

Unpack and Inspect the VNS

This chapter describes the contents of your VNS system shipping package and the physical characteristics of the VNS front and back panels. It includes the following sections:

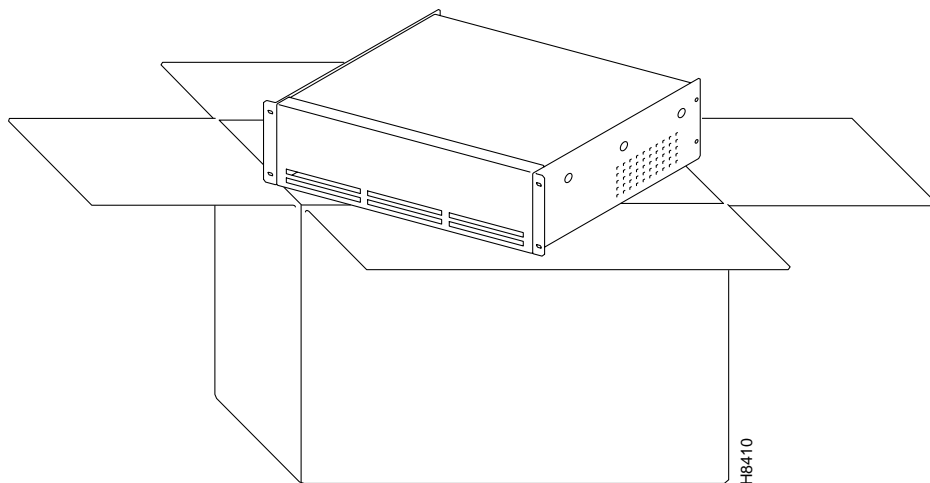
- Unpack the VNS
- Examine the VNS
- Observe Safety Measures

Unpack the VNS

If the shipping container is damaged, or if any of the various shipping indicators show improper handling of the container, contact your local shipping representative.

Figure 3-1 illustrates the unpacking of the VNS.

Figure 3-1 Shipping Contents



The shipping container contains:

- VNS Processor (Either VNS-AC-E or VNS-DC-E)
- AC power cord
- 10Base-T Ethernet Cable
- RS449 to V.35 cable for Frame Relay Card (part number 72-1415-01)
- RS449 to X.21 cable for Frame Relay Card (part number 72-1416-01)
- 2 Pair 75-Ohm E1 coaxial cables (one pair for each E1 Network Interface Card)
- Rear-mounting brackets and fasteners (2 sets) for mounting
- Optional Motorola V.34R Modem

And a publication:

- *Cisco Voice Network Switching Installation and Operation*, Release 3.0

Note The VNS software is factory-installed. Software upgrades are made available on Cisco Connection On-line (CCO). Contact Cisco Customer Service to find out how to get software upgrades for your product.

Note The RS449 to V.35 cable or the RS449 to X.21 cable are ordered independently.

Examine the VNS

This section provides descriptions the front and rear-panels of the two VNS models:

- VNS-AC-E
- VNS-DC-E

The external physical differences in the VNS models are pointed out in this section.

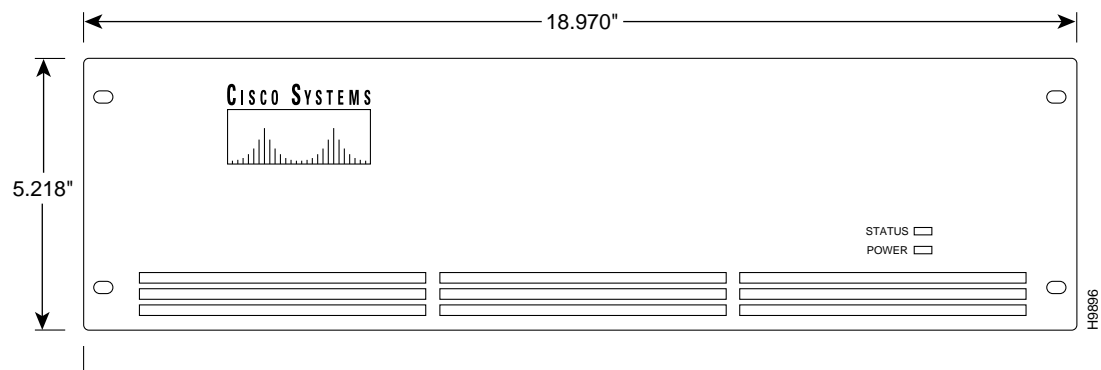
VVNS-AC-E and VNS-DC-E Front Panel

The VNS-AC-E or VNS-DC-E front panel, illustrated in Figure 3-2, are identical. They display the Cisco logo, the product name, and have the following two indicators:

- Power-On indicator indicates that the power is on.
- Status indicator is a tri-colored LED that indicates system status. The status indications are:
 - Off—VNS is off.
 - Blinking red—Unit booting, unit shutting down, factory installed soft-switch cable missing.
 - Red—Unit temperature gets too high.
 - Green--Unit powered on and ready.
 - Yellow—Reserved for future use.

These status indications apply to both the front- and rear-panel Status LEDs.

Figure 3-2 VNS-AC-E or VNS-DC-E Front Panel



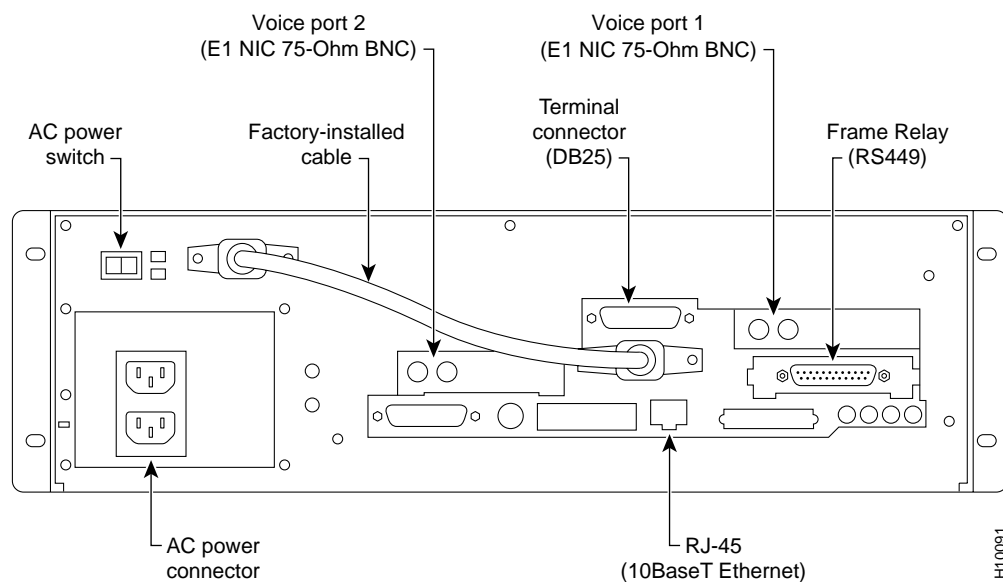
VNS-AC-E and VNS-DC-E Rear Panels

This section contains descriptions of the VNS-AC-E and VNS-DC-E rear panels.

VNS-AC-E Rear Panel

The VNS-AC-E contains the components and connectors shown in Figure 3-3. The Power On/Off Switch is to the left of the AC-Power Input connector.

Figure 3-3 VNS-AC-E Rear Panel



The VNS-AC-E has the following connectors and switches:

- AC Power Switch providing both graceful and emergency shutdown capability
- AC Power Connector (Single IEC 20)
- Power-On LED lights green when there is power to the unit
- Status LED providing the same indications as the front-panel Status LED
- Frame Relay Card RS449 connector
- Voice port 1 (E1 Network Interface Card) 75-ohm BNC connectors
- Voice port (E1 Network Interface Card) 75-ohm BNC connectors
- Ethernet Port RJ-45 Connector (referred to as a 10BaseT connector)
- Two Serial Port DB25 Connectors (for attaching a local terminal)

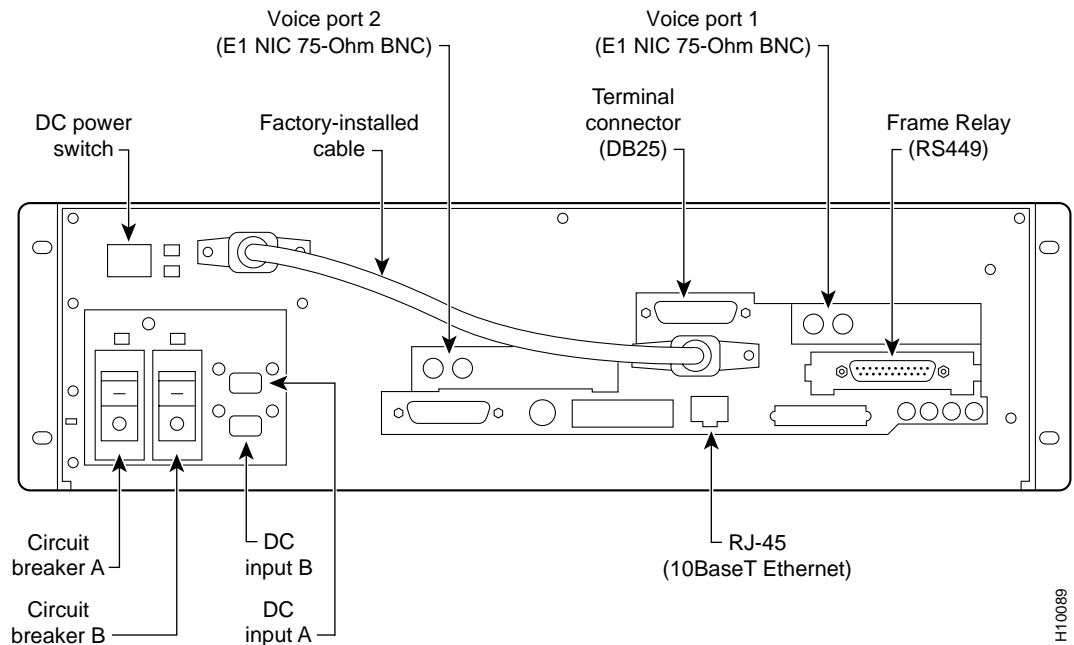
Note The factory-installed cable shown in Figure 3-3 is known as the soft-switch cable. It is installed from one of the DB25 connectors to a DB15 connector next to the AC power switch. If it is not installed, the Status LEDs will blink red.

Note Unlabeled connectors are not used in VNS applications.

VNS-DC-E Rear Panel

The VNS-DC-E rear panel contains the components and connectors shown in Figure 3-4. As shown, the VNS-DC-E has inputs for two DC power inputs (DC Input A and DC Input B). Typically these DC inputs are from separate DC power sources to provide for protection against a DC power source failure. Each DC input has its own circuit breaker.

Figure 3-4 VNS-DC-E Rear Panel



The VNS-DC-E has the following connectors and switches:

- DC Power Switch providing both graceful and emergency shutdown capability
- Two DC Power Connectors (Euro-style plugable terminal connector receptacles) (Phoenix P/N DFK-MSTB 2,5/3-GF-5.08)
- Power-On LED lights green when there is power to the unit
- Status LED providing the same indications as the front-panel Status LED
- Two circuit breakers:
 - Breaker A GOOD green LED is on when circuit breaker A is not tripped, off when circuit breaker is tripped
 - Breaker B GOOD green LED is on when circuit breaker B is not tripped, off when circuit breaker is tripped
- Frame Relay Card RS449 connector
- Voice port 1 (E1 Network Interface Card) 75-ohm BNC connectors

- Voice port (E1 Network Interface Card) 75-ohm BNC connectors
- Ethernet Port RJ-45 Connector (referred to as a 10BaseT connector)
- Two Serial Port DB25 Connectors (for attaching a local terminal)

Note Unlabeled connectors are not used in VNS applications.

Note The factory-installed cable shown in Figure 3-4 is known as the soft-switch cable. It is installed from one of the DB25 connectors to a DB15 connector next to the DC power switch. If it is not installed, the Status LEDs will blink red.

E1 Network Interface Card LEDs

The only status indicators on the rear panel of the VNS are the four LEDs on each E1 NIC. Figure 3-5 illustrates the location and the color of these LEDs. Table 3-1 describes what each LED indicates.

Figure 3-5 E1 NIC LEDs

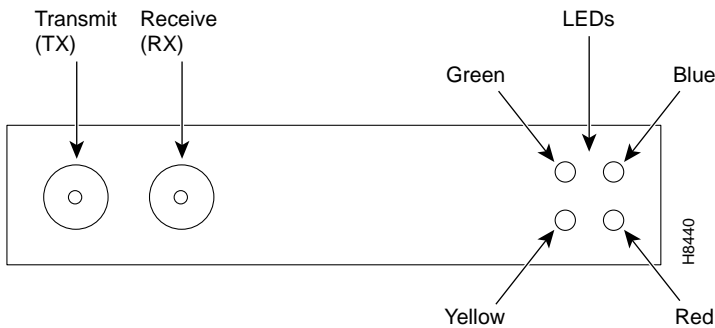


Table 3-1 E1 NIC LEDs

| LED | Function |
|--------|------------------|
| Green | Link is active. |
| Blue | Loss of sync. |
| Red | Loss of carrier. |
| Yellow | Remote alarm. |

Observe Safety Measures

To ensure safe performance as well as to maintain the integrity of your VNS, please observe a few safety measures as you proceed with this installation.

- Do not modify the internal or electrical assembly of VNS equipment.
- Protect the VNS from overheating; ensure that openings in the equipment are not blocked or covered. Never place the unit near any source of heat.
- Handle with care; rough treatment may damage sensitive components.
- Always turn off the power to the VNS before moving it.

