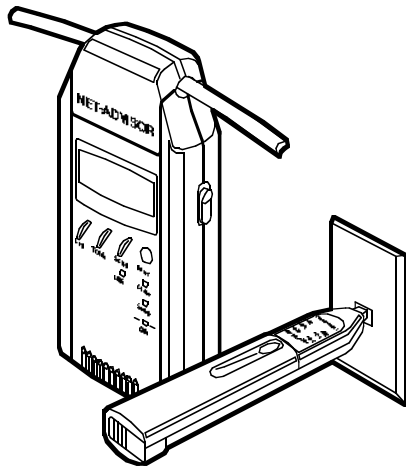


# BLACK BOX<sup>®</sup>

## NETWORK SERVICES

### NET-ADVISOR, NET-ADVISOR-RS, VERI-NET, VERI-NET + , AND VERI-NET PRO



*Troubleshooting doesn't get faster  
or easier than this!*

#### Key Features

- ▶ **Instant test results.**
- ▶ **Compact size.**
- ▶ **Tests active links—no need to isolate a link from the LAN.**
- ▶ **Net-Advisor and Net-Advisor-RS provide 24-hour traffic logging.**
- ▶ **Net-Advisor-RS has an RS-232 interface and includes cable and software for downloading of measurements to a host computer.**

#### About Net-Advisor/Net-Advisor-RS

Instantly detect and display network activity without a direct electrical connection to the cable. This tester features a sensor that reads data signals through all UTP, STP, or coax cables.

Just place the cable in the cable portal and close the jaws. Ultra-sensitive, high-frequency magnetics read the low-level fields generated by each data bit transmitted through the cable. Results are shown on the graphical LED display, and audible and visual signals trigger when traffic levels exceed user-defined threshold conditions.

The Net-Advisor verifies connectivity, measures network loading, and logs traffic levels for up to 24 hours.

Besides all those features, the Net-Advisor-RS has an RS-232 serial port for continuous downloading of traffic measurements to a host computer. Use that information to analyse use and performance baselining.

It's also convenient for troubleshooting in the field. The tester weighs about as much as a TV remote, is compact enough to fit in a shirt pocket, and runs on two AA batteries.

For information about Veri-Net and Veri-Net+, see Figure 2 and the description on page 2.

# Take a closer look and see what these testers can do.

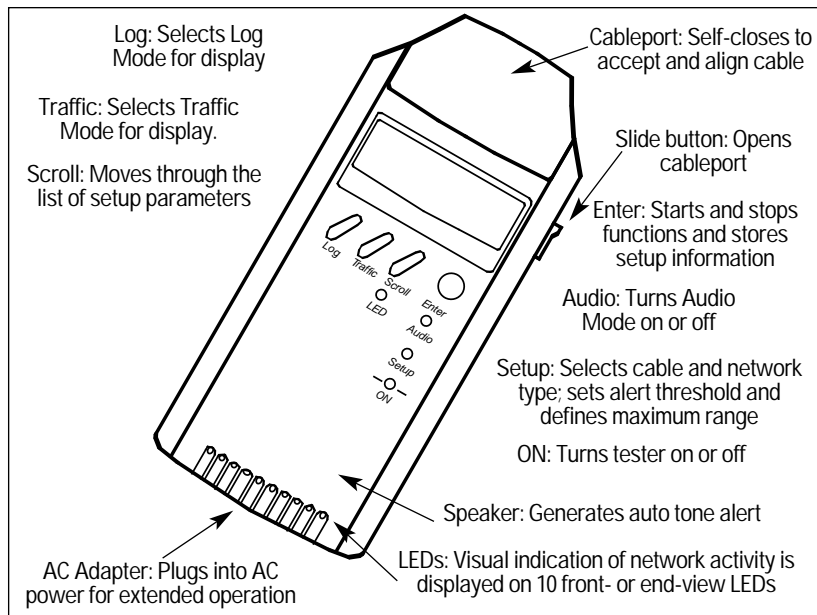


Figure 1. Net-Advisor/Net-Advisor-RS.

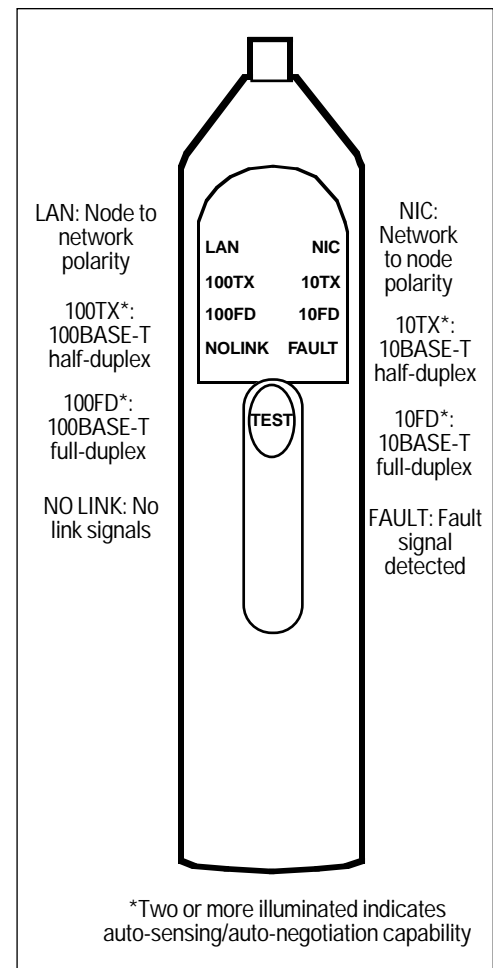


Figure 2. Veri-Net/Veri-Net+.

## Key Features of Veri-Net/Veri-Net +

- ▶ **Both models provide instant troubleshooting test results.**
- ▶ **Compact size—it'll fit in your shirt pocket.**
- ▶ **Tests active links; no need to isolate a link from the LAN.**
- ▶ **Veri-Net models decode link signals and display the exact configuration of the connected equipment within seconds.**
- ▶ **Veri-Net+ features "Link Activation."**
- ▶ **Veri-Net+ automatically powers down after 12 minutes of inactivity.**
- ▶ **Fault light on the Veri-Net+ flashes when the battery is low.**

## About Veri-Net/Veri-Net +

The Veri-Net is the essential tool for testing Fast Ethernet (100BASE-TX) and standard Ethernet (10BASE-T) links. This tester decodes link signals and displays the exact configuration of the equipment connected—all at the press of a button. Test results appear in only 3 seconds!

The Veri-Net also verifies link connectivity to the far end, tests for reported faults, and determines the polarity of the outlet or cable.

While the Veri-Net is a receive-only tester, the Veri-Net+ adds a transmit function called "Link Activation." It transmits a link pulse simulating a link partner which can be viewed on the far-end equipment (such as a hub, switch, or NIC) as a distinctive "blink-blink" of the Link LED. This

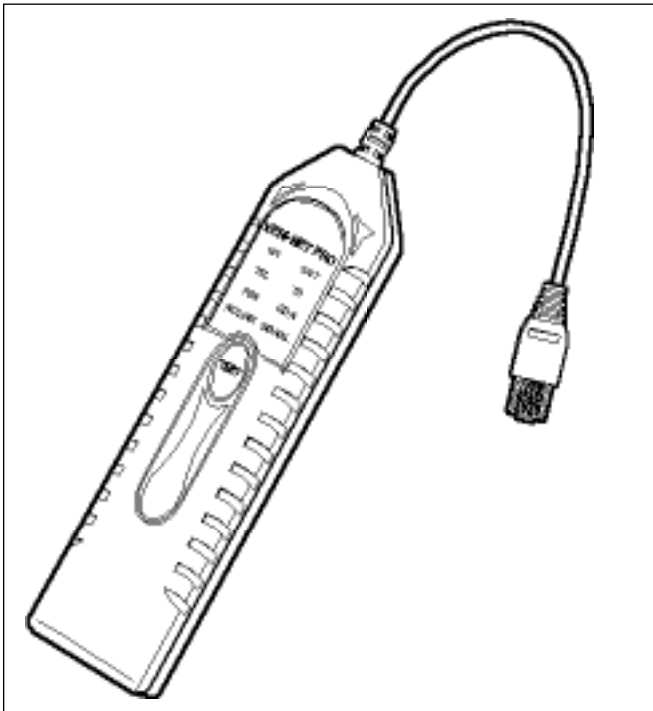
lets you verify two-way Link integrity and identify connections from the wall outlet to the hub or switch.

The Veri-Net+ also includes a tone-generator feature that lets you trace the cable path with a standard tone probe when a "No Link" condition is found.

What's more, the Veri-Net+ automatically powers down after 12 minutes of inactivity, and its fault light flashes when the battery is low.

For information about Net-Advisor and Net-Advisor-RS, see Figure 1, above, and the description on page 1.

# Quickly ID a wall outlet's network or telephone connection with the Veri-Net Pro.



## Key Features of Veri-Net Pro

- ▶ *Identifies the outlet before you connect expensive equipment.*
- ▶ *Warns you if unidentified signals are present.*
- ▶ *A must-have when updating cable-plant documentation.*
- ▶ *Flexible pigtailed connector for reaching wallplates behind desks and other furniture.*
- ▶ *Compact size.*
- ▶ *Battery-powered.*

## About Veri-Net Pro

Connecting equipment to an untested wall outlet can be risky business. Why chance damaging your equipment by plugging it into an incompatible electrical interface? The Veri-Net Pro is *the* essential tool you need for managing, installing, and maintaining network or telecom systems in an easy and safe manner.

The Veri-Net Pro quickly identifies the type of network or telephone connection on an outlet's RJ-45 jack. It tells you if it's a 10BASE-T (Ethernet), 100BASE-TX (Fast Ethernet), Token Ring, analogue telephone, PBX, or ISDN connection. The

tester warns you if unidentified signals occupy the jack or if the jack isn't connected.

For example, the Veri-Net Pro can help you avoid PBX systems that supply voltage and current levels that far exceed what your modems or network devices can handle. When conducting cable and network tests, use the tester to verify that there are no damaging voltages present before hooking up expensive cable testers or protocol analysers.

What's more, knowing an outlet's connection can save you time when troubleshooting physical-layer problems, such as

whether a workstation is correctly connected to a LAN. You can also eliminate the guesswork when determining the outlet you need or tracing cables.

Other typical applications include using the Veri-Net Pro to organize a messy wiring closet, verifying that cable runs connected at the far end are still connected at the panel. Or use the tester when punching down a new connection to verify that your outlet is functional.

Here's how the tester works. The Veri-Net Pro scans all eight wires connected to an RJ-45 outlet. It identifies the type of system connected or the

presence of potentially harmful signals.

The tester's flexible 15.2-cm (6-inch) pigtailed connector cable helps you access hard-to-reach wallplates behind desks and furniture. If the outlet is sideways or upside down, just plug in the tester and flip it over to identify line and network connection status.

Eight LEDs indicate whether you're attached to a device (10BASE-T, 100BASE-TX, or Token Ring) or a line (analogue, ISDN, or PBX). Both 10BASE-T and 100BASE-TX LEDs will light up if the attached device is configured for 10/100 autonegotiation.

# Specifications

**Networks Supported** — TS022A, TS027A-R2: 100BASE-TX (IEEE 802.3u) and 10BASE-T (not for use with 100BASE-T4 equipment);

TS023A, TS024A: Ethernet 10BASE-T and 4-/16-Mbps Token Ring;

TS028A: 100BASE-TX (IEEE 802.3u), 10BASE-T, Token Ring, analogue, PBX, ISDN

**Cable Types** — TS022A, TS027A-R2, TS028A: UTP, STP; TS023A, TS024A: UTP, STP, coax, with a maximum diameter of 0.34" (0.86 cm)

**Indicators** — TS023A, TS024A: Graphical LCD display (110 x 32), (10) LEDs, audible status monitor;

TS022A, TS027A-R2, TS028A: (8) LEDs

**Connectors** — TS024A: (1) RS-232 serial port; TS022A, TS027A-R2, TS028A: (1) RJ-45

**Operating Temperature** — 0 to 50°C (32 to 122°F)

**Storage Temperature** — -10 to +55°C (14 to 131°F)

**Humidity Tolerance** — 5 to 95%

**Power** — TS022A, TS027A-R2, TS028A: (1) 9-volt alkaline battery; TS023A, TS024A: (2) AA batteries (AC adapter included for extended operation)

**Size** — TS022A, TS027A-R2, TS028A: 17.3H x 3.6W x 3.3D cm (6.8"H x 1.4"W x 1.3"D); TS023A, TS024A: 17.5H x 7.4W x 2.8D cm (6.9"H x 2.9"W x 1.1"D)

**Weight** — TS022A, TS027A-R2, TS028A: 0.1 kg (0.3 lb.); TS023A, TS024A: 0.2 kg (0.5 lb.)

# Additional Equipment You May Need:

- Bulk Category 5 Solid-Conductor Cable, 4-Pair PVC (EYN737A)
- Bulk Category 5 Solid-Conductor Cable, Plenum (EYN738A)

# What the Package Includes

**TS022A, TS027A-R2, and TS028A:**

- Veri-Net, Veri-Net+, or Veri-Net Pro
- Female-to-female RJ-45 coupler
- 9-volt battery
- User's manual

**TS024A:**

- Net-Advisor-RS
- Pouch
- AC adapter
- (2) AA batteries
- RS-232 interface cable
- DataManager software (2 diskettes)
- User's manual

**TS023A:**

- Net-Advisor
- Pouch
- AC adapter
- (2) AA batteries
- User's manual

# Typical Application

*Your wiring closet's a mess. After years of changing and updating cable runs, you're just not sure what's being used. Cable runs that are no longer connected at the far end are still connected at the panel. Sound familiar? Without the Veri-Net, identifying active and inactive cable runs would be an all-day project. With it, however, you can trace the cable run in seconds—without disrupting the network.*

# Ordering Information

ITEM	CODE
Veri-Net .....	TS022A
Net-Advisor .....	TS023A
Net-Advisor-RS .....	TS024A
Veri-Net+ .....	TS027A-R2
Veri-Net Pro .....	TS028A

*You may also need...*

Tone Probe .....	TS155
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