



Command Summary for the 2-Port and 4-Port T3/E3 Serial SPAs

[Table 15-1](#) provides an alphabetical list of some of the related commands to configure, monitor, and maintain the serial SPAs.

Table 15-1 **Command Summary**

Command	Purpose
bert errors	Use this command to test link availability by injecting a fixed number of bert errors when a pattern is running and check that the same number of errors were received on the remote end.
bert pattern	Use the bert pattern command to start or stop a specific bit pattern. To test link availability, start a pattern on one end and put the remote end in network loopback and verify that there are no bert errors.
card type (T3-E3)	Use this command to change all the SPA ports from T3 to E3, you must deselect the card type and then configure the card with the new type of interface. Once a card type is issued, the user can enter the no card type command and then another card type command to configure a new card type. The user must save the configuration to NVRAM and reboot the router in order for the new configuration to take effect. When the router comes up, the software comes up with the new card type. Note that the software will reject the configuration associated with the old controller and old interface. The user will now have to configure the new controller and serial interface and save it.
framing (T3-E3 interface)	Use the framing command to set the framing mode on the T3/E3 port.
loopback (T3-E3 interface)	Use the loopback command to diagnose problems on the local port, between the framer and the line interface unit (LIU) level.
mdl	Use the mdl command to send msgs in maintenance data link in T3 c-bit framing mode.

Table 15-1 **Command Summary**

Command	Purpose
show controllers serial details	The output from the show controllers serial details command provides error and alarm information that is useful in troubleshooting line problems. The information displayed is generally useful for diagnostic tasks performed by Cisco Systems technical support personnel only. The show controllers serial command also displays configuration information such as the framing, clock source, bandwidth limit, whether scrambling is enabled, the national bit, the international bits, and DSU mode configured on the interface. Also displayed are the performance statistics for the current interval and last 15-minute interval and whether any alarms exist.
show interfaces serial	Frame Relay Use this command to determine the status of the Frame Relay link. This display also indicates Layer 2 status if switched virtual circuits (SVCs) are configured. Channel Groups as Virtual Serial Interfaces To find out about channel groups configured as virtual serial interfaces, to verify that the router has High-Level Data Link Control (HDLC) encapsulation on the interface, and to verify that the interface sees the loopback, use the show interfaces serial command in privileged EXEC mode.
ttb	Use the ttb command to attach a header that contains fields to send to a remote device.