part	See Legend For Ref	Rack Series	Item	Qty	Description
92094	* **	XDR Series	E	12	3/8-16 x 1" Whiz bolt
92023	± ‡	AX Series	E	8	3/8-16 x 1" Hex Bolt (For Bottom Frame Floor Angle)
94088	* ± ** ‡	All Racks	F	2	1/4-20 KEP NUT (for Ground Stud)
91150	±	AX Series	G	12	10-32 x 1/2" SEMS
0377	‡	AX Series	H	12	12-24 x 1/2" MS
93014	± ‡	AX Series	J	8	Flat Washer (for Bottom Frame Floor Angle)
93026	± ‡	AX Series	K	8	3/8 Lock Washer (for Bottom Frame Floor Angle)
93051	± ‡	AX Series		2	1/4" External Tooth Washer (for Ground Stud)

Mounting Hardware

Part Number	See Legend For Reference	Rack Series	Rack Use	Qty	Description
91263	*	XDR Series	10-32 Tapped	40	10-32 x 1/2" MS
91264	**	XDR Series	12-24 Tapped	40	12-24 x 1/2" MS
93076	** **	XDR Series	All XDR Series	40	External Tooth Washer

* Hardware used on racks with 10-32 tapped holes

** Hardware used on racks with 12-24 tapped holes

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- ± Supplied with AX Series Racks with 10-32 tapped holes
- ‡ Supplied with AX Series Racks with 12-24 tapped holes

XDR/BHRR Series Assembly Instructions

You are now ready to assemble your XDR/BHRR Series Rack

The following tools are required for assembly of the XDR & BHRR Series Rack:

- 9/16" Open End or Adjustable Wrench
- Phillips Screwdriver
- Square

1. Locate two vertical rails (Items A and B).
2. Place the rails parallel on the floor, approximately 20 or 24 inches apart (dependent upon the rack width you have chosen). Note: The ground studs are located approximately 2.5" from the bottom of each vertical rail with a ground symbol mark.
3. Position the rack top angle (Item D) between the frame channels at the top. Orient the angles as shown in Figure 1.
4. Use the 3/8-16 whiz bolt hardware (Item E) to attach the top angle.
5. Do not tighten the hardware at this time.
6. Attach one bottom frame floor angle (Item C) at the base of the two channels.
7. Use the 3/8-16 x 1" whiz bolt hardware (Item E) to attach the bottom frame floor angle to the channels.
8. Do not tighten this hardware at this time.
9. Turn the unit over and attach the second bottom frame floor angle (Item C) at the base of the two channels with the 3/8-16 x 1" whiz bolt hardware (Item E).
10. Position a square on the top edge of the mounting foot, square each vertical post to the foot and tighten the 3/8-16 x 1" whiz bolts.
11. After ensuring the rack is square, tighten the remaining whiz bolts to 25 in/lbs.

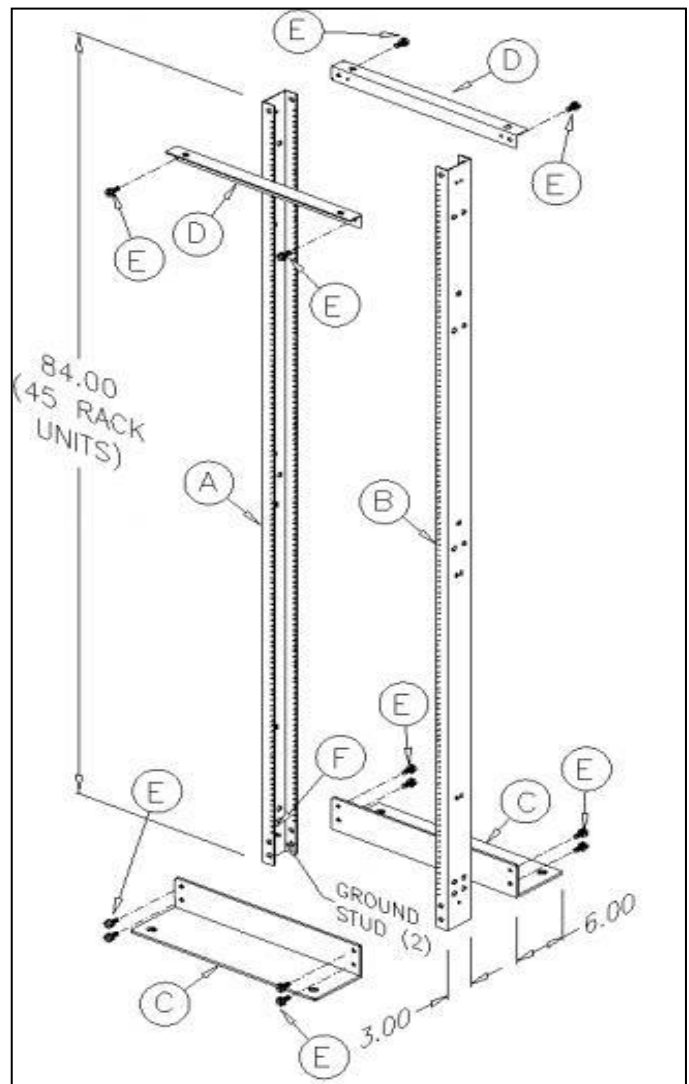


Figure 1

INSTALLATION INSTRUCTIONS

TWO POST DISTRIBUTION RACK

NOTE: You have now assembled your XDR Series rack and are ready to continue to anchor your rack securely to the floor by following the Mounting Hole Pattern instructions listed on page 7 of this instruction manual.

AX Series Assembly Instructions

You are now ready to assemble your AX Series Rack

The following tools are required for assembly of the AX Series Rack:

- 9/16" Open End or Adjustable Wrench
- Phillips Screwdriver
- Square

1. Locate both frame channels (Item B x 2).
2. Place the rails parallel on the floor, approximately 20 or 24 inches apart (dependent upon the rack width you have chosen). Note: The ground studs are located at the bottom of the rail marked with a ground symbol.
3. Position the rack top channel (Item A) between the frame channels (Item B) at the top.
4. Using 8 each of the #10-32 (23-in, Item G) or #12-24 (19-in, Item H) x 1/2" Pan head screws, attach Item A to Item B at the top of the rack. See Figure 2.
5. Do not tighten the hardware at this time.
6. Attach one bottom frame floor angle (Item D) at the base of the two channels.
7. Use the 3/8-16 assembly hardware (Item E, J, K) to attach the bottom frame floor angle to the channels.
8. Do not tighten this hardware at this time.
9. Turn the unit over and attach the second bottom frame floor angle (Item D) at the base of the two channels with the 3/8-16 assembly hardware (Item E, J, K).
10. Position square on the top edge of the mounting foot, square each vertical post to the foot and tighten the 3/8-16 hardware.
11. After ensuring the rack is square, tighten the 3/8-16 assembly hardware on the other foot and all 3/8-16 hardware to 25 in/lbs.
12. Raise the unit and loosen the front four #10-32 or #12-24 x 1/2" pan head screws at the top so that the head of the screw is 3/16 to 1/4" away from Item B.
13. Assemble the top Horizontal Trough (Item C) onto the #10-32 or #12-24 hardware and tighten. See Figure 2.
14. Using a Square, align the rack unit and tighten the #10-32 or #12-24 screws.
15. Attach the bottom horizontal cable trough at the lowest four hole positions on the frame channels with #10-32 (Item G) or #12-24 (Item H) x 1/2" pan head screws and tighten hardware.

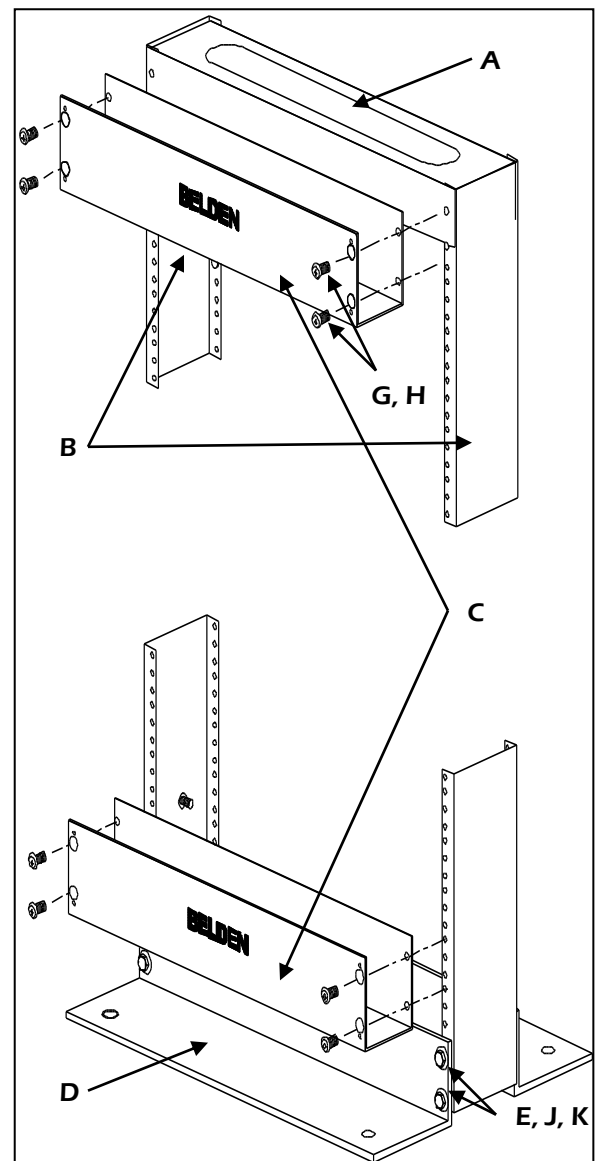


Figure 2

INSTALLATION INSTRUCTIONS TWO POST DISTRIBUTION RACK



NOTE: You have now assembled your AX Series rack with the horizontal cable troughs and are ready to continue to anchor your rack securely to the floor by following the Mounting Hole Pattern instructions listed on the next page of this instruction manual.

Anchoring Hardware should be a minimum of 5/8" diameter

Mounting Hole Pattern – AX Series Rack

Important Note: The distribution rack system should be anchored securely to the floor. Figure 3 below shows the bottom frame mounting angles hole pattern and placement for the 3/4" holes in the rack to facilitate anchoring. Due to building code and substrate variations we do not supply the anchoring hardware. Qualified personnel knowledgeable of local code should **ONLY** perform anchoring of this rack.

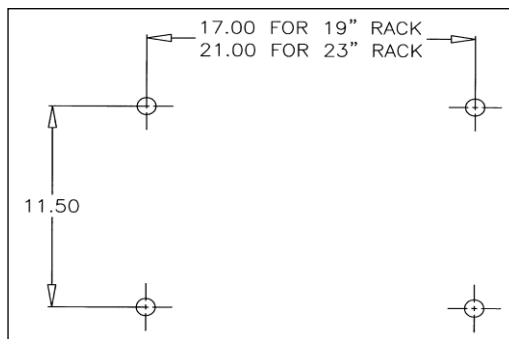
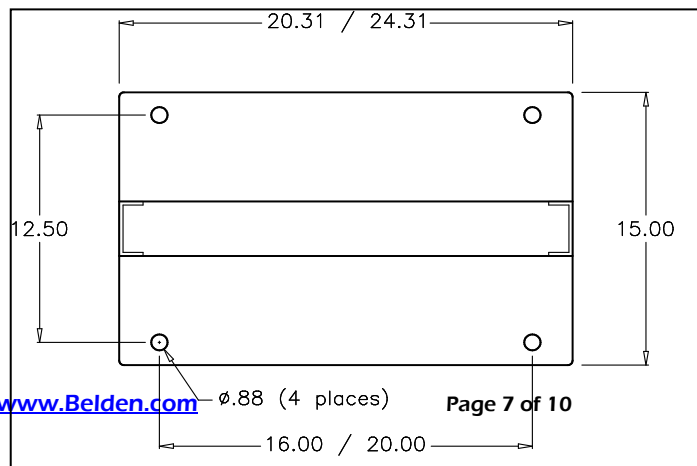


Figure 3

Mounting Hole Pattern – XDR/BHRR Series Racks

Important Note: The distribution rack system should be anchored securely to the floor. Figure 4 below shows the bottom frame mounting angles hole pattern and placement for the 7/8" holes in the rack to facilitate anchoring. Due to building code and substrate variations we do not supply the anchoring hardware. Qualified personnel knowledgeable of local code should **ONLY** perform anchoring of this rack.



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Figure 4

Grounding Stud - AX Series Rack

Two, 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, marked with a ground symbol as shown in Figure 5 below. A 1/4-20 hex nut with a captive external tooth lock washer (Kep nut part number 94088) and a loose 1/4" external tooth lock washer is provided for attachment of the ground lug (not supplied). The hex nut assembly is used to secure the ground lug in place.

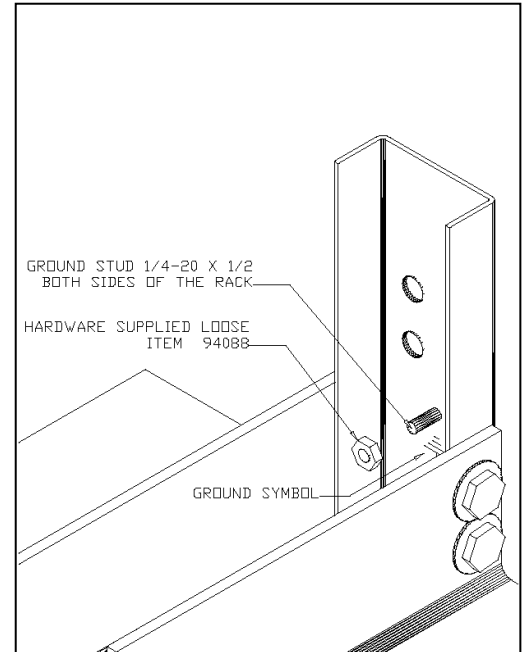


Figure 5

Grounding Stud - XDR Series Racks

Two, 1/4-20 X 3/4" long Grounding Studs are provided centered inside the left and right frame channels at a location approximately 2.5" up from the bottom, marked with a ground symbol as shown in Figure 6 below. A 1/4-20 hex nut with a captive external tooth lock washer (Part Number 94088) is provided for attachment of the ground lug (not supplied). The hex nut assembly is used to secure the ground lug in place.

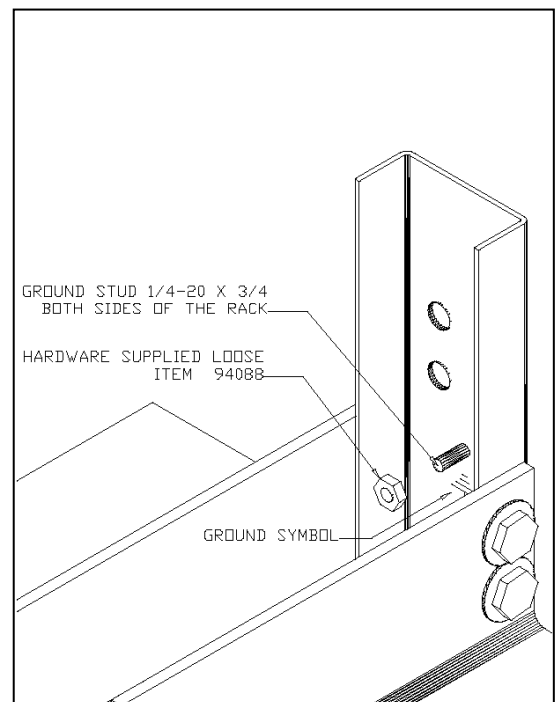


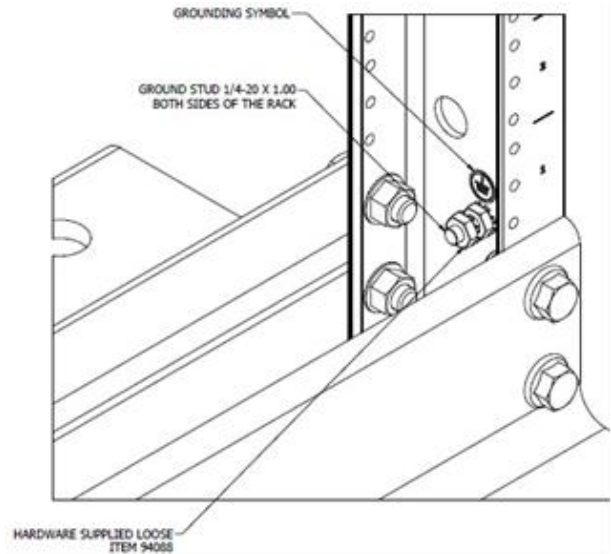
Figure 6

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Grounding Stud - BHRR Series Rack

Two, 1/4-20 X 1.00" long Grounding Studs are provided centered inside the left and right frame channels at a location approximately 2.5" up from the bottom, marked with a ground symbol as shown in Figure 6 below. Two (2) 1/4-20 hex nuts with a captive external tooth lock washer (Part Number 94088) is provided for attachment of the ground lug (not supplied). The hex nuts assembly is used to secure the ground lug in place.



Equipment Installation – AX Series Rack

Your Distribution Rack is provided as a complete for assembly Two Post Distribution Rack with a standard 5/8" – 5/8" – 1/2" rack spacing pattern of tapped #10-32 (23") or #12-24 (19") 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-in model and both sides on the 19-in model.

Equipment Installation – XDR Series Rack

Your Distribution Rack is provided as a Two Post Distribution Rack with a standard 5/8" – 5/8" – 1/2" rack spacing pattern of tapped #10-32 or #12-24 holes dependent upon the part number that was ordered. Your rail EIA rack units are marked for ease of panel and equipment alignment from rail to rail on the front and rear flanges.

Dependent upon the XDR Series Distribution Rack part number ordered, the rack is supplied with Mounting Screws either #10-32 (Part Number 91263) or #12-24 (Part Number 91264), along with External Tooth Washers (Part Number 93076) to be used in conjunction with each other for use during equipment mounting.

Equipment Installation – BHRR Series Rack

Your Distribution Rack is provided as a Two Post Distribution Rack with a standard 5/8" – 5/8" – 1/2" rack spacing pattern of tapped #12-24 holes. Your rail EIA rack units are marked for ease of panel and equipment alignment from rail to rail on the front and rear flanges.

BHRR Series Distribution Rack is supplied with #12-24 (Part Number 91264) Mounting Screws, along with External Tooth Washers (Part Number 93076) to be used in conjunction with each other for use during equipment mounting.

You can now install your equipment