APPENDIX B

Troubleshooting the Universal Access Server

This appendix describes how to troubleshoot the Cisco AS5200 universal access server by referring to the LEDs on the chassis, feature cards, and modules.

Refer to the appropriate illustration for the location of the LEDs:

- Access server rear panel, Figure B-1
- Dual T1/PRI card, Figure B-2
- Dual E1/PRI card, Figure B-3
- V.34 12-port module, Figure B-4
- 56K 12-port module, Figure B-5
- V.110 12-port module, Figure B-6

Figure B-1 Access Server Rear Panel LEDs

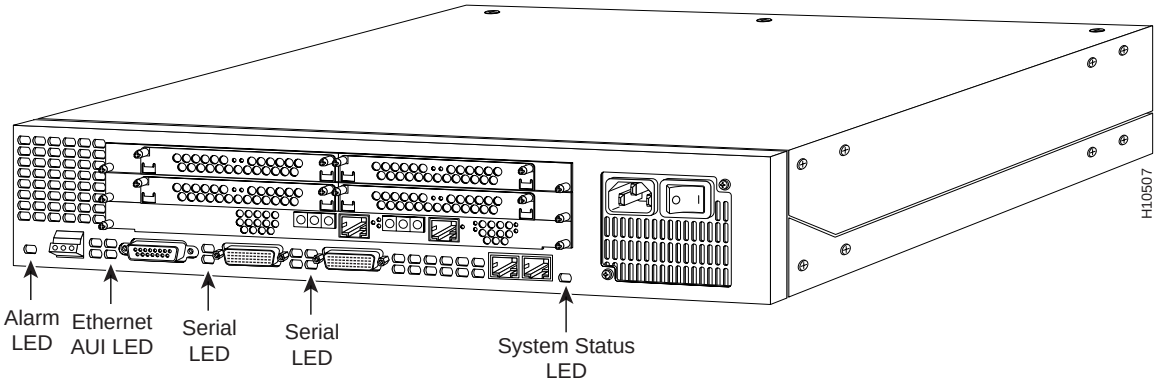

Figure B-2 Dual T1/PRI Card LEDs

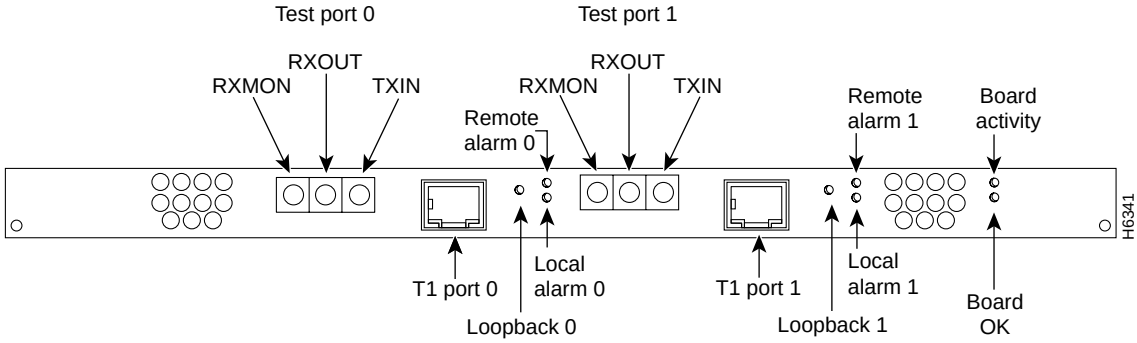

Figure B-3 Dual E1/PRI Card LEDs

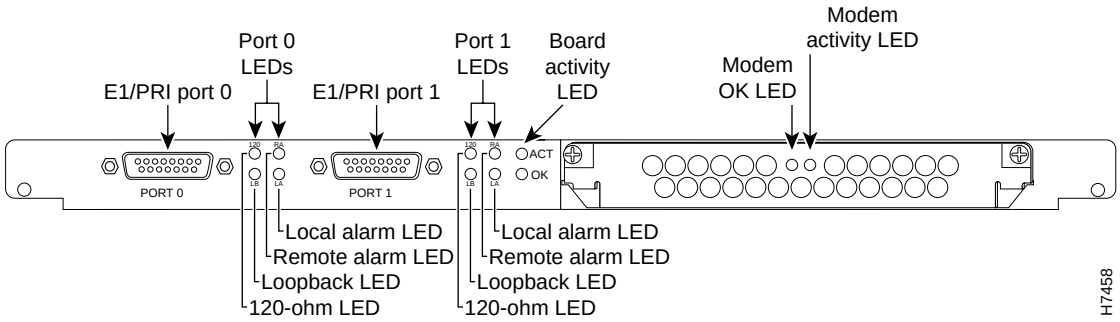

Figure B-4 V.34 12-Port Module LEDs

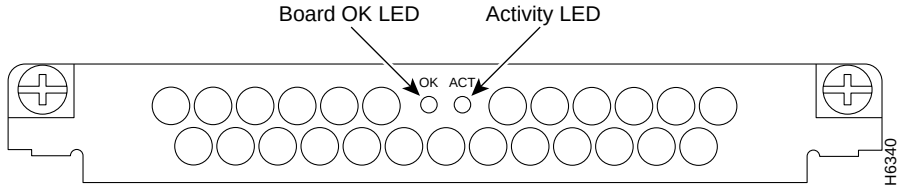

Figure B-5 56K 12-Port Module LEDs

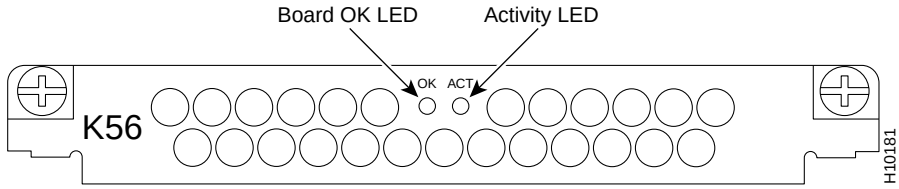

Figure B-6 V.110 12-Port Module LEDs

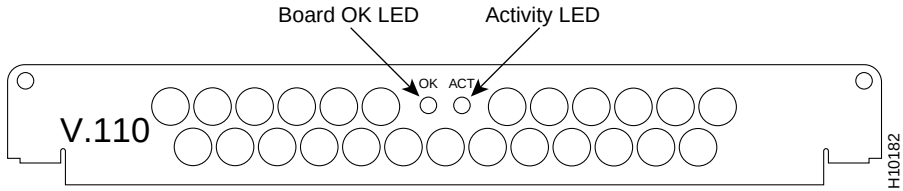

Table B-1 describes the LEDs on the chassis, feature card, and modules. The LEDs indicate the current operating condition of the access server. You can observe the LEDs, note any fault condition that the access server is encountering, and then contact your system administrator or a customer service representative, if necessary. Refer to the section "Getting Help" at the end of the this appendix for more information.

Table B-1 LEDs

LED Location	LED	State	Description
Access server rear panel	Alarm	On	An alarm error has been detected.
	Ethernet AUI	Flickering	The Ethernet LAN connection is transmitting and receiving data normally.
		Off	The Ethernet LAN connection is not transmitting or receiving data. Check the Ethernet cable connections.
	Serial	Flickering	The associated serial port connection is transmitting and receiving data normally.
	System Status	Off	The power is OFF or the system has not booted.
		On	The system is operating normally.
		Blinking	A memory failure has occurred.

Table B-1 LEDs (Continued)

LED Location	LED	State	Description
Dual T1/PRI card	Activity	Flickering	The CSU/DSU in the card is communicating with a remote CSU/DSU.
	Board OK	On	The T1/PRI card has passed initial power-ON diagnostics tests and is operating normally.
	Loopback	On	A local or remote loopback diagnostic test is running on the associated T1 port.
	Remote alarm	On	A remote alarm indication signal (AIS) has been received on the associated T1 port. The AIS is received when there has been a loss of signal (LOS).
	Local alarm	On	The associated T1 port has detected local loss of signal (LOS) or out of frame (OOF) errors.
Dual E1/PRI card	Activity	Flickering	The CSU/DSU in the card is communicating with a remote CSU/DSU.
	Board OK	On	The E1/PRI card has passed initial power-up diagnostics tests and is operating normally
	Loopback	On	A local or remote loopback diagnostic test is running on the associated E1 port.
	120-ohm	On	The port is configured for 120-ohm line termination.
	Remote alarm	On	A remote alarm indication signal (AIS) has been received on the associated E1 port. The AIS is received when there has been a loss of signal (LOS).
	Local alarm	On	The associated E1 port has detected local loss of signal (LOS) or out of frame (OOF) errors.
12-port modules	ACT (Activity)	Flickering	The module is processing transmit, receive, and interrupts normally.
	OK (Board OK)	On	The module has passed the initial power-ON diagnostic tests and is operating normally.
		Off	A fault condition is present on the module.

Running Diagnostic Tests

You can isolate problems on the dual T1/PRI card by connecting external test equipment to the RECEIVE jack to monitor signals coming into the RJ-48C port without interrupting normal data transmission. You can use the TRANSMIT jack to inject data, which interrupts normal data transmission.

Troubleshooting Network Interfaces

For information about isolating problems with the network connections to your access server, refer to the *Debug Command Reference* and *System Error Messages* publications. Cisco documentation is available:

- On the Cisco Connection Documentation CD-ROM that came with your access server
- On the World Wide Web at http://www.cisco.com, http://www-china.cisco.com, or http://www-europe.cisco.com
- In printed hard-copy form, which you must order separately

Getting Help

If you need assistance, contact Cisco Connection Online (CCO), Cisco Systems' primary, real-time support channel. Maintenance customers and partners can self-register on CCO to obtain additional information and services.

Available 24 hours a day, 7 days a week, CCO provides a wealth of standard and value-added services to Cisco's customers and business partners. CCO services include product information, product documentation, software updates, release notes, technical tips, the Bug Navigator, configuration notes, brochures, descriptions of service offerings, and download access to public and authorized files.

CCO serves a wide variety of users through two interfaces that are updated and enhanced simultaneously: a character-based version and a multimedia version that resides on the World Wide Web (WWW). The character-based CCO supports Zmodem, Kermit, Xmodem, FTP, and Internet e-mail, and it is excellent for quick access to information over lower bandwidths. The WWW version of CCO provides richly formatted documents with photographs, figures, graphics, and video, as well as hyperlinks to related information.

You can access CCO in the following ways:

- WWW: http://www.cisco.com
- WWW: http://www-europe.cisco.com
- WWW: http://www-china.cisco.com
- Telnet: cco.cisco.com
- Modem: From North America, 408 526-8070; from Europe, 33 1 64 46 40 82. Use the following terminal settings: VT100 emulation; databits: 8; parity: none; stop bits: 1; and connection rates up to 28.8 kbps.

For a copy of CCO's Frequently Asked Questions (FAQ), contact cco-help@cisco.com. For additional information, contact cco-team@cisco.com.

Note If you are a network administrator and need personal technical assistance with a Cisco product that is under warranty or covered by a maintenance contract, contact Cisco's Technical Assistance Center (TAC) at 800 553-2447, 408 526-7209, or tac@cisco.com. To obtain general information about Cisco Systems, Cisco products, or upgrades, contact 800 553-6387, 408 526-7208, or cs-rep@cisco.com.

For more information about technical support, onsite service, and exchange and repair services, refer to the *Cisco Information Packet* that shipped with the access server.