

Chapter 1

Introduction

WELCOME

The BitSURFR Pro ISDN Modem connects your PC to the Integrated Services Digital Network (ISDN) for high-speed data transfer. ISDN is a digital telephone network that requires the installation of a special line into your home or office. The BitSURFR Pro can be configured and operated using a variety of software and has two standard telephone jacks for connecting telephones, facsimile machines, modems, fax modems or answering machines.

This *User's Guide* contains a detailed description of AT commands and all advanced modes of operation. It contains a section on troubleshooting any problems you may encounter with your BitSURFR Pro, as well as appendices that describe the AT command set, ISDN interfaces, product specifications, and guidelines and forms for ordering ISDN service. For a quick and easy guide to connecting and configuring your new BitSURFR Pro, refer to the accompanying *Getting Started Guide*. For information on installing the Internet access software packaged with your BitSURFR Pro, refer to the "Installing Optional Software" insert included in your documentation bundle.

Note

Unless you are an experienced ISDN user, we recommend that you configure your BitSURFR Pro for additional features (such as Caller ID delivery and security) only after you have successfully installed and used the BitSURFR Pro.

Features

Your BitSURFR Pro includes the following features:

- Data throughput rates up to 11 kilobytes per second
- PPP async-to-sync conversion
- Asynchronous Inverse Multiplexing (AIMux)
- Caller ID number delivery to external Caller ID display unit.
- Caller ID delivery and security features via AT commands
- Call Waiting and Conference Calling compatibility

- Plug and Play compatibility
- V.120 rate adaptation
- ISDN AT command set
- Integrated NT1 device
- Multilink PPP
- Two standard RJ11 telephone jacks for telephone, fax, or modem connections
- Softload support for upgrading the BitSURFR Pro software

Just look at what the BitSURFR Pro will do for you...

Easy Operation

Your BitSURFR Pro makes it easy to benefit from the latest technology. Its menu-driven design and on-screen help options prompt you through each task. If you wish, you can also run the BitSURFR Pro using a concise vocabulary of ISDN AT commands—a kind of simplified shorthand for talking with your new equipment. There's a full index of AT commands in Appendix C of this guide.

Data Communication

Your BitSURFR Pro is a highly advanced digital modem designed to accommodate a wide range of software and protocols. It supports both single-link and multi-link Point-to-Point Protocol (PPP) as well as Asynchronous Inverse Multiplexing (AIMux). Because ISDN is designed for digital data transmission, it is faster, more accurate and more reliable than traditional analog telephone connections.

Analog Communication

Your BitSURFR Pro brings together the operation of up to two additional communication tools. Its dual standard RJ11 telephone jacks (exactly the kind you've been using for years) will allow you to network telephones, answering machines, fax machines, Caller ID display units, or even analog modems. As an added plus, flexible calling options—like Call Waiting or Call Conferencing—are completely compatible with your BitSURFR Pro.

Caller ID Delivery and Security

Your BitSURFR Pro gives you the power to identify and log the telephone numbers of incoming calls received. You can also use the BitSURFR Pro to block unwanted calls from a specific list of numbers, or use it to screen calls, allowing only a favored list of numbers to get through.

On-Going Support

Your BitSURFR Pro is built to last and designed with the future in mind. A “softload” process is built in for automatically upgrading the BitSURFR Pro software with the utmost ease and speed. And if you ever have a problem with your BitSURFR Pro that you can’t solve alone, Motorola’s expert technical support staff is just a fax, e-mail, or phone call away. They’ll be happy to help resolve any problem. To contact Motorola, refer to the “Service and Support” section at the back of this guide.

DOCUMENT CONVENTIONS

Here are a few document conventions you need to know to make the most of this guide:



Note

The Note symbol alerts you to important information and helpful tips.



Caution

The Caution symbol alerts you to possible system-related problems or failures.



Warning

The Warning symbol alerts you to situations which could cause possible injury.

OTHER RESOURCES

You’ll find plenty of information about ISDN benefits and use available for free from the real experts, people like you who use it every day. Try these online resources for the latest updates:

- Motorola’s own BBS. Our number is (508) 337-7304.

- Dan Kegel's informative ISDN page, located on the WWW at <http://alumni.caltech.edu/~dank/isdn/>.
- The FAQ (Frequently Asked Questions) list from the Internet news group at comp.dcom.isdn.
- A catalog of National ISDN Solutions for Selected NIUF Applications, Second Edition, produced by the North American ISDN Users' Forum, available on the Internet by anonymous file transfer protocol, at <ftp://info.bellcore.com/pub/ISDN/CATALOG/>.

COMMON SENSE WARNINGS

Use common sense when you use your BitSURFR Pro or any electrical equipment. Here are a few tips to remember.

Telephone Wiring

If your installation requires that you install or modify telephone wiring, keep the following in mind, especially if you cannot hire an expert:

- Never install telephone wiring during a lightning storm.
- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the telephone interface.
- Use caution when installing or modifying telephone lines.

Lightning Protection

Motorola recommends that you plug your BitSURFR Pro into a power strip that provides surge protection. However, surge protection devices do not offer protection from direct lightning strikes. If you want to ensure complete protection during an electrical storm, then before the storm arrives, you must unplug the BitSURFR Pro from its AC power source and ISDN line, and from all devices connected to it (unless you wish to unplug each of those devices from their AC power sources and any telephone lines connected to them).