Configuring the BitSURFR Pro

The following section will guide you step by step through the second part of installing your new BitSURFR Pro ISDN modem: configuring the BitSURFR Pro for use with your ISDN service, and establishing an ISDN connection.

CONFIGURATION BASICS

Before you connect your BitSURFR Pro to your ISDN line, you must configure your BitSURFR Pro to match the ISDN line configuration and any application requirements. To configure your BitSURFR Pro, you will need the information provided by your ISDN service provider when your ISDN line was configured. You can configure your BitSURFR Pro using one of the following methods:

- *ISDN SURFR Setup*--a Windows-based application that lets you easily define ISDN service parameters and other options from your PC without having to use terminal emulation software to enter a series of AT commands. (For use if you are running Windows 3.1 or higher.)
- *LocalMenu*--a user-friendly built-in firmware application that does not require the use of AT commands. (For use if you are running DOS or a Windows version prior to 3.1.) Your communications program must support VT-100 terminal emulation. Refer to Appendix F in the *User's Guide* for specific instructions on using LocalMenu.
- *AT Commands*--a set of commands programmed into the BitSURFR Pro and used for both configuration and operation. You must use the terminal emulation mode of your communications program to enter these commands. Refer to Appendix C in the *User's Guide* for specific instructions.

☞ **Note**
To configure your BitSURFR Pro, it must be in AT command mode. Your BitSURFR Pro should be in this mode when you receive it. However, if you enter an AT command and receive no response from the BitSURFR Pro (i.e., you do not

get an OK or error message), or if you are using ISDN SURFR Setup and it reports that the terminal adapter is not responding, you are probably not in AT command mode. To reset the BitSURFR Pro, locate the four-position switch on the rear panel, place switch position 4 in the ON position, and then remove and reapply power to the unit.

No matter which method you use, configuration consists of entering the switch type, SPID, and DN numbers provided to you by the telephone company, as well as entering any options specific to your application. Once you have configured your BitSURFR Pro, you should not have to do so again unless you change your line configuration or your application. Chapter 4 of the *User's Guide* gives detailed information on configuration options, as do the chapters on various features and protocols.

ISDN SURFR SETUP FOR WINDOWS

The enclosed ISDN SURFR Setup software is specifically designed to work with your BitSURFR Pro. It will gather some of the information necessary for ISDN service directly from your ISDN connection. Once you have configured your BitSURFR Pro and saved the settings, you should not have to do so again unless you change line configurations or applications.

☞ **Note**
Configuration consists of entering the switch type, SPID and DN numbers provided by the telephone company. While ISDN SURFR Setup will determine much of this information itself, you will need -- and should always keep -- a permanent record of these important numbers supplied by your ISDN provider.

If you have not already done so, install ISDN SURFR Setup for Windows.

Installing ISDN SURFR Setup for Windows

1. Insert Disk 1 of ISDN SURFR Setup for Windows (Version 1.2 or later) into your PC's floppy disk drive.
2. *For Windows 95 users:* Click the Start button on the Taskbar and choose the Run… option.

For Windows 3.1x users: From the Program Manger, pull down the File menu and select the Run… option.

3. In the space provided, type A:\SETUP and click OK. (If the drive in which you inserted the disk is not A:\, replace A:\ with the appropriate drive letter.) Follow the on-screen prompts to complete the installation process.

Using ISDN SURFR Setup for Windows

1. *For Windows 95 users:* Once ISDN SURFR Setup is installed, click the START button on the status bar. From the Windows 95 menu, highlight PROGRAMS. Highlight the ISDN SURFR Setup folder icon and then click the ISDN SURFR Setup icon.

   For Windows 3.1x users: Double-click on the ISDN SURFR Setup icon from the ISDN SURFR Setup program group.

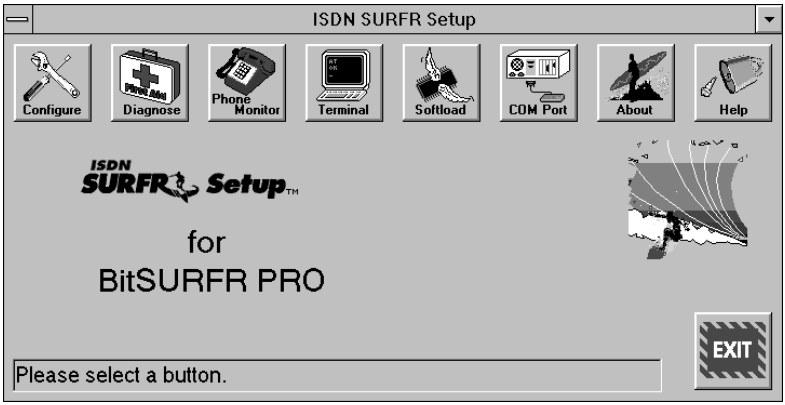

Figure 8 - ISDN SURFR Setup

2. When ISDN SURFR Setup runs for the first time it will attempt to locate your BitSURFR Pro. After ISDN SURFR Setup finds your BitSURFR Pro, it will check the configuration data stored for it. If ISDN SURFR Setup finds any missing configuration data, it will bring up a form (see Figure 9) in which you enter the essential information to make your BitSURFR Pro and ISDN line talk together.

If you made an earlier attempt to install your BitSURFR Pro using another method, there may be some configuration information already stored for your BitSURFR. If so, you will need to click the CONFIGURE button to bring up the form to allow the additional entry of important information for your BitSURFR Pro.

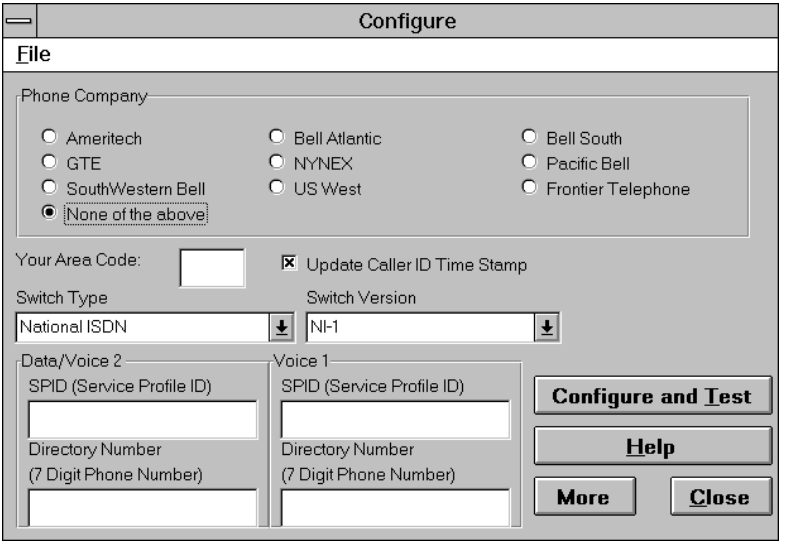

Figure 9 - ISDN SURFR Setup Configure form

3. Select which phone company is providing your ISDN service or line. ISDN SURFR Setup will use that information to match your BitSURFR Pro to your phone company's services.
4. Enter your area code in the box provided. That information will be used later to make additional entries.
5. You will see an Update Caller ID Time Stamp option. Make sure this checkbox option is selected. This will set your BitSURFR Pro's Caller ID clock based on your PC's system clock. Your BitSURFR Pro uses this clock to tell you what time a call came in on Caller ID equipment.

6. Choose the Switch Type provided to you by your phone company (switch types represent the kind of software the phone company uses for your ISDN line). A pull-down button provides a list of possible choices from which to select (for example, National ISDN, AT&T 5ESS, or Northern Telecom DMS100).
7. If the phone company also provided you with a Switch Version Type (for the version of software the phone company is using for your ISDN line), enter that information in the Switch Version box (for example, NI-1, BCS-29, or AT&T Custom). If you were not given a Switch Version, leave the value shown as displayed after you selected your Switch Type.
8. In the space provided, enter the first of the two SPID values given to you by the phone company. This number is used to identify what services your ISDN line is supposed to have. (The SPID usually looks like a 10-digit phone number with some extra digits at the beginning or end. An example would be: 80055512120100.)
9. ISDN SURFR Setup will attempt to determine the Directory Number (DN) from the SPID value entered. If the phone company provided you with a DN that is different from the value shown, enter the number the phone company gave you. (The DN usually appears as a seven-digit phone number, but this may vary depending on your ISDN service provider. An example would be: 5551212.) If ISDN SURFR Setup was unable to determine the appropriate DN, this field will be blank. If this is the case, use the number provided by your phone company or contact your phone company for this number if you did not receive it.
10. Repeat the two previous steps for the second SPID value and DN.

    The MORE/LESS toggle button will display more information to allow you to specify further details if needed. The options presented when the MORE button is activated are typically not changed except in special circumstances. Leave these settings as displayed unless your phone company gives you specific instructions for changing these values.

11. Connect your ISDN line to your BitSURFR Pro and then click on the CONFIGURE AND TEST button. ISDN SURFR Setup will transmit the configuration information to your BitSURFR Pro and then monitor the BitSURFR Pro's progress.
12. After a few moments (up to two minutes), you will see the message “Would you like to verify your phone number (DN) now?”.
    a: If you choose “YES”, a Port to Port Call box will be displayed. Enter the number required to access an outside line (if necessary), and click on the “Finish” button to execute the test. SURFR Setup will attempt to verify the supplied DNs. If the DNs are not correct, you will be prompted to re-configure for the correct phone numbers. If the test is successful, SURFR Setup will indicate that the DNs are correct. Choose “Close” to exit. You will then receive the message "Your BitSURFR Pro appears to be properly configured."
    b. If you choose “NO”, you will receive the message "Your BitSURFR Pro appears to be properly configured". You can verify the DNs by clicking on the Self Call Test button on the Diagnose form.

    Once you have received confirmation that it is properly configured, your BitSURFR Pro will be ready for use.

    If ISDN SURFR Setup determined there is a problem with the configuration, a message informing you of this will be shown and you will be given the option to run the DIAGNOSE function. When prompted, click the YES button to display a screen listing possible errors. You should open the CONFIGURE form and correct these errors. The CONFIGURE form may now have certain fields highlighted in yellow to show which piece of information (or lack of it) is most likely causing a problem. Carefully check the displayed information against that provided by your phone company. Correct any errors and then click the CONFIGURE AND TEST button to update your BitSURFR Pro with the correct information.

Additional Features of the ISDN SURFR Setup

In addition to the CONFIGURE and DIAGNOSE buttons provided in the ISDN SURFR Setup main window, several other important features are available to make the most of your BitSURFR Pro.

Phone Monitor

Press the Phone Monitor button to test and track operation of the voice port named across the bottom of the screen while your BitSURFR Modem is connected to a telephone. As you make or receive calls, information will be displayed in a window on screen.

COM Port

Press the COM Port button to inform your BitSURFR Pro that you are changing the COM port to which your BitSURFR Pro is connected.

Terminal

Press the Terminal button to open a terminal emulation window in which you can enter AT commands. In addition, buttons are provided for logging on to the Motorola BBS and for running the BitSURFR Pro configuration utility LocalMenu.

Softload

The Softload feature is a convenient way to upgrade your BitSURFR Pro as new features become available. Softload allows software upgrades available from Motorola to be downloaded from your PC directly into your BitSURFR Pro through the data port, thus adding new features without physically removing the unit from service.

Help

Press the Help button to receive information about ISDN SURFR Setup, ISDN and some technical jargon.

About

Press the About button to receive information about the version of ISDN SURFR Setup currently running and information regarding the firmware version of BitSURFR Pro.

Exit

Press the Exit button to close ISDN SURFR Setup.

What's Next?

Once you have your BitSURFR Pro installed and configured (and connected to an ISDN line), go to the next section of this guide to begin exploring the world of high-speed telecommunications.