TARITERM

A TERMINAL PROGRAM FOR ATARI 400 AND 800 COMPUTERS

VERSION 1.1

SEPTEMBER 15, 1981

TARITERM TERMINAL PROGRAM
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THE MICROPERIPHERAL CORPORATION
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SYSTEM REQUIREMENTS

TARITERM requires an ATARI 400 or 800 Personal Computer System with at least 16k of RAM, the Atari Basic Computing Language cartridge, either an Atari 410 Program Recorder or an Atari 810 or 815 Disk Drive with DOS II, the Atari 850 Interface Module, and a modem such as the MICROCONNECTION modem with cable for attaching to port #1 of the Atari 850 Interface Module. Optional equipment which TARITERM is able to use are the AutoDial/AutoAnswer option on the MICROCONNECTION modem and a printer.

LOADING TARITERM FROM CASSETTE TAPE

1. Power-up your Atari computer system as described in your Atari 400 or Atari 800 Operator's Manual, with the BASIC Computing Language cartridge installed. Be sure to turn on the Atari 850 Interface Module before you turn on the computer. You should see the READY prompt on your television screen, with the white square "cursor" just below.

2. Insert the cassette tape with TARITERM into the Atari 410 Program Recorder, with Side 1 facing up.

3. Type CLOAD and press <RETURN>. The computer will "beep" once to remind you to press PLAY on the recorder. After you have done so, press <RETURN> again.

4. If TARITERM has loaded without errors, READY will be printed on the screen again. Type RUN and press <RETURN>.

5. TARITERM will display a title screen with a turquoise background. Press any key to continue.

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COPYING TARITERM TO DISK

The Microperipheral Corporation supplies TARITERM on cassette tape for reading with the Atari 410 Program Recorder. To copy TARITERM to a disk, follow Steps 1, 2, and 3 in the section above, Loading TARITERM from Cassette Tape. You should also have the Atari Disk Operating System II (DOS II) booted. If TARITERM loads without error, then type SAVE"D:TARITERM" and press <RETURN>. TARITERM can then be loaded and run from diskette as described in the following section.

LOADING TARITERM FROM DISKETTE

1.   Power up your Atari computer system with the BASIC Computing Language cartridge installed. Be sure to turn on the Atari 850 Interface Module <u>before</u> you turn on the computer. Your disk drive <u>should</u> be powered on with a system disk which has the Atari DOS II Disk Operating System and the file AUTORUN.SYS provided by Atari with the DOS II system. You should see the READY prompt on your television screen, with the white square "cursor" just below.

2.   Type RUN"D:TARITERM" and press <RETURN>.

3.   TARITERM will display a title screen with a turquoise background. Press any key to continue.

OPERATING INSTRUCTIONS

The modem must be attached to RS-232 port #1 on the Atari 850 Interface Module!

The program has four individual screens. They are:

        1.   TITLE/LOGO   (turquoise)
        2.   MENU   (green)
        3.   AUTODIAL   (pink)
        4.   TERMINAL   (blue)

SCREEN #1

From the TITLE/LOGO screen, press any key to proceed to SCREEN #2.

SCREEN #2

Follow directions to set communications parameters. The <RETURN> key takes you directly to SCREEN #4. The <D> key takes you to AUTODIAL, SCREEN #3. The <Q> key takes you to BASIC.

SCREEN #3

Follow directions which are presented to dial a number that is contained in the pre-set table.

When the host computer answers, you will be taken automatically to SCREEN #4 (Terminal Mode). If no computer answers with a carrier tone within about 20 seconds, then TARITERM will report that there is no answer and will ask if you want to dial another number. If you respond "Y", then the list of phone numbers will be presented to you again. If you respond "N", then you will be taken to Terminal Mode (SCREEN #4).

SCREEN #4

This is Terminal Mode. Whatever you type on the keyboard will be sent via the modem to the host computer. Whatever the host computer sends over the phone line will be printed on your screen.

If you wish to return to the program menu (SCREEN #2), press the <SELECT> key.

PRINTER COPY OPERATION

To toggle the printer on or off, press the <OPTION> key. This will permit you to make a hard copy of your transactions on an Atari printer. The printer copy option is initially off. When you first press <OPTION>, incoming data starts being saved to a memory buffer. When you press <OPTION> again, the data is printed from the memory buffer

to an Atari printer, and the printer copy option gets turned off. If the buffer gets full (it can hold 1500 characters), TARITERM sends a CTRL-S character to signal the remote computer to stop sending data; it then exits from Terminal Mode and prints the data in the buffer; it then sends CTRL-Q to signal the host to resume sending data, and TARITERM resumes communications.

HOW TO CHANGE THE PRESTORED PHONE NUMBERS

TARITERM is supplied with 8 prestored phone numbers for automatic dialing. To change these numbers to ones you want to use, you must change the BASIC code and save your modified copy of TARITERM.

1.   After powering up your system, load TARITERM as required for your system, but do not RUN the program.

2.   List lines 3181 to 3188 with the command L.3181,3188. Your screen should show the following:

         L.3181,3188

         3181 DATA 723-3282,FORUM 80
         3182 DATA 763-8879,SEACOMM 80
         3183 DATA 937-0444,SUPERBIN/65
         3184 DATA 527-0897,MAILBOARD
         3185 DATA 244-5438,CRATE] [
         3186 DATA 762-5141,MINIBIN
         3187 DATA 634-1713,COMPUSERVE
         3188 DATA 447-9012,TELENET

         READY

     Line 3181 is phone number 1 (as displayed by the Autodial Option), line 3182 is phone number 2, and so on. Note that each DATA statement has a phone number followed by a comma and then a name.

3.   Use the Atari cursor controls (press the <CTRL> key and one of the 4 arrow keys) to position the cursor over numbers you want to change, and type the new number. Press <RETURN> with the cursor still on the line you have changed. Be sure that each telephone number is

followed by a comma, and each number must also have a name. Phone numbers can have up to 15 digits and dashes, e.g., 1-206-723-3282 is a valid phone number. Do not change the line numbers of the DATA statements.

4.   When you have made the changes, type RUN and select the D command from the menu. Verify that the list of telephone numbers displays correctly. Press Q twice to exit from TARITERM. If there were any mistakes in your numbers, then go back to Step 2. If the numbers are all correct, then continue to Step 5.

5.   Save your modified version of TARITERM with CSAVE (for cassette) or SAVE"D:TARITERM" (for diskette).

FAST DIALING

The AUTODIAL feature of TARITERM is designed to dial at a nominal rate of 10 pulses per second (p.p.s.), which should work on any telephone exchange. Some exchanges support a fast dialing rate of 20 p.p.s., and if the exchange in your area supports this higher rate, you can almost double the dialing speed in TARITERM. To find out if your exchange supports fast dialing, you must change one line of code in TARITERM. LOAD the program, and when BASIC says READY, type LIST 4010. The computer will display the following line:

        4010 Z1=C3:Z2=C4:Z3=C3*C10

Change this line to the following:

        4010 Z1=C1:Z2=C2:Z3=15

RUN the program, and use it to dial a number. If it dials successfully, then your telephone exchange supports fast dialing, and you will be able to SAVE and use TARITERM in this modified form. If TARITERM does not dial successfully, or if you reach a wrong number, then you must continue to use the program in the original form in which it was supplied to you.

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AUTOMATIC TELEPHONE ANSWERING

TARITERM can be modified so that it will automatically ans-
wer the telephone as well as dial automatically. To use the
terminal program in automatic answer mode, you must be near
your computer when the call arrives. If the call is from a
data terminal which provides a carrier signal, then you can
start communicating by way of your computer.

Add the following lines to the BASIC code for TARITERM:

```
140   AA=C0

2213 PRINT "        [ W ] to wait for a phone call"
```

(There are six spaces between the first " and the W)
([W] means use the inverse video key.)

```
2235 IF Z=87 THEN TASK=C4:AA=C1:RETURN

5060 IF AA THEN PRINT CHR$(29);"[WAITING FOR CALL]";
     CHR$(29):XIO CTRL,#MIO,C48,C0,"R:"

5200 IF R=C0 THEN XIO CTRL,#MIO,32,C0,"R:":AA=C0:
     GOTO 5999
```

Save this modified program on disk as D:TARITERM.AA. To use
it, RUN the program as usual, set HALF DUPLEX mode (item 1
on the communications settings menu), then select the new
command W. TARITERM should clear the screen, tell you it is
in Terminal Mode, and print the message "WAITING FOR CALL".
On your MICROCONNECTION modem, set the VOICE/DATA switch to
DATA and the ORIGINATE/ANSWER switch to ANSWER. That's all
there is! TARITERM.AA will now answer the phone.

If you now press <OPTION> to turn on the Printer Copy
Option, you can go away and call your computer (using a data
terminal or a computer and modem) and leave messages. What-
ever you type from your remote terminal will be printed on
the printer. Voila! TARITERM.AA is a message taking sys-
tem! Note, however, that your Atari will not send anything
back, unless someone happens to be present to type on the
keyboard.

CHARACTER TRANSLATION

Translation of ATASCII to ASCII for output to modem:

Keyboard Key Pressed   Sends
    CTRL-A to CTRL-Z   ASCII CTRL-A to CTRL-Z
    ESC   ESC
    BACK S   Backspace (CTRL-H)
    DELETE   Delete
    RETURN   Carriage return (CTRL-M)
    TAB   Horizontal tab (CTRL-I)
    CLEAR   Clears screen locally,
                                sends nothing.

    (Atari logo key)   Nothing
    BREAK   Nothing

Translation of ASCII for input from modem:

Character Received   Screen Display
    CR   New line
    FF   Clears screen
    HT   Tab
    VT   Move cursor down one
                                line
    BS   Back Space
    DEL   Deletes entire line
    BEL   Rings bell
    ESC   Ignored
    LF   Ignored
All other control characters   ATASCII graphics symbol
                                is printed

The Microperipheral Corp. will provide you with 15 minutes of consultation after which time will be billed at $50.00 per hour with a $25.00 minimum. Please be prepared to give us your Visa or Mastercharge number when you call.