

Versatile Network Controller

LSN/10Mbps Gateway Interface

Features Overview

- One 10Base2 port
- One 10Base-T port
- One LSN port
- Three LEDs to indicate Link, Active and Power status
- Optional Expander Board includes three RS-232 ports and one RS-485 port

Package Contents

- One VNC Versatile Network Controller
- One AC Power Adapter
- This Users Guide
- RS-232 Interface Cable

The Panels

The following illustrations depict the external components of the VNC.

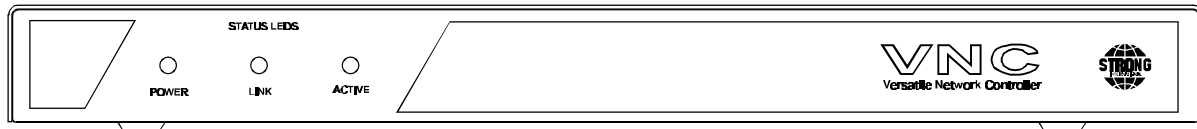


Figure 1: Front Panel

1. Power (RED) Indicator

This LED indicator lights when the VNC is powered on.

2. Link (GREEN) Indicator

The VNCs 10Base-T transceiver continually monitors the receive data path for activity as a means of checking whether the link is working correctly. The transceivers at both ends of the segment also send a link test signal to one another to verify the integrity of both twisted pair links. The Link LED indicator remains on when the connection is okay.

3. Active (GREEN) Indicator

This LED indicates transmit and receive activity on the segment.

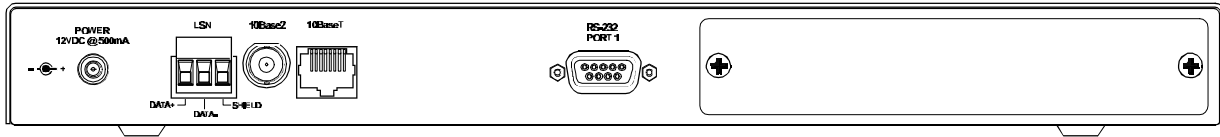


Figure 2: Rear Panel

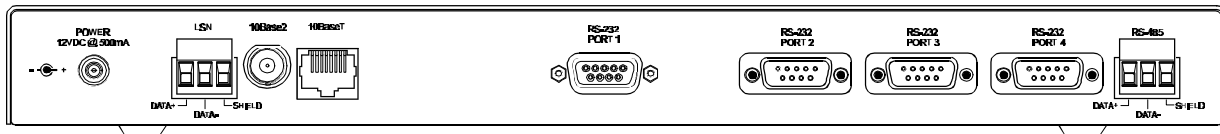


Figure 3: Rear Panel with Optional Expansion Board

1. AC Adapter Port

Plug the AC Adapter jack into this port.

2. LSN Port

This is an RS-485 port for making connections to the LSN (Automation Sync Network).

3. BNC Port

The VNC is equipped with one BNC port for making 10Base2 connections.

4. RJ-45 UTP Port

The VNC is equipped with one RJ-45 UTP port for making a 10Base-T to hub connection.

5. RS-232 Port 1

This is an RS-232 port that is used to connect the VNC to the Host computer.

6. RS-232 Port 2, 3 and 4 (optional)

These are RS-232 ports used to connect the VNC to auxiliary equipment such as an On-Premises Paging Transmitter, LED signs, etc.

7. RS-485 Port (optional)

This is an RS-485 port used to connect the VNC to auxiliary equipment such as LED signs.

Making Network Connections

The VNC can be wired as a Host gateway interface. Connect the RS-232 Port 1 to a serial port on the Host computer with the cable provided. Connect the LSN (Automation network) to the LSN connector on the VNC. Use RS-485 communication cable (Shielded twisted pair: Alpha #6412, Belden #9841 or equivalent).

The VNC also provides an LSN data path over 10mbps ethernet. The VNC can support either 10Base2 or 10Base-T. Any network device used to construct the ethernet network (such as hubs and bridges) must operate at the data link layer, or Layer 2 of the OSI model. A maximum of eight VNCs can be connected to the same ethernet network. A total of 63 automations (or other LSN devices) are supported. See the wiring diagram below

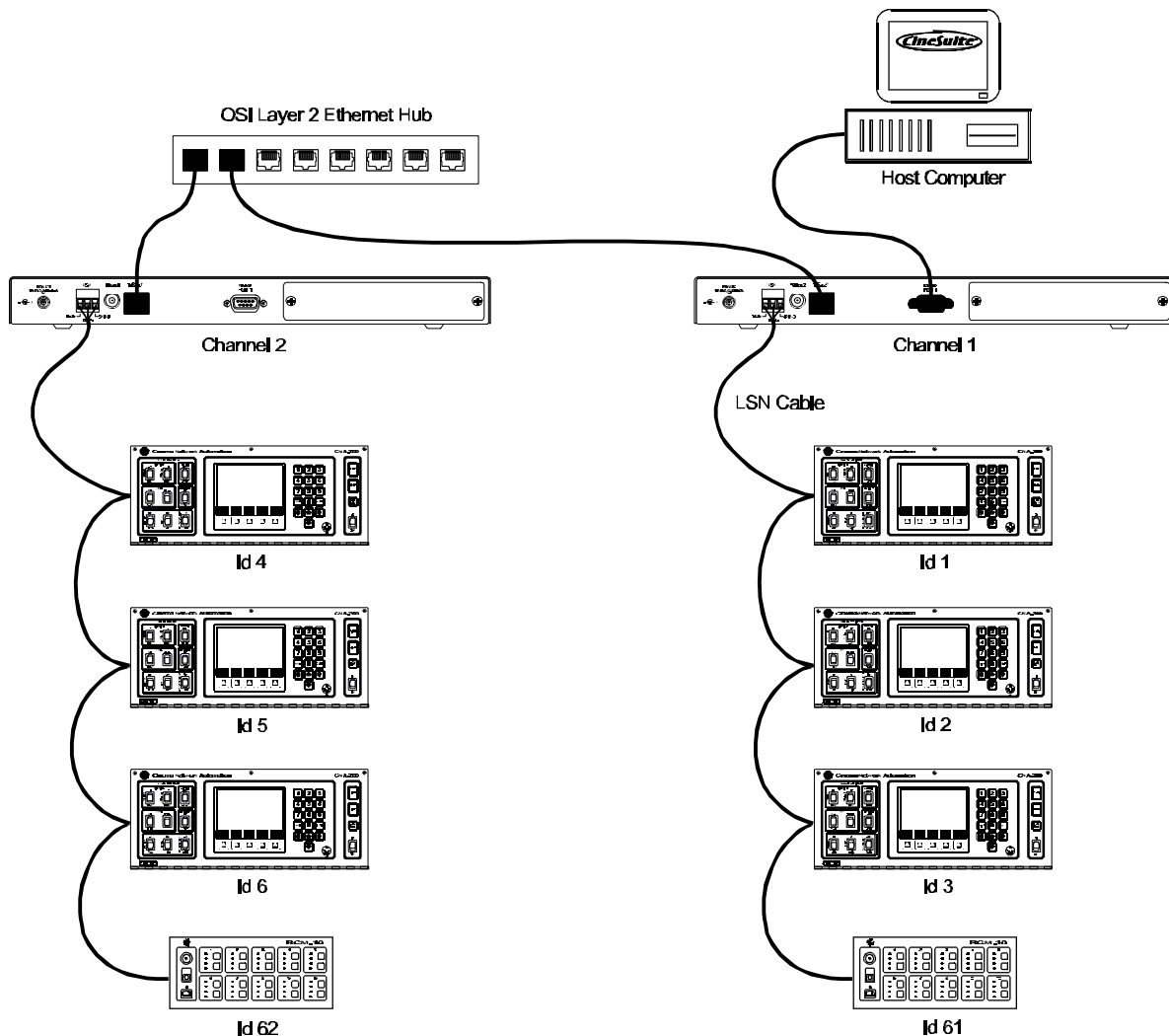


Figure 4: Connecting a Host computer and automations over an Ethernet network.

Insure that the VNC and other network device are in the power off mode before making the connections.

The following figure illustrates a simple network topology using a 10Base-T or 10Base2 Ethernet. Each VNC and CNA Automation must have a unique Id number. The Host computer must connect to VNC Id 0.

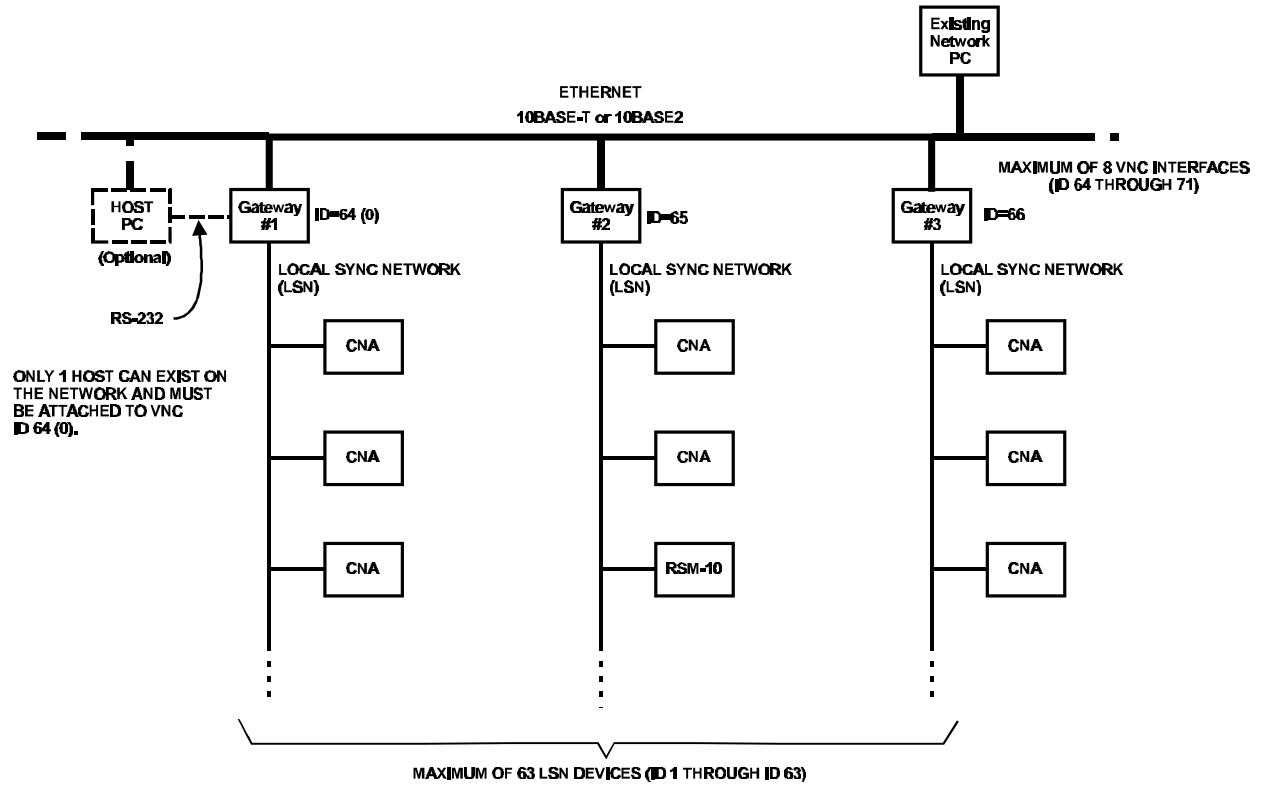
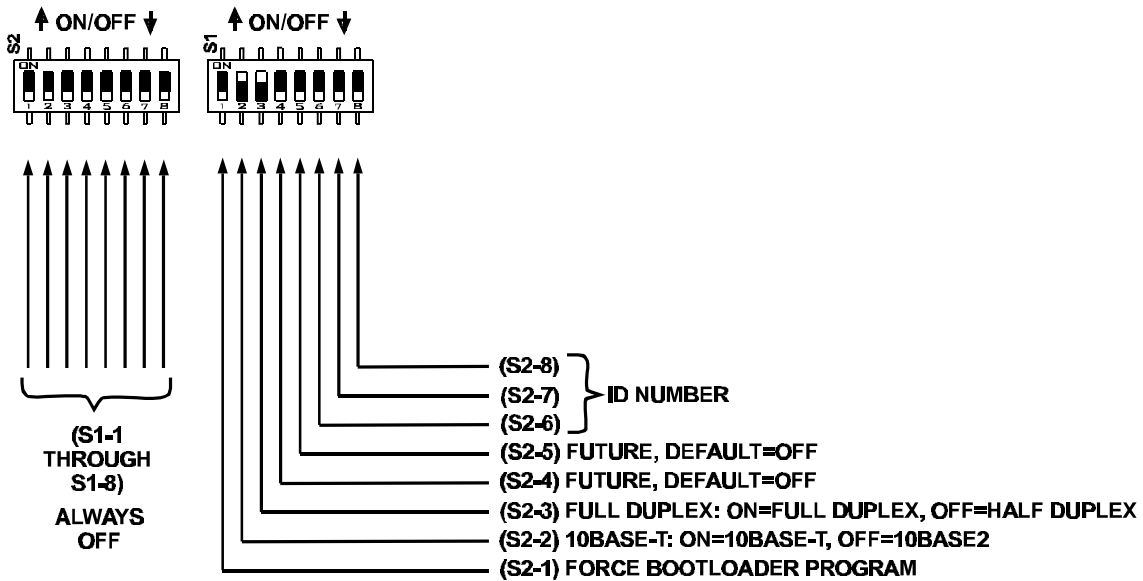


Figure 4: 10Base-T or 10Base2 network connections.

DIP Switch Settings

Open the VNC enclosure to configure the DIP switches on the VNC pc board.

*Switches are shown in default positions



<u>S1-6</u>	<u>S1-7</u>	<u>S1-8</u>	<u>ETHERNET ADDRESS</u>	<u>LSN ID</u>
OFF	OFF	OFF	00-D0-AD-00-00-01	(LSN Id=64, 0, Host connects here)
OFF	OFF	ON	00-D0-AD-00-00-02	(LSN Id=65)
OFF	ON	OFF	00-D0-AD-00-00-03	(LSN Id=66)
OFF	ON	ON	00-D0-AD-00-00-04	(LSN Id=67)
ON	OFF	OFF	00-D0-AD-00-00-05	(LSN Id=68)
ON	OFF	ON	00-D0-AD-00-00-06	(LSN Id=69)
ON	ON	OFF	00-D0-AD-00-00-07	(LSN Id=70)
ON	ON	ON	00-D0-AD-00-00-08	(LSN Id=71)

Note: Full duplex is ignored when S1-2 is off (10Base2).