

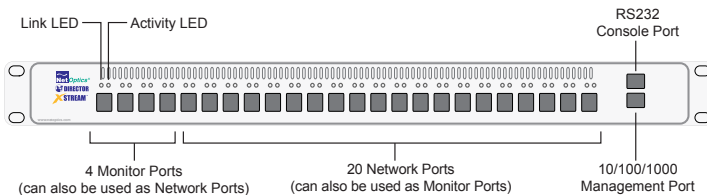
Unpacking and Inspection

Carefully unpack Director Xstream™ and retain materials for later use.

Director Xstream ships with the following:

- Director Xstream main chassis
- Two power cords
- Director User Guide and CLI Command Reference (on CD)
- RS232 RJ45 cable for Command Line Interface (CLI)
- RJ45 to DB9 adapter for CLI

Carefully check the packing slip against parts received. If any part is missing or damaged, contact Net Optics Customer Service. (Note: SFP and SFP+ modules are ordered and shipped separately.)



Planning the Installation

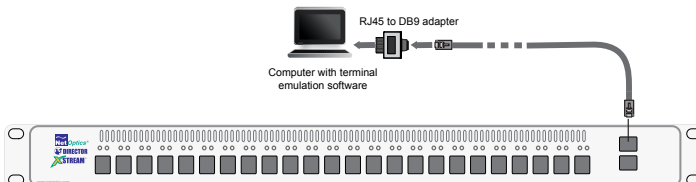
To enable the remote management features of Director Xstream, you must assign it an IP address. Determine the IP address, netmask, and the IP address of the gateway, if required, before beginning installation.

Configuring Director Xstream

All configuration options, status, and statistics are accessible from the CLI. To get started with the Director Xstream, you must set an IP address with the CLI using the local RS232 interface.

To access the Command Line Interface:

1. Connect a PC with terminal emulation software to Director Xstream using the supplied RS232 RJ45 cable and the RJ45 to DB9 adapter. Alternately, you can use an RJ45 to USB adapter if your terminal emulation software can run over USB.

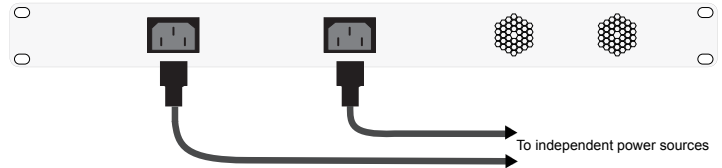


2. Launch terminal emulation software such as HyperTerminal or minicom and set the communication parameters to:

115200 baud, 8 data bits, no parity, 1 stop bit, no flow control

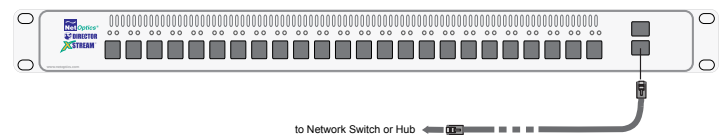
3. Connect power to Director Xstream.

Make sure that you connect the power supplies to two separate, independent power sources.



4. At the login prompt, type **admin**; and at the password prompt, type **netoptics**.
5. Change the password for the **admin** account by typing:
user mod name=admin priv=1 pw=<new-pw>
where **<new-pw>** is the new password
6. Set the Director Xstream IP address by typing:
sysip set ipaddr=<ipaddress> mask=<netmask>
gw=<gateway>
sysip commit
where **<ip address>** is the IP address for Director Xstream, **<netmask>** is the netmask, and **<gateway>** is the IP address of the gateway.
7. For more information on the CLI, type **Help** to display command information, or see the User Guide. The tab key can be used to autocomplete partially typed commands. Entering ? following a command (and a space) displays the arguments for that command. The up- and down-arrow keys access the CLI command history buffer.

The CLI can now be accessed remotely by SSH over the Director Xstream Management port. The default SSH username is **director**, the password is **netoptics** and the port is 22. Connect the Management port with a CAT5 cable to a switch or hub to access the CLI over the network. Use the **passwd** command to change the SSH password.



Mounting Director Xstream

Director Xstream is designed for a 19-inch rack, occupying 1U of height.

To rack mount Director Xstream:

1. Slide the Director Xstream main chassis into the desired rack location.
2. Secure it using the four supplied screws.
3. Make sure that the rack is properly grounded.

Installing SFP+ and SFP Modules

The Director Xstream network and monitor ports accept SFP+ (10 Gigabit) and SFP (1 Gigabit or 10/100/1000) transceiver modules. The modules may be shipped separately. An appropriate cable is shipped with each module.

An SFP+ or SFP module must be installed in a Director Xstream port in order to use it for network or monitor connections. To install an SFP+ or SFP module, simply remove the temporary plug from the port slot and insert the module until it clicks into place.

SFP+ and SFP modules may be freely intermixed in the 24 Director Xstream ports. Data rate conversion is automatic.

Note: Modules from Finisar do not fit in the Beta unit.

Connecting to the Network

To connect Director Xstream to a Span port on your network:

1. Connect any network port on Director Xstream to an appropriate network cable.
2. Connect the other end of the cable to a Span port on a network switch.

To connect Director Xstream in-line to your network:

1. Connect an external in-line Tap or Port Aggregator device in the network link.
2. Connect the outputs of the Tap or Port Aggregator to any network ports on Director Xstream using appropriate network cables.

Note: Monitor ports can also be used as network inputs.

Connecting to Monitoring Devices

To connect Director Xstream to a monitoring device:

1. Connect any monitor port on Director Xstream to an appropriate network cable.
2. Connect the other end of the cable to the monitoring device.

Note: Network ports can also be used as monitor outputs.

Checking the Installation

After you have connected Director Xstream, verify that it is functioning correctly by checking the link LEDs for each of the connected ports. The link LEDs should be illuminated to indicate that the links are connected and traffic is present.

Creating a Filter

To view traffic on monitor ports, you must define one or more filters. For example, create a filter that

- Aggregates traffic received on network ports 1 to 5 and 7
- Regenerates it to monitor ports 1 and 2
- Forwards only traffic going to Layer 4 Port 80
- But drops any traffic originating from 10.1.1.1

To create the filter, enter:

```
filter add in_ports=n.1-n.5,n.7 ip_src=10.1.1.1
      action=drop
```

```
filter add in_ports=n.1-n.5,n.7 l4_dst_port=80
      action=redir redir_ports=m.1-m.2
```

```
commit
```

Note: **commit** must be executed to activate previously defined filter actions.

For more information, see the **User Guide and CLI Command Reference** included on the Director Xstream CD (PUBDIRU.PDF and PUBDIRC.PDF).

About the Beta Unit

This Director Xstream is a Beta test version. It may exhibit some unexpected behaviors and some features may not be available.

Director Xstream is compatible with Director at the CLI level. While Director Xstream manuals are not yet available, Director manuals have been included on the CD shipped with this unit. The information in the Director manuals mostly applies to Director Xstream, with the obvious exception of the physical differences and the port resources. Please note that Director Xstream does not include the following Director features:

- TACACS+ and RADIUS server support
- SNMP
- Web Manager GUI
- Daisy-chain expansion
- Hot-swappable power supplies

Director Xstream's network ports are numbered n.1 to n.20. The monitor ports are m.1 to m.4. Any port can be used as a network function or a monitor function (in an in_ports list or a redir_ports list).

For technical support and to report problems with this Beta unit, please contact:

John Mattes
Applications Engineer
Net Optics, Inc.
e-mail: johnmattes@netoptics.com
(408) 737-7777