Installing the Compact Subscriber Module on the Cisco 8110 Broadband Network Termination Unit

This document contains the following sections:

Unpacking the Compact Subscriber Module

Upon receipt of, and before opening the Compact Subscriber Module (CSM), inspect the package for any damage that might have occurred during shipping. If the package shows any signs of external damage or rough handling, notify your carrier's representative.

When unpacking the CSM be sure to keep all original packing materials. They might be needed for storing, transporting, or returning the product.

Note All products returned to Cisco, under warranty, must be packed in their original packing materials.

The CSM package should include the following:

- CSM unit
- CSM Installation Manual

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Caution   All modules are susceptible to electrostatic discharge (ESD) even while installed. Take the necessary precautions to minimize electrostatic damage while handling modules.

Basic Hardware Features

The CSM is designed to be installed into the CISCO 8110 front slots, and operates as a CES (Circuit Emulation Service) module of the CISCO 8110 . It includes 4 E1 or T1 ports.

A standard CISCO 8110 configuration with CES module will include one LIM and up to two CSMs in slots 1 and/or 3. Each of these modules has handles for insertion and extraction from the unit.

Cable Connections

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Caution   The E1/T1 connections are restricted to intra-building use only. Do not connect to exposed plant.

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Caution   Electrical cables should be 26 AWG or lower.

To connect your CISCO 8110 unit electrical RJ-45 interfaces:

Step 1   Prepare an appropriate cable with appropriate connector on the CISCO 8110 side

The RJ-45 pin out should be as follows:

T1/E1 Pinouts

Pin	Signal
1	Rx Tip
2	Rx Ring
4	Tx Tip
5	Tx Ring

Step 2   Attach the cables into the CSM ports on the front panel of your CISCO 8110 unit.

Step 3   Attach the other end of the cable into the TDM equipment.

CSM Installation

This section contains the following:

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Installing a Compact Subscriber Module (CSM)

To install a CSM in your CISCO 8110 :

Step 1 Verify that the module state is OOS (Out of Service), using the console or the in-band management application.

Step 2 Place the module's card edges into the right or left module guides at the front of the CISCO 8110

Step 3 Slide in the module until it makes contact with the backplane, then push firmly to mate the connectors solidly with the backplane.

Step 4 Secure the module's front panel to the CISCO 8110 chassis using the mounting screws on the right and left of the module's front panel.

Step 5 Securely install and fasten each module to facilitate the installation of the one next to it.

Step 6 Configure the module type to CES, using the console or the in-band management application.

Step 7 Change the module state to active, using the console or the in-band management application.

Removing a Compact Subscriber Module (CSM)

To remove a CSM in your CISCO 8110 :

Step 1 Change the module state to OOS (Out Of Service) using the console, or the in band management application

Step 2 Unscrew the right and left mounting screws on the front panel of the module.

Step 3 Remove the module by pulling evenly its mounting screws.

Step 4 Use faceplate panels, supplied with the CISCO 8110 Unit to protect unused slots from dust and reduce electromagnetic radiation.

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Caution The Cisco 8110 ventilation mechanism is not effective if empty slots are not covered with faceplate panels.

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Caution If you store modules outside the CISCO 8110 for an extended period of time, place them in the original packaging (or equivalent packaging providing ESD protection).

Replacing Modules

When changing from one type of module to another (e.g. from CSM to E3) use the following procedure:

Step 1   Change the module state to OOS (Out of Service), using the console or the in-band management application.

Step 2   Remove the module

Step 3   Insert the new module.

Step 4   Change the module type by using the console or the in-band management application.

Step 5   Change the module state to active, using the console or the in-band management application

Table 1   Front Panel CSM LEDs

LEDIndicator	Status	Explanation
Active	Off	Off line.
	On	On line.
	Flashing	Module's failure.
ATM Tx	On Weak	No cells transmitted by the CSM.
	On Strong	Cells are being transmitted by the CSM.
ATM Rx	On Weak	No cells detected by the CSM.
	On Strong	ATM cells detected by the CSM.
E1/T1 Alarm	On	LOS for UDT with "all facility alarms monitoring" disabled.
		Any facility alarm for SDT and UDT with "all facility alarms monitoring" enabled.
	Off	No LOS for UDT with "all facility alarms monitoring" disabled.
		No facility alarm for SDT and UDT with "all facility alarms monitoring" enabled.
	Flashing - once	Errored Second
E1/T1 Status	ON	Signal present.
	OFF	No signal.

NOTES:

1. OUT of SERVICE - All LEDs are off

2. ACTIVE MODE - Active, ATM and E1/T1 Status LEDs are active (for no alarm)

3. STANDBY MODE - All LEDs are off

4. INITIALIZATION TEST- E1/T1 status LEDs are flashing

Obtaining Documentation

World Wide Web

You can access the most current Cisco documentation on the World Wide Web at http://www.cisco.com, http://www-china.cisco.com, or http://www-europe.cisco.com.

Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM is updated monthly. Therefore, it is probably more current than printed documentation. The CD-ROM package is available as a single unit or as an annual subscription.

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Nonregistered CCO users can order documentation through a local account representative by calling Cisco's corporate headquarters (California, USA) at 408 526-4000 or, in North America, call 800 553-NETS (6387).

Obtaining Technical Assistance

Cisco provides Cisco Connection Online (CCO) as a starting point for all technical assistance. Warranty or maintenance contract customers can use the Technical Assistance Center. All customers can submit technical feedback on Cisco documentation using the web, e-mail, a self-addressed stamped response card included in many printed docs, or by sending mail to Cisco.

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You can access CCO in the following ways:

- WWW: www.cisco.com

- Telnet: cco.cisco.com

- Modem using standard connection rates and the following terminal settings: VT100 emulation; 8 data bits; no parity; and 1 stop bit.

  – From North America, call 408 526-8070

  – From Europe, call 33 1 64 46 40 82

You can e-mail questions about using CCO to cco-team@cisco.com.

Technical Assistance Center

The Cisco Technical Assistance Center (TAC) is available to warranty or maintenance contract customers who need technical assistance with a Cisco product that is under warranty or covered by a maintenance contract.

To display the TAC web site that includes links to technical support information and software upgrades and for requesting TAC support, use www.cisco.com/techsupport.

To contact by e-mail, use one of the following:

Language	E-mail Address
English	tac@cisco.com
Hanzi (Chinese)	chinese-tac@cisco.com
Kanji (Japanese)	japan-tac@cisco.com
Hangul (Korean)	korea-tac@cisco.com
Spanish	tac@cisco.com
Thai	thai-tac@cisco.com

In North America, TAC can be reached at 800 553-2447 or 408 526-7209. For other telephone numbers and TAC e-mail addresses worldwide, consult the following web site: http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml.

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We appreciate and value your comments.

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