

INSIDE: PUBLIC DOMAIN SOFTWARE

ATARI CONNECTION[®] T.M.

Arcade Game Design!

FALL 1983

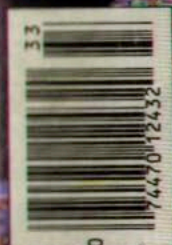
THE HOME COMPUTER MAGAZINE

\$3.00

LOGO vs. BASIC *WHICH IS BEST* ?

Seymour Papert
Logo Creator

Arthur Luehrmann
Language Expert



**SPECIAL
EDUCATION ISSUE**

Public Domain Software

How to Find Those Hard-to-Get Special Interest Programs!

by Dorothy and David Heller

BY "NETWORKING" with your Atari Computer, you can discover special interest groups for scientists and ham radio operators, writers, educators and teachers, "Dungeons and Dragons" fans and more. We're talking about an incredible variety of information services and electronic bulletin boards (BBS) that cost no more to use than the price of an ordinary phone call and are available as a resource for you at this moment.

These services include "Dial-Your-Match," to find the computer romance of your life; "The Living Tree," a vast and ever-expanding information bank; and hundreds of other sources for *free public domain software*.

Public domain software is software that has been donated by its authors for public use. Many hobbyists, educators, and amateur software developers aren't primarily interested in making money from their original programs—most public domain software has been written for special applications and system utilities. A special interest bulletin board is the most likely place you'll find those hard-to-get programs no one else seems interested in publishing.

Public domain programs may not be as polished as the best commercial software packages like *AtariWriter*, but they can be entertaining, useful—and phenomenally inexpensive!

With the right kind of modem and communications software, you can **UPLOAD** programs you want to contribute to other Atari Computer systems

and bulletin board services, or **DOWNLOAD** their programs to your Atari Computer and **SAVE** them to diskette or cassette.

Get On-Line Today

You'll need some extra equipment hooked up to your system to begin downloading *free software*: a modem and an Atari 850 Interface Module.

The **MODEM** (MODulator/DEMulator) is an inexpensive electronic device that lets you use your Atari Computer to communicate with other computers through regular telephone lines. The Atari 850 Interface Module enables the modem to work (interface) with your computer. The proliferation of low-cost modems—first the acoustical then the newer direct connect and, now the Atari 1400 and 1450 XL computers with built in modems—has literally brought the electronic information age into homes throughout the United States and abroad.

If you already own a modem and an Atari 850, the following terminal program, **MINIATRM**, will get you on-line today. You can communicate with Atari BBSs in just the time it takes to type in **MINIATRM** and dial one of the phone numbers we've provided.

MINIATRM was contributed by Mr. Jim Steinbrecher of the Michigan Atari Computer Enthusiasts (MACE). Jim is also the author of **AMODEM**, a more advanced terminal program, and co-author with Craig Chamberlain of **AMISTERM**, a terminal program designed specifically for communicating with Atari BBSs.

For Those with Disk Drives: "Open 'em Up"

Before you get started—are you using

a modem that requires the Atari 850 Interface Module? (The Atari 1030 Direct-Connect Modem does not require an Atari 850 Interface Module.) If your answer is "yes," you need special RS-232 software to "open up" your interface unit for communications software.

Note: Cassette users don't need this software. The Atari 850 boots up as soon as you turn your Atari Computer on. Skip this section and go on to the **MINIATRM** program listing.

The RS-232 handler software you need comes with the purchase of the Master Diskette, *Atari Disk Operating System* (DOS 2.0S).

Step 1: Format and write a DOS 2.0S file on a blank diskette.

Step 2: Label this diskette. It will become your "Communications Terminal" software package.

Step 3: With the BASIC cartridge plugged in your computer, type and enter the program exactly as shown below. Check it carefully to eliminate typing errors.

Step 4: Assign the name "AUTORUN.BAS" to this program and save it to your diskette.

Step 5: RUN the program. It will create an "AUTORUN.SYS" file on your disk.

How to Use Your New AUTORUN.SYS

1. Turn on your disk drive and wait until the "busy light" goes off.
2. Insert your "Communications Terminal" diskette.
3. Turn on both the modem and the Atari 850 Interface Module.
4. Turn on your Atari Computer. The **AUTORUN.SYS** software you've created will automatically open your interface module. You'll hear a tone from your TV speaker and the word "READY" will appear on your screen to tell you that your Atari 850 Interface Module is up and running.

WARNING: If you go to DOS to check your file, you'll have to repeat steps 1 through 4!

This article was adapted from Free Software for Your Atari Computer by David and Dorothy Heller, copyright © 1983, Enrich/Ohaus, San Jose, CA, \$8.95.

Open 'em Up Program

```

20 OPEN #1,8,0,"D:AUTORUN.SYS"
30 FOR I=1 TO 88
40 READ D
50 PUT #1,D
60 NEXT I
70 CLOSE #1
80 END
100 DATA 255,255,0,56,75,56,169,80
110 DATA 141,0,3,169,1,141,1,3,169
120 DATA 63,141,2,3,169,64,141,3,3
130 DATA 169,5,141,6,3,141,5,3,169
140 DATA 0,141,4,3,141,9,3,141,10
150 DATA 3,141,11,3,169,12,141,8,3
160 DATA 32,89,228,16,1,96,162,11
170 DATA 189,0,5,157,0,3,202,16,247
180 DATA 32,89,228,48,6,32,6,5,108
190 DATA 12,0,96
200 DATA 226,2,227,2,0,56

```

MINIATRM

```

10 REM * MINIATRM.BAS:
   REM BY JIM STEINBRECHER,
   ARCADE BBS 313-978-8087
20 REM * For a new or 16K user to DOWNLOAD
   Terminal software or other programs.
30 REM * Run in present form when connected
   to BBS using ATASCII <EOL=155>
40 REM * To use on CIS or ASCII BBS change
   Line 70 XIO-38 to "XIO 38,#2,0,0, etc."
50 C=FRE(0)-100:DIM D$(15),BUFF$(C):
   BUFF$=" ":BUFF$(C)=" ":
   BUFF$(2,LEN(BUFF$))=BUFF$:"BUFFER=";C
60 OPEN #1,4,0,"K:"
70 SAV=0:CLOSE #2:XIO 34,#2,192,0,"R:"XIO
   38,#2,32,0,"R:"OPEN #2,13,0,"R:"
   XIO 40,#2,0,0,"R:"
80 SETCOLOR 2,7,4:"* TERMINAL MODE *"
90 STATUS #2,C:IF PEEK(747) THEN GET #2,C:
   ? CHR$(C);:IF SAV THEN POKE ADDR,C:
   ADDR=ADDR+1:GOTO 90
100 IF PEEK(764)<255 THEN GET #1,C:
   PUT #2,C:GOTO 90
110 IF PEEK(53279)=7 THEN GOTO 90
120 IF PEEK(53279)=6 AND SAV=0 THEN SAV=1:
   ADDR=ADR(BUFF$):SETCOLOR 2,2,4:
   ? "* SAVE ON *":GOTO 90
130 IF PEEK(53279)<>5 OR SAV=0 THEN 90
140 CLOSE #2:?:? "SAVE DEVICE":INPUT D$:
   IF LEN(D$)=0 THEN 70:REM ENTER C,P,D:
   FILENAME.TYP
150 TRAP 140:OPEN #2,8,0,D$:TRAP 160:
   ? #2;BUFF$(1,ADDR-ADR(BUFF$)):
   GOTO 70
160 ? :? "BUFFER EMPTY":GOTO 70

```

MINIATRM: Your First Terminal Program

MINIATRM turns your computer into a communications terminal. Used with your modem, it enables you to communicate with distant computers to download any program, then add it to your diskette or cassette software library.

MINIATRM can also be used to download and save more sophisticated Terminal programs—you might only use it once, to capture and save AMIS-TERM for example, but it will get you on-line today! So, type in and SAVE this valuable MINIATRM program to your new "Communications Terminal" diskette or cassette.

Note: If you are using MINIATRM with a cassette and a 48K Atari Computer, change line 50 as follows:

```

From: "C=FRE(0)-100"
To : "C=FRE(0)-2200"

```

Now you have the software to begin your adventure into telecommunications: an Interface AUTORUN.SYS program and the MINIATRM terminal program!

How to Use MINIATRM and Get On-Line

First, make sure that both the AUTORUN.SYS program and MINIATRM are saved on the same diskette. Now follow the steps below:

Step 1: Turn on your disk drive, modem, and Atari 850 Interface Module.

Step 2: Insert the ATARI BASIC cartridge into your computer.

Step 3: Insert your "Communications Terminal" diskette into your disk drive and turn on your computer. Note: If you are using a cassette with a modem that does not require the Interface Module, simply type "CLOAD: MINIATRM" into your computer.

Step 4: Type RUN"D:MINIATRM" and press [RETURN].

Note: If you are using a cassette, turn on the Atari 850 Interface and your computer and type RUN"C:MINIATRM" and type [RETURN].

Your computer is now a *Communications Terminal*! You can begin accessing all the FREE software and services available to you! After you run MINI-

ATRM, you'll see "BUFFER=29213" appear on your monitor's screen. "BUFFER=29213" means that you can download and save programs that are as long as 29213 bytes (or letters). The screen also tells you that you are now in the *Terminal Mode* of operation.

Downloading

After you've established contact with a BBS and are ready to download a program, press the START key.

After pressing START, your screen will turn red and "*SAVE ON*" will appear to tell you that your computer's buffer memory is storing the program being sent to you by the BBS.

Storing Your Downloaded Program

Press the SELECT key when you are ready to save your newly acquired program. After you press SELECT, a "SAVE DEVICE?" prompt appears to ask if you want to store your program on diskette or cassette, and what you'd like to name it.

Cassette:

If you'd like to store your new program on cassette, answer the "SAVE DEVICE?" prompt by typing:

C:"FILENAME" and press [RETURN]

Now depress the RECORD and PLAY buttons on your Program Recorder, press [RETURN] on your computer, and your new program will be transferred automatically from your computer's buffer memory to the cassette tape.

Diskette:

To store your new program on diskette, answer the "SAVE DEVICE?" prompt by typing:

D:"FILENAME" and press [RETURN]

Your new program will be transferred automatically from your computer's buffer memory to your diskette.

That Was Easy!

That's all there is to it! If you'd like to use MINIATRM to get some free communications software, just look for abbreviations like "JTERM," "AMISTRM" and "JNSTRM" on a BBS list of available software. When you find one of these Terminal programs, simply download and store it on your diskette

or cassette. Building a great software library is really easy!

Dial Up Some Free Software

As a special supplement for ATARI CONNECTION, we have included seven of the more than 500 sources for free software listed in our book, *Free Software for Your Atari Computer*. These seven phone numbers will give you a good introduction to the quality and variety of free software, electronic mail, and information services that are available to you.

And remember—this is only the beginning! With the *Free Software* book, you can also access the public domain software libraries of hundreds of users' groups by mail or modem. If you are a parent or a teacher, you can get in touch and on-line with special educational resources and software libraries, including services for the handicapped and learning disabled.

Here are the seven phone numbers that will get you started in telecommunications:

M.A.C.E. (Michigan Atari Computer Enthusiasts) is an active, international users' group with three great electronic bulletin boards:

M.A.C.E.: 313-544-0885 (AMIS)

M.A.C.E. WEST: (AMIS)

313-274-3940

A.R.C.A.D.E.: (AMIS)

313-978-8087

These three BBSs offer you an impressive selection of amateur games, science programs, educational software, home management programs, computer utilities, and graphics demonstrations from their 30-disk library.

The people at M.A.C.E. are pioneers in computer modem communications. M.A.C.E. members, such as Jim Steinbrecher, created MINIATRM and A.M.I.S. (Atari Message and Information Service). This extensive program, which turns your computer into an electronic bulletin board, is available for downloading at selected times during the week. You must call the special phone number:

313-544-0885

It takes approximately one hour to receive the program's many sections. If you are interested, leave a message on one of their three bulletin boards to find out when the A.M.I.S. program is available for download.

* * *

A.C.E. (Atari Computer En-

thusiasts) is a users' group based in Eugene, Oregon, which has thousands of active members worldwide. The group has a special interest in programming and educational software. They are also world-renowned for good arcade game software. A.C.E. has a 24-hour ARMUDIC bulletin board that you can dial at:

503-343-4362

* * *

If you would like to dial up a number in California, you can talk to a "home-grown" BBS, *Itsy Bitsy Bulletin Board*. Jeff Bell enjoyed networking with his Atari Computer so much that he decided to set up his own bulletin board for the weekend. After lots of discussions with SYSOPS (system operators) of other bulletin boards, Jeff went online. People called all weekend and Jeff has been hooked on networking ever since.

Jeff is happy to share his experiences with you about the challenges and rewards of starting your own bulletin board (see "How to Start Your Own Electronic Bulletin Board" in *Free Software for Your Atari Computer*). To communicate with *Itsy Bitsy Bulletin Board*, dial:

408-298-6930

* * *

The Downtown Washington, D.C. Atari Computer Users' Group has 20 diskettes full of public domain software with a special emphasis on business programs and telecommunications. The group developed the ARMUDIC Electronic Bulletin Board. The name "ARMUDIC" was derived by transposing the board's phone number into "ARM-UDIC."

This excellent Bulletin Board System, which offers a breakdown of software on file by category, is available commercially to those who want to start their own base station. For more information, dial (you guessed it):

202-276-8342 (ARM-UDIC)

Telecommunications opens up business opportunities for enterprising Atari Computer owners. The GRAFEX Bulletin Board in California hosts a mail-order business for Atari equipment and software. You can find out about prices and new products, place your orders electronically, or simply exchange software and information by dialing:

408-253-5216

Happy dialing! Enjoy your telecommunications adventure! ■