
BANDIT III Hardware Installation Guide

2nd of 3 QuickStart Guides for the BANDIT III

The BANDIT III™ is a ROHS-compliant device in the BANDIT™ product family. This guide presents information and procedures for a standard installation of the BANDIT III hardware.

If you have questions or concerns after you have followed these procedures, contact Encore Networks, Inc., at support@encorenetworks.com, 703-787-4625 (fax), or 703-318-4350 (voice).

Gather all required information. Before you start these procedures, consult your network administrator to determine the information required to set the BANDIT III up for use in your network. Use your BANDIT III's [Site Planning Worksheets](#) as checklists for this information. Examples of information needed include the following:

- The BANDIT device's IP address
- The device's site name
- The device's passwords
- The device's VPN configuration
- Interface types (for example, DTE or DCE), protocols, and requirements for the device's ports
- Network and routing functions the device will perform
- Other pertinent network information

In addition, perform the procedures in [Unpacking the BANDIT Product and Preparing It for Installation](#).

To install the BANDIT III hardware, see the following:

- [Section 2.1, Preparing for Installation](#)
- [Section 2.2, Preparing Hardware Support for Wireless Networks](#)
- [Section 2.3, Setting Up the Hardware](#)

Note: To review the chassis hardware, see [Section 1.1, The BANDIT III Chassis](#), in the [BANDIT III Hardware Description](#).

After you have installed the hardware, see [Section 2.4, Preparing for Software Configuration](#).

2.1 Preparing for Installation

The BANDIT III arrives ready to plug in and use. However, it is best to review details of preparing the site, the chassis, and the cables. For this information, see the document [Unpacking the BANDIT Product and Preparing It for Installation](#).

At the least, do the following:

Unpack the chassis and components from the shipping box. Make sure you have all the parts:

- A paper copy of this *Installation Guide*
- A CD of the BANDIT documentation
- A BANDIT III chassis
- An RJ-11 modem cable
- If you ordered a BANDIT III that uses DC input power: A DC power connection set ([Figure 2-1](#), [Figure 2-2](#), and [Figure 2-3](#))

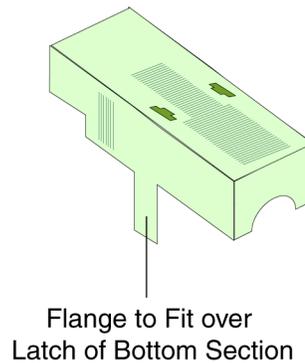


Figure 2-1. Top Section of Connector Shell

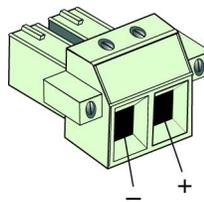


Figure 2-2. DC Power Connector

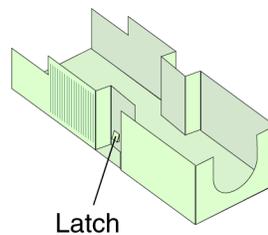


Figure 2-3. Bottom Section of Connector Shell

- If you ordered a BANDIT III that uses AC input power: An external AC power supply that accepts 100–240 VAC at 47–63 Hz input and delivers 5 VDC at 3 amps output.

Note: Shipments of an AC BANDIT III chassis within North America include a power cable for an AC outlet.

Shipments of an AC chassis outside North America do not include a power cable. Contact your local or regional distributor for a cable that meets the specifications of the country in which the BANDIT will be used. Use that cable to connect the BANDIT III's AC power supply to an AC power outlet.

- Any additional accessories that you ordered

Note: The connection between the BANDIT III and its management terminal (for example, a PC) uses a straight-through DB9-to-DB9 cable. This cable is not included with the BANDIT III; you must supply this cable.

2.2 Preparing Hardware Support for Wireless Networks

You select a CDMA or GSM internal wireless card when you order a BANDIT chassis. If you wish, the BANDIT III's expansion port can hold a second wireless card. The two wireless cards can use the same technology or can use different technologies.¹

A GSM wireless card must hold the appropriate Subscriber Identity Module (SIM) for access to the carrier's GSM wireless network. Note the following:

- In a new BANDIT product, the proper SIM has already been installed in your BANDIT's GSM card. In this case, continue to [Section 2.3, Setting Up the Hardware](#).
- If you change GSM carriers, you will need to install a SIM from the new carrier. In that case, follow the instructions in [Changing the SIM in a BANDIT Product's GSM Card](#).

2.3 Setting Up the Hardware

Use the following procedure to connect cables to user equipment and prepare the BANDIT III for configuration and use.

Note: See the [BANDIT III Hardware Description](#) and the [BANDIT III Hardware Specifications](#) for diagrams of pinouts.

- 1 Place the BANDIT III chassis on a tabletop or shelf.
- 2 Connect an earth ground wire to the chassis, as follows: Attach a (minimum) 12 AWG wire to the earth ground bolt (next to the safety ground symbol), on the extreme left rear of the chassis (recall [Figure 1-4](#) through [Figure 1-9](#) in [The BANDIT III Chassis](#)). Use a ring terminal, such as an AMP (part number 36160), for this connection.

 **Warning:** An earth ground must connect to the chassis so that the chassis remains grounded even when it is not receiving power.

1. When you order a GSM card, you specify whether it uses GPRS or EDGE technology. A CDMA card uses CDMA or EVDO CDMA technology.

- 3 Connect the BANDIT III's ports to their network devices. For example, connect the LAN ports, WAN port, modem port, serial port(s), and expansion port to the network devices, as follows:

Warning: If you need to disable the BANDIT's plug-and-play mode, do not connect the WAN port or the LAN ports to equipment until after you have completed this entire procedure.²

- a Use an Ethernet 10-Base-T cable to connect the WAN port to the WAN equipment.
 - b Use an Ethernet 10-Base-T cable to connect each LAN port to its equipment.
 - c If your BANDIT III chassis has four IDU serial ports, connect the IDU serial ports to the network equipment.
 - d Connect the dial backup modem port to the RJ11 phone jack you plan to use. (Encore Networks does not supply the modem cable.)
 - e Connect additional network equipment to the remaining ports on the BANDIT device. This includes any port in the expansion slot.
- 4 Use a DB9-to-DB9 cable to connect the device's DB9 Supervisory port to your PC's DB9 port.
 - 5 If the BANDIT III will use only AC input power, go to [Step 12](#).
 - 6 If the BANDIT III will use DC input power, connect the chassis to a power source supplying -12/-24 VDC or -24/-48 VDC, as described in [Step 7](#) through [Step 11](#).

Note: The power source must supply -12/-24 VDC or -24/-48 VDC.

- 7 Make sure the BANDIT III is disconnected from **all** power sources.
- 8 Make sure an earth ground wire is connected to the chassis frame, as described in [Step 2](#).
- 9 Do the following:
 - a Turn the DC power connector (the DC power plug) on its side, with the screwheads facing your left and with the prongs pointing away from you (as shown in [Figure 2-4](#)).

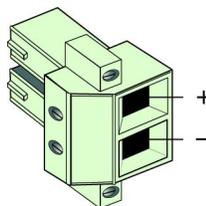


Figure 2-4. DC Power Connector, on Side

- b Note the following:
 - The top post is + (for the positive wire).
 - The bottom post is – (for the negative/return wire).

2. Plug-and-play mode is disabled by default in all BANDIT chassis except the BANDIT IP.

- c** Connect a (minimum) 14 AWG two-wire input cable to the green two-pin power connector (that is, the power plug). Make sure you connect the correct wire to each post. [Figure 2-5](#) shows the plug with the cables attached.

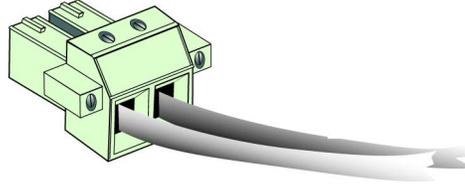


Figure 2-5. DC Power Connector with Wires

- 10** A shell cover is provided with the DC power connector, to provide strain relief for the wires. Restrain the wires against the lower half of the shell, and place the shell around the connector, as described in the following substeps:
- a** Seat the DC power connector (the plug) into the bottom half of the shell. The connector will seat into the shell in only one way, as shown in [Figure 2-6](#).

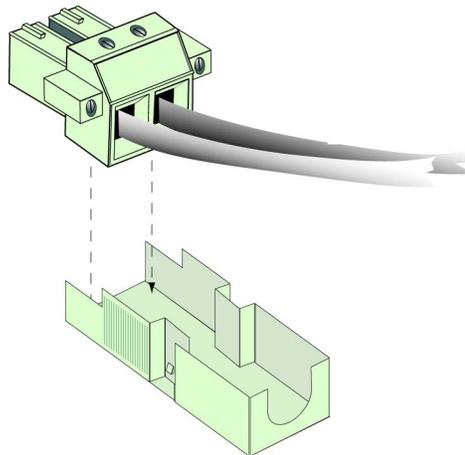


Figure 2-6. Cabled DC Power Connector and Bottom Section of Shell

Note: The top and bottom sections of the shell differ. The top section (recall [Figure 2-1](#)) has flanges to fit against the bottom section's latches (recall [Figure 2-3](#)).

- b** With the plug seated into the bottom section, place the top section of the shell onto the bottom section. Do not yet snap them into place. ([Figure 2-7](#) shows how the top and bottom sections fit together around the DC power plug.)

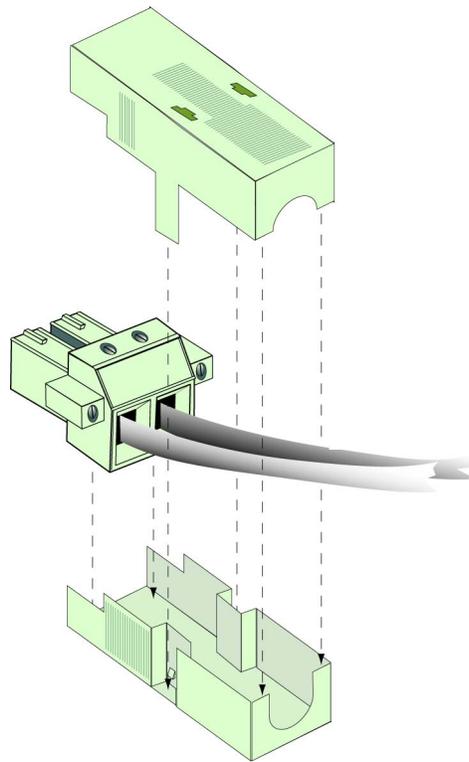


Figure 2-7. Top Section of Shell above Cabled DC Power Connector and Bottom Section

- c** Make sure the DC power connector sits properly in the bottom section. Then snap the top and bottom sections together, as shown in [Figure 2-8](#).

Note: Make sure the cables go through the cable hole.

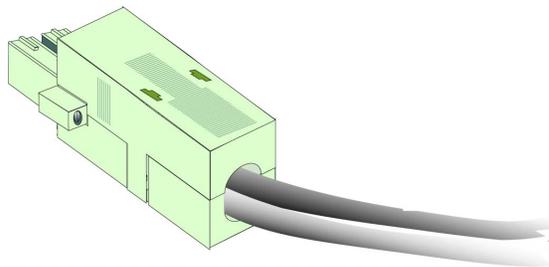


Figure 2-8. Closed Shell Assembly

Note: If you need to take the case apart, grasp each flange of the top section and gently pull them away from the latches on the bottom section. Then pull the top section off the bottom section. Repeat [Step 10a](#) through [Step 10c](#) to reassemble the connector case.

11 When the shell assembly has snapped into place around the DC plug, do the following:

- a** Flanges on the plug ([Figure 2-9](#)) allow it to fit into the DC power input port on the backplate of the BANDIT III in only one way (recall, for example, [Figure 1-9](#) in [Section 1.1, The BANDIT III Chassis](#), in the [BANDIT III Hardware Description](#)). You may need to turn the plug over to fit it into the port. If this is the case, rotate the shell assembly 180° around the axis corresponding to the DC power cable ([Figure 2-9](#) and [Figure 2-10](#)).

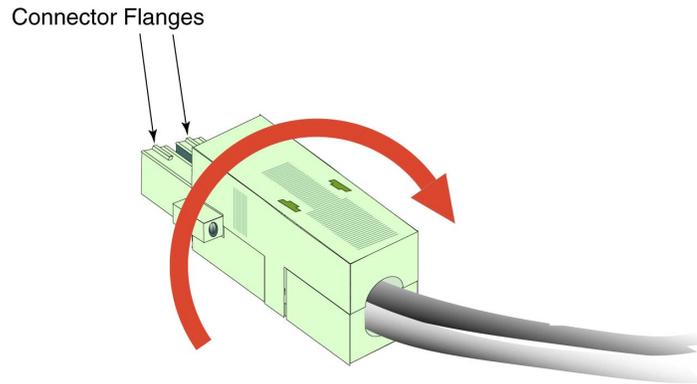


Figure 2-9. Rotate DC Shell Assembly 180 Degrees around Axis of Power Cable

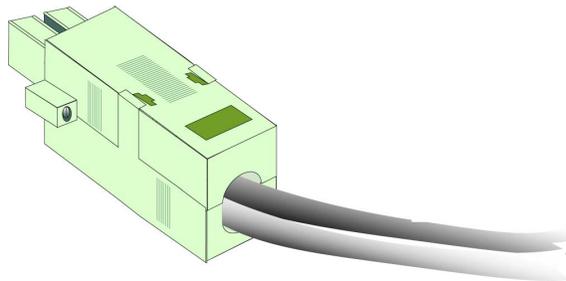


Figure 2-10. DC Shell Assembly Rotated 180 Degrees

- b** Plug the DC power connector (the shell plug) into the DC power input port on the rear of the BANDIT III chassis.
- c** Then connect the other end of the DC power cable to a -24/-48 volt DC or -12/-24 volt DC power source.

Note: The power source must supply -12/-24 VDC or -24/-48 VDC.

- ! **Caution:** The DC power source must match the DC input power rating indicated on the BANDIT III chassis.

- ❖ The BANDIT III chassis powers up.

12 If the BANDIT III will use AC input power (instead of DC power or in addition to DC power), connect the AC power supply to the chassis, and then connect the AC power supply to a power outlet supplying 100–240 VAC at 47–63 Hz.

- ❖ The BANDIT III chassis powers up.

13 The BANDIT III's hardware installation is complete. Continue to [Section 2.4, Preparing for Software Configuration](#).

2.4 Preparing for Software Configuration

When you have finished installing the BANDIT III hardware, you are ready to configure the software. Refer to your BANDIT III's [Site Planning Worksheets](#); then select one of the following:

- If the BANDIT III will be configured automatically over a Frame Relay network, see [Using FastCONNECT](#).
- If the BANDIT III will be configured manually, via a direct connection to its Supervisory port, refer to the following documents:
 - [Using the ELIOS Software](#)
 - [Activating a Wireless Card in a Cellular Carrier Network](#)
 - [BANDIT II and BANDIT III Quick Configuration Guide](#)
 - [BANDIT II and BANDIT III Expanded Configuration Guide](#)