



## CHAPTER 4

# Configuring the Clock Card

---

To continue the Cisco Cable Clock Card installation, you must configure the primary and/or secondary T1 interfaces. This chapter contains the following sections:

- [Minimum Software Requirements, page 4-1](#)
- [Configuration and Diagnostic Cisco IOS Commands for the Clock Card, page 4-2](#)

## Minimum Software Requirements

You must have Cisco IOS Release 12.1(1a)T1 or later, and Cisco IOS Release 12.1(2)EC1 or later if you are configuring the clock card with a Cisco uBR-MC16S or Cisco uBR-MC16E cable interface line card. If you are using a Cisco uBR-MC28C cable interface line card with the clock card, you must use Cisco IOS Release 12.1(3a)EC1 or later. If you are using a Cisco uBR-MC28U/X card, you must use Cisco IOS Release 12.2(15)CX or later.



### Note

---

You can use other cable interface cards, such as the Cisco uBR-MC16C, with the clock card, but these other cable interfaces will not synchronize their downstream SYNC messages with the external clock source.

---

# Configuration and Diagnostic Cisco IOS Commands for the Clock Card

Table 4-1 presents a list of basic configuration and diagnostic Cisco IOS commands that you can use to initially configure and troubleshoot clock card installation. For complete command-line syntax examples and more definitive explanations of command-line functions, refer to the *Cisco uBR7200 Series Universal Broadband Router Software Configuration Guide*.

**Table 4-1 Cisco IOS Commands for the Clock Card and Their Descriptions**

Command Line	Description
<b>Exec Commands</b>	
<b>show cable clock</b>	Displays clock card status information like primary and secondary connections' source and status, timestamp reference information, current clock card mode of operation, any hardware fault, and the midplane clock signal source, if active.
<b>show controllers clock-reference</b>	Displays clock card hardware information and current register values.
<b>cable clock clear-counters</b>	Instructs the router to reset the counters displayed by the <b>show controllers clock-reference</b> command.
<b>Config Commands</b>	
<b>[ no ] cable clock source-midplane</b>	Instructs the clock card to lock on to and propagate the router's internal TDM midplane clock signal.
<b>[ no ] cable clock force {primary   secondary}</b>	Forces activation or deactivation of the primary or secondary interface. (Cannot be executed if holdover mode is not possible.)
<b>Support Commands</b>	
<b>show version</b>	Displays critical information about the router, including the presence of a clock card, if one is installed.
<b>show tech-support</b>	Prints information regarding the router's current status, including the clock card timing reference, if a clock card is installed.
<b>show diag</b>	Displays diagnostic information about the router, including critical clock card information, if a clock card is installed.