Switch-IB™ SB7700 Quick Start Guide

Mechanical Installation

Installing the Switch

Planning the system's placement in the rack

Before mounting the system to the rack, select the way you wish to place the system. Pay attention to the airflow within the rack cooling, connector and cabling options.

While planning how to place the system, consider the two installation options shown in Figure 2, and review the following points:

- Make sure the system air flow is compatible with your installation selection. It is important to keep the airflow within the rack in the same direction.
- Note that the part of the system to which you choose to attach the rails (the front panel direction, as demonstrated in Option 1 or the FRUs direction, as demonstrated in Option 2) will determine the system's adjustable side. The system's part to which the brackets are attached, will be adjacent to the cabinet.
- The FRU side is extractable. Mounting the rack brackets inverted to the FRU side (Option 2), will allow you to slide the FRUs, in and out.

Rack Depth Range

MTEF-KIT-A

Short rack (17"-24") and Standard rack (24"-34")

Rail Kit Components

2x Rack mount rails (A)

2x Rack mount brackets (B)

2x Rack mount blades (C)

8x M6 Standard cage nuts and 8x M6 Standard pan-head Phillips screws (D)

4x Phillips100 DEG F.H TYPE-I ST.ST 6-32 X 1/4 screw with a round patch (E)

Figure 1: Rail Kit Components

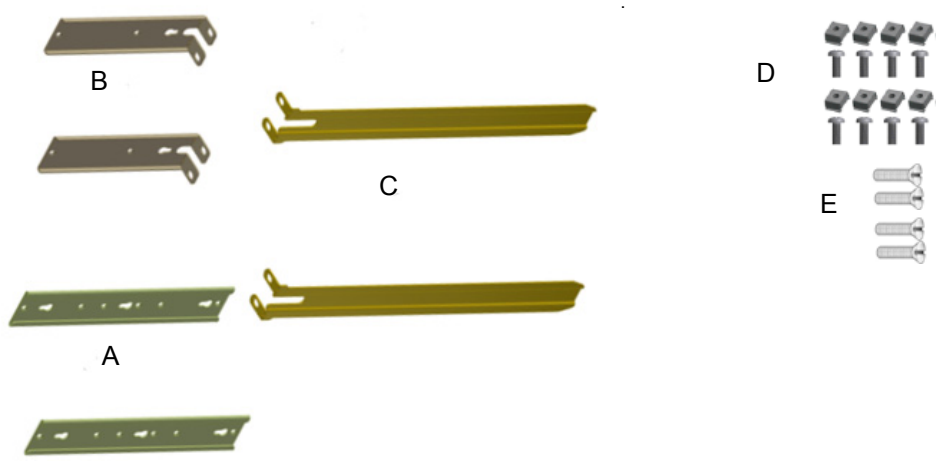

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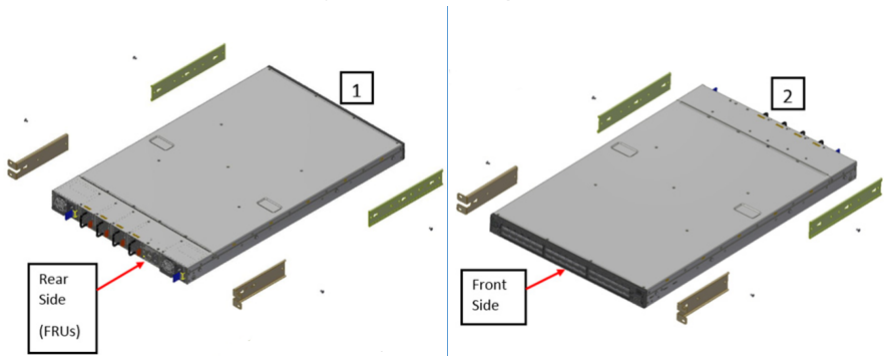
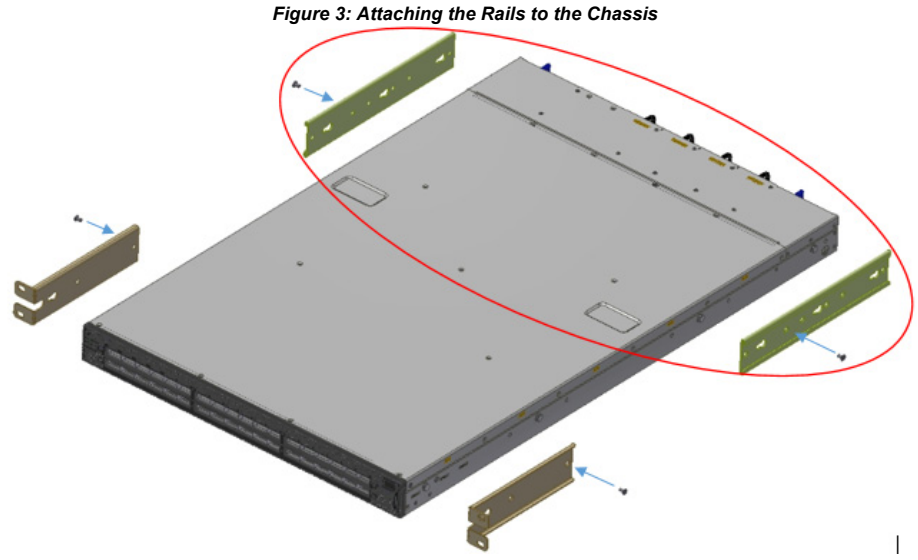
Figure 2: Installation Options



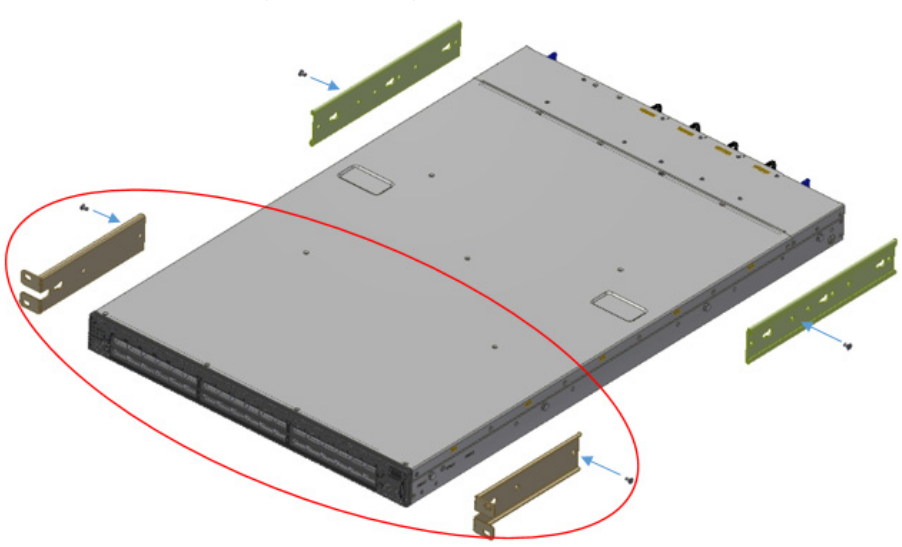
1. Attach the left and right rack mount rails (A) to the switch, by gently pushing the switch chassis' pins through the slider key holes, until locking occurs. Secure the chassis in the rails, screwing 2 flat head Phillips screws (E) in the designated points. See Figure 3.

Figure 3: Attaching the Rails to the Chassis



2. Attach the left and right rack mount brackets (B) to the switch, by gently pushing the switch chassis' pins through the slider key holes, until locking occurs. Secure the system in the brackets by screwing the remaining 2 flat head Phillips screws (E). See Figure 4.

Figure 4: Attaching the Brackets to the Chassis



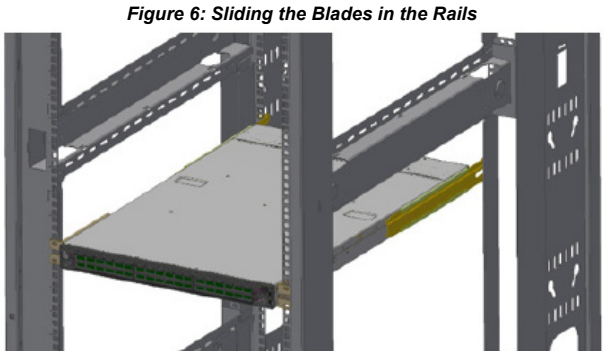
3. Install 8 cage nuts in the desired 1U slots of the rack: 4 cage nuts in the non-extractable side and 4 cage nuts in the extractable side. Note that while each rack U (unit) consists of three holes, the cage nut should be installed vertically with its ears engaging the top and bottom holes only.

While your installation partner is supporting the system's weight, perform Steps 4-6:

4. Mount the system into the rack enclosure and attach the brackets installed on the system to the rack's posts. Secure the brackets to the rack's posts by inserting four M6 screws in the designated cage nuts. See Figure 5. Do not tighten the screws yet.
5. Slide the two blades into the left and right rails (see Figure 6), and adjust them to fit your rack's depth. Use four M6 screws (D) to fix the blades into the rack. Do not tighten the screws yet.
6. Secure the system in the rack by tightening the 8 screws inserted in Step 4 and Step 5 with a torque of Min 2Nm.

Figure 5: Attaching the Brackets to the Rack

Figure 6: Sliding the Blades in the Rails



Grounding the Switch

1. Make sure that the rack is properly grounded and that there is a valid ground connection between the chassis of the switch and the rack. Test the ground using an Ohm meter.
2. Some national and/or local codes may require IT components to be bonded and externally grounded (not including the power cord ground). You must follow all national and local codes when installing this equipment.

Connecting Switch to Power

1. Plug in the power cables.
2. Check the Status LEDs and confirm that all of the LEDs show status lights consistent with normal operation
3. You can start connecting all of the cables to the switch..

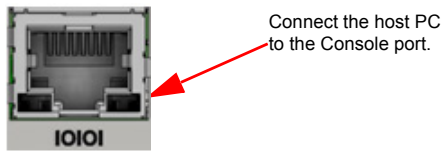
Any yellow or red status LEDs are cause for concern and must be dealt with immediately. It can take up to 5 minutes to boot up, during which time the status LED may indicate red.

Configuring the System

This section provides the initial configuration steps for the switch.

1. Connect the host PC to the Console (RJ-45) port of the switch system using the supplied cable. The Console ports for the switches are shown below as examples.

Figure 7: The Switch Console Port



Make sure to connect to the Console RJ-45 port of the switch and not to the (Ethernet) MGT port(s).

No remote IP connection is available at this stage.

2. Configure a serial terminal program (for example, HyperTerminal, minicom, or Tera Term) on your host PC with the settings described in Table 1.

Table 1 - Serial Terminal Program Configuration

Parameter	Setting
Baud Rate	115200
Data bits	8
Stop bits	1
Parity	None
Flow Control	None

3. Log in (from a serial terminal program) as admin and using “admin” as the password to start the Mellanox configuration wizard.
4. Go through the Mellanox configuration wizard. Table 2 shows an examples of DHCP, zeroconf, and static IP wizard sessions.

Table 2 - Configuration Wizard Session - IP Configuration by DHCP Example

Wizard Session Display	Comments
Mellanox configuration wizard Do you want to use the wizard for initial configuration? yes	You must perform this configuration the first time you operate the switch or after resetting the switch. Type ‘y’ and then press <Enter>.
Step 1: Hostname? [switch]	If you wish to accept the default hostname, then press <Enter>. Otherwise, type a different hostname and press <Enter>.
Step 2: Use DHCP on mgmt0 interface? [no] yes	Perform this step to obtain an IP address for the switch. (mgmt0 is the management port of the switch.) If you wish the DHCP server to assign the IP address, type ‘yes’ and press <Enter>. If you type ‘no’ (no DHCP), then you will be asked whether you wish to use the ‘zeroconf’ configuration or not. If you enter ‘no’ (no Zeroconf), then you need to enter a *static* IP, and the session will continue.
Step 3: Enable IPv6? [yes]	The management interface will be able to use IPv6 addresses.
Step 4: Enable IPv6 auto-config (SLAAC) on mgmt0 interface? [no]	This turns on auto-configuration of the IPv6 addresses. This is unsuitable for DHCPv6.
Step 5: Enable DHCPv6 on mgmt0 interface? [no]	To enable DHCPv6 on the MGMT0 interface.
Step 6: Admin password (Press <Enter> to leave unchanged)? <new_password> Step 6: Confirm admin password? <new_password>	To avoid illegal access to the machine, please type a password and then press <Enter>. Then confirm the password by re-entering it. Note that password characters are *not* printed.
You have entered the following information: <A summary of the configuration is now displayed.> To change an answer, enter the step number to return to or hit <enter> to save changes and exit. Choice: <Enter> Configuration changes saved.	The wizard displays a summary of your choices and then asks you to confirm the choices or to re-edit them. Either press <Enter> to save changes and exit, or enter the configuration step number that you wish to return to. Note: To re-run the configuration wizard run the command “configuration jump-start” in Config mode.

Table 3 shows an example of static IP configuration for mgmt0 interface.

Table 3 - Configuration Wizard Session- Static IP Configuration

Configuration Wizard Session- Static IP Configuration"
Mellanox configuration wizard Do you want to use the wizard for initial configuration? y Step 1: Hostname? [switch] Step 2: Use DHCP on mgmt0 interface? [yes] no Step 3: Use zeroconf on mgmt0 interface? [no] Step 4: Primary IP address? [for example 192.168.10.4] 10.10.10.10 Mask length may not be zero if address is not zero (interface eth0) Step 5: Netmask? [0.0.0.0] 255.255.255.0 Step 6: Default gateway? [for example 192.168.10.1] 10.10.10.255 Step 7: Primary DNS server? Step 8: Domain name? Step 9: Enable IPv6? [yes] Step 10: Enable IPv6 autoconfig (SLAAC) on mgmt0 interface? [no] Step 11: Admin password (Enter to leave unchanged)? To change an answer, enter the step number to return to. Otherwise hit <enter> to save changes and exit. Choice: Configuration changes saved. To return to the wizard from the CLI, enter the "configuration jump-start" command from configure mode. Launching CLI... switch>

Table 4 shows an example of a Zeroconf wizard session.

Table 4 - Configuration Wizard Session – Zeroconf Configuration

Wizard Session Display - IP Zeroconf Configuration (Example)
Mellanox configuration wizard Do you want to use the wizard for initial configuration? y Step 1: Hostname? [switch] Step 2: Use DHCP on mgmt0 interface? [yes] no Step 3: Use zeroconf on mgmt0 interface? [no] yes Step 4: Default gateway? [For example:192.168.10.1] Step 5: Primary DNS server? Step 6: Domain name? Step 7: Enable IPv6? [yes] Step 8: Enable IPv6 autoconfig (SLAAC) on mgmt0 interface? [no] Step 9: Admin password (Enter to leave unchanged)? To change an answer, enter the step number to return to. Otherwise hit <enter> to save changes and exit. Choice: Configuration changes saved. To return to the wizard from the CLI, enter the “configuration jump-start" command from configure mode. Launching CLI... switch>

5. Before attempting a remote (for example, SSH) connection to the switch, check the mgmt0 interface configuration. Specifically, verify the existence of an IP address. To check the current mgmt0 configuration, enter the following commands:

```
switch > enable
switch # configure terminal
switch (config) # show interfaces mgmt0
```

6. Run the command:

```
show version
```

7. Compare the results of this command with the latest version for your switch posted on the support page for your switch.

For full Installation Instructions and the full User Manual go to the Mellanox web page at: www.mellanox.com > Products > Select your product > Select the document.

Mellanox Tech Support

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