

1 Overview

This quick start guide provides basic instructions for rack-mounting a Cisco uBR 3x10 RF Switch in a 4-post equipment rack with the Cisco uBR0012 CMTS.

Before proceeding with the installation, review the safety information in the *Cisco RF Switch Regulatory Compliance and Safety Information*.



Tip

To prevent overheating, install the RF Switch in an area that is properly ventilated or air conditioned.

Sample Configurations

The following illustrations show sample configurations using the Cisco uBR3x10 RF Switch in a Cisco uBR10012 CMTS.

Figure 1 Cisco RF Switches Installed in a Cisco uBR10012 CMTS Using Cisco uBR10-MC5x20S/U Line Cards

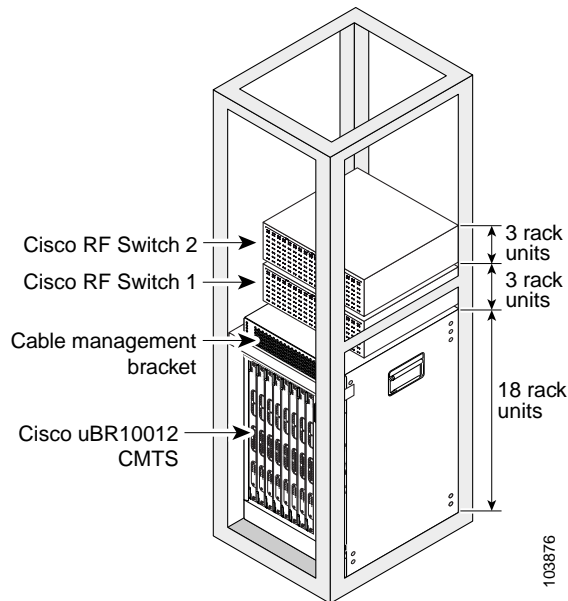
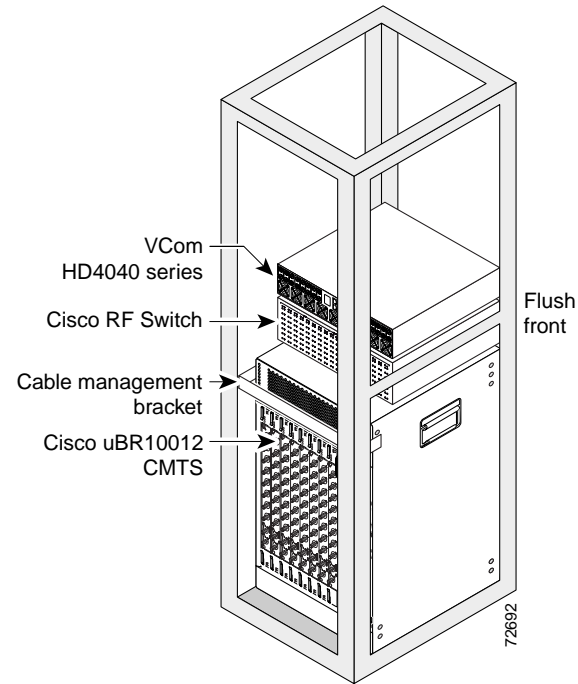


Figure 2 Cisco RF Switch Installed in a Cisco uBR10012 CMTS Using Cisco uBR10-LCP2-MC28C Line Cards



- 4 AWG ground wire
- Ground lug
- Heat-shrink tubing
- Cable management bracket
- Two M5 x 8-mm Phillips
- Two rack-mount brackets
- Four M5 x 8-mm Phillips

Cables Used with The Configurations

- 3-m cables—CAB-RFSW5 MCX to MCX connector
- 1-m cables—CABRFSW5 MCX to MCX connector
- 10-m cables—CABRFSW5 MCX to F connector
- 1.2-m cables—CAB-RFSW5 MCX to F connectors



Tip

For detailed installation instructions, refer to the *RF Switch Hardware Cabling Guide*.

2 Required Equipment

The following equipment is required for rack-mounting the Cisco uBR 3x10 RF Switch in a standard 19-inch-wide 4-post equipment rack.



Note

The rack-mount brackets that come in the accessory kit cannot be used with other racks, such as 23-inch telco racks

Tools and Equipment

- Number 2 Phillips screwdriver
- 7/16-inch flat-blade screwdriver
- Eight 1/32 x 3/8 slotted screws
- Two M5 hex-head screws

Quick Start Guide



Installing the 3x10 RF Switch in a Cisco uBR10012

Equipment
Rack Mount Brackets
Installing the Switch
The Chassis
Specifications
Documentation

Only trained and qualified personnel should be allowed to install, replace, or service this equipment. Statement 1030

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g the Brackets

hreaded holes at the front of
h chassis (both sides).

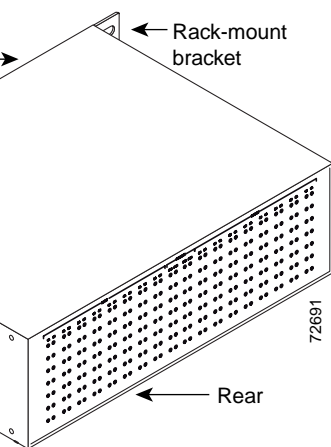
st rack-mount bracket with
holes in the left-front side of

M5 x 8 mm Phillips screws
rack-mount bracket and into
the chassis.

ber 2 Phillips screwdriver to
screws.

1 through Step 4 for the other

Mounted Brackets



Mounting the Switch

ple should perform this
on procedure.

all the modules are secure in

Step 2 Position the chassis so that the rear panel is facing the same way as the connectors on the cards. See Figure 1 and Figure 2.

Step 3 Slide the chassis into the rack. Use the illustrations to determine where you attach the chassis to the rack. See Figure 1 and Figure 2.

Step 4 While keeping the brackets flush against the posts or mounting strips, position the chassis so that the holes in the brackets are aligned with those in the mounting strips.



Note Use all four screws to fasten the two rack-mount brackets to the rack posts, because the brackets support the weight of the chassis (36.6 lbs (16.6 kg)).

Step 5 Insert all four 1/32 x 3/8 slotted screws (two on each side) through the brackets and into the mounting strip.



Tip Insert the bottom screws first.

Step 6 Tighten all the screws.

5 Grounding the Chassis



Caution Before connecting power and turning on the RF Switch, you must provide an adequate earth ground connection.

Step 1 Locate the ground lug holes on the left-side rear of the chassis.

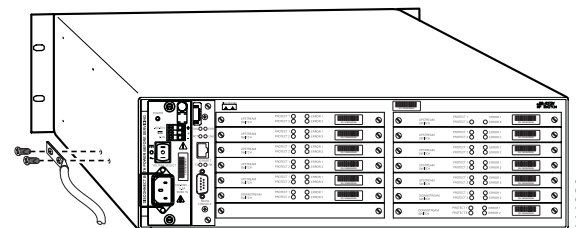
Step 2 Using 4 AWG wire (recommended), insert the wire into the ground lug.

Step 3 Cover any exposed wire with heat-shrink tubing.

Step 4 Use the two M5 hex-head screws to attach the grounding lug to the chassis.

Step 5 Attach the wire to an appropriate earth ground location.

Figure 4 Grounding Lug Location



Attaching the Cable Management Bracket

A cable management bracket is included in the shipping container. We recommend using this bracket to ensure proper airflow in the chassis.

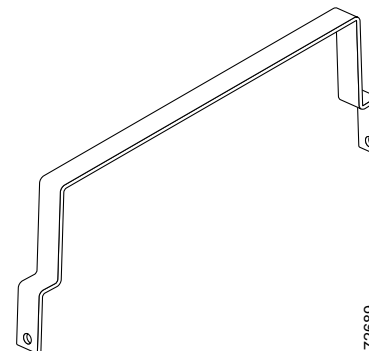
Step 1 Locate the threaded holes in the right-rear and left-rear side of the Cisco uBR10012 chassis. See Figure 1 and Figure 2.

Step 2 Align the cable-management bracket with the threaded holes

Step 3 Thread the countersunk screws through the bracket and into the chassis.

Step 4 Tighten the screws.

Figure 5 Cable-Management Bracket



6 Technical Specifications

Table 1 Part Numbers and Specifications

Description	Part Number
RF Switch (3x10)	UBR-RF
Weight	36.6 lbs (16.6 kg)
Dimensions (w x d x h)	19 x 15.5 x 4.5 (482 x 391 x 114 mm)
Operating temperature	32 to 104 °F (0 to 40 °C)
Storage temperature	-38 to 149 °F (-34 to 65 °C)
Power requirement	
AC	100 to 240 VAC, 50/60 Hz
DC	-48/-60 VDC
Requires Cisco IOS Release 12.2(4)T or later	

7 Related Documentation

- *Cisco uBR 3x10 RF Switch Installation and Cabling*
http://www.cisco.com/en/US/cable/ps2929/prod_instal_list.html
- *Cabling the Cisco uBR 3x10 RF Switch*
Cisco uBR7246VXR Router
http://www.cisco.com/en/US/cable/ps2929/products_quick_start.html
- *Cisco RF Switch Regulatory Safety Information*
http://www.cisco.com/en/US/cable/ps2929/products_regulatory_compliance_list.html
- For information about the Cisco uBR7246VXR Router, enter 78-10747-01C0 at <http://www.cisco.com/unity>
- For VCom HD4040 series power supply and power line conditioners information, enter 78-10747-01C0 at <http://www.vcom.com>