

Before you begin...

### Tools Required (for PC installations)

- DB-25 (25-pin) male to DB-9 (9-pin) female straight-through serial cable.
- USB to DB-25 (25-pin) male serial adapter cable (optional - necessary if a standard serial interface is not available)

### Ordering ISDN

The following ISDN packages are recommended by the industry for most home office/small business applications:

- EZ-ISDN 1 (Capability Package U)
- EZ-ISDN 1A (Capability Package V)
- Generic Data S (if EZ-ISDN is not available)

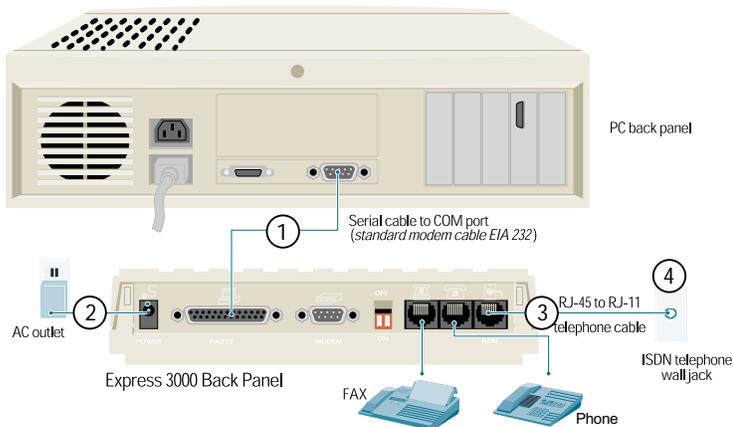
Use the above information when ordering your ISDN line from the telephone company to ensure the line is set up properly. Refer to the *ISDN Feature Table* for more details. For more information regarding ordering ISDN, see the *Ordering ISDN Service User Guide* (ADTRAN document number 60000.015-8) or contact the telephone company for alternative line configurations.

### Tools Required (for Macintosh installations)

- USB to serial adapter, such as the Keyspan brand
- DB-25 (25-pin) male to appropriate Macintosh interface (interfaces vary depending on model) serial cable

## 1. Hardware Installation

### PC Version



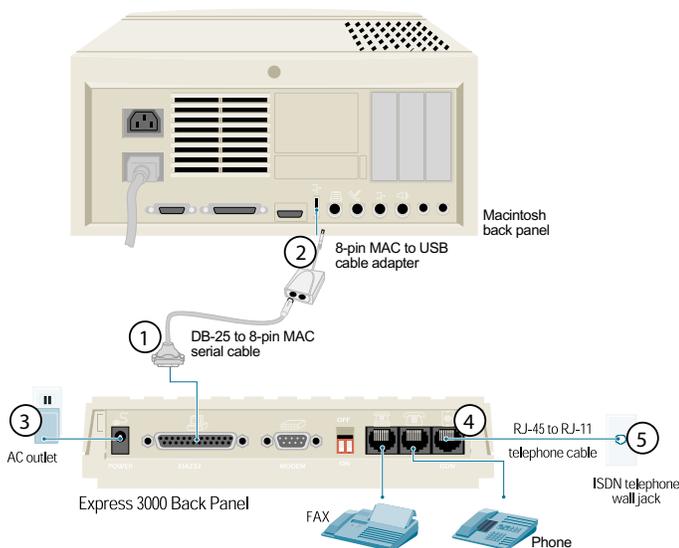
1. With the computer's power off, connect the EIA-232 port on the Express 3000 to an available serial port on the computer. You will need to provide a DB-25 (25-pin) male to DB-9 (9-pin) female straight-through serial cable, if one is not shipped by your supplier.
2. Plug the Express 3000's AC power cord into the port labeled **PWR**. Plug the other end into a 120 VAC electrical outlet. The Express 3000 is now powered on.
3. Plug the RJ-45 connector (large end) of the RJ-45 to RJ-11 telephone cable into the jack labeled **ISDN** on the rear of the Express 3000.
4. Plug the RJ-11 connector (small end) of the RJ-45 to RJ-11 telephone cable into the ISDN telephone wall jack.



*Please consider protecting your equipment from lightning and transient voltage by using a surge protector on the power line. Damages caused by power surges are not covered under the ADTRAN Warranty agreement.*

5. Proceed to *Express Configuration Software Installation* on page 2.

### Macintosh Version



*Macintosh computers no longer come standard with serial ports and require the use of a USB to serial adapter for operation with the Express 3000. To utilize both B channels on your ISDN link, purchase an adapter that supports speeds of at least 115.2 kbps. (For example, Keyspan offers a high-speed USB to serial adapter.)*

1. With the computer's power off, connect the EIA-232 port on the Express 3000 to an available serial port on the USB to serial adapter (adapter not provided with shipment). You will need to provide a DB-25 (25-pin) male to DB-9 (9-pin) female straight-through serial cable, if one is not shipped by your supplier.
2. Connect the USB end of the USB to serial adapter to an available USB port on the Mac.
3. Plug the Express 3000's AC power cord into the port labeled **PWR**. Plug the other end into a 120 VAC electrical outlet. The Express 3000 is now powered on.
4. Plug the RJ-45 connector (large end) of the RJ-45 to RJ-11 telephone cable into the jack labeled **ISDN** on the rear of the Express 3000.
5. Plug the RJ-11 connector (small end) of the RJ-45 to RJ-11 telephone cable into the ISDN telephone wall jack.



*Please consider protecting your equipment from lightning and transient voltage by using a surge protector on the power line. Damages caused by power surges are not covered under the ADTRAN Warranty agreement.*

6. Proceed to *Express Configuration Software Installation* on page 2.

## 2. Express Configuration Software Installation

### All Windows Versions

1. Power on the computer.
2. Insert the Express Configuration CD into the CD-ROM drive.
3. After the ADTRAN Installation Helper runs, click the **INSTALL** button and follow the on-screen instructions.



If the ADTRAN Installation Helper does not run automatically, double click on the **MY COMPUTER** icon (on the computer desktop) and double click on the CD-ROM drive.

4. Start the Express Configuration software (if it does not automatically run after the installation process) by clicking the **START** button and selecting **PROGRAMS > ADTRAN > ADTRAN EXPRESS CONFIGURATION**.



If the Configuration Wizard opens, click the **CANCEL** button to close the wizard.

5. Proceed to the steps outlined in *ISDN Configuration* section below.

### MAC OS 9.2 and earlier

1. Power on the computer.
2. Insert the Express Configuration CD into the CD-ROM drive.
3. After the ADTRAN Installation Helper runs, click the **INSTALL** button and follow the on-screen instructions.



If the ADTRAN Installation Helper does not run automatically, double click on the Express 3000 CD-ROM icon and select **ADTRAN > EXPRESS CONFIGURATION INSTALL**.

4. Start the Express Configuration software by double clicking the Macintosh HD icon and selecting **ADTRAN ISDN > EXPRESS CONFIGURATION**.
5. Proceed to the steps outlined in *ISDN Configuration* below.

### MAC OS X

The ADTRAN Express Configuration software operates with MAC OS versions 9.2 and earlier. If your system is currently running MAC OS X, load 9.2 by clicking **SYSTEM PREFERENCES** and selecting **STARTUP DISK**. Choose MAC OS 9.2 from the options list and click **RESTART**. Once MAC OS 9.2 is loaded, follow the steps for installing the software on a MAC OS 9.2 platform. If this does not work properly, or MAC OS X configuration is preferred, the unit may be manually configured in OS X using the following steps.

1. Download and install the terminal emulation program **ZTERM** from [www.download.com](http://www.download.com) and open a **ZTERM** session. (Please refer to the **ZTERM** instructions for more details on this step.)
2. Under the **DIAL** menu, select **DIRECTORY** and click **NEW**. Name the service Express 3000 and configure the following settings:

**Data Rate: 57600    Hardware Handshake: ON    Xon/Xoff: OFF**

3. Under the **SETTINGS** menu, select **MODEM PREFERENCES** and verify the serial port listed corresponds to the correct port on the serial adapter. Enter **ate1** in the **INITIALIZATION** field. Click **OK**.
4. Select the Express 3000 and click the **DIAL** button.
5. Enter **at!v** at the **ZTERM** prompt to access the Express 3000 Configuration menu.
6. Proceed to the steps outlined in *ISDN Configuration* below.

## 3. ISDN Configuration

### ISDN Configuration Guidelines

Use the following guidelines when entering the ISDN configuration parameters:

#### ISDN Line Phone Numbers

Enter a single string of 7 digits with no spaces or dashes. The area code is not entered in the ISDN Line Phone Numbers Field. There are two phone numbers on a BRI (one for each channel of the ISDN line). The directory numbers are assigned to the BRI by the ISDN Provider. (Example: Phone 1 = 5552222 and Phone 2 = 5552223)

#### Switch Type

The switch type is assigned by the ISDN Provider and corresponds to the ISDN switch protocol used on the D channel. The switch type will not always correspond to the manufacturer of the Central Office switch. The Express 3000 supports AT&T 5ESS (AT&T Custom), DMS-100 (DMS Custom), and National ISDN.

#### SPIDs (Service Profile Identifiers)

Enter a single string of digits with no spaces or dashes. A normal SPID follows this format: AREA CODE + LINE NUMBER + SUFFIX, where the area code is the local area code, the line number is the directory number assigned to the BRI by the ISDN Provider, and the suffix is a 4 digit extension (such as 0101 or 1111). There are two SPIDs on a BRI (one for each channel of the ISDN line). The SPID is defined by the ISDN Provider and assigned to the BRI by the Central Office switch. (Example: SPID 1 = 2565552220101 and SPID 2 = 25655522230101)



National ISDN switch type requires 14 digit SPIDs for proper operation.



When the unit is properly configured, the **PWR/Line LED** will be solid green (not blinking). If your LED is not solid after 2 minutes, refer to the Express 3000 Troubleshooting Guide for more help.

### All Windows Versions

1. Verify the **ISDN SETUP** link (located at the top of the left-side menu list) is highlighted and click the **SETUP** button (at the bottom of the screen).
2. Input the ISDN line information (assigned by the ISDN Provider) in the appropriate fields. Refer to *ISDN Configuration Guidelines* above for more details.
3. Click the **SAVE** button, then the **APPLY** button, and finally the **CLOSE** button to register the configuration changes. Click the **EXIT** link (at the bottom left) to exit the software.
4. Proceed to the *Remote Access Settings on page 3* for your specific operating system.

### MAC OS 9.2 or earlier

1. Select **MLPPP 128K** from the list of **PROFILES** and click the **NEW** button.
2. Input the ISDN line information (assigned by the ISDN Provider) in the appropriate fields. Refer to *ISDN Configuration Guidelines*, for more details.
3. Click the **OK** button and then the **CLOSE** button.
4. Proceed to the *Remote Access Settings on page 3* for your specific operating system.

### MAC OS X (Manual Configuration)

1. Use the active **ZTERM** session to input the ISDN line information (assigned by the ISDN Provider) in the appropriate fields. Refer to *ISDN Configuration Guidelines* for more details.
2. Proceed to *Remote Access Settings on page 3* for your specific operating system.

**ISDN Feature Table**

Package	EZ-ISDN 1 (U)	EZ-ISDN 1A (V)	Data S
Data	B1, B2	B1, B2	B1, B2
Voice	B1, B2	B1, B2	B1, B2
Calling Party Number	B1, B2	B1, B2	B1, B2
Flexible Calling (Additional Call Offering)	B1, B2	B1, B2	
Call Waiting	B1	B1	
Call Forward Variable	B1	B1	
Visual Message Waiting Indicator		B1	
Call Forward Busy		B1	
Call Forwarding No Answer		B1	

## 4. Remote Access Settings

### Initialization Strings and Dial Up Networking (All Windows versions except 2000 and XP)

#### Initialization Strings

1. Click the **START** button and select **SETTINGS > CONTROL PANEL**.



*Windows ME users must click **SHOW EVERYTHING IN THIS FOLDER**.*

2. Double click **MODEMS**.
3. Select the **ADTRAN Express 3000** and click **PROPERTIES**.
4. Select the **CONNECTION** tab.
5. Click the **ADVANCED** button.
6. Enter one of the following strings in the **EXTRA SETTINGS** field. (Consult with your Internet Service Provider if you are unsure which string to use.)

**Multi-link PPP (2 channels):**

**ats54=12s53=3s27=1s118=8s129=0s6=0s13=1**

**PPP (1 channel):**

**ats54=12s53=3s27=0s6=0s13=1**

7. Click **OK** to save the initialization string and close the open windows.

#### Dial Up Networking

1. Double click the **MY COMPUTER** icon.



*Windows ME users must click the **START** button, select **SETTINGS > CONTROL PANEL**, and then click **SHOW EVERYTHING IN THIS FOLDER**.*

2. Double click **DIAL UP NETWORKING**. Please consult with your Internet Service Provider for instructions on creating a new connection (or editing an existing connection).

### Initialization Strings and Dial Up Networking (Windows XP)

#### Initialization Strings

1. Click the **START** button and select **CONTROL PANEL > PRINTERS AND OTHER HARDWARE > PHONE AND MODEM OPTIONS**; then click the **MODEMS** tab.
2. Select the **ADTRAN Express 3000 Plug and Play** and click **PROPERTIES**.
3. Select the **ADVANCED** tab.
4. Enter one of the following strings in the **Extra Initialization Commands** field. (Consult with your Internet Service Provider if you are unsure which string to use.)

**Multi-link PPP (2 channels):**

**ats54=12s53=3s27=1s118=8s129=0s6=0s13=1**

**PPP (1 channel):**

**ats54=12s53=3s27=0s6=0s13=1**

5. Click the **DEFAULT PREFERENCES** button. Change the **DATA PROTOCOL** drop down box to **PPP 128K** (for 2 channels) or **PPP 64K** (for a single channel). Disregard this step if the **DATA PROTOCOL** drop down box is not available for configuring (grayed out).
6. Click **OK** to save the initialization string; then close the open windows.

#### Dial Up Networking

1. Click the **START** button and select **ALL PROGRAMS > ACCESSORIES > COMMUNICATIONS > NEW CONNECTION WIZARD**. Please consult with your Internet Service Provider for instructions on creating a new connection (or editing an existing connection).

### Initialization Strings and Dial Up Networking (Windows 2000)

#### Initialization Strings

1. Click the **START** button and select **SETTINGS > CONTROL PANEL**.
2. Double click **PHONE AND MODEM OPTIONS**; and then click the **MODEMS** tab.
3. Select the **ADTRAN Express 3000 Plug and Play** and click **PROPERTIES**.
4. Select the **ADVANCED** tab.
5. Enter one of the following strings in the **EXTRA INITIALIZATION COMMANDS** field. (Consult with your Internet Service Provider if you are unsure which string to use.)

**Multi-link PPP (2 channels):**

**ats54=12s53=3s27=1s118=8s129=0s6=0s13=1**

**PPP (1 channel):**

**ats54=12s53=3s27=0s6=0s13=1**

6. Click the **DEFAULT PREFERENCES** button. Change the **DATA PROTOCOL** drop down box to **PPP 128K** (for 2 channels) or **PPP 64K** (for a single channel). Disregard this step if the **DATA PROTOCOL** drop down box is not available for configuring (grayed out).
7. Click **OK** to save the initialization string; then close the open windows.

#### Dial Up Networking

Click the **START** button and select **SETTINGS > NETWORK AND DIALUP CONNECTIONS**. Please consult with your Internet Service Provider for instructions on creating a new connection (or editing an existing connection).

### MAC Settings (MAC OS 9.2 or earlier)



*There may be a control panel for the USB to serial adapter to provide information on the serial port.*

1. Click the **APPLE MENU** and select **CONTROL PANELS > MODEM**.
2. Select the appropriate serial port and choose one of the following (depending on your application) **ADTRAN 57.6K**, **115.2K**, or **230.4K**.
3. Click the **APPLE MENU** and select **CONTROL PANELS > TCP/IP**.
4. Configure the following parameters:
  - CONNECT VIA** PPP
  - CONFIGURE** Using PPP ServerEnter DNS numbers on this page (if necessary). Please consult with your Internet Service Provider for assistance with these settings.
5. Click the **APPLE MENU** and select **CONTROL PANELS > REMOTE ACCESS**. Enter the phone number, username, and password (provided by your Internet Service Provider) in the appropriate fields.
6. Click the **CONNECT** button.

### MAC Settings (MAC OS X)

#### Initialization Strings

1. Copy the scripts (located in the **MODEM SCRIPTS** folder on the Express Configuration CD) and place them in the **LIBRARY > MODEM SCRIPTS** folder (located on the Macintosh HD).
2. Click the **APPLE MENU** and select **SYSTEM PREFERENCES**.
3. Choose **NETWORK** and select **SHOW** for the appropriate serial port.
4. Select the **TCP/IP** tab and verify that the **CONFIGURE** field is defined as **USING PPP**.



*Enter DNS numbers on this page (if necessary). Please consult with your Internet Service Provider for assistance with these settings.*

5. Select the **PPP** tab and enter the phone number, username, and password (provided by your Internet Service Provider) in the appropriate fields.
6. Click the **MODEM** tab and select the **ADTRAN 115.2k** or **230.4k** (depending on your application) from the **MODEMS** list.
7. Click the **INTERNET CONNECT** button (the telephone symbol in the upper right hand corner) to connect. Select the appropriate connection from the pull down menu and click **CONNECT**.



*All necessary CCL scripts are installed automatically during Express Configuration Software Installation.*

*The **MODEM** and **TCP/IP** Control Panels are alternately accessed by selecting them from the **REMOTE ACCESS** menu. In addition, multiple configurations of each of program can be accessed by selecting **FILE > CONFIGURATIONS**.*

## Connecting a Telephone



*Port 2 is not available for use when there is an active data call on the Express 3000. If there is no active data call, Port 2 operates normally. Port 1 may be used normally at all times.*

1. Plug a telephone (or fax machine) in the jack labeled **1** on the back of the ADTRAN unit.



*The phone number assigned to **PORT 1** is the number entered in the **PHONE 1** field (see the ISDN Configuration on page 2 section of this guide).*

2. Use the telephone or fax machine for normal operation with a standard telephone line.

## Additional Telephone Features

## Call Waiting Mode

## To Enable:

Open the Express Configuration Wizard, configure the **FLASH/HOOK DEFAULT** to **CALL WAITING**, and click **OK**.

## To Use:

During a voice call, a beep indicates an incoming call. Flash hook to place the active call on hold and retrieve the incoming call. Flash hook again to return to the original active call.



*To flash hook a standard phone, press the flash button (as if you were disconnecting the call). Most cordless phones have a button labeled **FLASH**. Alternately, the **TALK** button may be used if no **FLASH** button is available.*

## To Disable:

Enter **\*70** from the telephone keypad before placing the call.

## Conference/Transfer Mode

## To Enable:

Open the Express Configuration Wizard, configure the **FLASH/HOOK DEFAULT** to **CONFERENCE/TRANSFER**, and click **OK**.

## To Use:

During a voice call, a beep indicates an incoming call. Flash hook to place the active call on hold and retrieve the incoming call. Flash hook again to return to the original active call.

If there is an active call and you wish to initiate another call, flash hook to place the first caller on hold and dial the second number (after hearing dial tone). Flash hook again to put the second caller on hold and retrieve the first caller. Flash hook once more to conference the calls together. Hanging up (after conferencing the calls together) will effectively transfer the call.

## To Disable:

Enter **\*70** from the telephone keypad before placing the call. (This feature is now disabled until a new configuration is applied to the Express 3000 or the unit is power-cycled.)

## To Redial:

Enter **\*\*5** from the telephone keypad.

## 6. Troubleshooting

**SYMPTOM:** All LEDs are off — No power to the Express 3000.

## TRY THIS

1. Connect the Express 3000 to a different electrical outlet.

## OR

2. Use a different 12V power supply.

**SYMPTOM:** PWR LED is flashing — No SYNC with the ISDN line.

## TRY THIS

1. Verify the cable is securely connected to the ISDN jack on the wall and the **ISDN** port on the back of the unit.

## THEN

1. If the unit is connected properly and the **PWR** LED is still flashing, start the ADTRAN Express Configuration software (ships with the unit) by selecting **PROGRAMS > ADTRAN > ADTRAN EXPRESS CONFIGURATION**. Select the **DIAGNOSTICS** menu (on the left side of the window). Click the **UNIT INFO** button and the unit status information displays. (The status information changes every 30 to 40 seconds, so click the **UNIT INFO** button a couple times to verify the displayed information is current.)

## VERIFY THE FOLLOWING

1. **ISDN LOOP STATUS** — The contents of the **ISDN LOOP STATUS** field will require one of two actions:

LINK DOWN

Call your telephone company to report trouble with your ISDN line.

GETTING TEI OR REGISTER SPID

Disable the SPID download feature and verify the Express 3000 ISDN configuration by completing the following steps:

1. Close the **UNIT INFO** screen by clicking the **CANCEL** button.
2. Select the **ISDN SETUP** menu (on the left side of the window).
3. Click the **SETUP** button and the **ISDN SETUP** menu displays.
4. Check the **DISABLE SPID DOWNLOAD** check box.
5. Verify the ISDN settings for your Express 3000 including the switch type, ISDN phone number, and SPIDS. (Refer to *ISDN Configuration on page 2* for more help.)
6. Click **SAVE, APPLY**, and then **CLOSE**.
7. Click **EXIT** to close the Express Configuration software.

## FINALLY

Reset the unit and the ISDN connection by completing the following steps:

1. Verify that both switches on the back of the unit are in the **ON** position (pointing down).
2. Disconnect power from the Express 3000.
3. Unplug the ISDN line from the wall jack and plug it back in, making sure it has a secure connection (the tab in the middle of the connector should snap in place).
4. Unplug the ISDN line from the back of the Express 3000.
5. Wait 2 minutes; then restore power to the Express 3000.
6. Connect the ISDN line to the **ISDN** port on the back of the unit, making sure it has a secure connection (the tab in the middle of the connector should snap in place).

**SYMPTOM:** ADTRAN Express Configuration or Windows Device Manager is unable to locate the Express 3000.

*Note: If the Express 3000 has an active data call, the unit will not be available through the ADTRAN Express Configuration software or Windows Device Manager.*

## TRY THIS

1. Verify the computer's COM port is directly connected to the **EIA-232** port on the back of the Express 3000.
2. Verify that both switches on the back of the unit are in the **ON** position (pointing down).
3. Reboot your computer; then check the unit again.
4. Check the computer COM port and serial cable. (Try a different COM port and/or cable if possible.) If you are using a USB to serial converter, verify that the converter is installed properly as a device on your computer.
5. If there is an icon in the Windows system tray (the icons located on the right side of the task bar) that says **DOUBLE CLICK TO EDIT MODEM PROPERTIES**, double click it to launch the ADTRAN Express Configuration software if you cannot open the software from the **START** menu. Select the **PREFERENCES** menu and verify that **CAPTURE COM PORT** is not checked. Click **EXIT** to close the software.

## WINDOWS TROUBLESHOOTING

1. Open the Windows Device Manager and verify the COM port is configured with the following settings:
  - Bits per second: 115200
  - Data bits: 8
  - Stop Bits: 1
  - Parity: None
  - Flow Control: Hardware
2. Check the Windows system tray (the icons located on the right side of the task bar) and verify no other programs are currently running that will use the COM port. Some examples of programs that use the COM port are HotSync, digital camera software (for non-USB connections), HyperTerminal, Remote Access Servers, etc.
3. BIOS settings can be set to disable serial ports on the computer. Have someone who is familiar with the BIOS settings on your computer verify the serial ports are enabled on the computer and are working inside Windows. (Please contact Technical Support for your computer or Operating System for help with this step.)

## FINALLY

Factory restore the Express 3000 by completing the following steps:

1. Disconnect power and all connected cables from the Express 3000.
2. Place **SWITCH 2** (on the back of the unit) in the **OFF** position (switch pointing up).
3. Connect power back to the Express 3000.
4. After the Express 3000 powers up, wait at least 30 seconds and place **SWITCH 2** in the **ON** position (switch pointing down).
5. Reapply the ISDN profile or reconfigure the device.
6. Reconnect all cables.

**SYMPTOM:** Data calls only connect with one channel.

**TRY THIS**

1. Verify that your ISP (Internet Service Provider) supports 2 channel ISDN (128K). Some ISPs support ISDN on one 64K channel. Verify you have the correct ISDN phone number (with the ISP).
2. Verify the Express 3000 configuration (using this guide).
3. Verify the initialization string is correct in your computer for your operating system (refer to *Remote Access Settings on page 3* for more details).

**Note:** If the Express 3000 has an active data call, the unit will not be available through the ADTRAN Express Configuration software or Windows Device Manager.

**THEN**

Check the Express 3000 status buffer messages by completing the following steps:

1. Launch the ADTRAN Express Configuration software (ships with the unit) by selecting **PROGRAMS > ADTRAN > ADTRAN EXPRESS CONFIGURATION**. Select the **DIAGNOSTICS** menu (on the left side of the window). Click the **STATUS BUFFER** button (for the Local Unit) and a list of the status buffer displays. Clear this buffer by clicking the **CLEAR BUFFER** button. Close the buffer window by clicking the **CLOSE** button. Exit Express Configuration Software by clicking **EXIT**.
2. Attempt your outbound call again.
3. Launch the ADTRAN Express Configuration software and display the status buffer messages (see *Express Configuration Software Installation on page 2*).
4. Review the status messages. The entries are in reverse order, with the most recent entry displayed on line 1. Check the sequence of events for the connection for a **DIAL 2** error message.

ED\_MISMATCH followed by Disconnect 2 indicates that the ISP was unable to bring both ISDN calls together and disconnected the second call. Try a different access number or contact your ISP.

NORMAL\_CLEARING followed by Disconnect 2 indicates that the ISP blocked and disconnected the second call. Some ISPs limit ISDN service to 64K during times of high traffic. Try a different access number or contact your ISP.

Telephone company messages are in upper case and have underscores between words (for example, NETWORK\_BUSY, NO\_ROUTE\_TO\_DEST, and INCOMPATIBLE\_DEST). Refer to the manual provided on the Express 3000 CD for error messages definitions.

**SYMPTOM:** Unit dials out but is unable to connect a data call.

**NOTE:** The **PHONE 2 LED** on the Express 3000 will illuminate orange during an outgoing call attempt. These steps assume the **PHONE 2 LED** is illuminating but the data call does not successfully negotiate. If the **PHONE 2 LED** does not illuminate during an outgoing call attempt, refer to the troubleshooting steps in **SYMPTOM: ADTRAN Express Configuration or Windows Device Manager is unable to locate the Express 3000 on page 4**.

**TRY THIS**

1. Verify the number dialed is an ISDN number.
2. Verify the initialization string is correct in your computer for your operating system (refer to *Remote Access Settings on page 3* for more details).

**NOTE:** If the initialization string you enter in Windows does not save, the Windows registry is not working properly. Please contact Technical Support for your computer or operating system for help with this problem.

**THEN**

Check the Express 3000 status buffer messages by completing the following steps:

1. Launch the ADTRAN Express Configuration software (ships with the unit) by selecting **PROGRAMS > ADTRAN > ADTRAN EXPRESS CONFIGURATION**. Select the **DIAGNOSTICS** menu (on the left side of the window). Click the **STATUS BUFFER** button (for the Local Unit) and a list of the status buffer displays. Clear this buffer by clicking the **CLEAR BUFFER** button. Close the buffer window by clicking the **CLOSE** button. Exit Express Configuration Software by clicking **EXIT**.
2. Attempt your outbound call again.
3. Launch the ADTRAN Express Configuration software and display the status buffer messages (see *Step 1 above*).
4. Review the status messages. The entries are in reverse order, with the most recent entry displayed on line 1. Telephone company messages are in upper case and have underscores between words (for example, NETWORK\_BUSY, NO\_ROUTE\_TO\_DEST, and INCOMPATIBLE\_DEST). Refer to the manual provided on the Express 3000 CD for error message definitions.

**NOTE:** If there are no entries in the status buffer, the dialer you are using (normally Windows) is not communicating with the Express 3000. Check the setup of your dialer and verify that it is configured to use the Express 3000.

**SYMPTOM:** PWR LED is off and Phone 1 or 2 is on and solid.

**TRY THIS**

1. Disconnect power from the Express 3000.
2. Unplug the ISDN line from the back of the unit.
3. Connect power back to the Express 3000.
4. Connect the ISDN line to the **ISDN** port on the back of the unit.
5. If the **PHONE 1** and **2** lights are off, wait a minute and verify the **PWR LED** turns solid green.

**OR**

Factory restore the Express 3000 by completing the following steps:

1. Disconnect power from the Express 3000.
2. Place **SWITCH 2** (on the back of the unit) in the **OFF** position (switch pointing up).
3. Connect power back to the Express 3000.
4. After the Express 3000 powers up, wait at least 30 seconds and place **SWITCH 2** in the **ON** position (switch pointing down).
5. If the **PHONE 1** and **2** lights remain off, reconfigure the unit. If the **PHONE LEDs** illuminate again, contact ADTRAN Technical Support (see *Contact Information on page 6*).
6. Reapply the ISDN profile or reconfigure the device.
7. Reconnect all cables.

**SYMPTOM:** Unable to receive/place voice/fax calls.

**NOTE:** If you are able to make a call but there is noise or static on the line, or if you get a dial tone that continues after you dial the number, contact ADTRAN Technical Support.

**TRY THIS**

Verify the ISDN settings are correct by completing the following steps:

1. Launch the ADTRAN Express Configuration software (ships with the unit) by selecting **PROGRAMS > ADTRAN > ADTRAN EXPRESS CONFIGURATION**. Select the **DIAGNOSTICS** menu (on the left side of the window). Click the **REGISTER DUMP** button (for the Local Unit) and a list of the AT registers displays.
2. Verify that the assigned phone numbers (7 digits with no spaces or hyphens) for the ISDN line are listed in **ATS 62** and **63**. The area code is listed in **ATS 67**.
3. Click the **CLOSE** button to exit the register dump.

**THEN**

Verify your unit is running the latest firmware by completing the following steps:

1. Click the **UNIT INFO** button and the firmware version displays (in the second line). Note the firmware version for later.
2. Go to [www.adtran.com](http://www.adtran.com) (go the Technical Support page) and obtain the latest firmware.
3. If your firmware is not the latest firmware, upgrade your unit. (Refer to the manual provided on the Express 3000 CD for details on upgrading the unit.)

**FINALLY**

Contact your ISDN provider to verify that your line is provisioned for voice and data.

**SYMPTOM:** Unable to receive/place voice/fax calls on devices connected to the **PHONE 1** port while connected with a data calls.

**NOTE:** The **PHONE 2 port** on the Express 3000 is not available for use while there is an active data call. Any incoming call to **PHONE 2** will receive a busy signal, and local phones/fax machines connected to **PHONE 2** will not receive dial tone. Use the **PHONE 1 port** for a device that needs to be available for use during an active data call.

**TRY THIS**

Verify your unit is running the latest firmware by completing the following steps:

1. Click the **UNIT INFO** button and the firmware version displays (in the second line). Note the firmware version for later.
2. Go to [www.adtran.com](http://www.adtran.com) (go the Technical Support page) and obtain the latest firmware.
3. If your firmware is not the latest firmware, upgrade your unit. (Refer to the manual provided on the Express 3000 CD for details on upgrading the unit.)

**THEN**

Verify the initialization string is correct in your computer for your operating system (refer to *Remote Access Settings on page 3* for more details).

**NOTE:** If the initialization string you enter in Windows does not save, the Windows registry is not working properly. Please contact Technical Support for your computer or operating system for help with this problem.



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**Internet:**  
[www.adtran.com](http://www.adtran.com)

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(800) 615-1176

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(888) 4ADTRAN  
Monday through Friday  
7AM to 10 PM CT -- \$19.95  
Saturday  
8AM to 5 PM CT -- \$29.95

**ACES Help Desk:**  
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