SERIMUX® Series

SERIMUX-S-x
SECURE SSH
CONSOLE SERIAL SWITCH
Quick Installation Guide

The NTI SERIMUX-S-x SSH Console Serial Switch (SERIMUX) is a serial port switch that delivers secure management of up to 32 serial devices via the internet, TCP/IP network, or dial-up modem connections. It combines the advanced security of Secure Shell v2 with unlimited access to remote network management. The SERIMUX-S-x allows links (or connections) between multiple pairs of RS-232 asynchronous serial ports. The SERIMUX-S-x (x=4,8,16,24,or 32) is available with up to 32 serial port connections.

The main purpose of the switch is to provide secure management of several serial devices from local or remote locations (using Ethernet or external modems). Devices include routers, DSU's, servers, switches or any other equipment allowing serial operation using RS232 interface. Users can work locally using a VT100 or ANSI serial console or a CPU with a terminal program (i.e. HyperTerminal)) or from remote locations via Ethernet connection (Web Interface, SSH, Telnet).

Each SERIMUX port has to be configured for serial communication (baud rate, parity, etc) within the specifications of the attached serial device, but the configurations of the two devices linked by the SERIMUX do not need to match.   Various parameters (communication speed, hardware and/or software flow control, timeout, etc) can be selected for each SERIMUX port. Devices may be either locally connected or connected through attached modems.

Each SERIMUX port can be configured as either a host or user port. Serial hosts (such as servers, switches etc.) are connected to host ports, while serial user devices (such as a terminal or serial console) are connected to user ports.

Installation

1. Mount the SERIMUX to a rack using the hardware provided.
2. Connect a serial console to the port labeled "CONSOLE" on the SERIMUX using a serial cable with an RJ45 male connector (Cat5 patch cable supplied). This will be the default administrator device.
3. Connect each additional serial user device or host device to be connected by the SERIMUX to any remaining port (1-4/8/16/24/32) using a serial cable with an RJ45 male connector. It may be necessary to add one of the cable adapters (supplied) detailed in Appendix C of the manual between the device port on the user device or host device and the RJ45 connector.

Rear View of SERIMUX-S-16DP
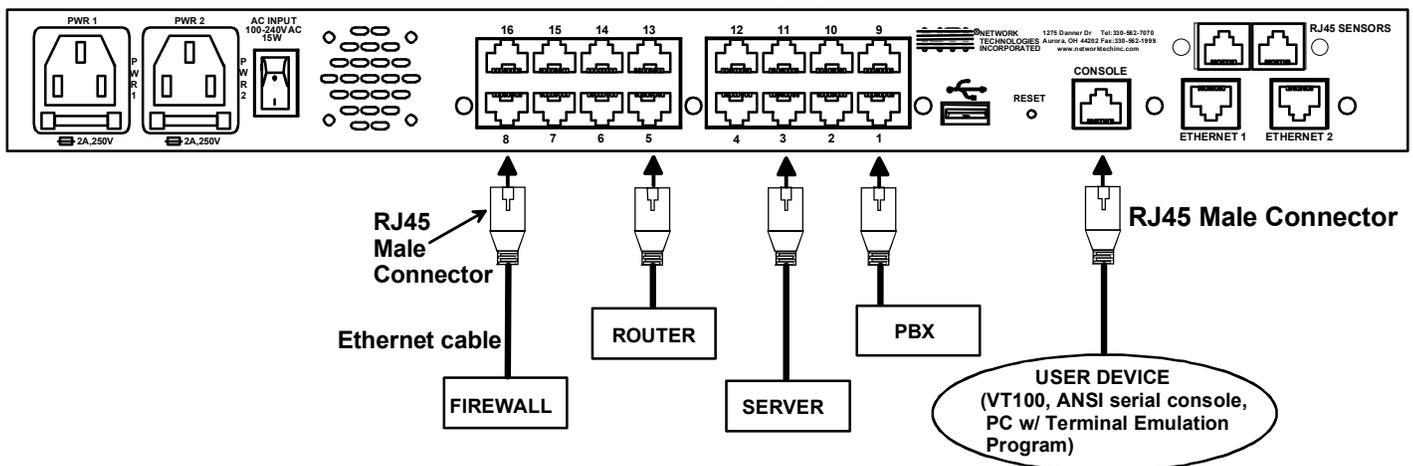
4.   Connect the power cord.

Connect the SERIMUX to the Ethernet for remote system management using the "ETHERNET1" or "ETHERNET 2" port and CAT5/5e/6 patch cable.

Login and Use the SERIMUX

The following instruction will enable the user to quickly make port connections using a terminal connected to the "CONSOLE" port. For instruction to make quick connection using the Ethernet port and Web Interface, see "Web Interface" in the instruction manual on page 43.

1. Make sure the SERIMUX is powered OFF.
2. Using the serial device connected to the port labeled "CONSOLE", start the terminal program (e.g. Windows HyperTerminal) and configure it as follows:
   - direct connection (using the appropriate CPU local serial Com port)
   - 115200 bps
   - 8 bits
   - no parity
   - 1 stop bit
   - no flow control
   - ANSI or VT100 terminal mode.
3. Power ON the SERIMUX. Wait for the SERIMUX login prompt.
4. At "`login as:` " type <**root**> (all lowercase letters) and press <**Enter**>.
5. At "`password`" type <**nti**> (all lowercase letters) and press <**Enter**>.
6. A shell prompt will be displayed "`-sh-2.05b#` "

To access the configuration menu:

Type <**serimuxconfig**> to open Serimux Secure Configuration Menu. Use menu structure to configure SERIMUX.

```
login as: root
Using keyboard-interactive authentication.
Password:
Last login: Thu Mar 19 10:40:44 2009 from 65.243.248.31
-sh-2.05b# serimuxconfig

-----------------------------------------------------------------------
Welcome to NTI Serimux Secure configuration menu
Firmware Revision  :v1.0
MAC Address(eth0)  :00:82:0c:04:00:06
IP Address(eth0)   :98.17.207.203
-----------------------------------------------------------------------
    1. Port Management
    2. Network Management
    3. Administration Settings
    4. User Management
    5. Administrative Info

e[x]it, [s]ave, a[p]ply, [h]elp, [Esc]
INPUT :
```

-OR-

To make a connection with a serial device:

Type <**portmenu**> to open a port connection menu. Then type a port number and press <**Enter**> to make a connection with a serial device.

Note: To connect to a host, the host must first be configured with the same communication settings as the port (default serial settings = 9600 baud, 8 bits, no parity, 1 stop bit, no flow control). If needed, see "Serial Settings" on page 16 of the manual to change the SERIMUX port serial settings.

For more details, specifications, and troubleshooting tips,   see the Installation and Operation Manual or go to www.networktechinc.com.