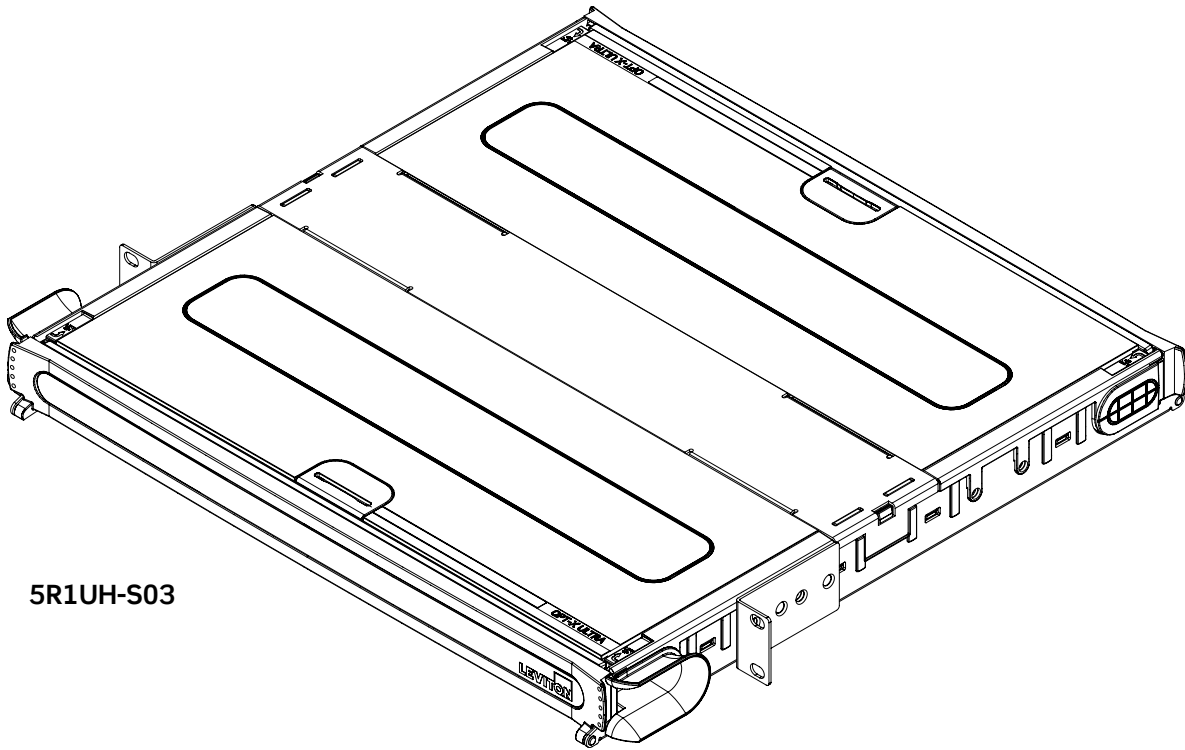


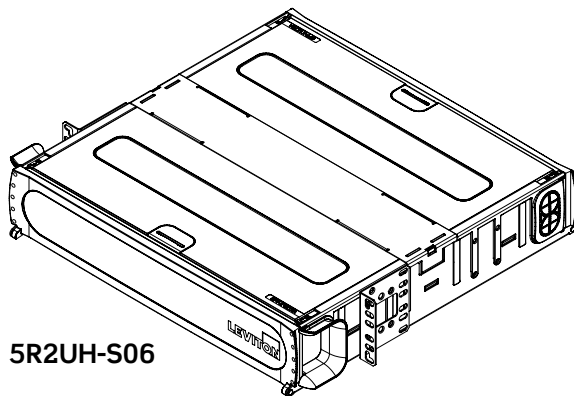
# Instructions for Use - Opt-X Ultra™ Enclosure

## Directives — Enceintes Opt-X Ultra<sup>MC</sup>

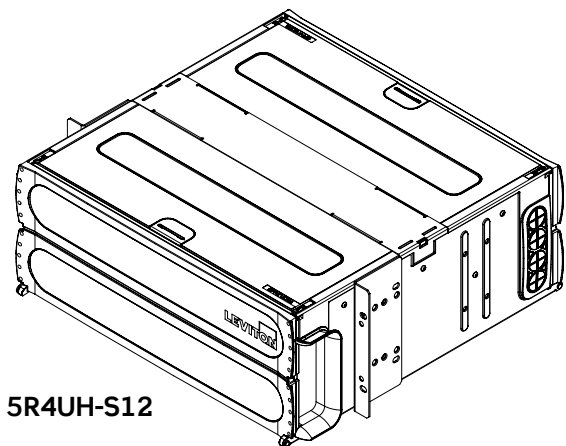
## Instrucciones de Uso - Caja Opt-X Ultra<sup>MR</sup>



5R1UH-S03



5R2UH-S06



5R4UH-S12

## **FIBER CONNECTOR SAFETY WARNINGS**

### **SAFETY INFORMATION**

1. Always wear safety glasses.
2. Isopropyl alcohol is flammable and may cause eye irritation. In case of contact with eyes, flush with water for at least 15 minutes. When using isopropyl alcohol, always assure proper levels of ventilation. In case of ingestion, consult a physician immediately.
3. Never look directly into a laser light source, point source at a person's eyes, or point source at reflective surfaces.
4. When working on a fiber link, always turn laser source off, or disconnect completely.
5. Always dispose of fiber debris properly, preferably using sticky tabs.
6. Do not place food or beverages in the vicinity of the work area.
7. Thoroughly wash face and hands after terminating fiber.
8. Carefully remove any fiber debris that may have been stuck to clothing, or left in work area, and dispose of properly.

### **TIPS AND RECOMMENDATIONS**

1. Using isopropyl alcohol, thoroughly clean exposed fiber and buffer ensuring both are free from dust, oil, and debris.
2. Do not lay ferrule dust covers on a dirty or dusty surface.
3. Always use proper tools and/or accessories to terminate fibers and clean connector tips.

## QUICK START GUIDE

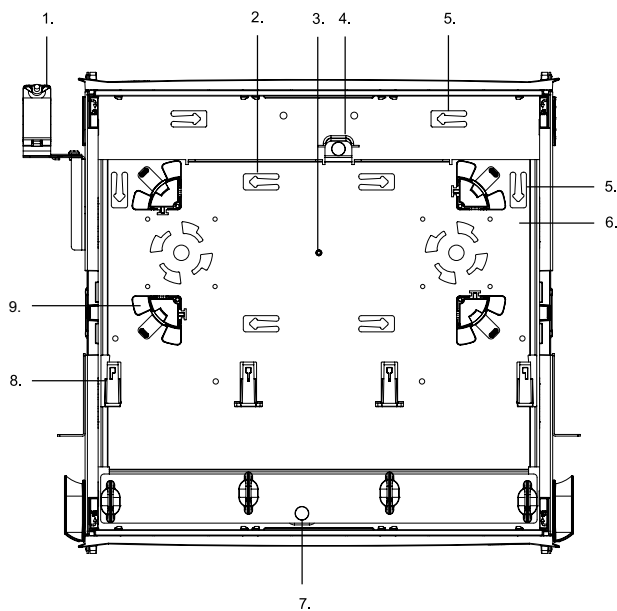
The following instructions will help you quickly install your Leviton Opt-X Ultra™ Enclosure for use in your equipment cabinet or rack. For detailed information on each step, go to the page number listed below.

Safety and Installation Instructions	Pg. 2
Quick Start Guide	Pg. 3
Equipment Overview	Pg. 3
Standard Accessories	Pg. 4
Optional Part Numbers	Pg. 4
Side View	Pg. 5
Bend Radius Installation, Cover Removal, and Door Removal	Pg. 5
Cable Installation - Preparation	Pg. 6
Center Bar Removal - Detail View	Pg. 6
Cable Installation - Applications	Pg. 7
Opt-X Ultra Labeling	Pg. 8
Opt-X Ultra Fiber Management Ring	Pg. 9

## EQUIPMENT OVERVIEW

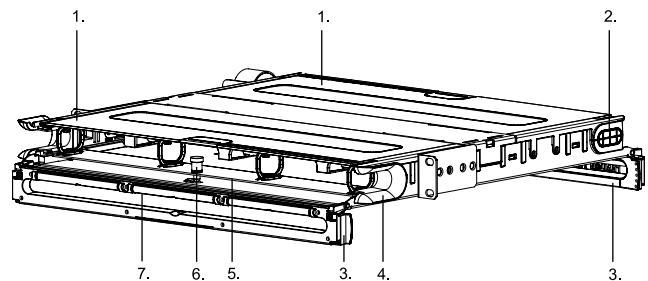
### Interior

**NOTE:** Covers and Center Support Bar removed for clarity.



1. Strain Relief Kit (Optional)
2. Hook and Loop Lacing Points for securing splice trays
3. Splice tray alignment pin
4. Rear tray plunger (lift plunger to slide tray backward)
5. Cable Lace Points
6. Slide out termination tray
7. Front Tray Plunger (lift plunger to slide tray forward)
8. Bulkhead Brackets (Opt-X = Blue, LGX = Grey)
9. 1/4 Fiber Cable Management Ring

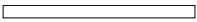

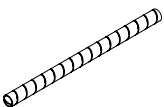

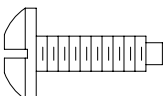
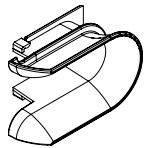
### Exterior



1. Removable Covers
2. Cable Grommet
3. Removable Doors
4. Bend Radius Bracket
5. Slide Out Termination Tray
6. Front Tray Plunger (lift to release)
7. Label ID Holder

## STANDARD ACCESSORIES (Included with Opt-X Ultra™ Enclosure)

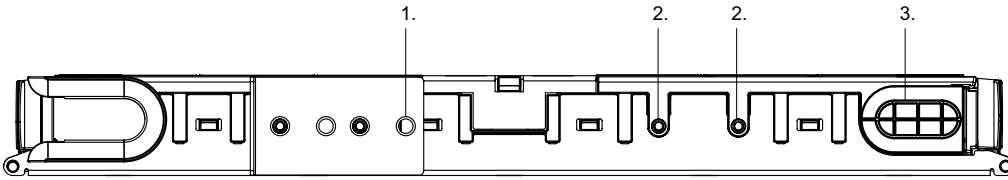
Prior to installing your Leviton Opt-X Ultra Enclosure, please refer to the table below. This will help ensure that you have all the items shipped with the unit, and/or any additional items that may be required for proper installation.

Description	Image	Quantity in 1RU Kit	Quantity in 2RU Kit	Quantity in 4RU Kit
Paper Label Kit		1	2	-
ID Card Label		-	-	1
Spiral Loop, 18"		1	1	2
Cable Tie		4	6	8
Rack Mnt Screw		4	4	4
Bend Radius Bracket (1RU Shown)		2	2	2

## OPTIONAL PART NUMBERS

Description	Part Number
Opt-X Ultra Fiber Management Ring Kit	5R100-14R
Opt-X Ultra Strain Relief Bracket Kit	5RCMP-KIT
1RU Mounting Ear for 23" Rack	5R1RU-23
1RU Replacement Door	5D000-1UN
2RU Replacement Door	5D000-2UN
4RU Replacement Door	5D000-4UN
1RU Replacement Door w/Lock	5D000-1UL
2RU Replacement Door w/Lock	5D000-2UL
4RU Replacement Door w/Lock	5D000-4UL
Replacement Covers	5C000-RPL
Grounding Kit	DPGRD-KIT

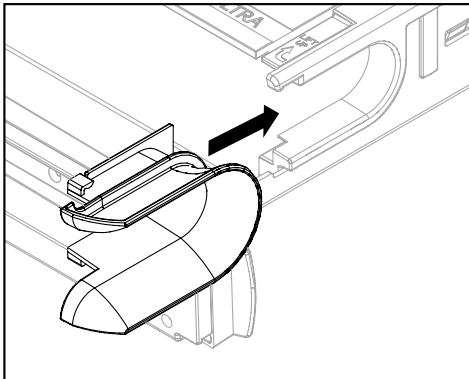
## SIDE VIEW (1RU Shown)



- 1. Adjustable 19" rack mount brackets
- 2. Strain relief kit mounting points
- 3. Cut grommet as needed to accommodate cables.

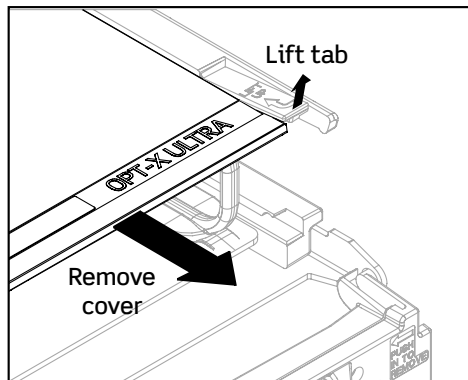
**NOTE:** 2RU and 4RU brackets are reversible for mounting onto 23" racks. Optional 23" RM kit also available for 1RU. See Optional Part Number list (see page 4).

### BEND RADIUS INSTALLATION



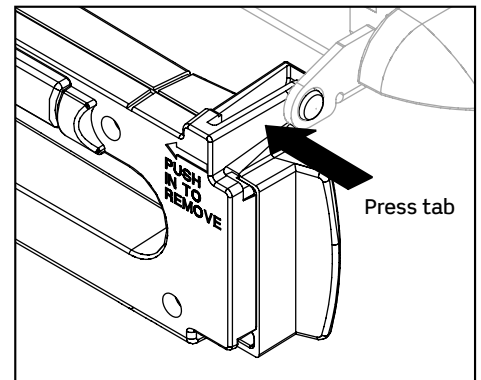
Slide bend radius bracket into opening

### COVER REMOVAL



To remove cover: lift tabs, and then slide out

### DOOR REMOVAL

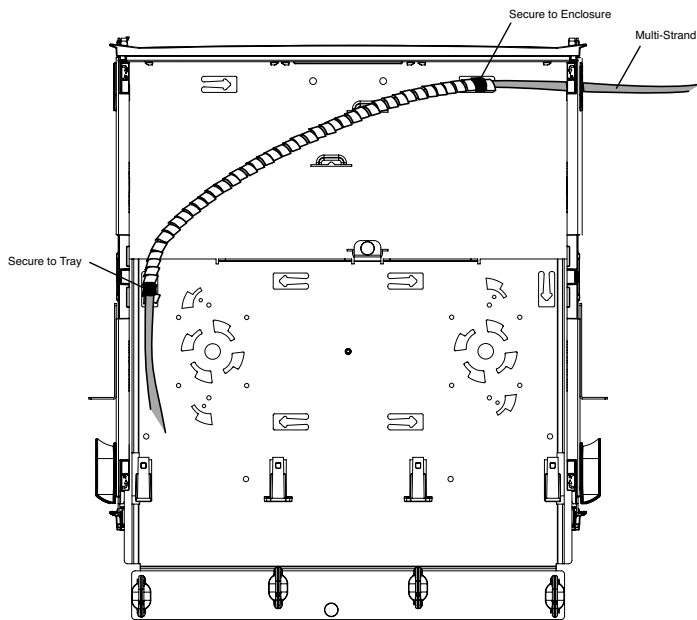


To remove door: press tabs as shown

## CABLE INSTALLATION - PREPARATION

### Top View: Tray to Front

**NOTE:** Tray in forward position, covers and center bar removed for clarity.

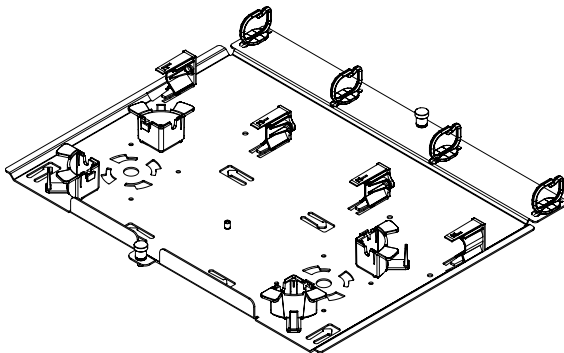


### NOTE:

- Route cable to tray through grommet on the opposite side of cable entry.
- Plan for cable routing prior to termination.
- Adjust fiber ring kit based on desired application (see page 7 for detail).
- Assure cable slack for tray movement.
- For additional cable slack management, use optional Fiber Management Ring Kit (5R100-14R). See image below for detail on placement.

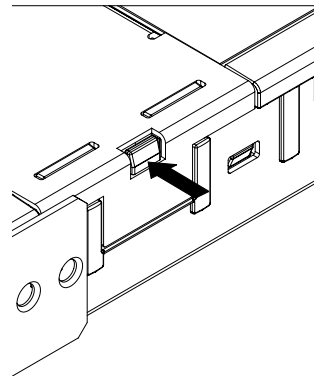
To remove tray from enclosure, slide tray fully rearward, then lift front pin to release the tray (pull to slide tray to the rear).

### Pictured: Removable tray to facilitate field termination and splicing



### Pictured: Center bar removal - detail view

To remove center steel support bar, depress latch as shown per arrow in diagram below.

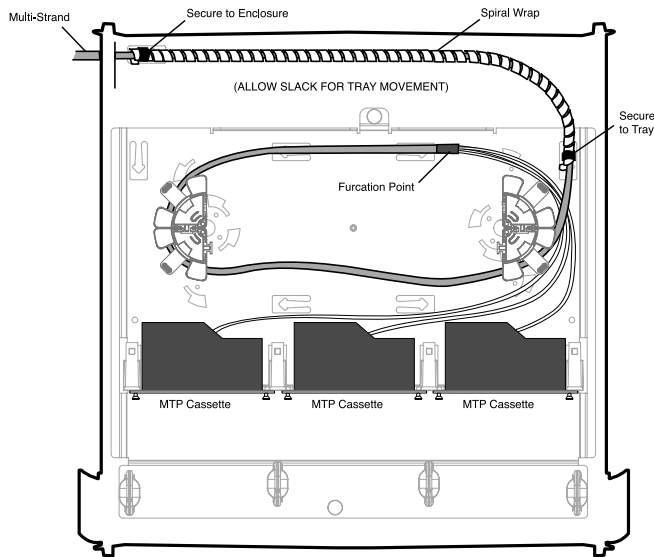


### NOTE:

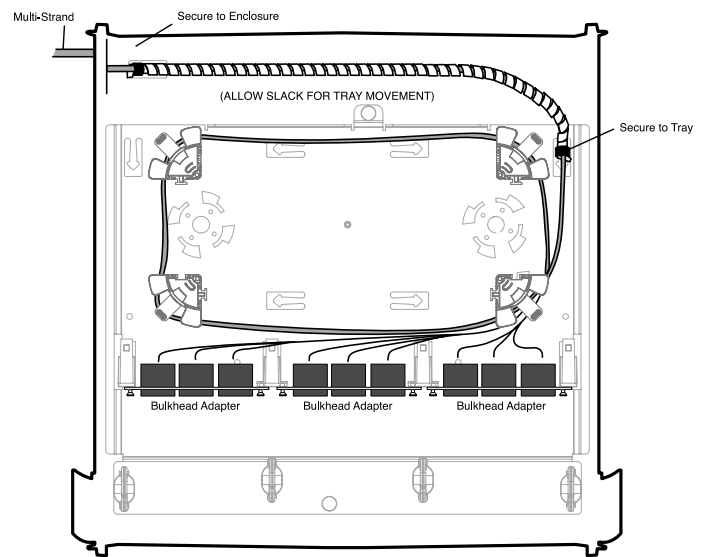
- Do not remove bar before installing enclosure in rack.
- Center bar is required for operation of the removable covers.
- Replace center bar when service is complete.

## CABLE INSTALLATION - APPLICATIONS

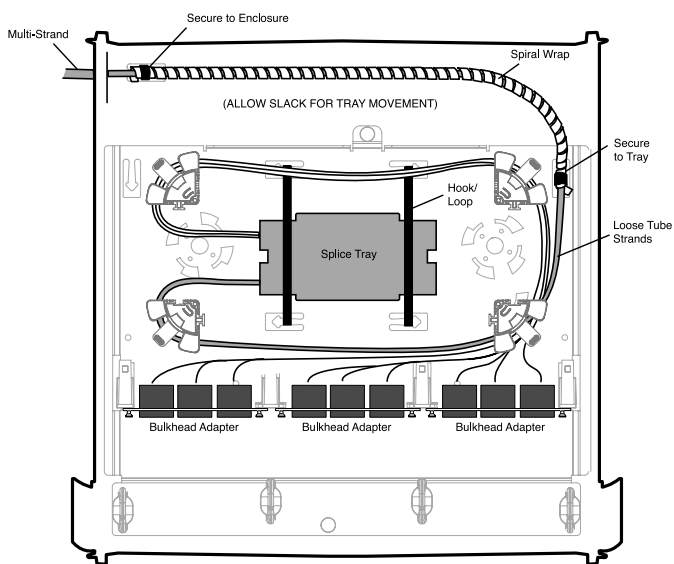
### Utilizing MTP Cassettes



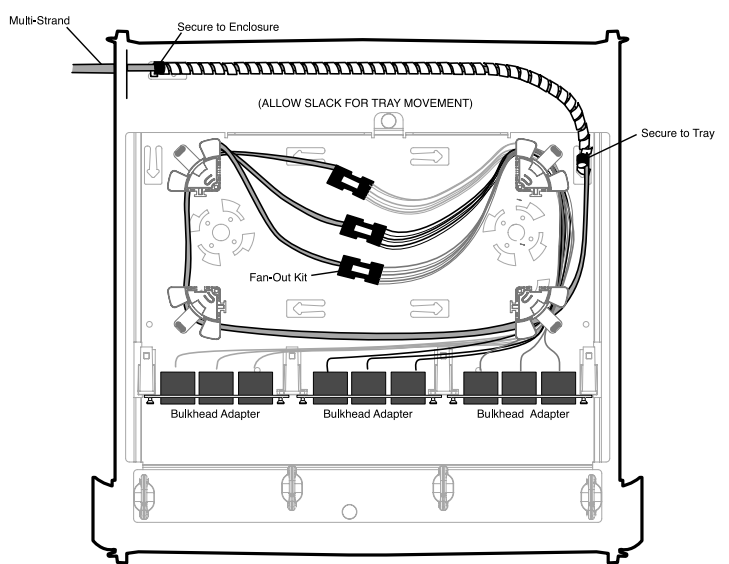
### Utilizing Pre-Terminated Cables or Field Termination of tight-buffered cable



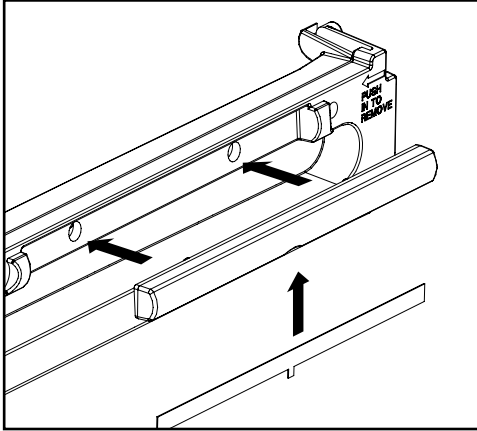
### Utilizing Splice Trays



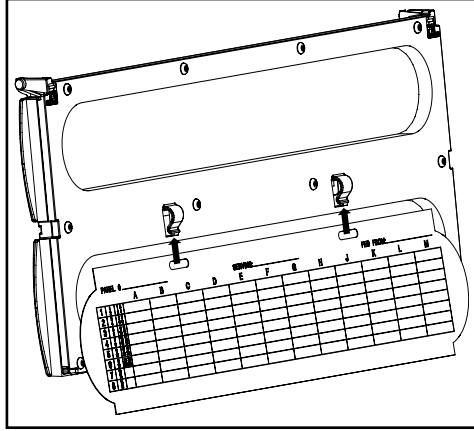
### Utilizing Fan-Out Kits



## OPT-X ULTRA™ LABELING



**1RU/2RU Units:** Remove label holder from door by inserting a thin blade screwdriver (from below) at location pin points and gently twisting.



**4RU Unit:** Place label card into the clips.

### Label Printing Organization by Fiber Adapter Panel Type

	1/4" Label Holder		3/8" Label Holder		Number Scheme					
	Port Spacing	No. of Ports	Port Spacing	No. of Ports						
Duplex SC (3 pack)	.50	6	.48	6	1	2	3	4	5	6
Duplex SC (6 pack)	.50	12	.48	12	1-2		3-4		5-6	
					7-8		9-10		11-12	
Duplex LC (6 pack)	.65	12	.62	12	1 2	3 4	5 6	7 8	9 10	11 12
Quad LC (6 pack)	.50	24	.48	24	1-2 / 3-4		5-6 / 7-8		9-10 / 11-12	
					13-14 / 15-16		17-18 / 19-20		21-22 / 23-24	
ST/FC (6 pack)	.65	6	.62	6	1	2	3	4	5	6
ST/FC (8 pack)	.50	8	.48	8	1 - 2 - 3 - 4 - 5 - 6 - 7 - 8					

### Universal Labeling Devices

#### 1RU

- Use 1/4" label tape
- Total label length  $\approx$  4"
- Each panel section is 1/4" H x 3/4" L

#### 2RU

- Use 3/8" label tape
- Total label length  $\approx$  3 3/4"
- Each panel section is 3/8" H x 5/8" L

#### 4RU

- Use 1/4" label tape
- Total label length  $\approx$  13 1/2"
- Each panel section is 1/4" H x 1 1/8" L

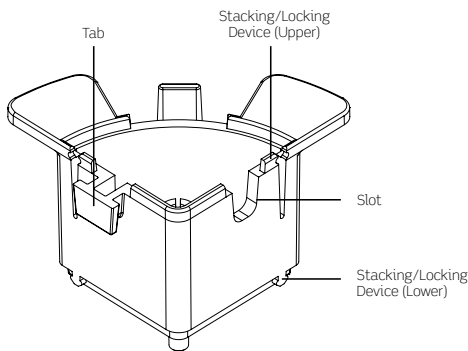
Leviton has provided the labeling model requirements to Rhino Labeling. Rhino has established product standards which are available at [www.rhinolabeling.com](http://www.rhinolabeling.com)



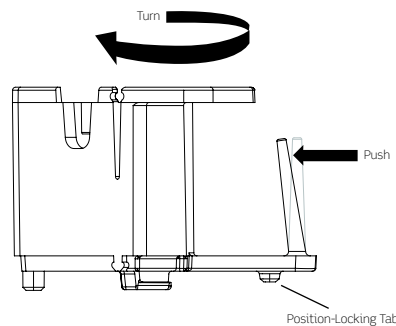
## OPT-X ULTRA™ FIBER RING (Removal, Installation and Assembly)

Four Opt-X Ultra Fiber management  $\frac{1}{4}$  rings are pre-installed at the factory. To remove, grip the  $\frac{1}{4}$  ring, lift the Position-Locking Tab, turn counter clockwise until unlocked, and then lift to remove. When removing a half or full management ring group, simultaneously lift the 2 or 4 Position-Locking Tabs, turn counter clockwise until unlocked, and then lift to remove.

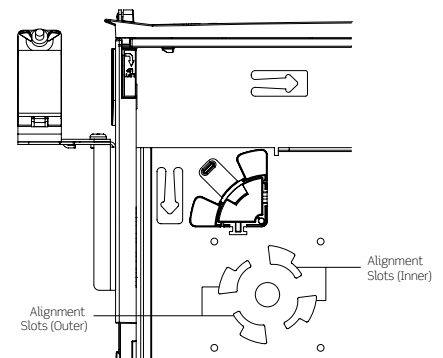
### Ring Overview



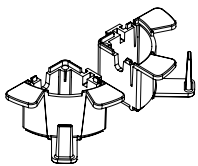
### Ring Side Profile



### Ring Alignment Slots



### HALF RING ASSEMBLY



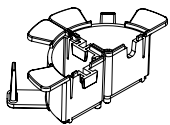
#### HALF RING ASSEMBLY

Hold a  $\frac{1}{4}$  ring unit in each hand, bring the units together and engage by placing the tab of the left unit into the slot of the right unit.

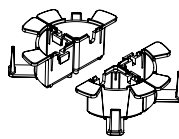
#### HALF RING INSTALLATION

Position  $\frac{1}{2}$  ring unit over outer ring slots so the alignment tabs fit into slots. Press down and turn the  $\frac{1}{2}$  ring unit clockwise to engage tabs and lock into position.

**CAUTION** - when installing into a tray that is in the enclosure, provide adequate support under the tray by placing a hand under the ring slot area.



### FULL RING ASSEMBLY



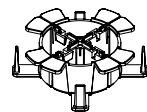
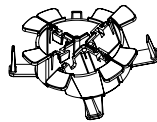
#### FULL RING ASSEMBLY

Hold a  $\frac{1}{2}$  ring unit in each hand, bring units together with tabs above slots, rotate to engage tabs.

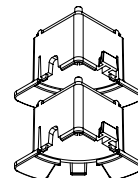
#### FULL RING INSTALLATION

Position full ring unit over inner and outer ring slots so alignment tabs fit into slots. Firmly press down and turn the full ring unit clockwise to engage tabs and lock into position.

**CAUTION** - when installing into a tray that is in the enclosure, provide adequate support under the tray by placing a hand under the ring slot area.



### RING STACKING



#### RING STACKING

Position initial ring unit ( $\frac{1}{4}$ ,  $\frac{1}{2}$ , or full) upside down on a flat surface. Position additional ring upside down above initial ring and press together using sufficient force to engage stack locking device.

**CAUTION** - always perform stacking before installing ring unit into tray.

