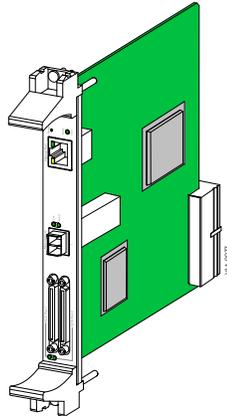# Quick Start Guide

IMPORTANT: Improper installation may result in damage which voids existing warranties. Be sure to register your card on the Overland Storage web site to activate the warranty.

WARNING: To reduce the risk of electric shock or damage to equipment, disconnect the power by unplugging the power cord.

The Virtual Interface Architecture (V.I.A.) Fibre Channel Option version 3 (FCO3) card is a RoHS (Restriction of Hazardous Substances) compliant 4 Gbps Fibre Channel (FC)-to-Small Computer System Interface (SCSI) bridge that enables connectivity between Overland NEO SERIES libraries and a fibre channel host or SAN.

Unpacking

Carefully unpack and verify that you have all the parts:

- FCO3 V.I.A. card (Figure 1)
- 4/2/1 Gbps capable SFP (Small Form-Factor Plugable) optical transceiver
- Ethernet crossover cable
- FCO3 Software And Documentation CD
- This quick install guide

Electrostatic Discharge Information

A discharge of static electricity can damage micro-circuitry or static-sensitive devices. To help prevent Electrostatic Discharge (ESD), observe standard ESD precautions.
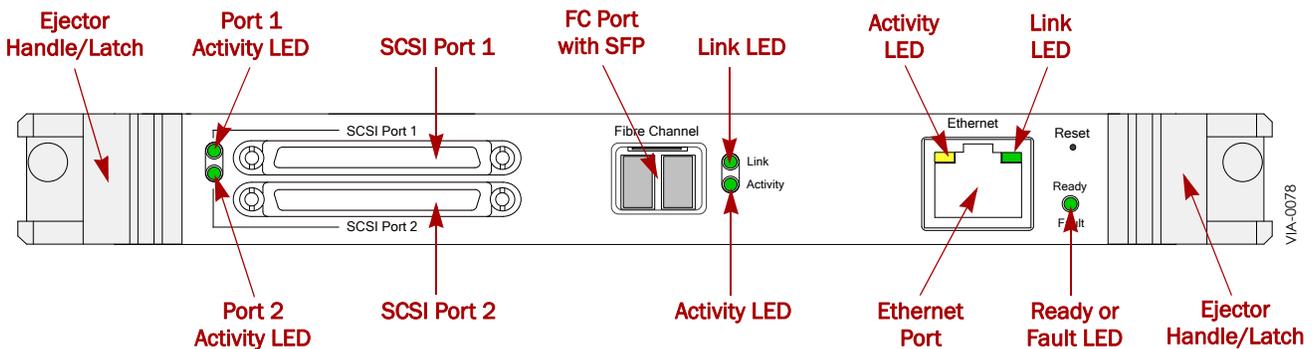

Figure 1. FCO3 Card Connections and Indicators

FCO3 Card Installation

CAUTION: The right-most option slot in the primary card cage must ALWAYS contain the Library Controller card (LCC). Insertion of an FCO3 card into this slot damages the PCI backplane and renders the library inoperable.

The FCO3 card can be added to any available V.I.A. bay located at the rear of a NEO SERIES library. On the NEO 4000 and NEO 8000, this includes the Expansion or Secondary card cages (Figure 2 on page 2).

1. Before installing the card, make a note of the **serial number** for use during configuration.

2. Power down the **NEO library**.

   On the NEO 8000, also open the circuit breakers.

3. Remove all **power cords** from the library.

4. Using a Phillips screwdriver, remove the **cover plate** of the V.I.A. option bay where the FCO3 card will go.

5. With the SCSI ports positioned at the bottom, carefully slide the **FCO3 card** into the option bay until resistance is felt.

6. Apply just enough force to seat the **card**.

7. Push the **top ejector handle down** and the **bottom ejector handle up** to seat the card and latch it.
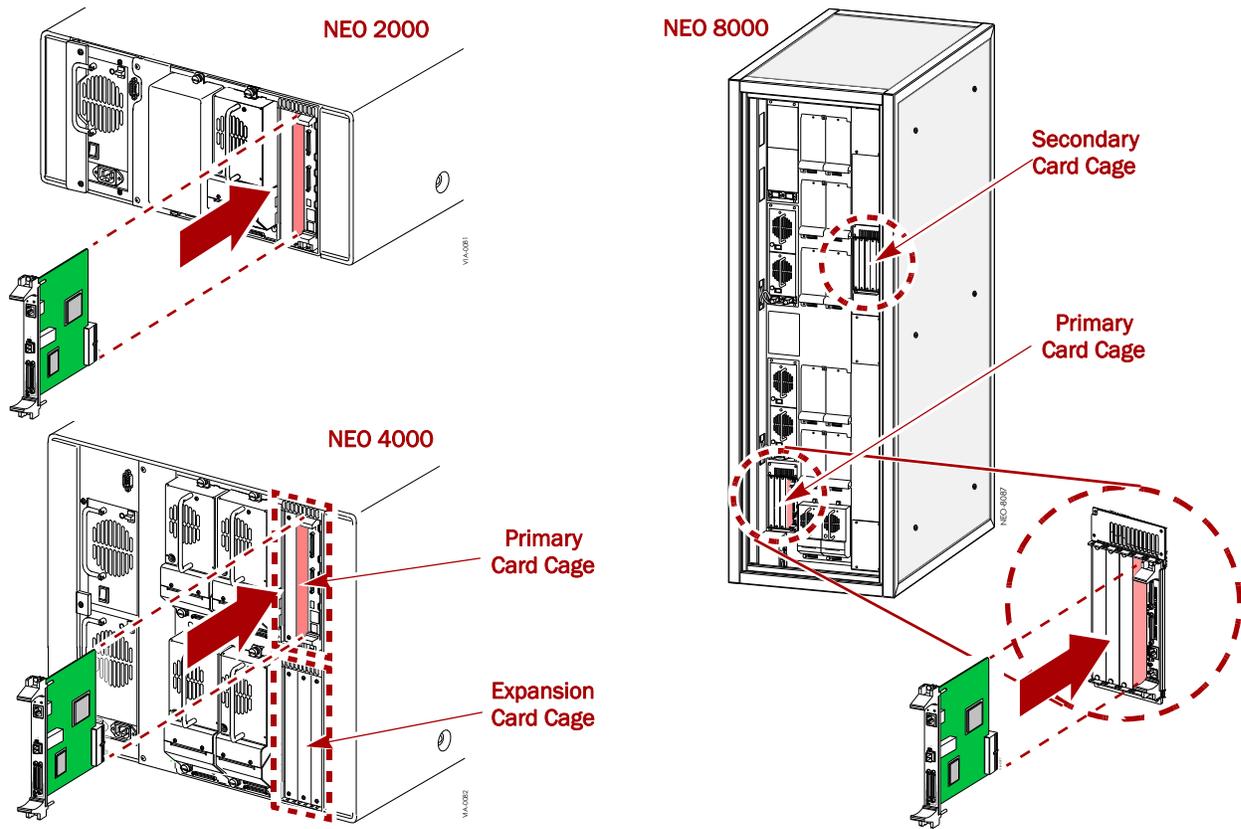
Figure 2. FCO3 Card Installation Locations

Cabling and Ethernet Configuration

Connecting the Cables

⚠️ **CAUTION:** Use only Ultra 320 (SCSI SPI-4) compliant cables and terminators when connecting SCSI devices.

1. Verify that the **NEO library** is still powered down.

2. Connect the **SCSI jumper cable** from the LCC SCSI Port 1 to the FCO3 card Port 2.

3. If the FCO3 card controls only the **library** (Figure 3), connect a **terminator** to Port 2, and go to Step 7.
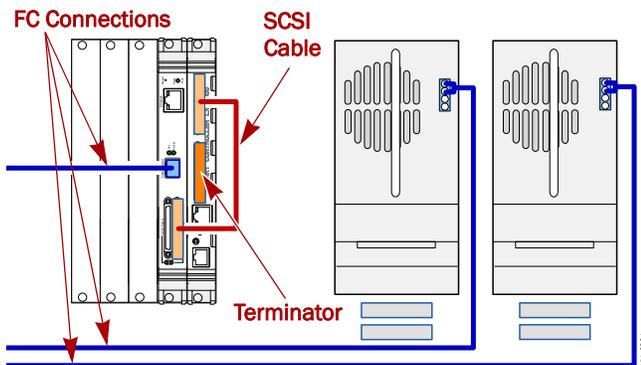

Figure 3. Cabling When FCO3 Controls Only the Library

4. Determine the maximum number of drives for the FCO3 card (based on a 4 Gbps FC connection):
   - LTO-3 or 4 – one drive per SCSI port (two per card)
   - LTO-2 – two drives per SCSI port (four per card)
   - SDLT 600– two drives per SCSI port (four per card)

5. Connect the drives to the **LCC** SCSI port 2 (Figure 4).

   a. Connect a **SCSI cable** from LCC to first tape drive.

   b. Do **one** of the following:
      - For the last tape drive in the chain, attach a **terminator** on the drive's other port.
      - If there are more drives, connect this drive to the next one using a **SCSI cable**.

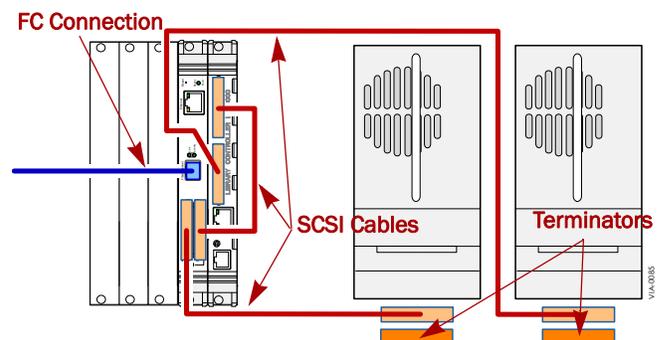   c. If this was **not the last drive**, repeat Step b.

Figure 4. Cabling When FCO3 Controls Library & Drives

6. Connect the drives to the **FCO3 card** SCSI port 1.

   a. Connect a **SCSI cable** from the FCO3 card SCSI port 1 to the first tape drive.

   b. Do **one** of the following:

      • For the last tape drive in the chain, attach a **terminator** on the drive's other port.

      • If there are more drives, connect this drive to the next one using a **SCSI cable**.

   c. If this was **not the last drive**, repeat Step b.

7. Ensure all SCSI connectors are tight and all SCSI buses are properly terminated.

Ethernet Preparation

1. Connect the FCO3 Ethernet port to a stand-alone PC using the included Ethernet **crossover cable**.

2. Temporarily set the IP address of the PC to one number higher than the IP address that the FCO3 card will use.

   For example, if the FCO3 will use 10.20.30.1 on the management LAN, set the IP address of the PC to 10.20.30.2.

3. Temporarily set the subnet mask of the PC to the subnet mask that will be used by the FCO3 card.

4. Install the QuickNav software on the PC from the FCO3 Software and Documentation CD.

   Use either Windows or Macintosh software version based on the type of stand-alone PC being used.

Power Up the Library

⚠ CAUTION: If the NEO library firmware is less than version shown in tab, it must be upgraded to support FC drives.

Table 1: Drive Type Firmware Minimums

Drive Type	NEO 8000 Minimum FW	NEO 2000/4000 Minimum FW
LTO-3	4.03	5.08
LTO-4	5.02	6.02

1. Power on the library by toggling each power supply switch (and circuit breakers on the NEO 8000) to **ON**.

2. Press anywhere on the **GUI touch screen** to activate the display and turn the library ON.

   This will also provide power to the FCO3 card.

3. Wait for the FCO3 card to complete **Power On Self Test** (POST).

   It should take no more than 3½ minutes to complete.

FCO3 Card Configuration (Initial)

The FCO3 card is configured and managed through its Ethernet interface using either the browser-based GUI or a Telnet interface. The GUI interface uses traditional GUI actions to select choices while Telnet uses CLI commands to configure the FCO3. The *NEO SERIES FCO3 Card User Guide* at the Overland Technical Support website provides details.

Browser Compatibility

All pages are written in XHTML 1.0 and CSS1 to be compatible with the latest versions of Internet Explorer, Netscape, Firefox, Mozilla (including K-Meleon, Camino, Epiphany and Galeon), and KHTML (including Konqueror and Safari). The minimum version requirement is Internet Explorer 5.5 and Netscape 6.2.

Optimizing Your Browser

JavaScript must enabled to use the browser GUI interface.

Internet Explorer

1. From the menu, choose **Tools > Internet Options.**

2. Click the **Security** tab.

3. Click the **Custom Level** button.

4. Scroll down to **Microsoft VM > Java permissions** and verify that **Disable Java** is NOT selected.

5. Scroll down to **Miscellaneous > Allow META REFRESH** and verify that **Enable** is selected.

6. Click **OK twice** to save and exit.

Netscape/Mozilla/Firefox

Verify that Java is enabled in the Preferences.

Configure Using QuickNAV

1. Launch the **QuickNAV** software loaded on the stand-alone PC.

2. At the startup screen, click **Next**.

3. At the product selection screen, highlight the proper **serial number** for the FCO3 card and click **Next**.

   NOTE: If the FCO3 card is not shown, click Rescan. If it still does not appear, verify that the Ethernet link lights on both the FCO3 card and the PC are lit, and that you are using the supplied crossover cable.

4. At the network setting screen, enter the desired **IP address** and **subnet mask** for the card. Click **Next**.

   QuickNAV sets the card's address and restarts the card. A countdown screen is displayed.

5. When the countdown screen's **Next** button is enabled, click it.

6. At the final screen, do one of the following.

- If a network gateway is needed, click **Launch Browser** and continue with "Setting a Gateway."

- Otherwise, click **Finish** and continue with "Final Cabling."

Setting a Gateway

1. If not already launched, launch your browser and enter the IP address of the FCO3 card.

NOTE: *If using* "Configure Using QuickNAV" *above, your browser is automatically pointed at the IP address.*

2. Click **Enter here** to display login screen.

3. Enter your User Name and Password, and click **OK**.

The defaults are:

- User Name = **root**

- Password = **Password** (case sensitive)

4. At the Status screen (Figure 5), click **Ethernet** (1) in the left-side menu.
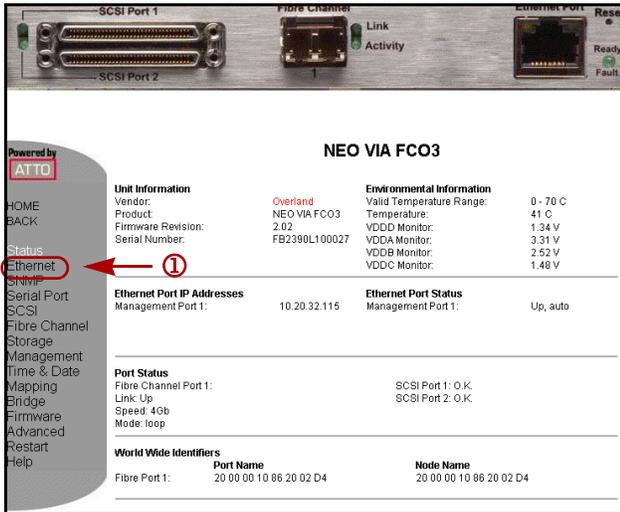

Figure 5. FCO3 Status Screen

5. At the Ethernet screen (Figure 6), in the second data field, enter the IP address for the **Gateway** (1), and click **Submit** (2).
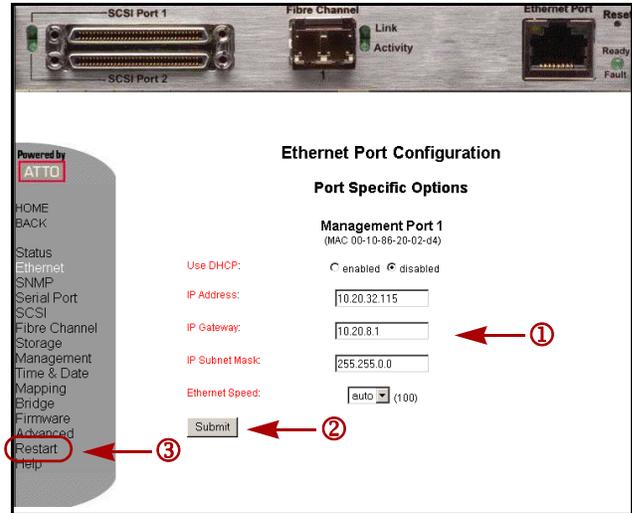

Figure 6. FCO3 Ethernet Screen

6. When the change confirmation message appears at the top of the screen, click **Restart** (3) on the left-side menu.

7. At the Restart screen, click the **Restart** button.

The card restarts (showing an interim countdown screen) and the GUI is refreshed to the Status screen.

Final Cabling

Once the card is configured (and Gateway set if required), do the following:

1. Remove the **crossover cable**.

2. Attach the FCO3 to the management LAN using a **CAT5 cable**.

3. Use the permanent **management station** to finish configuring the FCO3 card.

Refer to the "Graphic User Interface" and "Command Line Interface" sections in the *NEO SERIES FCO3 User Guide* for device mapping, detailed configuration, and device defaults.