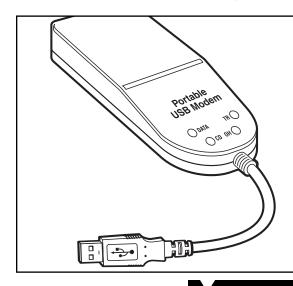


PORTABLE USB MODEM



Take it on the road. This high-speed USB modem is built for the mobile user.

Key Features

- ➤ V.90/56K performance from a compact device.
- Hot-swappable with other USB devices.
- Class 1 and Class 2 faxing at 14.4K.
- Host-based USB power. No external power supply required.
- Wizard enables easy setup and country selection.
- Remote configuration for centralized management.
- Industry-standard error correction and data compression.

If you're looking for a truly compact way to bring V.90 communications to your laptop, then the Portable USB Modem is for you. It's really about as small and convenient as one can get and still provide full-featured V.90 performance.

Because it doesn't require a PC Card slot, this pocket-sized data/fax modem saves you space for other functions. What's more, it requires no power supply, can conserve power when not in use, eliminates COM port bottlenecks, and is hot-swappable.

It's also a great add-on if you're a power user who needs more than one V.90 connection to the Internet from your laptop. Use the Portable USB Modem in tandem with a PC Card modem to make your multiple connections. **Modem's built into the cable!**

Easy to install with Windows 98, 2000, and Windows Me plugand-play operation, the device is a fully functional V.90 data/fax modem built into a USB cable that connects a USB laptop computer or PC to a phone line. Just plug it into a laptop or desktop USB port. Your Windows 98, 2000, or Windows Me system will do all the work, automatically detecting and configuring the modem. Plus, with USB, you never have to reboot or change system settings when swapping this modem with other USB devices.

Speedy data transfers!

As a dual-mode 56-kbps modem that supports the ITU V.90 and K56flex tsandards(*), the Portable USB Modem can be used for fast Internet access, e-mail, fax, or file transfers. Plus, with the modem's 12-Mbps USB connection, you can achieve faster throughput than most conventional PC Cards or desktop modems.

By being a controller-based

modem (as opposed to a controller-less or software modem), the Portable USB Modem assumes most modem functions and offloads CPU cycles. It has a powerful built-in processor that frees up your computer by handling modem operations. As a result, you get improved performance that can give you faster file downloads.

When sending data, the modem supports automatic fallback to slower speeds in noisy line conditions and fall-forward to faster speeds when the conditions improve. In addition, the Portable USB Modem automatically disables data compression when transferring already-compressed files.

This full-duplex, intelligent modem also has V.42 error correction, V.42bis data

Document Number 25694 Page 1 of 3

(continued from page 1)

compression, and V.17 (14,400 bps), Class 1 and 2, Group 3 fax capabilities.

The modem pulse- or tone-dials, and recognizes dial tones and busy signals for reliable call-progress detection. It can also detect AT&T $^{\circ}$ calling card tones and has a Caller ID function.

LEDs let you know the status.

The Portable USB Modem has four front-panel LEDs (Terminal Ready, Off-Hook, Data, and Carrier Detect) that indicate status, configuration, and activity. When Windows detects and initializes the modem, the Terminal Ready LED lights. The modem's Off-Hook LED lights when the modem is dialing, online, or answering a call and flashes when the modem pulse-dials. And when the modem is transmitting or receiving data to or from another modem, the Data LED flashes. Lastly, when a valid carrier signal from another modem is detected, the Carrier Detect LED lights.

Use it in another country.

The modem is FCC-registered for connection without notification to the telephone company. But it also comes with a Global Wizard program (included on the Installation CD-ROM) so you can use the modem from one country to the next while adhering to country-specific telco requirements. Simply choose a country from a pull-down menu in the Global Wizard program, and the Global Wizard does the rest, automatically setting up the correct operating parameters for the modem's operation in that country. You can also use AT commands to do the same task. The Portable USB Modem is compatible with the standard AT command set used by most communication programs.

Configure it locally...or from afar!

For easy modem setup and configuration, you get integrated Data Comms and Fax Software on CD-ROM with the modem. The bundled software has a user-friendly graphical interface for use under Windows. It simplifies control of the modem by guiding you through the process of selecting your serial port, your port speed, and other variables, and then storing your settings. You can also store frequently called phone numbers and recall them with the stroke of a key or the click of a mouse.

While operating the Portable USB Modem in standard mode, you can store up to two command lines or telephone numbers of up to 40 characters each in the modem's nonvolatile memory.

The Portable USB Modem also supports remote configuration. This network management tool enables you to configure modems anywhere in your network from one location. With password-protected remote configuration, you can issue AT commands to a remote Portable USB Modem for maintenance or troubleshooting—just as if you were on-site!

The Flash Wizard utility lets you update the modem's firmware when new features are offered. Since the firmware is stored in flash memory, you can upgrade it yourself in a few minutes by using a simple set of procedures.

Other advantages:

Because it draws its power directly from the USB port and only uses the battery when it's plugged in, the modem enables you to get the most life from your laptop's battery. Compare that with many PC Card modems; they can drain a battery's resources—even when they're not in use.

Each time you turn on the modem, it performs an automatic self-test to ensure proper operation. It also has three diagnostic tests: local analog loopback, remote digital loopback, and local digital loopback. These ITU-T V.54 loopback tests isolate telephone circuit and transmission problems.

The modem also features self-resetting lightning protection to protect it from electrical spikes on the telephone line.

Specifications

Approvals: FCC Parts 15B and 68; UL® 1950; IC CS03; CE mark

Client-to-Server Data Rates: V.90 or K56flex [™] speeds when accessing an ISP type V.90 or K56flex server (actual speed depends on server capabilities and line conditions)

Client-to-Client Data Rates: 33,600, 31,200, 28,800, 26,400, 24,000, 21,600, 19,200, 16,800, 14,400, 12,000, 9600, 7200, 4800, 2400, 300 bps

Fax Data Rates: 14.400, 12.000, 9600, 7200, 4800, 2400, 300 bps

Data Format: Serial, binary, asynchronous

Modem Compatibility: ITU V.90, K56flex; ITU-T V.34 enhanced, V.34, V.32bis, V.32, V.22bis, V.22; Bell 212A and 103/113; ITU-T V.29, V.42, V.42bis; ITU-T V.21 and V.23 in international versions

Fax Compatibility: ITU-T Group 3, Class 1 and 2, T.4, T.30, V.21, V.27ter, V.29, V.17, and TIA/EIA TR29.2

V.17, and TIAYLIA TH25.2

Error Correction: ITU-T V.42 (LAP-M or MNP® 3-4)

Data Compression: ITU-T V.42bis (4:1 throughput), MNP 5 (2:1 throughput)

Flow Control: X-ON/X-OFF (software), RTS/CTS (hardware)

Intelligent Features: Plug and play; fully AT command compatible; autodial, redial, repeat dial; pulse or tone dial; dial pauses; auto answer; caller ID; EIA extended automode; adaptive line probing; automatic symbol and carrier frequency during startup, retrain, and rate negotiation; call status display, auto-parity, and data rate selections; keyboard-controlled modem options; non-volatile memory; on-screen displays for modem option parameters; command lines of up to 40 characters each; help menus; remote configuration

Command Buffer: 40 characters

Data Modulation: FSK at 300 bps, PSK at 1200 bps, QAM at 2400, 4800, and 9600 bps (non-trellis), QAM with trellis-coded modulation (TCM) at 9600, 12,000, 14,400, 16,800, 19,200, 21,600, 24,000, 26,400, 28,800, 31,200, 33,600, and 56,000 bps

Fax Modulation: V.21 CH2 FSK at 300 bps (half-duplex); V.27ter DPSK at 4800 and 2400 bps; V.29 QAM at 9600 and 7200 bps; V.17TCM at 14,400, 12,000, 9600, and 7200 bps

Carrier Frequencies:

ITU-T V.35: 1600, 1646, 1680, 1800, 1829, 1867, 1920, 1959, 2000 Hz; ITU-T V.32bis/V.32: 1800 Hz;

V.22bis/V.22 or Bell 212A Standard (2400 and 1200 bps): Transmit originate: 1200 Hz; Transmit answer: 2400 Hz; Receive originate: 2400 Hz; Receive answer: 1200 Hz;

ITU-T V.23 (1200 bps): Transmit originate: 390 Hz mark, 450 Hz space; Receive originate: 1300 Hz mark, 2100 Hz space; Transmit answer: 1300 Hz mark, 2100 Hz space; Receive answer: 390 Hz mark, 450 Hz space;

ITU-T V.21 (0 to 300 bps): Transmit originate: 980 Hz mark, 1180 Hz space; Receive originate: 1650 Hz mark, 1850 Hz space; Transmit answer: 1650 Hz mark, 1850 Hz space; Receive answer: 980 Hz mark, 1180 Hz space;

Bell 103/113 (0 to 300 bps): Transmit originate: 1270 Hz mark, 1070 Hz space; Receive originate: 2225 Hz mark, 2025 Hz space; Transmit answer: 2225 Hz mark, 2025 Hz space; Receive answer: 1270 Hz mark, 1070 Hz space

Fax Carrier Frequencies: V.21 Ch2 (half-duplex): 1650 Hz mark, 1850 Hz space for transmit originate; 1650 Hz mark, 1860 Hz space for transmit answer; V.27ter: 1800 Hz originate/answer; V.29 QAM: 1800 Hz originate/answer; V.17 TCM: 1800 Hz originate/answer

Transmit Level: -11 dBm (dial-up)
Frequency Stability: ±0.01%

Receiver Sensitivity: -43 dBm under worst-case conditions

AGC Dynamic Range: 43 dB

Connectors: (1) USB "A" connector; (1) RJ-11 phone jack

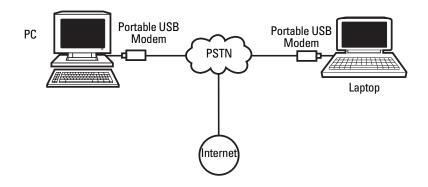
Operating Systems Supported: Windows® 98, 2000, and Windows Me

Humidity: 20 to 90% relative, noncondensing **Temperature:** Operating: 32 to 122°F (0 to 50°C) **Size:** $1^{\circ}H \times 1.3^{\circ}W \times 3.1^{\circ}D$ (2.5 $\times 3.3 \times 7.9$ cm)

Weight: 2 oz. (57 g)

Document Number 25694 Page 2 of 3

Two Portable USB Modem users linked via the PSTN





- Portable USB Modem
- (2) CD-ROMs: (1) Installation, (1) Datacomm software and Users' Manual
- (1) USB cable
- (1) RJ-11 telephone cable
- (1) Quick Start Guide

Ordering Information CODE

Portable USB Modem.....MD403A



Black Box offers the best warranty program in the industry—Fido Protection*. For more information, request **FaxBack 22512**.

Document Number 25694 Page 3 of 3