FC310

FIBRE CHANNEL BRIDGE **QUICK REFERENCE GUIDE**

This Quick Reference Guide explains how to install the FC310 in a Quantum|ATL M-Series tape library.

For your convenience, this task has been condensed into a few simple steps. As you perform each step, watch for instructions that specifically address a first-time installation or a field replacement.

If you need help with any part of these instructions, please contact Quantum|ATL Customer Support 24 hours a day, 7 days a week, at the number for your area listed in the *M1500 Library User's Guide*. You can also receive help in the form of a complete set of M1500 user documents in Portable Document File (PDF) format by going to *www.QuantumATL.com*.

Once the FC310 is installed, it must be configured using instructions found in the *Quantum|ATL FC310 Bridge User's Guide* (PN 6421018). This *User's Guide* and other applicable documentation are available in PDF format on the CD shipped in the *FC310 Upgrade/FRU Kit*.

NOTE: Adobe Acrobat Reader is required to view and print PDF documents. To download a free copy of Adobe Acrobat Reader, go to *www.adobe.com*.
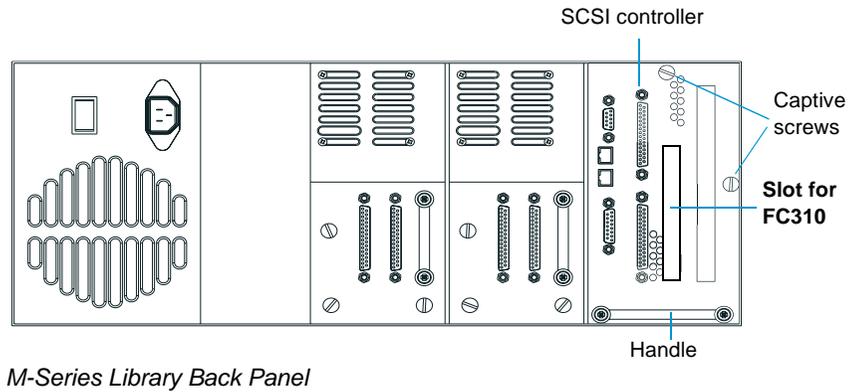
STEP 1: PREPARE FOR INSTALLATION/REPLACEMENT

a. **If this is a first-time installation,** make sure you have the following system requirements:

-- A server or Quantum|ATL-approved Fibre Channel hub or switch with an appropriate connection topology (fabric, loop, or point-to-point)

-- A Quantum|ATL-approved Fibre Channel host bus adapter (HBA) configured for the correct topology.

-- Compatible Fibre Channel cable connectors. The FC310 has an SC type Fibre Channel connector, which is designed to accommodate 50-micron or 62.5-micron multimode fiber-optic cables. The 10-meter (32.8-foot) cable supplied with the FC310 is a 62.5-micron fiber-optic cable.

-- Quantum|ATL-approved network management software package.

-- Quantum|ATL approved operating system (Windows® NT 4.0 SP6, Windows 2000 SP2, Solaris® 8, etc.).

b. Make sure you have the tools and equipment recommended for this procedure:

-- #1 Phillips screwdriver.

-- Flat-blade screwdriver.

-- A personal computer such as a laptop with a standard, 9-pin, D-type serial port and HyperTerminal or equivalent.

c. Check the FC310 kit using the *Quantum|ATL FC310 Contents List*.

d. Take precautions to prevent electrostatic discharge (ESD). These precautions include:

-- Wearing a properly grounded antistatic wrist strap.

-- Wearing other antistatic apparel (smock, footwear, etc.).

-- Keeping the FC310 in its antistatic packaging until you are ready to configure and install it.

CAUTION: Failure to take adequate antistatic precautions may result in damage to the FC310 card or other library components.

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STEP 2: INSTALL THE FC310

a. Turn off and unplug the library. (If this is a standalone library, remove the two screws holding the library cover in place and slide the cover off.)

b. Loosen the two captive screws that secure the card cage to the back of the library.

c. Slide the card cage out of the library using the handle.

d. Locate the expansion slot closest to the SCSI adapter.

SCSI controller

Captive screws

Slot for FC310
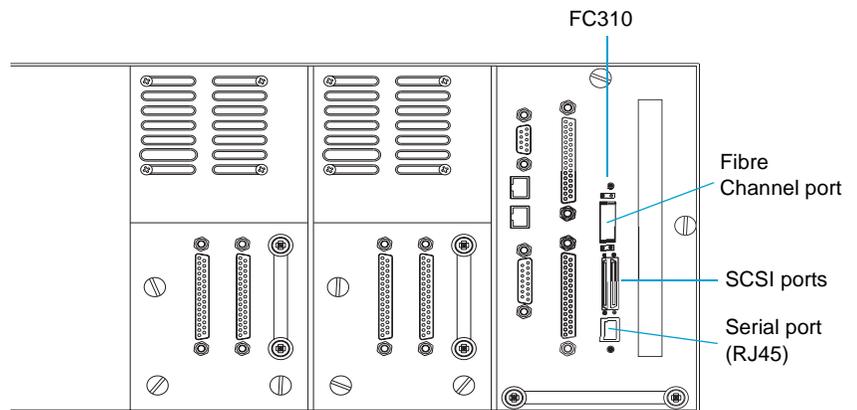
Handle

M-Series Library Back Panel

If this is a first-time installation, remove the slot cover plate and hold-down clamp. To do this, remove the screws securing the cover plate to the card cage and then lift the plate out. Remove the screws that secure the hold-down clamp to the side of the card cage. Save the clamp for use later in this installation. Save the cover plate for future use.

If you are replacing an FC310, remove the existing FC310 by detaching all cables, removing the hold-down clamp screws from the side of the card cage, removing the screws that secure the FC310 to the card cage, and then lifting the FC310 out of the expansion slot.

> **NOTE:** Refer to the Return Material Authorization (RMA) documents shipped with the replacement FC310 Bridge kit for the appropriate return procedure.

e. Carefully remove the new FC310 from its antistatic packaging. Hold the FC310 by the edges; avoid contact with FC310 components and connectors.

f. Insert the FC310 into the expansion slot. Press down gently on the card edge until the card is securely seated.

g. Secure the FC310 to the card cage frame using the two screws provided.

h. Reattach the hold-down clamp to secure the card in the slot.

i. Slide the card cage back into the library and secure the cage by tightening the two captive screws.

j. If this is a standalone library, slide the cover back on the library and secure it in place.

FC310

Fibre Channel port

SCSI ports

Serial port (RJ45)

M-Series Library Back Panel with FC310 Installed

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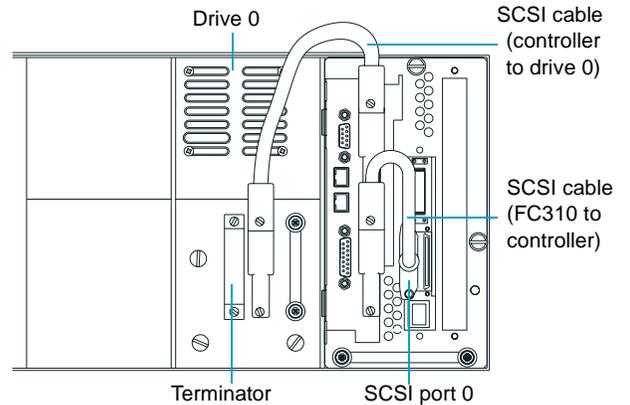
STEP 3: CONNECT SCSI CABLES

a. Attach a SCSI cable from the upper SCSI port on the library SCSI controller to the first SCSI connector on drive 0. Terminate the second SCSI connector on drive 0.

b. Attach a SCSI cable from SCSI port 0 on the FC310 (the left VHDCI connector) to the lower SCSI port on the library SCSI controller.

c. If the library has two drives, attach a SCSI cable from SCSI port 1 on the FC310 (the right VHDCI connector) to the first SCSI connector on drive 1. Terminate the second SCSI connector on drive 1.
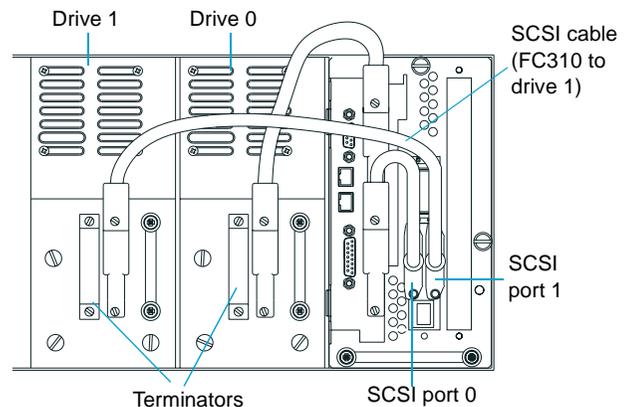
STEP 4: CONNECT THE FIBRE CHANNEL CABLE

a. Connect one end of the Fibre Channel cable to the Fibre Channel port on the FC310.

b. Connect the other end of the Fibre Channel cable to the Fibre Channel port on an HBA installed in a host computer, or to a switch or hub.

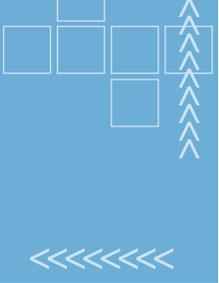## STEP 5: STARTING UP/SELF-TESTING THE FC310

a. Using the serial cable provided, establish a connection between the serial (RJ45) connector on the FC310 and the COM port (DB9) of the external host computer.

b. Reconnect the library's power cord to a grounded power outlet and then turn on the library.

c. When the library has powered up, turn on the host computer.

d. Make sure the COM port on the host computer has the following settings:

-- Baud rate: **9600**

-- Data bits: **8**

-- Parity: **None**

-- Stop bits: **1**

-- Flow control: **None**

e. Run HyperTerminal or equivalent.

C310 SCSI Cabling—One-Drive Library

FC310 SCSI Cabling—Two-Drive Library

f. At the `Ready` prompt, type **firmwarerestart** and press **<Enter>**. This causes the firmware to restart and the power-on self-test (POST) to run. During POST, make sure that all SCSI port initiator IDs are present and all status messages appear normal.

The `Ready` prompt reappears when POST is completed.

> **NOTE:** If POST messages do not appear, check all connections and COM port settings. Power cycle the library and verify that the green "Ready" LED above the Fibre Channel port is on steady. Then repeat the startup procedure.

STEP 6: CONFIGURE THE FC310

A command-line interface (CLI) is available to assist with FC310 configuration and maintenance as well as system diagnostics. Specifically, the CLI can be used to configure the serial, Fibre Channel, and SCSI ports; to create device maps; to obtain FC310 status information; to log FC310 events; and to report SCSI and Fibre Channel device information.

For more information, refer to the *Quantum|ATL FC310 Bridge User's Manual* (PN 6421018).