

Quick Start Guide

ESERV-1xT Serial Servers



1

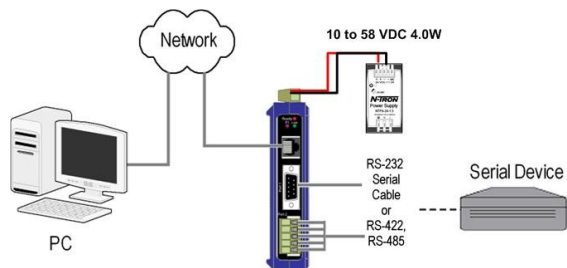
Check for All Required Hardware

- ☐ ESERV-1xT module
- ☐ This Quick Start Guide
- ☐ CD with Software Manager and manuals
- ☐ Network cable (not included)
- ☐ Serial cable(s) (not included)
- ☐ 10 to 58V DC (4W) Power Supply (not included)

2

Install the Hardware

- ☐ Connect a 10 to 58 VDC power supply
- ☐ Connect the network cable from the serial server to a network drop using a standard network cable. Use a straight-through Ethernet Cable on copper ports.
- ☐ Connect the serial device(s):
 - RS-232 with DB9: straight-through for DCE device, null modem for DTE device
 - RS-232/422/485 with terminal blocks: see Appendix D for pinouts



- One Conductor Per Terminal
- Use Copper Wire Only
- Wire Size: 28 to 16 AWG
- Tightening Torque: 5 KG -CM
- Wire Temperature Rating: 105°C Minimum (Sized for 60°C ampacity)
- 80°C Maximum Surrounding Air Ambient

3

LED Status

LED	STATUS
Ready	Blinks if system is operating correctly
Port 1	On indicates serial port open, blinks when data present on serial port
Port 2	Same as Port 1 (Present on 2 port units only)
Link	On indicates Ethernet operating in 100BaseTX, blinks when data present on Ethernet link

4

Mode Switch

Hold in Mode switch for...	Result
0 to 2 seconds	Initiates a Hardware Reset
2 to 10 seconds	Enters Console Mode
More than 10 seconds	Resets to Factory Defaults

5

Install Management Software

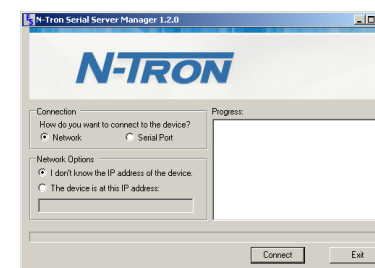
- ☐ Insert the included CD and it should autostart
- ☐ Follow the prompts to install the Ethernet Serial Server Manager software.

Note: Be sure you have administrative rights & disable firewalls in Windows XP and Vista.

6

Setup Management Software

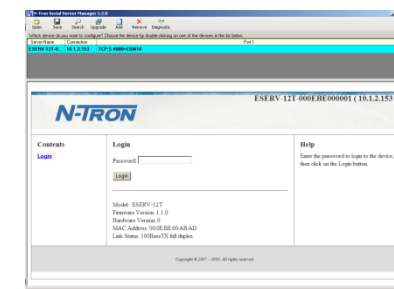
- ☐ Open Ethernet Serial Server Manager: click Start→Programs→N-TRON→ Ethernet Serial Server Manager
- ☐ The Discovery page opens



- ☐ To configure via the network, select Network.
- ☐ If you know the IP address, select *The device is at this address*, and type in the address. If not, select *I don't know the IP address of the device*.
- ☐ Click Connect.

OR...Setup the Web Interface

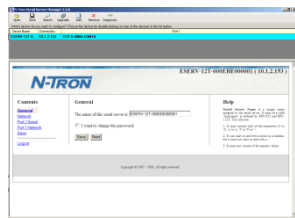
- ☐ Open a browser and type the IP address of the serial server in the Address Bar.
- ☐ When the serial server is found, the Configuration window appears.



7

Login

- ☐ Click Login. (Password is blank from factory)
- ☐ The General page appears.



8

Setup the Network

- ☐ The serial server is set at the factory to receive an IP assignment from a DHCP Server. If a DHCP server is not available on your network, it will default to **169.254.102.39**.
- ☐ If this address does not work with your PC, change your network settings to:
 - o IP Address = 169.254.102.1
 - o Subnet Mask = 255.255.255.0
 - o Default Gateway = 169.254.102.100
- ☐ If you need to use different settings, refer to the Users Manual for instructions.

9

Setup the Serial Port Parameters

- ☐ Click **Port 1 Serial** to open the Serial Port Parameters page. Select the type of serial connection between the serial server and the serial device. (RS-232, RS-422, RS-485 2-wire, or RS-485 4-wire)
- ☐ Select the Baud Rate, Data Bits, Stop Bits, Parity and Flow Control needed to communicate with the serial device.
- ☐ If your serial server is 2 port, select the next port in the Description box, then repeat the previous steps.
- ☐ Click Next.

10

Setup the Port Network Parameters

- ☐ Click **Port 1 Network** to open the Port Network Parameters page.
- ☐ Select the type of network protocol you want to use: TCP, UDP, VCOM or Paired Mode.
- ☐ If you select TCP, select whether the serial server will operate as a Client or Server, then configure the required IP address, port numbers and other related parameters.
- ☐ If you select UDP, configure the IP addresses, ports and other related parameters for the devices you want to receive from and send to.
- ☐ If you want the serial server to act as a virtual communications port for a computer, select VCOM. This allows your computer to connect to a serial device on the network as if it were connected to a physical COM port.
- ☐ If you want the serial server to operate in Paired mode with another serial server, select Paired, then configure it as a client or server and set up the IP address, port numbers and other related parameters (similar to setting up TCP).

11

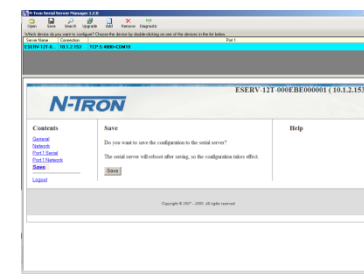
Setup Advanced Parameters

- ☐ If you want to set up Advanced parameters, click Advanced on the Port Network Parameters page.
- ☐ If necessary for your application, select *I want to control when connections are forced closed*, then set up the Network Watchdog and Serial Watchdog as required.
- ☐ If necessary for your application, select *I want to control data packets are sent over the network*, then set up the Character Count, Forced Transmit, Intercharacter Timeout, Delimiters and Delimiter Removal as required.
- ☐ Click Next.

12

Save and Logout

- ☐ If you have completed the configuration, click Save to save the configuration to the serial server.
- ☐ To Logout, click the Logout button.



13

To Test and Verify Operation

- ☐ Set up serial server as a TCP Server on serial port 1.
- ☐ Set serial port to RS-232 on serial port 1.
- ☐ Set to 9600 8-N-1 on serial port 1.
- ☐ Loopback serial port 1 by connecting TD to RD.
- ☐ Open a DOS window and type "telnet x.x.x.x yyyy" where x.x.x.x is the IP address of the serial server and yyyy is the port number of the serial port.
- ☐ Type characters on the keyboard. The characters should appear in the window. If not, double check your settings.