



# SMART 1030

**COMMUNICATIONS SOFTWARE  
ENHANCEMENT PACKAGE**

# **SMART 1030**

**Written by**

**BRENT BORGHESE**

## **TRADE MARKS**

The following registered trademarks are used within this manual. Credit is hereby given:

ATARI, ATARI 400, ATARI 800, ATARI 1200XL, ATARI 600XL, ATARI 800XL, ATARI 850 INTERFACE MODULE, ATARI 1030 MODEM and ATARI 835 MODEM are all trademarks of ATARI, INC., Sunnyvale, California. 94086.

HAYES and HAYES SMARTMODEM are trademarks of HAYES MICROCOMPUTER PRODUCTS, INC., 5923 Peachtree Industrial Blvd., Norcross, Georgia 30092.

MCI is a registered service mark of MCI Communications Corporation.

Touch-Tone is a registered service mark of American Telephone & Telegraph.

# INTRODUCTION

Although the ATARI 1030 modem is supplied with a communication software program, most advanced users find its capabilities somewhat limited. Many other communication programs are in the public domain or available from third party software companies. These programs have expanded capabilities that allow communication over telephone lines to time-sharing host systems or to other computers with greater efficiency and convenience.

The 1030 modem is a quality piece of equipment, available at a reasonable price. However, many advanced users prefer the sophistication and versatility available only in much more expensive equipment. Through the use of SMART 1030, both of the above problems can be eliminated.

SMART 1030 is a handler that allows your ATARI 1030 modem to simulate a Hayes intelligent modem. In addition, SMART 1030 is compatible with most communication software currently written for the ATARI 850. Your favorite communication software can therefore be used with the versatility of the Hayes command set.

SMART 1030 is compatible with both the ATARI 1030 and 835 modems and can be used with an ATARI 400, 800, 1200XL, 600XL, or 800XL computer. Included with SMART 1030 is the communication software AMODEM PLUS, written by Jim Steinbrecher. This program is in the public domain, and is one of the better communication programs available. The version included may not be the most recent available. If you have a more recent version, or want to use SMART 1030 with a different communication program, see the instructions elsewhere in this manual on how to use your software with SMART 1030

This program is not copy-protected. Any copy-protection method used would only reduce the flexibility and useability of the program. Please consider its reasonable price and respect the efforts put forth by the programmer in its creation.

Copies may be made by the original purchaser of this program for any legal use. We strongly recommend immediate back-up of the program to provide protection from unexpected loss of data.

## QUICK SET-UP INSTRUCTIONS

The following directions allow the experienced user who is already familiar with the Hayes command set to quickly begin using SMART 1030. First time users should read the entire manual for a complete understanding of the program.

Turn on your disk drive, modem, monitor and printer (optional).

Insert your BASIC cartridge into the computer.

After your disk drive has completed its initialization process, load SMART 1030 into the disk drive and turn on your computer.

Although SMART 1030 boots with common default parameter settings, you may want to check them or make changes. Enter BASIC by hitting SYSTEM RESET, then type RUN"D:EDIT.BAS". Make all necessary parameter changes and save to disk with the SAVE/END selection.

The SAVE/END selection will automatically load the terminal program and place you into the local command state. At this point you may enter any valid command or go to the on-line state by entering a dial command. If you need help remembering any command, type HELP, and a command summary with explanations will be displayed on the screen.

## OPERATIONAL STATES

SMART 1030 allows your modem to operate in two states: local command or on-line.

In the local command state, you can send commands to your modem that will instruct it to perform various functions, change parameter settings or access the bulletin board data base. SMART 1030 will acknowledge your commands with a result code. This result code will be numeric or alphabetic, depending upon the "V" parameter setting you have selected.

Following is a list of all valid result codes:



NUMERIC	ENGLISH	DESCRIPTION
---------	---------	-------------

0	OK	The command has been executed normally
1	CONNECT	A carrier has been detected
2	RING	The phone is ringing*
3	NO CARRIER	Carrier was lost or never detected
4	ERROR	An error exists in your command line

\* This advanced feature allows experienced users the capability of setting up a bulletin board system. It requires the use a ring detector connected to joystick port number two (trigger input).

You will automatically enter the on-line state by entering a dial command. In the on-line state, your modem functions in the standard transmit/receive communication mode. While in the on-line state, you may return to the local command state by entering "+++"(escape command). Before using this escape command, wait four seconds after any data transmission.

## DIALING

SMART 1030 allows the user to input dial commands directly through the keyboard, from the bulletin board data base, or by using the autodial features of your communication software. The dialing commands available in SMART 1030 are as follows:

NOTE THAT ALL COMMANDS MUST BE PROCEEDED BY "AT" WHICH IS THE ATTENTION MODEM COMMAND

COMMAND	DESCRIPTION
---------	-------------

D	Instructs modem to dial
,	Instructs modem to pause for two seconds
T	Instructs modem to dial Touch-Tone (1030 only)

## COMMAND DESCRIPTION

P	Instructs modem to dial Pulse
R	Switches modem to answer mode
A/	Repeat the last command
;	Instructs modem to return to local command state

## EXAMPLES\*

### AT D2680405

This command instructs the modem to dial the phone number "268-0405". Note that the default mode uses tone dialing. The modem will wait 20 seconds for a carrier. If none is received, a NO CARRIER result code will be displayed. If a carrier is received, a CONNECT result code is sent, and the modem will go to the on-line state.

### AT D9,2680405

A comma instructs the modem to pause for two seconds. This allows easy access through PBX systems that require the dialing of a "9" in order to access an outside line.

### AT DP2680405

With this command the phone number 268-0405 will be pulse dialed. This also changes the parameter to pulse dialing.

### AT DT2680405

This command will tone dial the phone number "268-0405", and changes the parameter back to tone dialing. Note that the 835 modem does not support this command.

\*The space following AT in these examples is optional and is not required.

AT DP2221234; [return]

OK (modem response)

AT DT1234567,16142680405

A semicolon causes the modem to enter the local command state. This is necessary when using a long distance network. The modem will dial into the network using pulse dialing and then dial your access code, the area code, and the phone number using tone dialing.

AT DTR2680405

Since the "D" command forces the modem into an originate mode, if you need to communicate with an originate only modem, you must set your modem to the answer mode. This is done with the "R" command. The "R" can be placed anywhere in the command line as long as it is following the "D" command.

## COMMAND SET

A number of functions can be performed with the commands provided in SMART 1030. These commands instruct the modem to execute the specific command entered. For example, in the last chapter, dialing commands were identified and explained. A dial command instructs the modem to dial a telephone number, and depending on which dial command is used, the modem will dial a number in a variety of ways.

In this chapter the remaining command set will be explained. Remember that all commands must be input while in the local command state, so if you are on-line, first return to the local command state by using the escape command mentioned earlier.

Remember to enter the attention modem command "AT" prior to the actual command you want executed.

## AT A

The "A" changes the modem to answer mode and forces the modem to answer the telephone without waiting for any rings. It immediately looks for a carrier detect, and transmits an answer tone.

## AT B

The "B" command is your access to the bulletin board data base. When input, the program will read the data base file stored on the disk. The names of all bulletin boards currently in the data base will be displayed next to an alphabetic reference character.

## AT Bx (x can be any alpha character)

When the "B" command is followed by an alphabetic character currently used in the bulletin board data base, the program will instruct the modem to dial the related telephone number.

## AT Ex (x can be either 1 or 0)

The "E" command instructs the modem to echo back to the screen data entered through the keyboard. This is in effect only when in the local command state.

x=1 Echo back all characters when in the command state.

x=0 Do not echo back characters.

## AT Gx (x can be either 1 or 0)

When you are using a terminal emulator program, it might be necessary to use ASCII rather than ATARI ASCII. This is due to the fact that the end of line character differs between the two.

x=1 ATARI ASCII

x=0 ASCII



## **AT Hx (x can be either 1 or 0)**

The "H" command controls the telephone switch hook. Just as in using the telephone, by picking up the receiver, you have removed it from the hook. This is the same as the modem being off-hook. When you hang up the telephone, it is the same as being on-hook.

x=1 Off-hook

x=0 On-hook

## **AT O**

As mentioned earlier, while you are in the on-line state, it may become necessary to enter the local command state. This is done by entering the escape command "+++". Once you have made parameter changes, or entered any other local command, you return to the on-line state by using the "O" command.

## **AT Qx (x can be either 1 or 0)**

This command instructs the modem to respond with or without result codes. When no result codes are sent, the modem is in the quiet mode.

x=1 No result codes sent (quiet mode).

x=0 Result codes sent.

## **AT Vx (x can be either 1 or 0)**

When parameter setting "Q" is set to instruct the modem to respond with result codes, command "V" determines what type of result code will be sent. Result codes can be either alphabetic or numeric.

x=1 Result codes will be alphabetic.

x=0 Result codes will be numeric.

## **AT Z**

This command initializes and resets the modem.

## HELP

Enter the help command, and a listing of the most frequently used commands will be displayed on the screen.

## EDITOR PROGRAM

Included on your disk is the program EDIT.BAS. This program is used to update the bulletin board data base and change parameter settings. After booting your SMART 1030 disk, enter basic by hitting SYSTEM RESET. Then type RUN"D:EDIT.BAS". A menu will display three options:

- 1 CHANGE SWITCH PARAMETERS
- 2 BBS NUMBER EDITOR
- 3 SAVE/END

Select the appropriate number and type return.

### OPTION 1

Option "1" is used to make changes to the parameter settings. Note that the settings selected and saved to your disk will become default settings and will automatically load when booting the SMART 1030 disk. Available settings are as follows:

PARAMETER	CORRESPONDING	
	COMMAND	PARAMETER DESCRIPTION
1	E	Echo or no echo of characters in command mode. See explanation in COMMAND chapter.
2	Q	Result codes sent or not sent. See explanation in COMMAND chapter.

PARAMETER	CORRESPONDING COMMAND	PARAMETER DESCRIPTION
3	V	Alphabetic or numeric result codes sent. See explanation in COMMAND chapter.
4	n/a	Escape code operational (+++ on) or off. This escape command is used to enter the local command state from the on-line state. See also the OPERATIONAL STATES chapter.
5	n/a	Answer phone option on or off. This disables or enables joystick port number two trigger input.
6	G	ASCII or ATARI ASCII mode. See explanation in COMMAND chapter.
7	n/a	Data terminal ready supported or not supported. This feature has been included for advanced users who wish to set up a bulletin board. Its main purpose is to disconnect communications between terminals.
8	n/a	Carrier detect status enabled or disabled. If enabled, the software will be able to determine if the modem is receiving a carrier. When disabled, the carrier detect status will always be true.

## OPTION 2

Option "2" is used to update the bulletin board data base. Up to 18 names and phone numbers can be stored and displayed. You may add to the data base or make corrections to previously entered data.

When entering telephone numbers into the data base, dialing commands can be used if needed. For example, if you are dialing through a pbx system, enter the phone number in the data base using the format 9,2680405. If you do not have Touch-Tone service, or use an 835 modem, use the format P2680405 when entering the number.

### OPTION 3

Option "3" saves the current parameter settings and bulletin board data to the disk. Whatever settings are saved become the default settings. Option 3 also returns you to the terminal program.

## SOFTWARE MODIFICATION

SMART 1030 comes with the communication software AMODEM. You may be more familiar with or prefer to use a different communication program with SMART 1030. Use the following directions to substitute that program for AMODEM.

First, rename the program "AMODEM.BAS" which is on the SMART 1030 disk to "ORAMODEM.BAS", which is a short title for ORIGINAL AMODEM. This will save the original program for future use if ever needed.

Next, transfer the communication program you want to use to the SMART 1030 disk.

Finally, rename the new program "AMODEM.BAS". When you boot the SMART 1030 disk, it will automatically boot the new communication program. If you want to switch back to AMODEM, rename "ORAMODEM.BAS" back to "AMODEM.BAS".



## NOTES

## NOTES

Every effort has been made to ensure the accuracy of all information in this manual. However, due to the constant improvement and upgrade of our products, E & B Computer Services cannot guarantee its accuracy after publication and disclaims liability for any errors, omissions or changes.

No reproduction of this manual or any part thereof is allowed without permission of E & B Computer Services, P.O. Box 292506, Columbus, Ohio 43229.

# SMART 1030

- ★ DESIGNED FOR USE WITH ALL ATARI™ COMPUTERS
- ★ USE WITH ATARI 835™ OR 1030™ MODEMS
- ★ HAYES™ COMMAND SET COMPATIBLE WITH EXPANDED COMMAND SET
- ★ PULSE OR TOUCH-TONE™ DIALING
- ★ COMPATIBLE WITH MOST COMMUNICATION SOFTWARE AVAILABLE FOR THE ATARI 850 INTERFACE MODULE™
- ★ USE LONG DISTANCE NETWORKS, SUCH AS MCI™, OR EASY ACCESS THROUGH PBX SYSTEMS
- ★ AUTOMATIC REDIAL OF LAST NUMBER ENTERED
- ★ ON SCREEN HELP COMMANDS
- ★ AUTO DIALING
- ★ ON LINE BULLETIN BOARD LISTING WITH AUTOMATIC DIALING
- ★ AUTO ANSWER CAPABILITY
- ★ AMODEM SOFTWARE INCLUDED FREE
  - UNLIMITED FILE TRANSFER CAPABILITY
  - SUPPORTS XMODEM PROTOCOL

**COPYRIGHT 1985  
E & B COMPUTER SERVICES  
P.O. BOX 292506  
COLUMBUS, OHIO 43229**



## AMODEM DIRECTIONS

If you are not familiar with the program AMODEM, we have included a documentation file on the SMART 1030 disk that will give you the basics. To read the file, enter BASIC by hitting SYSTEM RESET, then load DOS by typing "DOS". Use the "C" option of DOS, and when you are prompted "COPY--FROM, TO?", then type "AMODEM.DOC, E:". If you want to print instead of read the file, type "AMODEM.DOC, P:".

To DOWNLOAD with AMODEM, first follow the download instructions for the BBS. When the BBS indicates it is ready to send the file, hit the SELECT key. Select the R (receive XMODEM) menu function, enter filename, and type return. Hit START to begin receiving.

AMODEM also provides an autodial menu. To update the autodial directory, enter BASIC by hitting SYSTEM RESET, then type "RUN"D:AUTODIAL.BAS". Follow the on-screen commands from this point on.