

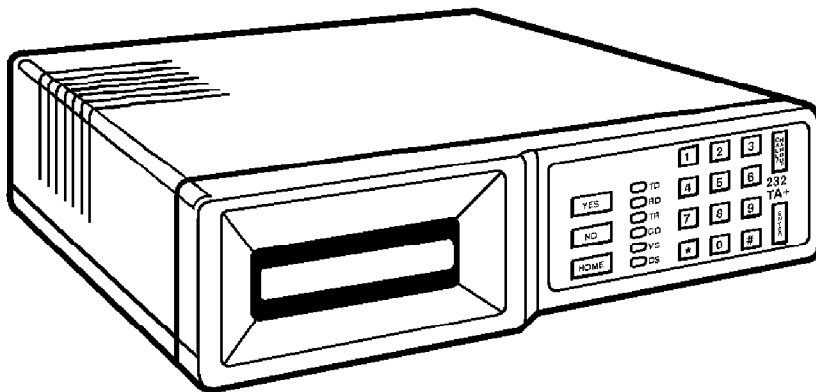


BLACK BOX[®]

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Black Box Corporation

The Source for ConnectivitySM

ISDN Terminal Adapters



The speed and services of ISDN—get it all and use the analog phone equipment you already own. Our ISDN Adapter makes it happen!

Our ISDN Adapter is the cost-effective cornerstone of your ISDN network. Choose from models with or without an enhanced numeric keypad, and either RS-232 or V.35 interfaces.

Key Features

- ▶ Full compatibility with Northern Telecom DMS-100 and AT&T 5ESS, 5E6 central-office switches.
- ▶ Full compatibility with the extended Standard AT Command Set.
- ▶ Easy-to-read front-panel 2-line LCD for programming and diagnostics.
- ▶ Asynchronous and synchronous transmission.
- ▶ Rate adaption with V.120 or T-link.

Overview

Send data on an end-to-end digital link that has at least twice the bandwidth of a typical dialup modem. That's ISDN. And our ISDN Adapter brings it to your desktop.

You can send voice and data simultaneously. One B-channel can send data to one location, while the voice channel goes to a different location.

The B-channel sends async data at 38.4 Kbps and sync data at 64 Kbps. A 16-Kbps D-channel transmits X.25 data. Like DDS and T1, you get high speed and error immunity—but in a system that's sized right for your budget.

With our Terminal Adapter, you can use the equipment you already have—either RS-232 or V.35. The RS-232 Adapters have a DB25 connector, and the V.35 Adapters have a 34-pin connector.

Get your Adapter with or without an enhanced numeric keypad, too. With the keypad, you can dial data calls right from the unit.

Our ISDN Adapter gives you full support for the latest telephone switching systems. It's fully compatible with Northern Telecom DMS-100 central-office switches running software versions BCS-30 and above, and with AT&T 5ESS ISDN central-office switches running generic programs 5E4.2, 5E5, or 5E6 for Type A terminals.

Installation is about as easy as setting up a modem. You just plug your PC, terminal, or other DTE (data terminal equipment) into the

Adapter, along with your telephone. Then plug the Adapter into the ISDN circuit. Set two strap options and one DIP switch, and you're ready to program.

You program the Adapter right from the front-panel pushbuttons and LCD, or from your PC. Front-panel programming is menu-driven. You get full compatibility with the extended Standard AT Command Set.

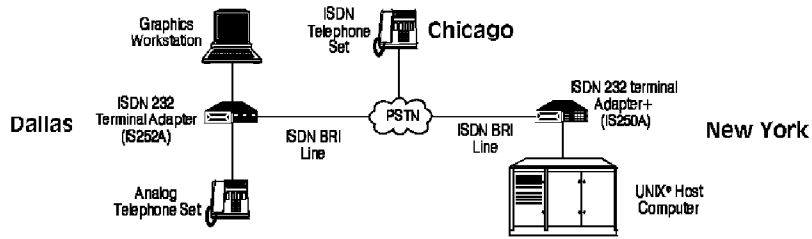
Is ISDN for you? If you want high-bandwidth data transmission but not a leased line, the answer is yes. And our Terminal Adapter is the component that can bring it all together for you.

Typical Applications

Send large files often? This is the fastest data transmission you can get on an ISDN dialup line.

Video conferencing? Here's where you need our Adapter's dialup flexibility and high speed.

With ISDN, each channel can send data to two different places—at the same time.



Technically Speaking

The Integrated Services Digital Network (ISDN) is a digital network that gives its subscribers end-to-end digital connectivity. ISDN's two B-channels and one D-channel support transmission of audio and video data, video-text, telex, fax, and telemetry. Its digital transmission technology lets ISDN send all this information in one binary digital stream.

The B-channels are circuit-switched. So you're charged only during use. (A leased line costs you whether you're using it or

not.) The D-channel is always active and will call setup information, but it can also be used for packet switched X.25 communication.

ISDN uses full-duplex, time-division multiplexing technology. As with a modem, full-duplex lets you send and transmit data simultaneously on ISDN. The send and receive data paths operate independently. Like a multiplexor, ISDN lets you mix multiple channels on one line.

Those are ISDN's basic operating characteristics. Its key implementations are the basic rate interface (BRI), the primary rate interface (PRI), and the D-channel.

BRI is the digital link between two or more ISDN nodes. Its characteristic speed is 192 Kbps. The BRI consists of two 64-Kbps B-channels for circuit-switched voice or data, or packet-switched data. There's also a 16-Kbps D-channel for signaling or packet-switched data.

PRI is a digital link that runs at 1.544 to 2 Mbps, full-duplex and time-division-multiplexed. The PRI consists of 23 B-channels and 1 D-channel. It's used for very-high-speed data transfer.

The D-channel, present in both BRI and PRI, is an out-of-band signaling channel for handshaking functions. The PRI D-channel is for signaling only, while the BRI D-channel is for signaling plus low-speed packet-switched data.

Specifications

ISDN Terminal Adapter

Switch Compatibility — Northern Telecom DMS-100, AT&T 5ESS central-office switches

Rate Adaption — CCITT V.120, T-link, or none

Protocol — DTE: Asynchronous and synchronous; D-channel: X-25

BRI Line Code — 2B1Q

Speed — Async: up to 38,400 bps; Sync: 1200 to 64,000 bps

Diagnostics — 2B+D loopback; bilateral loopback; NT1 B1 loopback; NT1 B2 loopback; NT1 B1 and

B2 loopback; NT1 self-tests nailed up tests for B1 and B2

DTE Interface — IS250A, IS252A: EIA232; IS255A, IS275A: CCITT V.35

Connectors — IS250A, IS252A: DB25 female; IS255A, IS275A: 34-pin M block; Analog phone: RJ-11 female; S/T interface RJ-45

Power — 6 watts @ 110 VAC± 10%, 60 Hz

Size — 2.2"H x 7"W x 10"D (5.4 x 17.8 x 25.4 cm)

Weight — 5.5 lb. (2.5 kg)

The Complete Package

What you get when you order the ISDN Terminal Adapter.

- ◆ The ISDN Terminal Adapter
- ◆ User's manual
- ◆ S/T interface cable for telephone

Ordering Information

This information will help you place your order quickly.

PRODUCT NAME	ORDER CODE
ISDN Terminal Adapters	
232 Terminal Adapter+	IS250A
232 Terminal Adapter	IS252A
V35 Terminal Adapter+	IS255A
V35 Terminal Adapter	IS257A