⅃ATARI®

SX Express!™
Communications Program

For Atari® XE™ and XL™ computer systems

User's Manual

ЛⱢATARI®

SX Express! ™
Communications Program

For Atari® XE™ and XL™ computer systems

User's Manual

TABLE OF CONTENTS

INTRODUCTION

Welcome to Atari SX Express!

SX Express! is a communications program you can use to operate the Atari SX212 modem with your Atari XE or XL computer. SX Express! makes it easy to communicate with bulletin boards, information services, and other modem users. The program offers a variety of dialing and data transfer options for making the most of your online time. As a special feature, SX Express! lets you create phone lists of numbers to dial automatically. The program also offers XModem protocol for error-free file transfers.

To protect the files on the SX Express! program disk, make a backup copy of it with the DOS DUPLICATE DISK command. Store the original in a safe place and use the backup copy each time you use the program.

Using This Manual

This manual is written to serve the novice as well as the seasoned computer user. The chapters and sections are organized so you can easily find the information you need.

Chapter 1: Getting Started describes what you need to use the program and how to use the menus. Also included are short tutorials on the basics of connecting to other systems and answering calls.

Chapter 2: Using the Program explains how to use the terminal mode screen and Dialing menu. The terminal mode screen is the screen you use when you're connected to another system. The Dialing menu lets you create phone lists and automatically dial other systems. Also included is information on transferring files and using the copy buffer.

Chapter 3: SX Express! Options offers complete information on all menu options.

1

Appendix A: Troubleshooting explains how to identify and correct common problems you may have with the program.

The **Glossary** defines common modem and communications program terms as they relate to the SX Express! program.

Customer Support tells you where to find more information about SX Express! and other Atari computer products.

The **Index** helps you locate terms and procedures used or explained in the manual.

Paragraphs marked **Note** or **Warning** appear throughout the manual. Notes contain helpful hints and other information relevant to the topic being discussed. Warnings alert you to potential problems and suggest ways to avoid them.

Note: Characters in dark type enclosed by square brackets (**[ ]**) represent keys on your Atari XE or XL keyboard. In cases where a process or function requires using two or three keys, the keys are listed together in order. For example, **[Shift] [Delete]** means to hold down the **[Shift]** key while pressing the **[Delete]** key; **[Shift] [Control] [W]** means to hold down the **[Shift]** and **[Control]** keys while pressing the **[W]** key.

CHAPTER 1 GETTING STARTED

System Requirements

You'll need the following in order to use the SX Express! program:

• Atari XE or XL computer, or Atari XE game system with keyboard

• Monitor or television (color or black and white)

• Atari XF551 or 1050 disk drive

• Atari SX212 modem

The modem and your entire system must be set up in a clean, grease-free location, protected from extreme temperatures, direct sunlight, and high humidity.

Before you load SX Express!, make sure all components are connected as described in your owner's manuals.

You should also be familiar with the modem's indicator lights and on-screen messages. (For complete information, see your **Atari SX212 Modem Owner's Manual.**)

Backing Up the Program Disk

It is essential that you make a backup, working copy of the SX Express! program disk before beginning to work with it routinely. A backup copy protects you from losing the original disk or damaging its contents.

Write protect the original disk by covering the write-protect notch with a write-protect tab. Then copy the disk with the DOS DUPLICATE DISK command as described in your Atari DOS manual.

3

Always use the backup copy as your working disk. Store the original disk in a safe place protected from dust, moisture, direct sunlight, and sources of electric power or magnetism.

Program Disk Contents

Your SX Express! program disk contains all of the files you need to boot your system and load the program. From the DOS menu, you can display a directory of the files on this disk by selecting **A. DISK DIRECTORY**.

AUTORUN.SYS

AUTORUN.SYS loads SX Express! into RAM when you boot your system.

DOS.SYS and DUP.SYS

These are the files of the Atari Disk Operating System, version 2.5.

RAMDISK.COM

RAMDISK.COM automatically sets up a 64-kilobyte RAM disk if you have an Atari 130XE computer. See your Atari disk drive or DOS manual for information on using the RAM disk.

HANDLER.OBJ

HANDLER.OBJ contains the software used to link the SX212 and the XE computer. It is included for programmers developing communications programs for the SX212 modem.

HANDLER.DOC

HANDLER.DOC explains how to use the HANDLER.OBJ
program.

Loading SX Express!

Follow these steps to start the program:

1. Turn on your monitor or television.

2. Remove all cartridges from your computer and switch
   on disk drive 1. When the busy light on the disk drive
   turns off, insert the SX Express! program disk into
   drive 1.

3. Turn on your SX212 modem by pushing the on/off
   switch on the back of the modem to the on position.
   The modem's HS (High Speed) and MR (Modem
   Ready) lights should light up.

Note: If the HS and MR lights fail to light up, make sure
the modem is securely connected and switched on.

4. Switch on your computer. The TR (Terminal Ready)
   light should be on.

5. After the program loads, the SX Express! title screen
   appears briefly and the Main menu appears. If you
   have a 130XE, the RAM disk message appears first.

F300	Atari	Buffer:	0	00:00:000

Ver 3.00	SX Express! By Keith Ledbetter	Ver. 3.00

A	Mode: Atascii	N	Dial Mode: Tone
B	Baud: 300	O	Duplex: Full
C	Parity: None		
D	Dial From List	P	Time For Conn = 15
E	Dial Manually	Q	Left Margin = 0
F	Originate Call		
G	Answer Call	R	Receive XModem
H	Hang Up Phone	S	Send XModem
⏚	Force Term Mode		
		T	Capture To Disk
I	Format A Disk	U	Send From Disk
J	Delete A File		
K	Unlock A File	V	View Copy Buffer

To Change Menu: OPTION (↑),   SELECT (↓)

Options List

Note: This screen shows default settings.

From this menu, you select settings for the communications link, dial other systems, select data to transfer, and perform DOS functions.

The status bar at the top of the menu displays the currently selected baud rate, character display mode, the number of bytes of data in the copy buffer, and how much time has been spent in terminal mode. This information comes in handy when you are connected to another computer. (You can learn more about these settings in the following chapters.)

The options list contains two columns of option names and the keys you use to select them. The list contains options for setting up dialing parameters, dialing other systems, and sending and receiving data.

Making Selections

Press the [Select] key to scroll down through the options and the [Option] key to scroll up. To select an option, press the key on the keyboard that corresponds to the option. For example, the letter B in front of the Baud option means you press the [B] key to change the baud rate.

When you select an option one of the following happens:

• A new selection for the option appears on the menu. Continue to press the selection key to select other available options.

• A prompt for additional information appears at screen bottom.

• A new menu appears.

• An action is initiated.

Connecting to a Bulletin Board Service

This section describes how to connect to a bulletin board service (often called a BBS). Bulletin board services provide information on computer products, offer files you can download (copy) to your system, and act as a forum for computer users on a number of topics. These services are usually free of charge.

There are many bulletin boards specifically for Atari users in the United States and around the world. Most likely there is an Atari bulletin board within your local dialing area.

To find out about local bulletin boards, contact your local Atari user group. (For information about user groups, refer to the **Customer Support** section in this manual.)

Atari Corporation has its own bulletin board service in California called the Atari Base. If you'd like, you can call the Atari Base at (408) 745-5308; it is active 24 hours a day. This bulletin board lets you make contact online as well as upload and download files.

Before you begin, have your bulletin board number handy and make sure SX Express! is loaded and the Main menu is on your screen. Follow these steps:

1. With the SX Express! Main menu on your screen, press **[A]** to change the Mode to ASCII. The Mode determines the type of character translation display. In order to have readable character displays, your computer and the computer you're linked to must use the same mode.

2. Press **[B]** to change the baud rate to match that of the bulletin board you are calling. If you're not sure, select 1200. The baud rate determines the rate of speed of data transfer.

3. Set the Dial Mode for your telephone type: Tone for push-button phones and Pulse for rotary phones. Press **[N]** if you need to change this mode from the default (Tone).

4. Make sure the Duplex option is set to Full. Press **[O]** if you need to change it. Full duplex allows data to be sent in both directions at the same time.

5. Make sure the Parity option is set to None. Press **[C]** if you need to change it. The Parity setting determines how the bits of data are checked when they are transmitted.

6. Press [E] (Dial Manually). Respond to the "Number:" prompt at the bottom of the screen by entering the phone number of the bulletin board. Enter the complete number, including the area code. For example, if the number is (408) 745-5308, type:

(408) 745-5308

and press [Return].

Note: You can also enter phone numbers in other formats. (See E Dial Manually in Chapter 3 for details.)

Status messages appear at screen bottom as SX Express! dials, waits for the phone line to be answered, and then connects with the bulletin board. When the connection is made, the terminal mode screen appears.

F1200	Ascii	Buffer:	0	00:00:000

Connected!

You are prompted to press **[Return]** or other keys to begin communications. Then follow the prompts given by the bulletin board.

Connecting to an Information Service

Connecting to an information service gives you access to special interest groups, large databases of specialized information, world news, online shopping, and other services. Refer to the literature supplied with your Atari SX212 modem or a computer magazine for information on subscribing to GEnie, BIX, CompuServe, and other services. To connect to an information service, follow the steps in **Connecting to a Bulletin Board Service**, but be sure to select the baud rate that matches that used by the information service. For complete information on connecting and using an information service, follow the instructions supplied with your subscription.

Connecting to Another Personal Computer

SX Express! lets you communicate with other Atari computers, as well as computers from other manufacturers. You can converse back and forth on screen and send and receive files and other data.

Follow these steps to connect with another personal computer:

1. Contact the user so you can arrange a time when both of you have your computer systems switched on and loaded with a communications program. (The other user can use SX Express! or another communications program.) Agree on a mode and baud rate. You must both use the same mode and baud rate in order to communicate. Make sure the other user's system is set up to answer a call.

2. Make sure SX Express! is loaded and the Main menu appears on screen.

3. If necessary, change the mode and baud rate.

4. Set Duplex to Half.

5. Press [E] (Dial Manually). Respond to the "Number:" prompt at screen bottom by entering the complete number, including area code. (See the section on **Connecting to a Bulletin Board Service** in this chapter for an example of entering a phone number.)

6. When your call is answered and the terminal mode screen appears, type a message and wait for the other user to respond. Once the two computers are connected, you can exchange files or copy buffer contents, as described in **Chapter 2**.

Answering a Call

You must prepare your system to receive calls. If you have a "Y" connector and are talking voice to voice, press [G] (Answer Call) to answer the carrier sent by the other system. The "Y" connector allows the phone and the modem to be connected to the phone line at the same time.

Note: See the **Atari SX212 Modem Owner's Manual** for information on setting up your modem with a "Y" connector.

If you are not currently using the phone line or if you don't have a "Y" connector, follow these steps:

1. Make sure SX Express! is loaded and the Main menu appears on screen.

2. Press [Esc] (Force Term Mode) to display the terminal mode screen.

3. Type the following command:

   ATS0=1

   and press [Return].

Note: This command instructs the modem to answer a call after one ring. You can substitute another number (up to 255) for 1 if you want more than one ring.

When the call comes in, you can begin conversing on the terminal mode screen.

To cancel automatic answering in order to use the phone for voice contact, enter ATS0=0 on the terminal mode screen and press **[Return]**.
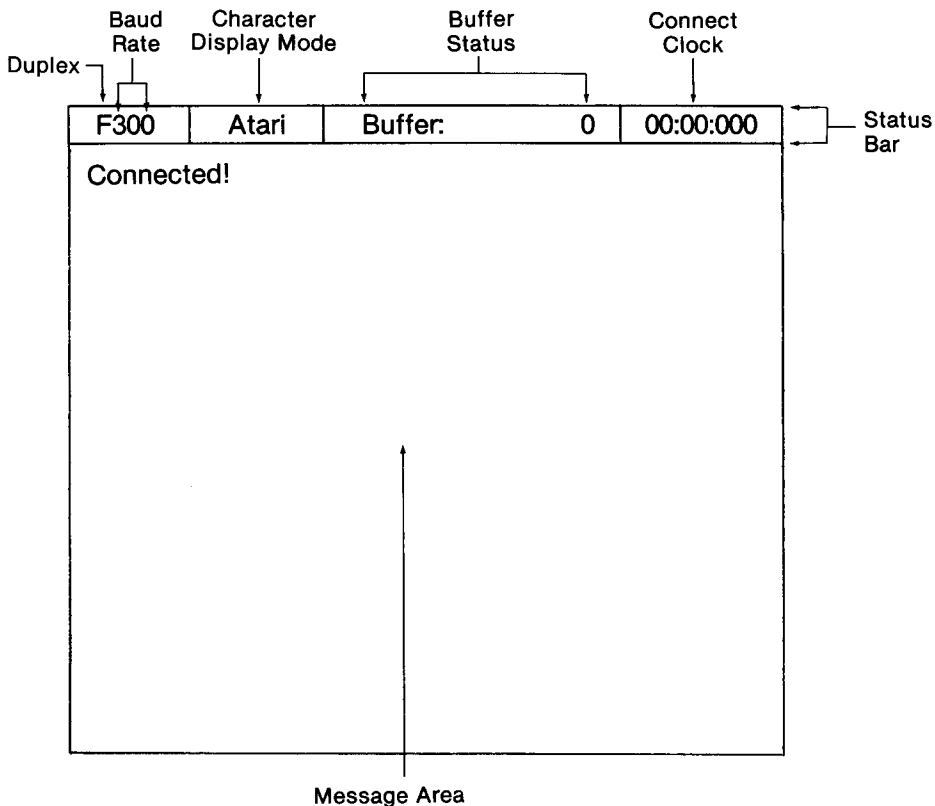
CHAPTER 2
USING THE PROGRAM

This chapter describes how to use the terminal mode screen and the Dialing menu, how to transfer files to and from your computer system, and how to manipulate the copy buffer. The terminal mode screen appears when you dial and make a connection. You can also display this screen without making a connection by pressing the [Esc] key from the Main menu. All on-screen dialogs take place on the terminal mode screen. The Dialing menu contains options for creating phone lists and dialing phone list entries.

You can transfer files using two sets of options from the Main menu. One set is used to transfer data files; the other is used for text files. The copy buffer can be a useful record of your communications using SX Express! The buffer can be saved to disk, sent to another computer, and printed.

For a comprehensive list of all SX Express! options, refer to **Chapter 3.**

Using the Terminal Mode Screen

The terminal mode screen consists of a status bar (the same one that appears on the Main menu) and a message area that displays text when you begin conversing with another system.

Baud Rate	Character Display Mode	Buffer Status		Connect Clock	Status Bar

Duplex

F300	Atari	Buffer:	0	00:00:000

Connected!

Message Area

The status bar is helpful in a number of ways. You can use it to:

• Check the duplex, baud rate, and character display settings. If they are incorrect for the connection, you can return to the Main menu and change them.

• Determine how many bytes of data are in the copy buffer. The copy buffer is temporary memory you can use to store your on-screen dialogs or other data. The copy buffer can hold a maximum of 4736 bytes.

• Check the connect clock to see how long you've been connected to the other system. If you are connected to an information service, you can use this clock to help control online costs.

14

While your computer is in terminal mode, you can press
[Start] to go to the Main menu and make selections with-
out losing the connection. Then press [Return] to return to
the terminal mode screen.

EDITING A MESSAGE TO SEND

The edit window lets you compose and edit a two-line
message on the terminal mode screen before sending it to
the receiver. To activate or deactivate this window, press
[Select] from the terminal mode screen and compose and
edit your message. To send the contents of the window to
the receiver, press [Return] or [Esc].

F300	Atari	Buffer:	0	00:00:000
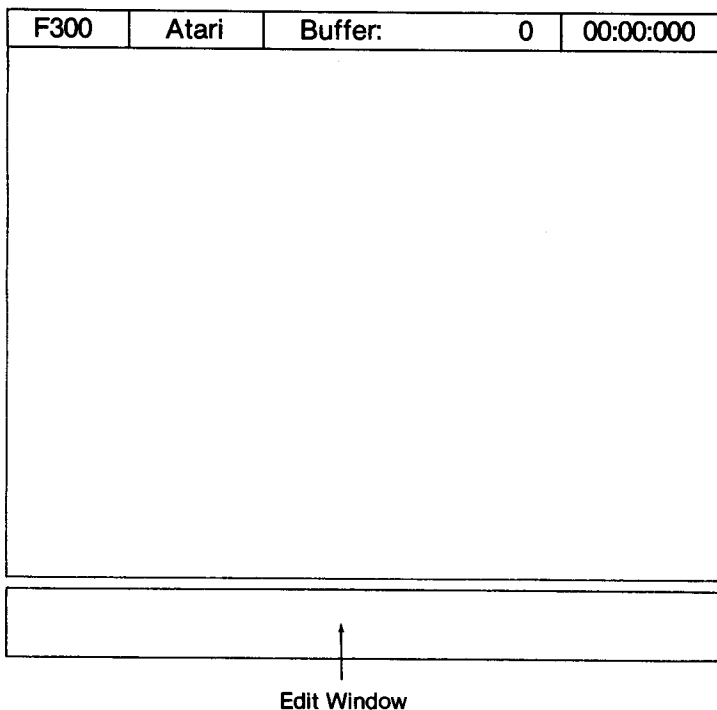
Edit Window

When the edit window is active, you can use editing keys
to work on your message. The keys you can use are listed
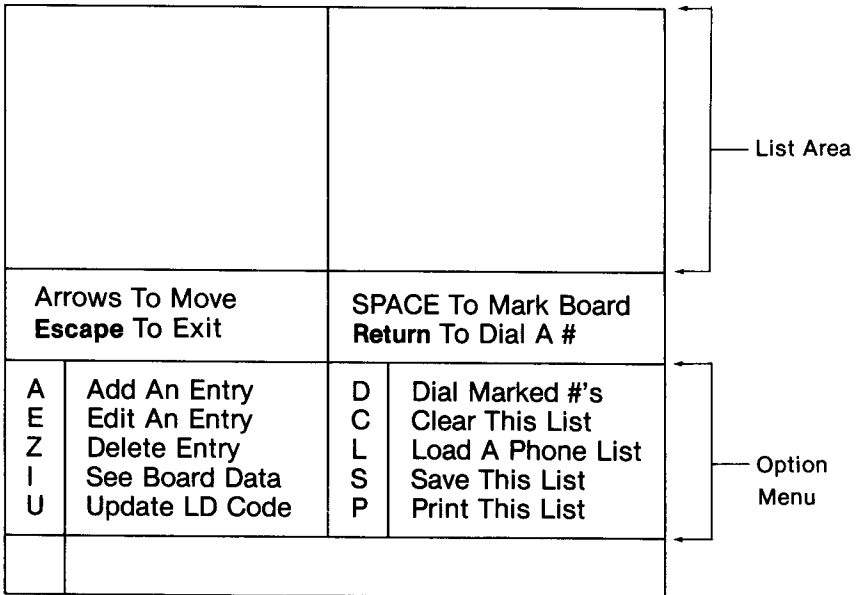in the section Select = On/Off in Chapter 3.

15

Note: Bulletin boards and other communications programs often use control characters (such as **[Control] [S]** or **[Control] [Q]**) that, when typed in the edit window, are sent directly to the receiver instead of being held in the window until you send them.

Using the Dialing Menu

The Dialing menu consists of a list area and a menu of options for creating and managing phone lists. Each entry on a phone list contains complete dialing information, so you can simply select an entry to dial it instead of making multiple selections from the Main menu. If you'd like, you can create separate phone list files and load them as needed. To select the Dialing menu, press **[D]** (Dial From List) from the Main menu.

F300	Atari	Buffer:	0	00:00:000

SX Express!	

List Area

Arrows To Move	SPACE To Mark Board
Escape To Exit	**Return** To Dial A #

A	Add An Entry	D	Dial Marked #'s
E	Edit An Entry	C	Clear This List
Z	Delete Entry	L	Load A Phone List
I	See Board Data	S	Save This List
U	Update LD Code	P	Print This List

Option Menu

Read the next two sections, **Creating Phone Lists** and
Dialing Phone List Entries, for the basics on using the
Dialing menu. (Refer to **Chapter 3** for complete information
on all Dialing menu options.)

CREATING PHONE LISTS

Press [A] (Add An Entry) to display a phone list form. To
complete this form, type information for each item and
press [Return] to enter the information and move to the
next item. To use the default setting or to leave a macro
line blank, press [Return]. When an item is active, it is
highlighted and a corresponding prompt appears at
screen bottom. After you have responded to all items, the
form disappears, and the message "List Updated!"
appears at screen bottom.

The following is an example of a phone list entry for the
Atari bulletin board:

Board Name:	ATARI BASE
Number:	(408) 745-5308
Macro 1:	Your Name
Macro 2:	Your Password
Macro 3:	
Conn. Time:	15 Seconds
Format:	ATASCII
Baud Rate:	1200

Fill in each of these items on the phone list form:

Board Name: Enter the name of the bulletin board,
information service, or individual in 16 characters
(including spaces) or less.

Number: Enter the complete phone number including
area code. Punctuation is optional. You can enter
(408) 745-5308, 408/745-5308, or 4087455308. Use a
comma to instruct the modem to pause before dialing
through a PBX or switchboard. For example, if you have
to dial 9 to get an outside line, you would enter 9, (408)
745-5308.

Note: You can also include an exclamation point (!) in a number to represent an MCI or Sprint long-distance code. (See **U Update LD Code** in **Chapter 3** for more information.)

Macro 1:, Macro 2:, and **Macro 3:** Enter a macro name in 16 characters or less and press **[Return]**. Macros are most often used for user identification batch commands such as user name, password, and control characters. You can enter these macro names directly from the terminal mode screen with just a few keystrokes.

Conn. Time: Enter the number of seconds you want the program to wait before redialing an unanswered or busy number. If the receiving party doesn't answer or the line is busy, the program redials when the designated number of seconds has elapsed. It will continue dialing until it makes a connection or until you instruct it to discontinue by pressing **[Esc]**.

Format: Press the number (1, 2, or 3) that corresponds to the appropriate character mode. Select ATASCII to connect to other Atari XE and XL computers and Atari-specific bulletin boards, ASCII for non-Atari bulletin boards and information services, and Vidtex to display Vidtex graphics.

Baud Rate: Press the number (1, 2, or 3) that corresponds to the appropriate baud rate. The baud rate you select must match that used by the other modem. The F300 setting can help you make a connection by forcing the modem to dial at 300 baud instead of 1200 baud.

To change any of the information on the form, press **[E]** (Edit An Entry) and **[Return]** until the item you want to change is highlighted. Respond to the prompt just as you did when first creating the entry.

To save the currently displayed phone list to disk, press **[S]** (Save This List), and enter a filename. If you want a list to be loaded automatically when you start the program, name it PHONE1.LST and save it to the program disk. You can create a number of phone lists, saving them to any filename you choose. Each phone list can have up to 18 entries.

Note: To help you identify the contents of each list, you might want to use the first entry in each list as a list identifier. For example, you could enter "CALIFORNIA" for the Board Name (leaving the rest of the entry blank) to identify a phone list of bulletin boards in California.

DIALING PHONE LIST ENTRIES

To dial an entry from a phone list, use the arrow keys to move the cursor to the entry and press [Return].

To automatically dial a series of numbers, use the arrow keys to move the cursor to a phone list entry and press [Space Bar] to mark it. (You can also use [Space Bar] to unmark an entry.) Repeat for each number you want dialed. Press [D] (Dial Marked #'s) to begin dialing.

SX Express! automatically dials each marked number until it makes a connection or until you press any key to stop dialing. This is handy if you normally call a number of bulletin boards at peak times and find it difficult to get through.

Once you connect to a number, SX Express! unmarks it for you. You can then select Dial Marked #'s to dial the remaining numbers or you can unmark them with the [Space Bar].

Transferring Files

Downloading and uploading files is the process of transferring files between computer systems. Downloading sends a program to your system from a remote computer system. Uploading is the reverse. You can build your own library of programs by downloading files offered by bulletin boards, information services, and other modem users. There are two types of files: text files (ASCII) and data files.

SX Express! comes with two pairs of options for transfer-ring files. One pair, [S] (Send XModem) and [R] (Receive XModem), sends and receives data files with XModem protocol. This protocol ensures that files are transmitted without errors. The other pair, [T] (Capture To Disk) and [U] (Send From Disk), is for text files.

Note: Though you can send and receive both data and text files with XModem, it's usually quicker and easier to transfer text files with [T] Capture To Disk and [U] Send From Disk.

The following sections explain these commands using a bulletin board as an example.

TRANSFERRING DATA FILES WITH XMODEM PROTOCOL

To download a data file with XModem protocol, follow these steps:

1. Connect with the bulletin board and follow the on-screen prompts to select a file and indicate that it is to be sent with XModem protocol.

2. When the bulletin board service indicates it is ready to send, press [Start] to return to the Main menu.

3. Press [R] to select Receive XModem.

4. When prompted, press [S] (Standard Cksum) to receive a text file or [C] CRC to receive a data file. Cksum (short for checksum) and CRC (cyclic redun-dancy check) are two types of XModem protocol.

5. Press [Return] to display the XModem Receive screen and begin the transfer. This screen displays messages that inform you of the progress of the transfer. Mes-sages alert you if there are any problems with the transfer.

To upload a file, follow the prompts your bulletin board
provides for sending a file. When the bulletin board is
ready to receive, press [Start] to return to the Main menu
and [S] to select Send XModem. Enter the name of the
file to send.

TRANSFERRING TEXT FILES WITH SEND FROM DISK AND CAPTURE TO DISK

To upload a text file, follow these steps:

1. Connect with the bulletin board and follow the on-
   screen prompts for uploading an ASCII file.

2. When the bulletin board is ready to receive, press
   [Start] to return to the Main menu.

3. Select [U] (Send From Disk).

4. When prompted, enter the name of the file and a delay
   rate. A delay rate of 25 to 30 seconds is usually suffi-
   cient to ensure that all bits are successfully transferred.

To capture text from your screen, select [T] (Capture To
Disk) from the Main menu. This option loads all text dis-
played in terminal mode into the copy buffer, saves it to
disk when the copy buffer is full, and then repeats the
process.

Working with the Copy Buffer

SX Express! can temporarily store 4736 bytes of data in
the copy buffer. The contents of the copy buffer are
cleared when you turn off your system, but if you like, you
can save this data to disk or manipulate it in other ways.

To begin storing all on-screen text in the copy buffer,
make sure the terminal mode screen is displayed. Press
[Option] to select the Copy On option.

When the copy buffer is full, the buffer indicator on the status bar reads "4736F." If you'd like, you can save the buffer (either full or partially filled) by copying it to a file on the disk. To do this, follow these steps:

1. Make sure you have a formatted disk in the active disk drive.

2. Press [Start] to return to the Main menu and [W] (Save Copy Buffer).

3. Enter a filename as prompted. The buffer is saved in the file, then cleared. When you return to the terminal mode screen, the Copy On option is still active.

You can use the following options from the Main menu with the copy buffer:

• View Copy Buffer to view the contents of the copy buffer.

• Save Copy Buffer to save it to disk. (You're prompted to enter a filename).

• Load Copy Buffer to load the buffer with an entire disk file. (You're prompted to enter the name of the file you want to load.)

• Send Copy Buffer to send the current contents of the copy buffer to the receiving computer.

• Print Buffer to send the copy buffer to your printer.

• Clear Buffer to erase the entire contents of the copy buffer. (You're asked to confirm your choice.)

For example, you can view the copy buffer, append a file to it, and then send it to the receiver. You can also save the buffer to disk or print it so you can refer to it later.

CHAPTER 3
SX EXPRESS! OPTIONS

SX Express! offers a variety of options to help you get the most out of your connect time. All operations begin at the Main menu. From there you can go to the terminal mode and Dialing menu screens, where you can access other sets of options. This chapter lists all options and explains how to use each one.

The options are listed by menu in the order they appear on the menu.

Main Menu Options

The Main menu contains two columns of options for making connections and sending and receiving data. To view the entire menu, press [Option] to scroll up through the menu or [Select] to scroll down. From terminal mode, press [Start] to return to the Main menu without losing your connection. From the Dialing menu, press [Esc] to return to this menu.

A MODE: ATASCII

The Mode option selects ATASCII, ASCII, or Vidtex character display. Press [A] until the selection you want appears next to the option.

ATASCII is the character set used by Atari XE and XL computers. ASCII is the standard character set used by most other computers. Vidtex is used to display Vidtex graphics (available from the CompuServe information service.)

Note: When you select ATASCII or Vidtex mode, the status bar message differs from your selection. ATASCII is listed as "Atari"; Vidtex is listed as "Vidtx."

23

If the terminal mode screen displays unreadable charac-
ters, return to the Main menu and select another mode.

You don't need to set this option before dialing a phone
list entry because the mode selection is already contained
in the entry.

F300	Atari	Buffer:	0	00:00:000

Ver 3.00	SX Express! By Keith Ledbetter	Ver. 3.00

A	Mode: Atascii	N	Dial Mode: Tone
B	Baud: 300	O	Duplex: Full
C	Parity: None		
D	Dial From List	P	Time For Conn = 15
E	Dial Manually	Q	Left Margin = 0
F	Originate Call		
G	Answer Call	R	Receive XModem
H	Hang Up Phone	S	Send XModem
↨	Force Term Mode		
		T	Capture To Disk
I	Format A Disk	U	Send From Disk
J	Delete A File		
K	Unlock A File	V	View Copy Buffer
L	Lock A File	W	Save Copy Buffer
M	Rename A File	X	Load Copy Buffer
?	View A File	Y	Send Copy Buffer
>	Copy A File	Z	Print Buffer
=	Default Drive:1	<	Clear Buffer
#	1-8 For Catalog		
+	Save Defaults	↑	↓ Change Backgrnd
−	Reload Defaults	←	→ Change Foregrnd

Terminal Mode Commands
- START = This Menu   OPTION = Copy On
- SELECT = Edit Window On/Off
- Shift/Control/W = Word Wrap On/Off
  - P = Print Screen   O = Buffer Screen
  - 1 − 3 = Send Macros   R = Reset Clock

To Change Menu: OPTION (↑),   SELECT (↓)

24

B BAUD: 300

The Baud option selects 300, 1200, or F300 for the baud rate. Press **[B]** until the baud selection you want appears next to the option. Baud rate is the speed at which information is transmitted. A baud is one bit per second.

Both modems (yours and the other computer's) must use the same baud rate. SX Express! dials at 1200 baud, unless F300 is selected. F300 switches to 300 baud before dialing. Use this if you have trouble connecting to a 300 baud system after switching from 1200 to 300.

You don't need to set this option before dialing a phone list entry because the baud rate is already contained in the entry.

C PARITY: NONE

The Parity option determines the parity setting: None, Even, or Odd. Press **[C]** until the parity setting you want appears. The parity bit is added to a group of bits to make the total of all bits odd or even. The Parity option, when set to Even or Odd, detects errors by checking the number of bits when you transmit your data. When exchanging information, both computers should have the same parity setting. Use the parity setting of None to communicate with most bulletin boards and information services.

D DIAL FROM LIST

The Dial From List option displays the Dialing menu. Press **[D]** to select this option. From the Dialing menu, you can create, edit, save, list, and print phone list entries. (For complete information on using the Dialing menu, see **Using the Dialing Menu** in **Chapter 2.**)

E DIAL MANUALLY

The Dial Manually option lets you dial a number by typing it from the keyboard. Press [E] to select this option, then type the number and press [Return]. You can enter the entire number (including area code and MCI or Sprint long-distance code) with or without punctuation. (See **U Update LD Code** in the **Dialing Menu Options** section of this chapter for more information on long-distance codes.) For example, you can enter 4087455308, (408) 745-5308, or 408-745-5308. The number you type appears at screen bottom. You can edit the number using the [Delete] key. The last number dialed with this option during the current session appears the next time you select option E. To dial this number again, press [Return]. To change the number, press [Delete] and enter the new number.

Note: Use a comma to instruct the modem to pause before dialing a number through a PBX or switchboard. For example, if you have to dial 9 to get an outside line, you would enter 9, (408) 745-5308.

F ORIGINATE CALL, G ANSWER CALL

The Originate Call option starts modem communication after you've established telephone voice contact. This is the option to use when you are speaking with a modem user over the phone and decide to go online during the conversation. In order to use the Originate Call and Answer Call options, both parties must have a telephone connected to their modem. One person must originate the call by pressing [F] (Originate Call) and the other must answer by pressing [G] (Answer Call).

H HANG UP PHONE

The Hang Up Phone option breaks the connection when you're finished communicating with the other computer. When you press [H] to select this option, the message "Connection Terminated" appears at screen bottom. Most bulletin boards and information services automatically hang up for you when you log off.

Esc FORCE TERM MODE

The Force Term Mode option simulates a connection. When you select this option by pressing [Esc], the terminal mode screen appears. Use this option to enter a direct modem command, such as the ATS0=1 command for answering a call.

Note: Options I (Format A Disk) through # (1-8 For Catalog) include many of the same commands available on the Atari DOS menu. DOS 2.5 is included in SX Express! so you don't have to quit SX Express! to perform basic disk operations. When you select one of these options, you are prompted to specify a disk or filename in the window at screen bottom. (See the owner's manual supplied with your Atari disk drive or a DOS manual for detailed descriptions of these DOS commands.)

I FORMAT A DISK

The Format A Disk option prepares a blank disk for storing information.

Warning: Formatting a disk permanently erases all files on the disk. If the disk contains files you want to keep, back them up before formatting.

J DELETE A FILE

The Delete A File option erases the disk file or files you specify.

K UNLOCK A FILE, L LOCK A FILE

The Unlock A File option removes write protection from a file. The Lock A File option prevents a file from being deleted or altered.

M RENAME A FILE

The Rename A File option permits you to change a file's
name.

? VIEW A FILE

The View A File option displays a disk file that is in ASCII
format. This is useful if you want to view a text file before
sending, deleting, unlocking, locking, renaming, or copy-
ing it. Press [Control] [1] to stop or resume scrolling, and
any key to stop the display and return to the Main menu.

> COPY A FILE

The Copy A File option copies a file from one disk to
another. (Wildcards are not permitted.) You can use this
option to copy a RAM disk to a floppy disk or to copy a file
from one floppy disk to another if you have two floppy-disk
drives. You cannot use this option to copy a file from one
floppy disk to another if you have only one disk drive
because the option doesn't allow for disk swapping.

= DEFAULT DRIVE: 1

The Default Drive option selects a drive for all SX
Express! disk and file options. Unless you select anoth-
er drive with this option, SX Express! selects drive 1 as
the default.

* 1-8 FOR CATALOG

The 1-8 For Catalog option displays a list of the files on
the drive you select. To use this option, type the number
of the drive. (Do not press the [*] character.) To see a list
of all files on the default (currently active) disk, press
[Return]. To see a list of files with a specific extension or
string of characters, use wildcards in the filename specifi-
cation. (See your Atari disk drive manual or DOS manual
for information on using wildcards.)

Note: On the Atari 130 XE computer, drive 8 is the RAM disk.

+ SAVE DEFAULTS, - RELOAD DEFAULTS

These options save and reload settings for parity, default disk drive, dial mode, left margin, time for connection, and foreground and background colors.

When you press [+] to select Save Defaults, the current settings you select are automatically saved to a file called CONFIG.EXP on the SX Express! disk. SX Express! automatically creates the CONFIG.EXP file for you the first time you use this option. When the defaults have been saved, the message "Operation Completed..." appears at screen bottom.

When you press [-] to select Reload Defaults, the last defaults you saved go into effect. For example, if you change your mind about the colors or settings you just changed, use this option to return to the previous colors or settings.

N DIAL MODE: TONE

The Dial Mode option selects phone type. Press [N] until the dial mode you want appears next to the option. Select Tone if you are using push-button phone service, or pulse if you are using rotary phone service.

O DUPLEX: FULL

The Duplex option selects Half or Full duplex. Press [O]
until the selection you want appears next to the option.
Full duplex transmits data in both directions at once, and
Half duplex sends it in one direction at a time. Use Half
duplex when communicating with another modem user.
With Half duplex, your keystrokes appear on screen as
they are sent to the receiver. Use Full duplex when com-
municating with a bulletin board or information service. If
nothing appears on screen when you type, or you get
double characters (for example, "hheelllloo" instead of
"hello"), select the other duplex setting.

P TIME FOR CONN:15

The Time for Conn option specifies how long the modem
waits for a connection before terminating a command or
redialing. When you press [P] to select this option, a
prompt for entering a new number appears at screen
bottom. Enter the number you want and press [Return].

For local dialing, the default of 15 seconds is sufficient.
For long-distance dialing, try 20 or higher. You can enter
any number from 5 to 60, but a setting of 8 or higher
usually works best.

You don't need to use this option before dialing a phone
list entry because the connection time is already con-
tained in the entry.

Q LEFT MARGIN: 0

The Left Margin option sets the left margin on your ter-
minal mode screen display. When you press [Q] to select
this option, a prompt for entering a new number appears
at screen bottom. You can set the left margin to any num-
ber from 0 to 25. Enter the number you want and press
[Return]. The number indicates columns. (The default
setting is 0.)

R RECEIVE XMODEM, S SEND XMODEM

XModem can be used to upload and download data files. XModem checks for errors as the file is transferred. A status screen displays messages that inform you of the progress of the transmission. If XModem encounters a block of bad data, it resends the data and then checks it again. If the error occurs during transmission, XModem catches it, retries, and usually is able to send readable data after a number of tries. You must be online with another system in order to use the XModem commands.

To download a file from a bulletin board using XModem, follow these steps:

1. Make sure the bulletin board you are using supports XModem protocol.

Note: Most bulletin board services support XModem.

2. Determine which file you want to receive from those offered by the bulletin board.

3. When the bulletin board is ready to send, press [Start] to return to the Main menu; press [R] to select Receive XModem.

4. When prompted, select an XModem protocol type. If you are receiving a text file, press [S] to select Standard Cksum. If you are receiving a non-text file, press [C] to select CRC. (Cksum and CRC are two types of XModem protocol.)

5. Enter the filename and press [Return] to go to the XModem receive screen. As the file is sent, on-screen messages inform you of the progress of the transfer.

To upload files with XModem error-checking protocol, follow the prompts your bulletin board provides for sending a file. When the bulletin board is ready to receive, press [Start] to return to the Main menu and [S] to select Send XModem. Then enter the name of the file to send.

T CAPTURE TO DISK

The Capture To Disk option copies the text of your on-screen dialog to disk. You must be online to use this option. When you press [T] to select this option, you are prompted to enter a filename. You are then returned to the terminal mode screen with the Copy On option active.

The Capture To Disk option is useful for creating a "transcript" of an on-screen dialog. The option automatically saves text to disk when the buffer becomes full or when you go from the terminal mode screen to the Main menu.

U SEND FROM DISK

The Send From Disk option transmits a disk file in text (ASCII) form. If you are using a bulletin board or information service, follow on-screen prompts for sending a file. If you are sending a file to another personal computer, notify the receiver that you are about to send a file before you select this option. Then return to the Main menu and press [U]. Enter the filename and delay rate when prompted.

The delay rate should be short enough so you can send the file quickly, but long enough so that no bytes are dropped during the transmission. A delay rate of 25 to 30 seconds is recommended .

Note: Files sent with this option are not checked for transmission errors. To send an error-checked file, use the Send XModem option.

V VIEW COPY BUFFER

The View Copy Buffer option displays and scrolls the contents of the copy buffer. Press [V] to select this option. While the buffer is displayed you can press [Control] [1] to pause or resume the display, or any key to quit the display and return to the Main menu. Viewing the copy buffer can help you make decisions about clearing, saving, or per-forming other copy buffer operations.

W SAVE COPY BUFFER, X LOAD COPY BUFFER

Use the Save Copy Buffer option to save the contents of
the copy buffer to a disk file. When you press [W] to select
this option, you are prompted to enter a filename. After
the file is saved, the message "Operation Completed..."
appears at screen bottom and the copy buffer automati-
cally clears.

Use the Load Copy Buffer option to load the buffer with
the contents of a disk file. When you press [X] to select
this option, you are prompted to enter the name of a disk
file. The disk file you load is appended to any data already
in the buffer. This option is helpful for preparing a copy
buffer to send.

Y SEND COPY BUFFER

Use the Send Copy Buffer option to send the contents of
the copy buffer to the receiving computer. When you
press [Y] to select this option, you are prompted to enter a
delay rate. A delay rate of 25 to 30 seconds is recom-
mended. (See **U Send From Disk** for more information on
delay rates.)

Z PRINT BUFFER

The Print Buffer option sends the contents of the buffer to
your printer. Before you press [Z] to select this option,
make sure your printer is connected to your computer and
is switched on.

< CLEAR BUFFER

The Clear Buffer option erases the contents of the buffer.
When you press [<] to select this option, you are prompt-
ed to confirm your choice. You can use this option to free
buffer space for additional data or to prepare a copy buf-
fer to save to disk or send.

[CONTROL] [↑] OR [↓] CHANGE BACKGRND
[CONTROL] [←] OR [→] CHANGE FOREGRND

These options change the background and foreground colors of the display. Press the key combinations for either of these options repeatedly to see all available colors.

OPTION (↑), SELECT (↓)

Press [Option] to scroll up through Main menu options, and [Select] to scroll down.

Terminal Mode Command Menu

The terminal mode screen is the screen that is displayed when you are connected to another computer system or are forcing terminal mode. When this screen is displayed, you can go to the Main menu to make selections by pressing [Start], and return to the terminal mode screen (without losing your connection) by pressing [Return]. The terminal mode commands are listed on the Main menu.

Terminal Mode Commands
- START = This Menu   OPTION = Copy On
- SELECT = Edit Window On/Off
- Shift/Control/W = Word Wrap On/Off
  P = Print Screen   O = Buffer Screen
  1 − 3 = Send Macros   R = Reset Clock

To Change Menu: OPTION (↑), SELECT (↓)

START=THIS MENU

Press [Start] to display the Main menu while you are in terminal mode. If you are connected to a bulletin board or information service, you can pause incoming text before returning to the Main menu by pressing the [Pause] key or keys designated by the bulletin board or information service (usually [Control] [S]). If you are connected to another personal computer, you must ask that user to stop sending information.

OPTION=COPY ON

Press [Option] to switch on the copy buffer. When this option is on, all characters on the terminal mode screen are sent to the copy buffer. The copy buffer can then be saved (Save Copy Buffer option) or printed (Print Buffer option). If you are going to save or print the buffer, be sure to do so before it is full (4736 bytes).

Note: As the buffer nears 4736 bytes, the screen border on color monitors turns red. When the buffer is full, the buffer indicator on the status bar displays "4736F bytes."

SELECT=ON/OFF

Press [Select] to switch the edit window on or off. The edit window lets you compose and edit a two-line message on the terminal mode screen before sending it to the receiver. Press [Return] or [Esc] to send the contents of the window to the receiver. Press [Esc] to send a bulletin board command that ends in Esc or to send the escape character while in Vidtex. You can use the following editing keys when the edit window is active:

[Control] [←]	Moves the cursor one character to the left.
[Control] [→]	Moves the cursor one character to the right.

[Control] [↑]	Moves the cursor to the first character position in the edit window.
[Control] [↓]	Moves the cursor to the last character position in the edit window.
[Shift] [Delete]	Deletes text from the cursor position to the end of the edit window.
[Shift] [Clr]	Deletes the entire contents of the edit window.
[Control] [Insert]	Inserts a space at the cursor position.
[Control] [Delete]	Deletes the character under the cursor and shifts the text on the right of the cursor one position to the left.
[Space Bar]	Deletes the character under the cursor and inserts a blank.
[Tab]	Moves the cursor five characters to the right.

[Shift] [Control] [W]=WORD WRAP ON/OFF

Press **[Shift] [Control] [W]** to switch word wrap on and off. When word wrap is on, whole words that extend past the right margin are automatically moved to the beginning of the next line. When word wrap is off, your text breaks at 40 columns, even in the middle of a word.

[SHIFT] [CONTROL] [P]=PRINT SCREEN

Press [Shift] [Control] [P] to send the screen image to a printer. This is helpful if you want a copy of the screen to look at later. Control characters print as blank spaces and inverse characters print as regular characters.

[SHIFT] [CONTROL] [O]=BUFFER SCREEN

Press [Shift] [Control] [O] to place the screen image in the copy buffer. Once in the copy buffer, you can manipulate the copy buffer with the buffer commands on the Main menu.

[SHIFT] [CONTROL] [1], [2], or [3]=SEND MACRO

Press [Shift] [Control] [1], [2], or [3] to enter a macro from your currently active phone list entry. This option lets you quickly enter your name, password, or other information on the terminal mode screen when you connect to a bulletin board or information service.

[SHIFT] [CONTROL] [R]=RESET CLOCK

Press [Shift] [Control] [R] to reset the connect clock to 00:00:00. If you are connected to an information service or are calling another modem user long distance, you can use this option to time your connection and control online costs. For example, if you want to disconnect after 10 minutes, you can do so when the timer shows that 10 minutes have elapsed.

Dialing Menu Options

The Dialing menu lets you create and manage phone lists of numbers you can call with your modem. Though this menu is geared towards making a list of bulletin boards to call, you can also use it to call information services, other modem users, and regular voice contact phones.

You enter dialing information in each entry on your phone list so you can conveniently dial numbers by selecting a phone list entry instead of making selections from the Main menu. As a special feature, SX Express! lets you mark a number of phone list entries and automatically dial them until it makes a connection. To get to this menu, press [D] (Dial From List) on the Main menu.

F300	Atari	Buffer:	0	00:00:003

SX Express!

Arrows To Move **Escape** To Exit	SPACE To Mark Board **Return** To Dial A #

A	Add An Entry	D	Dial Marked #'s
E	Edit An Entry	C	Clear This List
Z	Delete Entry	L	Load A Phone List
I	See Board Data	S	Save This List
U	Update LD Code	P	Print This List

ARROWS TO MOVE

Press the arrow keys to select a single entry to dial, edit, or view. An entry is highlighted when it is selected.

ESCAPE TO EXIT

Press [Esc] to return to the Main menu.

SPACE TO MARK BOARD

Press the [Space Bar] to mark a selected (highlighted) entry for automatic dialing. Press the [Space Bar] again to remove the mark.

RETURN TO DIAL A *

Press [Return] to dial a highlighted entry.

A ADD AN ENTRY

When you press [A] to select the Add An Entry option, a phone list form appears on screen. Follow the prompts at screen bottom for entering information for each item, and press [Return] when you are finished with each entry. (Macros 1, 2, and 3 are for entering your log-on sequence, including user name, password, and control characters.)

E EDIT AN ENTRY

The Edit An Entry option allows you to edit a phone list entry. Use the arrow keys to highlight an entry, and press [E] to display the entry's phone list form. Press [Return] to move to the field you want to change, and follow the prompts at screen bottom to reenter your information.

Z DELETE ENTRY

The Delete Entry option allows you to delete a phone list entry from memory (not disk). Use the arrow keys to highlight an entry, then press [Z] to delete the entry. When the "Delete This Board?" message appears, press [Y] to delete the entry or [N] to keep the entry and redisplay the phone list.

I SEE BOARD DATA

The See Board Data option lets you view the contents of a phone list entry. Use the arrow keys to select an entry and then press [I] to display the form. When you are finished looking at the entry, press any key to return to the phone list.

U UPDATE LD CODE

The Update LD Code option lets you enter a long-distance code for long-distance services such as Sprint or MCI. This code is saved with the phone list. Press [U] to select the option. Enter the code at the "Long Dist Code:" prompt at screen bottom. In order to use the code with a number, enter an exclamation point (!) in the number when you type it on the phone list form. For example, if the number is (408) 745-5308, enter it as !(408) 745-5308. The exclamation point can also be used when you dial from the keyboard.

D DIAL MARKED #'S

The Dial Marked #'s option dials all entries marked with the [Space Bar]. When you press [D] to select this option, SX Express! dials the marked numbers continuously until it makes a connection, or until you stop the process by pressing any key.

C CLEAR THIS LIST

The Clear This List option deletes from memory (not disk) all entries on the currently loaded phone list. When you press [C] to select this option, the message "OK To Clear? (Y/N):" appears. Press [Y] to delete the list, or [N] to retain the list.

L LOAD A PHONE LIST

The Load A Phone List option loads a phone list from the default (currently active) disk. To load a list, press [L] and enter the list filename when prompted.

S SAVE THIS LIST

The Save This List option saves the currently displayed phone list to disk. Press [S] to select this option, and enter a filename. To designate a list to load automatically when you start SX Express!, name the file PHONE1.LST and save it to the SX Express! program disk.

P PRINT THIS LIST

The Print This List option prints a list of all entries on the currently displayed phone list when you press [P].
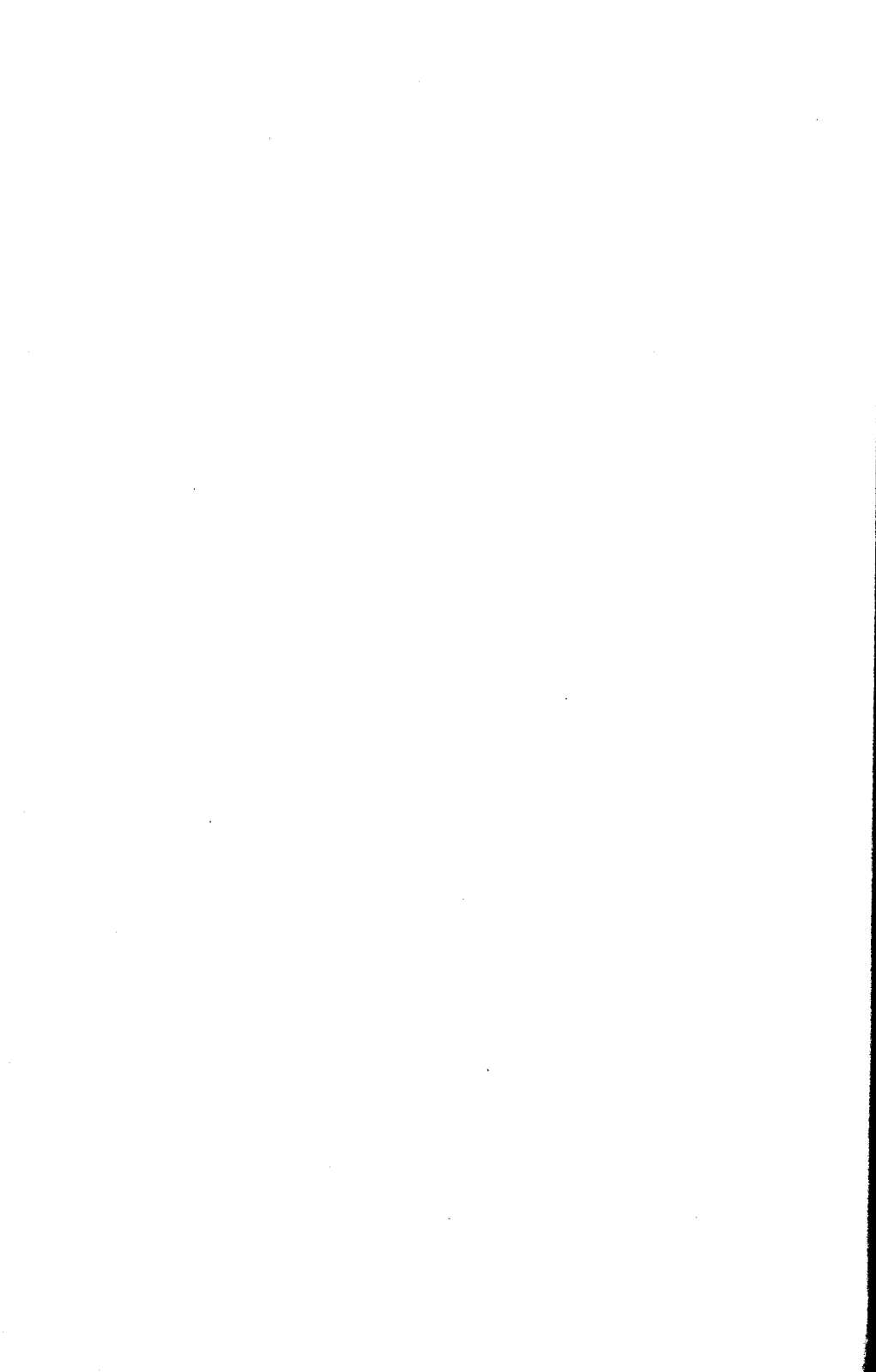
APPENDIX A
TROUBLESHOOTING

If you run into problems while using SX Express!, don't panic. Chances are, the difficulty is something you can take care of yourself.

If you are unable to load the program, make sure that you are using a disk that contains DOS and the SX Express! program. If you are still unable to load the program, use another copy of the SX Express! program disk.

The following is a list of other possible problems you may encounter and the corrective steps you can take:

The program won't load. Make sure all cartridges have been removed and the SX Express! program is loaded in drive 1.

Random characters appear on screen. Press [A] (Mode) on the Main menu to select a different character display mode.

Nothing appears when you type on the terminal mode screen. Press [O] (Duplex) to select half duplex.

Each character appears twice when you type. Press [O] (Duplex) to select full duplex.

You are suddenly unable to send or receive messages after successfully making a connection. The receiving computer has terminated the connection. Dial again.

Nothing happens after you make a connection with a bulletin board or information service. Most bulletin boards require you to press [Return] once or twice to begin communications. If this doesn't work, return to the Main menu to hang up and redial.

While you are using an information service, the screen scrolls too fast for you to read the display. Most systems have commands to stop and start scrolling (usually **[Control] [S]** and **[Control] [Q]**). If not, save the text by pressing **[T]** (Capture To Disk) so you can view or print it later.

A file you have downloaded does not work or contains garbled text. Occasionally, bits are dropped when files are transmitted without XModem protocol. To ensure error-free transfer, download the file with XModem protocol by selecting **[R]** (Receive XModem). The other system must also be able to support XModem protocol.

When initiating an XModem file transfer, the transfer terminates and the message "Checksum Errors" appears on screen. Select **[R]** (Receive XModem) again and select a different XModem type. The XModem types are either **[S]** (Cksum) or **[C]** (CRC).

You can't connect to a 300 baud system after switching from 1200 baud to 300 baud. Set the baud rate to F300 instead of 300.

GLOSSARY

ASCII American Standard Code for Information Interchange (pronounced ask-ee). This code is used to transmit standard letters and symbols in the English language. Each standard 8-bit code represents a single alphabetical or numerical character.

ATASCII Atari's specialized version of the ASCII code, developed to handle the enhanced graphics capability of the XE or XL computer.

baud A unit of data transmission, usually equal to one bit per second.

BBS Bulletin Board Service. (See **bulletin board**.)

bulletin board An interactive database you can access with your modem and SX Express! program. Bulletin boards contain files you can download and can act as a forum for different special interest groups.

carrier The signal detected from the other computer when you make a connection.

cksum or **checksum** An error-checking protocol that checks data files.

connect clock The timer on the status bar in SX Express! that shows how long you have been connected to another computer system.

copy buffer Temporary storage for your on-screen dialogs or other information. The contents of the copy buffer can, for example, be sent to the receiving computer system or copied to disk.

CRC (cyclic redundancy check) An error-checking protocol that checks data files.

data files Non-text or binary files. These files should be transferred with the XModem protocol.

default The option chosen by your computer when you haven't chosen a specific option.

delay rate The amount of time between entering a command and the beginning of its execution.

download To transfer a file by modem to your system from another system. Most bulletin board systems and information services make programs available to callers through downloading. (Compare with **upload**.)

full duplex Data transmission in both directions simultaneously. Use full duplex when communicating with bulletin boards and information services. (Compare with **half duplex**.)

half duplex Data transmission in one direction at a time. Use half duplex when communicating with other modem users. (Compare with **full duplex**.)

information service A service such as GEnie, BIX, or CompuServe that gives you access to special interest groups, large databases of specialized information and files, world news, online shopping, and other services.

macro A string of characters that can be sent with one command. For example, your bulletin board user name or password can be a macro. In SX Express!, you create macros from the Dialing menu.

modem A MOdulator-DEModulator device connected directly to the phone system and your computer for use in data transmission.

online The state of being connected to another computer system over telephone lines.

parity A method of detecting errors during transmission by checking for even or odd bits in each word of data.

phone list A list of phone numbers you store on disk and dial with the SX Express! program. Each entry on a phone list contains complete dialing information.

pulse dialing Dialing with a rotary dial phone.

terminal mode The state of your computer system when you are connected to another computer system or have simulated a connection.

terminal mode screen The screen you use for exchanging information when in terminal mode.

text file A file that consists of ASCII characters.

tone dialing Dialing with a push-button phone.

upload To send information by modem to another computer. (Compare with **download**.)

Vidtex A character display mode for displaying graphics. Vidtex graphics can be found on the CompuServe information service.

XModem protocol A method of checking for errors during data transmission. If XModem encounters a block of bad data, it attempts to retransmit the data and then checks it again. Only information free of transmission errors is sent to the receiving computer.

CUSTOMER SUPPORT

Atari Corporation welcomes inquiries about your Atari computer products. We also provide technical assistance. Write to **Customer Relations** at an address listed below.

Atari user groups also provide outstanding assistance. To receive a list of Atari user groups in your area, send a self-addressed, stamped envelope to an address below.

In the United States, write to:

Atari Corporation
Customer Relations
P.O. Box 61657
Sunnyvale, CA 94088

In Canada, write to:

Atari (Canada) Corp.
90 Gough Road
Markham, Ontario
Canada L3R 5V5

In the United Kingdom, write to:

Atari Corp. (UK) Ltd.
P.O. Box 555
Slough
Berkshire SL2 5BZ

Please indicate **User Group List, Technical Assistance,** or the subject of your letter on the outside of the envelope.

INDEX

A

U

Unlock A File option, 27
Update LD Code option, 40
Uploading files, 20, 21, 31

V

View A File option, 28
View Copy Buffer option, 22,
   32

W

Wildcards, 28
Word Wrap On/Off option, 36

X

XModem protocol, 20

Notes