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PowerConnect B-DCX-4S Mid-Mount Rack Kit

Installation Procedure

Supporting PowerConnect B-DCX-4S Backbone

53-1001798-01



Notes, Cautions, and Warnings

NOTE

A NOTE indicates important information that helps you make better use of your computer.



CAUTION

See the safety and regulatory information that shipped with your system. For additional regulatory information, see the Regulatory Compliance Homepage on www.dell.com at the following location: www.dell.com/regulatory_compliance.



CAUTION

A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.



DANGER

A DANGER indicates a potential for property damage, personal injury, or death.

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Regulatory Model Codes: Brocade DCX-4S, Brocade DCX

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Introduction

This document provides instructions to install a PowerConnect B-DCX-4S Backbone in a telecommunications (Telco) cabinet.

Safety

Observe the caution notice in this manual. The caution notice has an ID, which is displayed in parentheses (C015). Use this ID to locate the translation of this caution notice in the *Brocade Product Safety Notices*.



CAUTION

Use safe lifting practices when moving the product. (C015)

NOTE

A fully populated PowerConnect B-DCX-4S weighs 103.50 kg (228.20 lb) with four FC8-48 port cards installed (192 ports) and requires a hydraulic or assisted lift to install it.

Installation guidelines

ATTENTION

To ensure adequate cooling, install the chassis with the air intake (nonport side) facing the cool-air aisle.

Follow these general installation guidelines:

- Provide a space that is 8 rack units (8U) high, 61.19 cm (24.09 in.) deep, and 43.74 cm (17.22 in.) wide. 1U is equal to 4.45 cm (1.75 in.).
- To allow the quick removal of all power from the chassis, use AC power sources that are easily accessible and located near the chassis.
- Verify that the additional weight of the chassis does not exceed the weight limits of the cabinet.

- Plan for cable management before installing the chassis. Cables can be managed in a variety of ways, such as by routing cables below the chassis, to either side of the chassis, through cable channels on the sides of the cabinet, or using patch panels. Refer to the *DCX-4S Backbone Hardware Reference Manual* for specific information.
- Ensure that one or two dedicated electrical branch circuits with the following characteristics are available:
 - 200-240 VAC, 50-60 Hz (refer to the corresponding Hardware Reference Manual for additional electrical specifications).
 - Protected by a circuit breaker in accordance with local electrical codes.
 - Supply circuit, line fusing, and wire size are adequate, according to the electrical rating on the chassis nameplate.
 - Grounded outlets are installed by a licensed electrician and compatible with the power cords.
 - Located close to the enterprise-class platform chassis and easily accessible.
- To maximize fault tolerance, connect each power cord to a separate power source.
- Ensure that all equipment installed in the cabinet is grounded through a reliable branch circuit connection. Do not rely on a secondary connection to a branch circuit, such as a power strip.
- Ensure that the product fans have access to a total minimum airflow of 350 cubic ft (9.91 cubic meters) per minute. Do not block intake vents. Allow for a minimum of 14 in. (35.66 cm) clearance.
- Ensure that the air temperature on the air intake side is less than 104° Fahrenheit (40° Celsius) during operation.

Installing the DCX-4S in equipment cabinet

Use the following instructions to install the DCX-4S in an equipment cabinet using the Mid-Mount Rack Kit.

Time required

Allow approximately one hour to unpack and install a chassis in a cabinet.

Tools required

The following tools are required when installing the rack-mount kit:

- Torque wrench with #2 Phillips screwdriver tip
- Flathead screwdriver
- Hydraulic or assisted lift with a minimum raise of 55 in. (140 cm) and a minimum capacity of 250 lbs (113 kg)

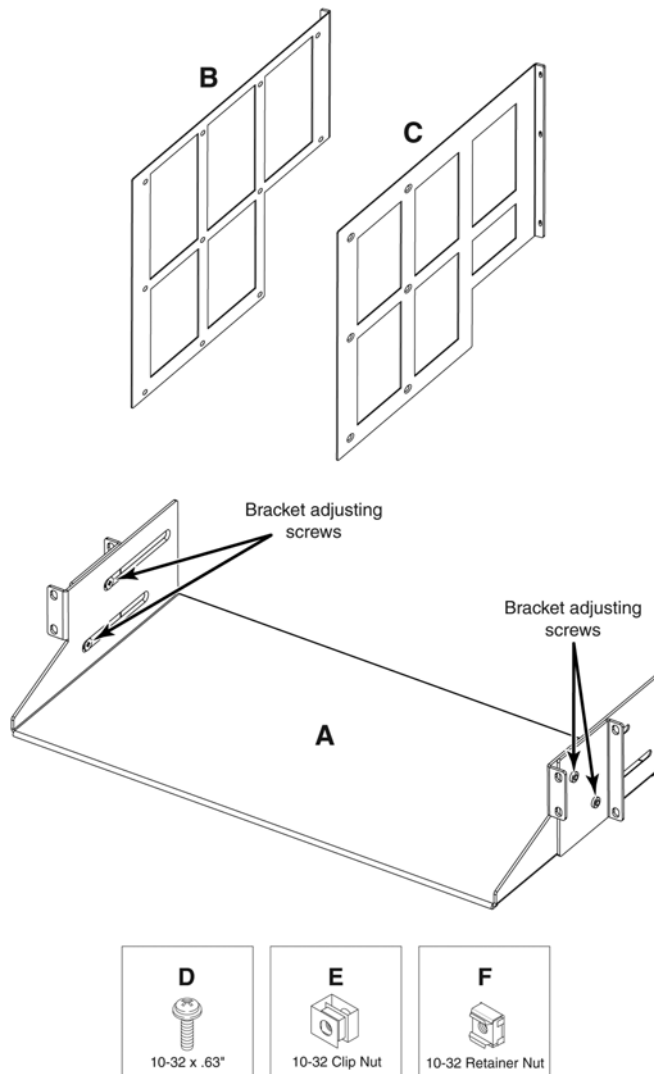
Parts list

The following parts list refers to items illustrated in [Figure 1](#) on page 5.

TABLE 1 Items supplied with the DCX-4S Mid-Mount Rack Kit

Item	Description
A	Saddle
B	Telco mid-mount mounting bracket for DCX-4S (left)
C	Telco mid-mount mounting bracket for DCX-4S (right)
D	10-32 x .63 in.(1.60 cm) Phillips screws with square cone washer for cabinets that have rails with round holes
E	10-32 clip nuts for cabinets that have rails with round holes
F	10-32 retainer nuts for cabinets that have rails with square holes

FIGURE 1 Mid-Mount Rack Kit)



Unpacking the PowerConnect B-DCX-4S

Use the following procedure to unpack the PowerConnect B-DCX-4S.



CAUTION

Use safe lifting practices when moving the product. (C015)

NOTE

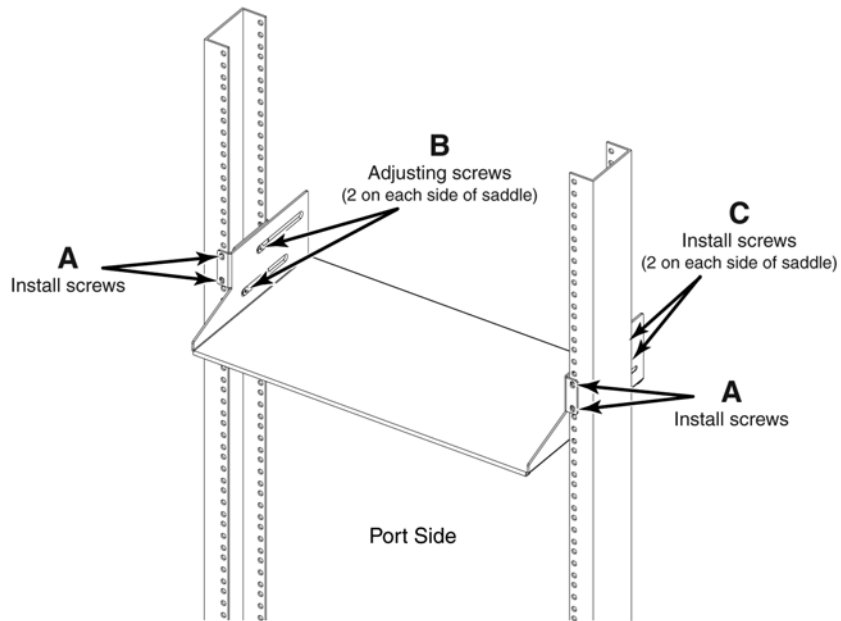
A fully populated PowerConnect B-DCX-4S weighs 103.50 kg (228.20 lb) with four FC8-48 port cards installed (192 ports) and requires a hydraulic or assisted lift to install it.

1. Unpack the PowerConnect B-DCX-4S.
 - a. Cut the bands that encircle the packaging.
 - b. Remove the lid and the kits and foam from the top of the chassis.
 - c. Lift the cardboard box off the chassis and remove the plastic bag from around the chassis. Save the packing materials for use when returning the old chassis.
 - d. Leave the chassis on top of the plastic shipping tray if the chassis must be transported to the installation location.
2. Use a pallet jack or other assisted lift to transport the new chassis to the installation area. Doorways must be wider than 36 in. (91 cm) to accommodate the chassis on the pallet.
3. Remove the rack-mount kit, accessory kit, packing foam, and antistatic plastic from the chassis and set aside.

Install cabinet hardware

1. Loosen the two 10-32 adjusting screws securing the each mid-mount bracket to the saddle ([Figure 1](#) on page 5) and slide brackets as far backward as possible.
2. Install the saddle to the equipment rack rails using the following steps while referring to [Figure 2](#) on page 7. Also refer to [Figure 3](#) on page 7 for details on securing screws to equipment rack.
 - a. Install the saddle (A in [Figure 2](#) on page 7) to the port side of the equipment cabinet rails using four 10-32 screws with square-cone washers (D in [Figure 2](#) on page 7), two screws on each side of the saddle. Tighten screws to 32 in.-lbs (36.86 cm-kg).
 - b. Move the mid-mount brackets into position so they align with the equipment cabinet mounting holes on the nonport side of the rack. Secure the mid-mount brackets to the equipment cabinet with four 10-32 screws with square-cone washers, two on each side. Tighten screws to 32 in.-lbs (36.86 cm-kg).
 - c. Tighten the two 10-32 adjusting screws on each mid-mount bracket.

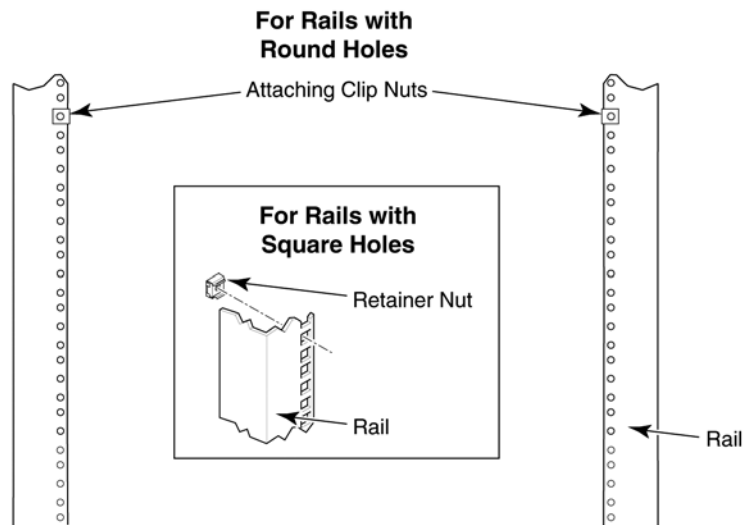
FIGURE 2 Saddle installed in equipment cabinet.



NOTE

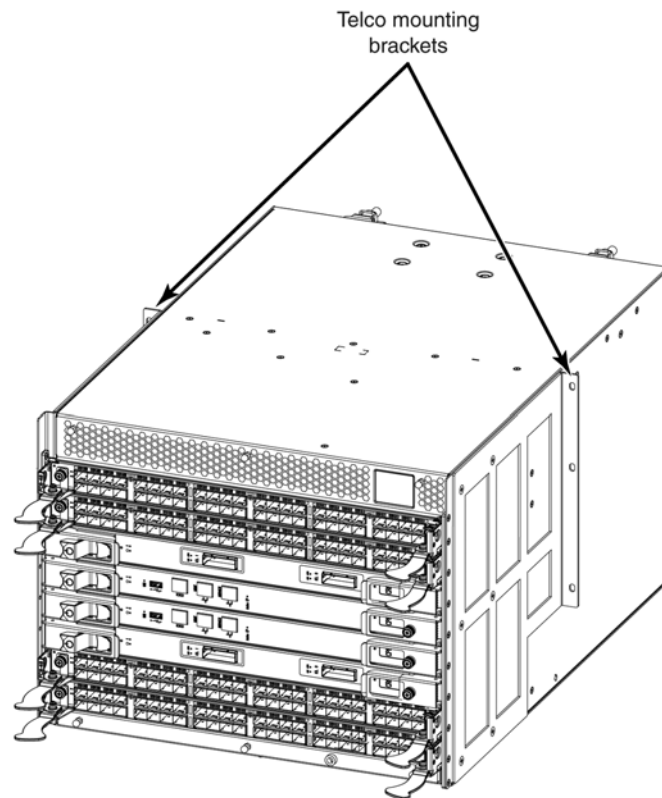
For rails with round holes, use the clip nuts (E in [Figure 1](#) on page 5) on the cabinet rails for securing 10-32 screws. For rails with square holes, use the retainer nuts (F in [Figure 1](#) on page 5). Also refer to [Figure 3](#).

FIGURE 3 Using clip nuts and retainer nuts to secure screws to cabinet rails



3. Remove the existing rack-mount brackets (B and C in [Figure 1](#) on page 5) from the DCX-4S chassis, and install the new Telco mid-mount brackets from the accessory kit. Refer to [Figure 4](#).

FIGURE 4 Telco mid-mount brackets installed on DCX-4S chassis



Install DCX-4S in cabinet

1. Ensure that the door is removed from the port side of the DCX-4S. For instructions, refer to the *DCX-4S Backbone Hardware Reference Manual*.
2. Ensure the chassis can be oriented so that the nonport side has access to intake air (cool).
3. Use a lift to raise the chassis to the correct level.

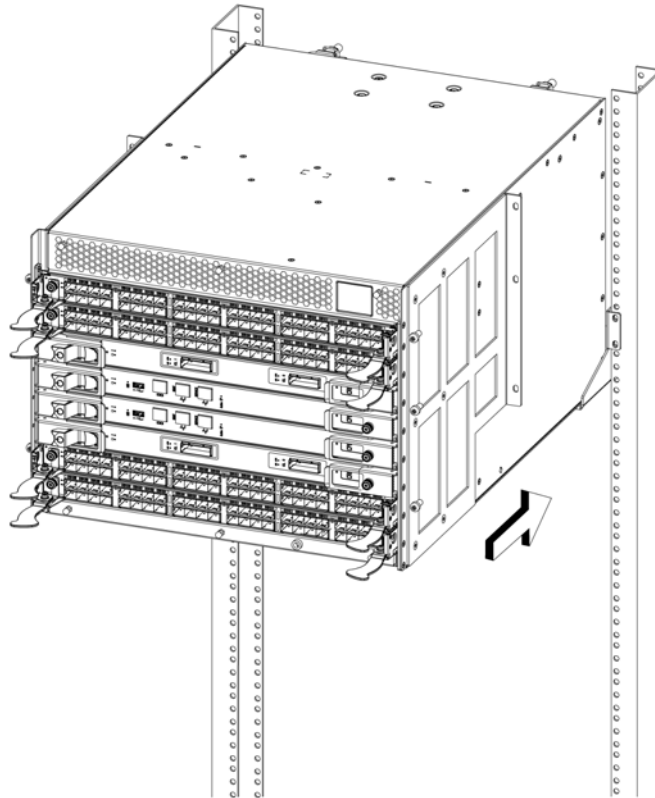


CAUTION

Use safe lifting practices when moving the product. (C015)

4. If applicable, lock the wheels of the lift.
5. Gently slide the chassis onto the saddle, ensuring that it remains supported during the transfer. Refer to [Figure 5](#) on page 9.

FIGURE 5 DCX-4S installing in mid-mount saddle

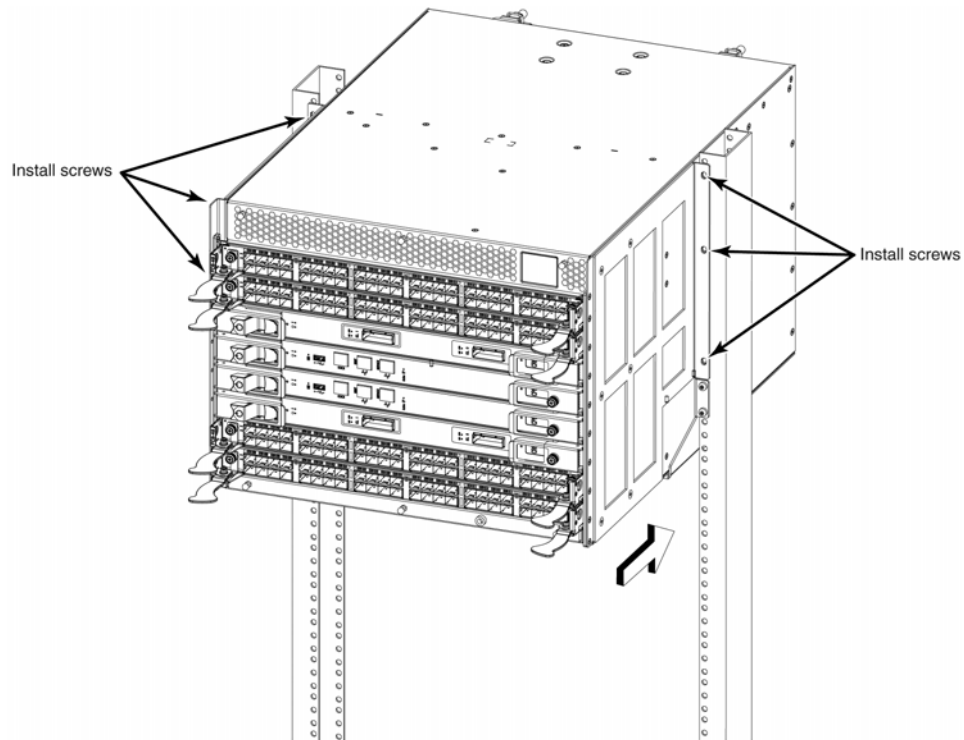


6. Secure the DCX-4S chassis to the cabinet using six 10-32 screws with square-cone washers, three screws for each mounting bracket attached to the DCX-4S. Refer to [Figure 6](#) on page 10. Tighten screws to 32 in.-lbs (36.86 cm-kg)

NOTE

Screws, clip nuts, and retainer nuts for mounting the DCX-4S to the equipment rack are located in the DCX-4S hardware accessory kit.

FIGURE 6 DCX-4S installed in mid-mount saddle



NOTE

For rails with round holes, use the clip nuts on the cabinet rails for securing 10-32 screws. For rails with square holes, use the retainer nuts (E and F in [Figure 1](#) on page 5). Also refer to [Figure 3](#) on page 7.

7. Install the DCX-4S door using instructions in the corresponding *DCX-4S Backbone Hardware Reference Manual*.