2AM-BBS, Version 2.0

   User's Manual

Across the Country... put your signatures here!

Chapter 1

Making the CALL!

1.1   The Raw Materials

To call any Bulletin Board System, you are first going to
need the following:
  1.   A computer or a terminal.
  2.   A modem -- This device MOdulates data bits into sounds
       so that they can be transmitted and DEModulates
       incoming sounds into bits so that the
       computer/terminal can make sense of them. There are
       several different kinds of modems. Each will use
       slightly different communications parameters. More on
       communications parameters later.
  3.   A telephone line. Refer to your modem's user manual
       for instructions on how to connect your modem to the
       phone line.
  4.   A terminal program (if you are using a computer). If
                                   1
       you are just using a dumb terminal   you will not need
       this program. Terminal programs instruct your
       computer how to "talk" over the RS-232 port, which is
       the thing your modem is plugged into on the computer.
       Without this program, the computer knows no more about
       using the RS-232 port as it does about using a printer
       or any other device. You will have to set up your
       terminal program. This set up is accomplished in many
       ways depending on your terminal program. However, we
       will get to some basic guidelines in a minute.

1.2 Communications Parameters

In order to effect a communication link between two
machines, you need to set various parameters on each side.

----

1. dumb terminals do not run programs, you just turn them on
   and they automatically are set up to communicate thru a
   modem.

_____

Basically a parameter is a variable that must be set
correctly for proper communications. Many years ago,
parameters had to be changed frequently. Different links
used different parameters. There was no real standard.
Now, almost all communications between microcomputers is
done using a standard set of parameters. Here they are:

   1.   Baud: Baud rate is the speed in which characters are
        sent/received. This parameter is dependent on what
        kind of modem you have. Cheaper modems transmit and
        receive at 300 baud. More expensive modems run at
        1200, 2400, 4800, or even 9600 baud. Baud rates over
        2400 are used primarily in large applications in the
        corporate world. 4800 and 9600 baud modems are very
        expensive and require special phone lines for such
        high transmission speeds. In 10 or 15 years, when Ma
        Bell, et. al. convert the nation's phone system to
        digital, we will all be 9600 baud. For now, most
        phone lines will not transmit accurately at this
        speed. Baud rates of 2400 baud are possible at the
        time this manual was written, but are expensive. Many
        BBS's still do not use 2400 baud modems. The average
        2AM-BBS will go at either 1200 or 300 baud. You set
        up for the highest baud speed your modem can transmit
        at. The BBS will "autobaud", that is, set its baud
        rate at the speed at which you are set up at.
   2.   Duplex: This parameter can be set to either FULL or
        HALF. It determines whether the two computers should
        echo characters back at each other. Using HALF
        duplex, characters are echoed. Using FULL duplex,
        characters are not. You should set your terminal
        program and/or modem for FULL duplex. This is
        standard to the BBS world. If you set your modem

wrong, the characters you type and/or receive will
echo, i.e.

        HHEELLOO   TTHHEERREE

    If you get this sort of transmission, change your
    duplex setting.
 3. Bits (or bits per word): This gets tricky to define
     without launching into some more complicated stuff.
     Let's make it simple and say, set up for 8 bits.
 4. Stop bits: A little too complicated to explain. Set
     up for 1 stop bit.
 5. Parity: This parameter allows for some error checking
     while transmitting. Basically, when a character is
     sent, a code is built in which tells the other machine
     whether the character was received correctly or not.
     It is not used much in the BBS world. Set parity for
     NONE. Other parities are ODD, EVEN, MARK, and SPACE.

    Don't use them. If you get garbage when you connect,
    very often it is because your parity is set wrong. I
    notice a lot of 'p' and 'x' characters when parity is
    set wrong.
 6. Linefeeds: This is to decide whether your terminal
     program should skip down a line when you receive a
     carriage return or whether the BBS should transmit a
     linefeed character. It can be set either way (usually
     easier to let the BBS transmit the linefeed, thus
     answer CR only versus CR+LF in your terminal set up
     area). You will be asked whether or not you wish the
     BBS to transmit linefeeds in the new user login
     procedure. If your terminal program is not setup to
     supply linefeeds, reply YES to the linefeeds question.
     Otherwise reply NO to the linefeeds question. Oh, if
     all output is double spaced, it is because both your
     terminal program and the BBS are supplying a linefeed.
     Either turn linefeeds off in your terminal program set
     up section, or use the BBS's Configure utility and set
     up for no linefeeds from the BBS.

Put all together, you have what is called the 8-N-1
standard. That is: 8 bits, 1 stop bit, no parity. You may
find that, with no set up at all, your terminal program is
already set up this way (by default).

1.3 Protocols

One of the first things that a computer hobbyist probably
learns is that you cannot take an Apple program and load it
into an IBM (or most any other machine). Different
computers have different sets of instructions and different
methods for computing. However, in the BBS world, different
computers can communicate. All of this communication is
accomplished by using what is called a protocol.

When you are just communicating normally with a BBS, you are
sending and receiving codes that correspond to each letter
on the keyboard. The terminal program functions to convert
these numbers back into letters. However, when you are
communicating, you are, in reality, sending and receiving
these codes. These codes are known as ASCII (The American
Standard Code for Information Interchange). They are
standard to almost every computer made today and allow
Apples, Commodores, IBMs, and many other types of computers
to communicate. ASCII can be thought of as a communications
protocol. It is standard to many computers. However, when
you get to more complicated things such as transferring
files, you need protocols that can do more. You need error
checking to make sure that everything transmitted is

_____

received correctly, and you need a protocol that can
efficiently transmit information. ASCII is an efficient
protocol for posting messages and reading bulletins, but is
not so great for sending programs back and forth. If you
want to do file transmissions, your terminal program must
support another communications protocol. The second
protocol that 2AM-BBS uses is called Xmodem. Xmodem is
efficient and has error checking and is thus very good for
file transfers. Since it sends data in blocks (chunks of
data rather than one character at a time), it is not useful
for posting and reading messages, however. Read through the
manual to your terminal program to see if it supports the
Xmodem protocol. Basically, there should be a method for
sending and receiving a file using Xmodem. 2AM-BBS also
supports a modified form of Xmodem called Xmodem CRC. The
differences between Xmodem and Xmodem CRC are minor, but
Xmodem CRC allows for faster file transfer times.

1.4 The person on the other end!

BBS's are run for all sorts of reasons (pleasure, business
purposes, etc.), but in all cases, one person normally
supervises the BBS's operation and solves all the problems
that come up. This person is known as the SYStem OPerator
or SYSOP. If you have problems with the use of the BBS,
methods for contacting the sysop will be explained shortly.
However, remember that sysops get busy, and if you have
questions about other aspects of BBS'ing, there are always
lots of other users to communcate with as well!

1.5 HELP!

When using a 2AM-BBS, do not ever let yourself become
confused. Help is available from ANYWHERE by hitting 'H'
and then RETURN. You are strongly encouraged to make use of
help files! Hitting 'H' from the main menu will take you
into the master help file section. Here you can get help on
any part of the BBS.

If you are at a prompt and want to know what commands are
available, type a question mark (?) and hit RETURN for a
menu of commands.

1-4

_____

Chapter 2

Basic Concepts used in the Software

Before you launch into all the descriptions of what the
various sections of 2AM-BBS do, here is a little bit of
information on how to give commands to the board. In this
chapter, there are lots of examples of typical commands that
you could give. These examples come before any information

on using the board, so they won't mean much, but this
chapter is useful for getting some basic ideas on moving
around.

2.1 Basic Command Parsing

At any prompt (a prompt is where the BBS stops and, with a
neat little arrow, nudges you to type something in), you
will have to enter commands. These commands are then
parsed. What is parsing?? Well, keep in mind that computer
programs do not just glance at phrases and understand them.
In most cases, they are taken apart letter by letter and
examined in order to try and figure out what to do. The
programs that do this reading/interpreting are called
parsers. In 2AM-BBS, most utilities have parsers, but since
it is one program, each parser shares information with the
others. The user's job is to give the parser input that it
can deal with. If you do not, you will get errors. Most
errors are easy to read. If any are cryptic, we will
explain them further in this manual.

Most commands are only one letter long (i.e. command to send
feedback from the main menu is 'F'), but some are longer,
and many need additional information. For instance, to go
from the main menu to message base 2, you would type in 'g2'
and hit return. Now, if you forget a part of the command,
(i.e. put the 'g' and forget the '2'), the BBS will always
prompt you.

_____

Example 1: (the slick way)   Example 2: (the tedious
                                  way)

Main:> g2   Main:> g
Moving to base 2 :: System News   Base to move to :> 2
12 Messages, 5 New   Moving to base 2 ::
                                  System News
Base-2:>   12 Messages, 5 New
                                  Base-2:>

2.2 Multiple Command Parsing

You can enter as many commands on a line as you wish. Just separate them with slashes (/). This practice is encouraged just because it gets you around faster. An example:

     Main :> y/e/ri/m/ra

This command will show you your current status, take you into Email, read your incoming messages, take you back to the main menu, and set you up to read all new messages on all message bases. NOTE: you may be prompted for additional information (ex: in Email, you might be asked if you want to answer or re-read each message). Some of these additional responses can be put into your command line; others will not work. Just take each case as you have to. In addition, if you mistype a multiple command line, you may get a slew of syntax errors as the parsers try to interpret commands that are in the wrong place (ex: ri is great in Email, but will really upset the parser at the main menu). If you ever get the message "Unrecognized command", you know that part or all of the command you just gave was incorrect.

2.3 Ranges

Many commands will operate on a range of values, and this section lays out how 2AM-BBS parses ranges of numbers. From a base prompt, you may wish to read messages 2 thru 6. 2 thru 6 is a RANGE of messages. Other places you will find ranges are in the editor (delete lines 1,3, and 5 thru 7) or in the voter (vote on topics 1 and 3). This is how they work:
  1. The simplest range is just a single number (i.e. R12).
  2. To specify several numbers, separate them with commas (i.e. R1,3,5,6,7).
  3. If the numbers are in order, you can use a dash (i.e. R1,3,5-7).

_____

  4. You can go backwards (i.e. R12-6 is legal). In some cases the range will not work backwards even though it is legal to specify it backwards (i.e. 11-7 will come out just like 7-11).

5.   The asterisk is a special character that is useful in
     some ranges, and illegal in others. In the message
     bases, it means 'new' (so R* means 'read new'). In
     the Voter, it means 'all' (so D* might mean 'display
     all'). In some cases, it doesn't mean anything (from
     the main menu, R1-7 means 'read new messages on bases
     1 to 7, but R* will give you an error. When the
     asterisk is inappropriate, we have tried to print out
     the message 'Asterisk invalid in this range'.
     Hopefully that message will guide you a bit.

2.4 Pauses and Aborts

These commands are used to pause and abort output. They are
not normal commands; you do not type them from a prompt.
They are interrupt commands (named so because you use them
to 'interrupt' what is happening).

There are two sets of pause and abort keys in 2AM-BBS. The
first set is the standard set (called buffered set) and, if
you are a new user, you will use these keys. The second set
(called non-buffered set) is a little simpler to use and is
prefered by some users.

2.4.1 Standard (Buffered) Pauses and Aborts

When normally using 2AM-BBS, you can type commands at any
time, and they will be printed out and executed when you get
a prompt. This type of input and output is known as
"buffered" input and output.

With buffered IO, you must use control keys to pause or
abort output. They are as follows:

  1.   Control-X or Control-K or TAB aborts a message or
       textfile that is typing out on your screen.
  2.   Control-C or Control-A aborts a whole range of
       messages or textfiles that are outputting. No matter
       what is going on, either of these two keys will get
       you back to a prompt.
  3.   Control-N skips to the next base when you are reading
       a range of bases. If you are on base 3 and hit
       control-N, you will immediately go to base 4 if you
       are doing an RA (read all new messages on all bases).

                          2-3

4. Control-S pauses at any time. Hit any key to resume
       output.

2.4.2 Non-Buffered Pauses and Aborts

A simpler set of pause and abort keys are available. If you
turn off buffering (a user option in configure, see the
section on the configure utility for information on doing
this), you no longer have to use control characters. Output
is slowed down a bit by this action, but some users prefer
simple pause and abort keys. In non-buffered mode, you can
always use the control keys listed above to pause/abort,
but, in addition, the following keys are available:
   1. [Spacebar] will abort a message or textfile that is
       outputting (like Control-X above)
   2. [A] will abort everything and return you to a prompt
       (like control-C above)
   3. [S] will skip a base when reading a range of bases
       (like control-N above)
   4. [P] will pause output (like control-S above)

2.5 Conventions used in this manual

Most commands are only a few letters long. When this manual
makes reference to a command, it encloses it in brackets
([]). When you enter the command, do not include the
brackets! Example: If you want to use the [S] command,
type "S" (no quote marks either) at the prompt and hit the
RETURN key. For those of you who are computer lingo
readers, qualifiers are enclosed in the brackets with the
command and parameter lists (if any) follow outside the
brackets.

                              Chapter 3

                           New User Logins

This chapter will guide you through the process of becoming
a new user on a 2AM-BBS.

When first logging in, you will get the BBS Name/ID,
communications parameters, and a <HIT RETURN> prompt. Make
                              2
sure you are setup for 8N1 and hit the RETURN key. Now,
the account number prompt is displayed. If you have already
gotten an account number, you would enter it here, followed
by your password, and you would then go straight into the
main section (login notes, login stats, then main prompt).
However, let's go the new user root.

3.1 A New User Login

From the account number prompt:

  1.   HIT RETURN. You are playing new user
  2.   You will now have to supply:
        a.   Username
        b.   Password
        c.   Terminal info: (all these responses can be
             changed later, so don't worry if you are unsure
             about something)
              i.   Do you need linefeeds?: If your terminal
                   program does not generate linefeeds, reply
                   [Y] here, otherwise reply [N].
             ii.   Terminal width: Either 40 or 80 columns.
                   Most terminals are 80 columns. However,
                   check your terminal. Just count the width
                   of a line in characters. It should be
                   obvious whether it is 40 or 80 columns.

----

2. for more information on communications parameters, see
   the previous chapter

2AM BBS
User's Manual   A New User Login
_____

                     If your terminal displays less than 40 or
                     more than 80 columns, pick 80 columns.
           iii. Uppercase only: Answer [N] if your
                     computer can display lowercase characters.
            iv. Ansi menus?: If your terminal program can
                     recognize ANSI escape sequences, respond
                     [Y] here otherwise respond [N]. If you
                     are unsure, play safe and say [N].
             v. Number of Nulls: If you need to slow
                     things down a bit, you can ask 2AM-BBS to
                     send null characters in between each
                     character it sends. If you get any
                     garbage characters while connected, set
                     nulls to some number between 1 and 30. If
                     you are really confused here, set nulls to
                     0 and worry about it later if you get
                     garbage characters.
3. Verify your information is correct when you are asked
    "Is everything correct (Y/N)?" by hitting the 'Y' key.
4. You are now asked for:
      a. Real name
      b. Address
      c. Voice/Modem Phone numbers
      d. Age
      e. Privacy statement (can we release this
          information (Y/N))
5. Now, there are some multiple choice questions to
    answer. Each question can have up to 8 choices for
    answers. The choices will be output and then you will
    be instructed:

          Input all choices that apply
          Input one choice per line
          Hit RETURN on a blank line when done

    You can pick as many of the choices as apply to you
    for each question. When you are done, hit return on a
    blank line to exit. If none of the choices apply,
    just hit return on a blank line without selecting any
    choices.
6. Now you are asked to verify that this information is
    true. If all is OK, respond [Y]es. If not, respond
    [N], and you may start the user application procedure
    over.
7. After some closing comments, you are given your
    account number and your password is displayed. You

are instructed to write these down and remember them.
When they are written down, hit return. The screen
will clear and you will be tested to make sure you got
the right stuff written down. If you provide the
correct account number and password, you continue.

2AM BBS
User's Manual   The Second Login
_____

  8. You are now at the login notes. You are a 2AM-BBS
      user!

3.2 The Second Login

Now that you have a usernumber and password, you do not need
to answer the new user questions when logging in. At the
user name/number prompt, enter either your username or your
account number and hit RETURN. You will be prompted for
your password. Enter it carefully; asterisk characters
(***) will echo when you type in your password. If all was
done correctly, you will be taken to the main prompt.

2AM BBS
User's Manual   2AM-BBS Sections
_____

Chapter 4

2AM-BBS Sections

The rest of this manual goes into the details for using all
of the utilities that the board offers. With only a few
exceptions, these utilities can be entered with a command
from the main menu. Once you enter a section, you will have
new set of commands that are specific to that section.
There are lots of options, but FEAR NOT!, many are similar
from section to section.

4.1 The Editor

The BBS has one editor, and it is called whenever you post a
message on a message base, in feedback, or in Email. If you
have ever tried to describe an editor to someone, you will
probably have noticed that some features are really hard to
describe. The best way to see what a command does is just
to try it out. Use the descriptions below as guidelines for
exploration

4.1.1 Some of the features...

Most editor commands are not necessary and are rarely used.
Just keep in mind that, to end a message and save it, type
'/S' on a BLANK line. To abort a message, type '/A' on a
blank line. The editor features full word wrap, so just
type along and let it do most of the work for you. Since
the BBS is designed so that MANY different computers can
communicate with it, the editor is very simple.

4.1.2 Editor Commands

Here is a reprint of the editor menu. This menu is gotten
by hitting '/?' on any blank line in the editor. For that
matter, every command is entered in this fashion

Editor Commands

2AM BBS
User's Manual   Editor Commands
_____

/A - (or /Q) Abort and return to sub-base menu.
/B - Go to beginning of the message.
/D - Delete current line # (RANGES available)
/E - Go to end of message.
/G## - Go to line ## (EX: G5 to go to line 5)
/I## - Insert a blank line BEFORE line ##. (RANGES available.)
/L - List all text (RANGES available.)
/L* - List lines with numbers. (Ranges available)
/N - Toggle line number display on/off.
/P - Paste contents of BUFFER to end of file.
/R - Restart editing session.
/S - Save message and return to main menu.
/T - Change title of message.
/X - Ascii upload mode.
CTRL-R = Reprint current line.
CTRL-W = Walk through line.
CTRL-X = Delete line (abortable by spacebar, and retrievable by CTRL-W
or -U)
CTRL-U = UN-delete line (abortable by spacebar)
/? - This Help.

   1. /A or /Q aborts a message. You will be asked if you
       are sure you want to abort. An answer of yes will
       take you back to the prompt you were at before you
       entered the editor, and your message will not be
       saved.
   2. /B takes you to the beginning of the message. This is

always line 1, but since the 'B' was there, we threw
it in
3. /D [range] will delete the range of lines you specify.
4. /E will take you to the last line of the message you
    are editing.
5. /G [#] will take you to the line number you specify.
    It will print out the line and put your cursor at the
    end of it. NOTE: Many terminal programs allow you to
    move from line to line by hitting the up and down
    arrow keys. Try this with your computer to see if it
    works.
6. /I [range] will insert blank lines BEFORE the line
    number you specify. You can then put text into these
    lines.
7. /L [*] [range] will list the lines in the range you
    specify. If you put an '*' before the range, line
    numbers will be listed as well.
8. /N will toggle line numbers on and off. Selecting /N
    once will turn line numbers off. Selecting /N a
    second time will turn line numbers back on. If you
    are uploading text into the editor, it is a good idea
    to turn line numbers off. This action avoids dropping
    characters as each line is transmitted.

                            4-2

_____

 9. /P will paste whatever you have put in the buffer
     (with the /CPY command) on the end of the file.
10. /R will clear the editor and restart the editing
     session. Any text you have typed in will be deleted.
11. /S saves your message and exits you from the editor.
12. /T will let you change the title of your message.
13. /X If you wish to use your terminal program to dump a
     message into the editor (ASCII uploading), use this
     command. It turns off word wrap and line numbers for
     the best uploading conditions. Hit Control-Z to get
     out of this mode.
14. Hitting control-R will re-print whatever line you are
     on.
15. Hitting control-W will print one character of the line
     you are on at a time. Hitting control-W over and over
     again will reprint the current line one character at a
     time.
16. Hitting control-X will delete all the text on the line
     you are on. If you hit the spacebar right after you
     hit control-X, the text will come back.
17. Hitting control-U will un-delete the line you are on
     if you just deleted it.

18.   If your terminal program can generate ANSI escape
       sequences for the up and down arrow keys, you can move
       to the next/previous line in the editor with the up
       and down arrow keys. You can't just cursor around
       like in a word processor; you are still in a line
       editor, but it does help when moving around from line
       to line.

4.2 Archiver Utility

The archiver utility allows the users to read or download
TEXT (i.e. ASCII) files. Programs and really large text
libraries are offered in the FILES utility. A point of
philosophy here: the archiver is really used for
documentation and notes that most people would read while on
line. The FILES utility best catches programs and larger
documents that would be downloaded and read off line.
Archiver is recommended for short articles, summaries, and
short descriptions.

In the archiver, files are organized into several libraries.
There are commands to show the list of libraries available
and to move from library to library.

4.2.1 User Contributions to the Archiver

There is no upload option here, so if you have a file to
contribute, use one of two strategies: If you have xmodem,
you can send the file over using xmodem in the FILES
section. If you have a TEXT file to donate and do not have
X-modem, leave the Sysop feedback. The Sysop can then make
arrangements for you to leave the file in Email or mail it
thru US mail.

4.2.2 Archiver Commands

The archiver is entered from the main menu with the [A]
command. If you know in advance which library you want to

goto, you can specify a library number after the "A" (i.e.
'A2'). Once you are in the archiver, the following commands
are available:
  1. [G] allows you to go to a new library. If you specify
      a number right after the G (e.g. G2) you will go
      directly to that library. If you do not, you will get
      a list of libraries available, and then will be asked
      to select. Note, when you first go into the archiver,
      the menu of libraries will be displayed, and you will
      have to choose in the same fashion. Also, if you want
      to go to the next or previous library, use the < and >
      keys.
  2. [L] gets you a directory of the files in that library.
      When you hit RETURN, you will be asked to select a
      [B]rief or [V]erbose listing. A brief listing gives
      you the file name and number. A verbose listing gives
      what a short listing does, but also provides you with
      a 3 line explanation of the file.
  3. [R] allows you to read a file. The file can be output
      as text or can be sent using X-modem. The system
      pauses before outputting the file in case a user wants
      to open a text buffer. All else is self explanatory.
  4. [S] will show you what libraries are online.

4.3 BBS Lister Utility

This utility will keep statistics on other bbs's and allows
you to compile lists of BBS's based on several criteria.
The lister has two sections, one for local BBS's (same area
code as the BBS you are logged into) and one for non-local
BBS's.

4.3.1 BBS Lister Commands

The BBS Lister is accessed from the main menu with the [BBS]
command. Once inside the BBS Lister, the following commands
are available:

  1. [A]dd allows a suitably privileged user to add a bbs
      to the list. If the area code is the same as the

BBS's area code, the bbs will be added to the local
list, otherwise it will be added to the non-local
list. You will need special privileges to add BBS's.
If you have a BBS to add, leave feedback to the sysop
asking for this privilege. When it is granted, you
will be able to add one BBS to the list. If you have
several BBS's that you want to add, be sure to let the
sysop know that. This way, the sysop can set you up
so that you can add more than one BBS.
The following information is asked for during the
adding phase:
   a. BBS name
   b. BBS phone number
   c. Maximum baud rate
   d. BBS location (city, state)
   e. Computer the BBS is running on
   f. Software the BBS is running
   g. 4 line description of the BBS
The check for a duplication in the data base is made
by comparing phone numbers. If a BBS with a phone
number already added is added, a message will appear
to that effect and the BBS will not be added. If you
know of information in the data base that is
incorrect, please contact the sysop through feedback.

2. [LL] and [LN] list all the BBS's in the database for
the local and non-local calling areas respectively.
You are asked if you want a [B]rief or [V]erbose
listing. A brief listing will only output the BBS
name, phone number and baud rate. A verbose listing
will output all information recorded on the BBS.

3. [S]can is a data base pattern matcher. You can scan
either the local or non-local BBS data bases for
certain bases. Scans can be done by:
   a. Prefix
   b. BBS Name
   c. BBS Location
   d. Computer Type
   e. Telephone number
   f. Software
After you pick a field to scan by, you are asked for
some text to look for. Any BBS entry that matches
will be output. NOTE: you don't have to hit the

4-5

_____

field right on the head, any good pattern will do.
For example, if you wanted to search by computer type
and get any bbs's run on apples, just put 'apple' for
the computer type. Any BBS listed that runs on a

computer type with the string 'apple' in the computer
type (apple II, apple IIe, apple IIc, apple III, even
such stuff as apple //e) will be output. When you add
bbs's, try to fill in the fields with information that
will be easy to match against (i.e. Don't put IBM, put
IBM PC-AT. That way, people can match against 'IBM',
'PC' or 'AT').

4.4 Configure Utility

The Configure Utility allows a user to set up BBS options
that are specific to his or her needs or tastes. These
options break down into two categories, user-specific
(personal tastes and such) and terminal specific
(capabilities of your terminal and/or terminal software).

The utility is accessed from the main menu with the [C]
option. Once inside the utility, the following commands are
available:

4.4.1 User Options

1.   [C]hange password allows a user to change his/her
     password. User is prompted for the old password first
     to minimize the possibility of someone sneaking up to
     a user's terminal and changing an account password
     without a user's knowledge!
2.   [U]ser options. The following questions will be asked
     if you select this option:
       a.   In Email, notify you if a message you sent was
            read: Answer "Y" if you wish to be notified
            when your messages have been read.
       b.   In Email, notify you if a message you sent was
            not read: Answer "Y" if you wish to be notified
            if any of your messages have not been read yet.
       c.   Pause after each base in a range read. Pauses
            and aborts are another option that varies with a
            user's tastes. When you read a range of bases
            (RA, QA or R or Q [range] from the main menu),
            you can choose whether the prompt:

                 [P]ost, [Q]uit, [N]ext :>

                      4-6

should appear after you read each base. By
default, this prompt appears. However, if you
find it troublesome, turn it off by selecting
this option in the Configure menu. You will be
asked whether you want it on or not; respond
[N]o.
        d. Buffered IO mode [Y/N]. Choose Yes if you wish
the BBS to accept characters from you and hold
onto them until a prompt appears. This is the
normal input/output mode. Choose No if you wish
to use the input/output non-bufferd mode. This
mode has a simpler set of pause and abort keys
and is preferred by some users. They are listed
in the manual section on Pauses and Aborts.
   3. [X]pert mode is a toggle. If you select it once, you
are in expert mode. All menus will not appear
automatically unless you hit '?' at a prompt. If you
select it again, you are taken out of expert mode.
All menus appear automatically after completion of a
command. NOTE: this option works identically to the
e[X]pert mode option on the main menu.

4.4.2 Terminal Configure

Selecting the [T] option gets you into the terminal
configure section. In this section you are asked:

   1. Terminal Width (40 or 80 columns).
   2. Can you handle Uppercase (yes/no)?
   3. Do you need linefeeds (yes/no)?
   4. Can you display ANSI graphics (yes/no)?
   5. How many nulls do you need (0-30)?

If you are having problems with your terminal, changing some
of these options may help. Some background on these options
is given at the beginning of this manual, so we will not go
into them here.

4.5 Email Utility

You can get into Email by using the [E] option on the main
menu. Email allows you to send/receive private messages
to/from other users.

_____

4.5.1 Email Commands

The commands for Email are as follows:

  1.   [S]end or [P]ost allows you to send mail to another
       user. You will be prompted for a username, or you can
       execute the command as:

            S username

       and you will not be prompted. You will be prompted
       for a title (giving no title here aborts the message),
       and then will be placed into the editor. Exiting from
       the editor saves the message (assuming you did not
       abort). Also, you can mail to more than one user by
       separating usernames with commas (S user1, user2,
       user3).
  2.   [RI] allows you to read your incoming mail. Incoming
       mail is mail sent from others TO you. If you have
       incoming messages, Email will tell you so in two
       places: When you first log in (appears with welcome
       message and caller number information), and when you
       first enter Email. When reading incoming mail, you
       will have the chance to do the following after each
       message:
         a.   [A]nswer: You can respond to the person who
              sent you the mail with this option
         b.   [F]orward: Forward the message to another user.
              You will be prompted for comments (which will be
              tacked onto the top of the message when it is
              forwarded).
         c.   [R]e-read: Will output the mail message again.
              If you wish to capture the text in a buffer, use
              this option. NOTE: you can re-read a mail
              message as many times as you want! If you foul
              up with your buffer, just try again until you
              get it right.
         d.   [N]ext: Just go to the next message. The
              message you just read will be deleted.
       When you finish with a mail message, it is deleted.
       NO way around it! Obtuse social experimentation has
       shown us that, if people are given the chance, they
       will fight to the death to avoid deleting mail. We
       have enforced our wisdom upon the users. Otherwise,
       the BBS disk will turn into an attic.
  3.   [RO] allows you to read your outgoing messages. An
       outgoing message is one sent BY you to another person.
       When reading outgoing messages, you have the chance to
       do the following after each message:

     a. [D]elete: You decide not to send it after all.
         This will delete the mail message and lower the
         receiver's Email counter by one. (Email counter
         is number of new mail messages that is reported
         to you upon login). So, all record that the
         message was sent is gone. NOTE: If a user is
         deleted from the system and you delete mail to
         that user, the message:

             User not found, deleting mail anyway!

         Will be output. This is just for your
         information, no error!
     b. [R]eread: Reread the message. For a
         dissertation on the usefulness of this option,
         see the Reread section in [RI] above.
     c. [S]top: Do not output any more messages.
     d. [N]ext: Go on to the next message.
  4. [U] allows you to search the userlog for a particular
      user. Many users have strange handles and some
      decorate them with ASCII garlands. The handle looks
      really neat on messages, but it is impossible to
      remember. Here you just pop into the userlog with the
      [U] command. You will be asked if you wish to get a
      [F]ull list or [S]earch for a user. If you [S]earch,
      you will be asked for a pattern of characters to match
      usernames against. Any user that has the sequence of
      characters that you specify in his/her username will
      be output. So, to find a user who's name has the
      letters 'RED' in it, you would type 'RED' at the
      pattern prompt. The results might look like this:

          THE RED FOX
          :: RED ROSE ::
          DRED SCOTT

      You can then choose from this list. NOTE: this
      utility is identical to the [U]serlog utility
      available from the main menu.

4.5.2 Mail notification

If you wish to be notified which messages have or have not
been read when you enter Email, go into Configure (see the
configure section) and select the [U] option. You will be

asked (among other things):
  1. Do you wish to be notified if a message has been read.
  2. Do you wish to be notified if a message is still
      unread.

4.6 FILES Utility

This utility is used for uploading and downloading of
software. Downloading is the process of transferring a file
from a host computer (the BBS) to your computer. Uploading
is the reverse process (transferring a file from your
computer to a host computer). All up/downloading is done
using the Xmodem protocol. 2AM-BBS allows uploading and
downloading using 2 protocols: Xmodem, and Xmodem CRC (a
modified form of Xmodem).

Software available for downloading is stored in one of
several libraries. Uploaded files are kept in a separate
directory for review by the sysop before they are put up for
the public.

4.6.1 FILES Commands

This utility is accessed from the main menu with the [FILES]
command. Once inside the utility, the following commands
are available:

  1. [S]how libraries allows a user to see what libraries
      are online. A library is essentially a directory of
      available files. The sysop normally catalogs whatever
      software he or she wants to offer into several
      categories, each of which becomes a library. When you
      first enter the FILES utility, you are placed into
      library 1.
  2. [G]o allows a user to go to a different library. A
      list of libraries is available by using the [S]
      command. If you wish to go to the next/previous
      library, you can use the < and > keys.
  3. [L]ist files just lists files available in the library
      that the user is currently in. The list includes:
        a. File number
        b. Filename

c. Date file was put into the library
        d. Size (in bytes)
        e. A short (40 column) description of the file
        f. Some lines that may contain comments.
    When a user downloads a file, s/he will be asked for
    the file's file number or name.
4. [N]ew file list. This utility is just like the list
    files utility, but it only lists those files in the
    library that have been added since the user's last
    call date or since any date that you specifiy. By
    typing a range after the N (EX: N1-5), you can view
    the new files in that range of libraries.

2AM BBS
User's Manual   FILES Commands
_____

5. [F]ind a file. This utility is like the list files
    utility also, but after hitting [F] and return, you
    are prompted for a string of characters to match
    against. The file directory you are in is then
    searched (file name field and file description field)
    for that pattern.. If you wish to search through more
    than one library, give a range after the F (i.e. F1-5
    or F* for all libraries).
6. [D]ownload a file. The user will be prompted for a
    file number (given in the directory, the [L] or [N]
    commands) or file name, and the downloading process
    will begin. The user will have 60 seconds to instruct
    his/her terminal program to receive a file using the
    Xmodem or Xmodem CRC protocol before the BBS aborts
    the download attempt.
7. [U]pload a file. The user, after selecting this
    option has 60 seconds to instruct his/her terminal
    program to begin transmitting a file using the Xmodem
    or Xmodem CRC protocol before the BBS aborts the
    attempt. If a sucessful transmission is received, the
    utility will then ask for a filename and 1 line
    description of the uploaded file. After uploading,
    the user will get credit towards his or her
    upload/download ratio.

4.6.2 Requirements for downloading a file

1. The user must upload a program for after downloading
    so many files. The ratio of uploads to downloads is
    known as an upload/download ratio and is determined by
    the sysop. A typical upload/download ratio is 1
    upload for every 5 downloads. This practice is only

fair. One cannot take forever if one is not willing
to give. Besides, contributing programs enriches the
BBS's libraries and attracts more uploads, so it is
always in your advantage. After an upload, you will
be told how many programs you can download before this
ratio will become imbalanced. If you try to download
after exhausting this quota, the BBS will not let you.
New users are permitted to download 3 files before
uploading.
2.   The user must be validated. First time users should
not be discouraged if they cannot download. The SYSOP
will review all user applications before giving out
privileges to upload or download
3.   The time that it takes to download a file cannot go
seriously over the user's time limit. 2AM-BBS gives
some leeway if you are just a minute or two short, but
if a file takes much more time than your time limit,

you not be able to download the file during that
session.

4.7   Jump Utility

2AM-BBS offers the ability for the sysop to set up other
programs that can be run from within the BBS itself. These
programs (known as JumpDoors because you jump out of the BBS
and run another program) can be any sort of utility, game,
or other program of interest.

The [J] command at the main menu will take you into the
jumpdoors utility. Commands are basic:

1.   [S] shows you what programs are available. The list
is totally up to the sysop.
2.   [G] will ask you the number of the door you want to
jump through (i.e. what program you want to run) and
then run that program. Using the list given in the
[S]how option above, pick your poison. When the
program is done, you will be returned to the jumpdoors
menu.
3.   [M] will take you back to the main menu.

For any and all programmers out there: A jumpdoor can be
any program that addresses the serial port. 2AM-BBS will

not interfere with serial communications while a jumpdoor is
running; it will just TSR (terminate and stay resident).
The 2AM Associates will be glad to distribute any jumpdoor
with future versions of 2AM-BBS. Contact the sysop of your
board for more information.

4.8 Message Base Utility

A message base is a section of the BBS where users can go to
read and post messages. This utility is the most important
part of a BBS because it is the area where the majority of
the communication between the users takes place. Users
typically have many discussions going on at once, so many
bases are set up. Each base has a title which identifies
the nature of the discussion that is going on on it. Within
that base are messages related to that discussion.

4.8.1 Message Base Commands

The Message Base utility is run from the MAIN menu by
entering [G] (Goto message base) and then a base name or

_____

number to go to. To find out the names and numbers of the
bases, just use the [S]how message bases command at the main
menu. Note that once you know the name of the base, you
don't have to use the base number. If you want to go to
base 23 (which for instance might be titled "The Debate
Base"), you can use the commands 'G23' OR 'Gdebate' OR
'Gdeb'. Simply put, use a name after the [G] that is
unambiguous and you will get to that base. If you just used
the command 'Gthe', you would goto the first base in the
list that has the characters 'the' in its title (which might
not be where you wanted to go).

Once inside the message base utility, the following commands
are available:

   1. [G] option lets you go to another base once you are in
       the message base shell. It works exactly the same as
       the [G] option on the main menu.
   2. [P] option lets you post in a base. You are prompted
       for a message title and then are put into the editor.
       Exiting from the editor (without aborting) saves the

message as the last message in the base. The real
work here is done by the editor.
3. [S] option shows you what bases you have access to.
    You may have only read access to a base. If you have
    only read access to a base, you will not be able to
    post in it. Read only bases are denoted with an
    asterisk (*) next to them in this listing. If you
    have maintenance privileges for a base, an (-) will
    appear next to that base name. The sysop will tell
    you about the additional maintenance commands if you
    are given maintanence privileges for a base. NOTE:
    [S] is also available from the main menu and has the
    same function there.
4. [D] allows you to delete a message. To use it, you
    just type D# where # is a message number in the base
    you are currently in. The message is then marked
    deleted. You may delete a message if you posted it.
5. [E] allows you to edit a message. You can do this if
    you posted the message originally. You will be asked
    if you want the old title to stay the same, or if you
    want to rename the message. You will then be placed
    into the editor. The message will be there with you.
    Just move around and change things. When you exit,
    the changes will be made.
6. [R] allows you to read messages on the base you are
    currently on. Full ranges are all allowed including
    the asterisk (read new messages on this base, r*).
    One other extension of R is RA. RA allows you to read
    all new messages on ALL bases you have access to.
    When you are done with an RA, you will be brought back

    to the base you were at when you started. NOTE: RA
    is also available from the main menu.
7. [Q] allows you to quickscan messages on the base you
    are currently on. Only the title, username who posted
    the message and date/time output here. Like read,
    full ranges (including asterisk) are available. The
    QA extension works just like the RA extension except
    quickscans instead of reads are done. NOTE: QA is
    also available from the main menu.

4.8.2 Pauses and Aborts, a reminder

This was mentioned in another section, but it bears
repeating. Here, the messages will fly hot and fast,
especially when you are reading a range of messages. Just

remember, hit Control-S to pause output, hit Control-X to
abort a message, Control-C to abort all output, and hit
Control-N to skip a base when reading messages on a range of
bases. in normal input and output mode or use the "P" key to
pause output, the spacebar to abort a message, the "A" key
to abort all output, and the "S" key to skip a base in non-
buffered mode.

4.9 Trivia Utility

This utility allows you to answer sets of trivia questions.
These questions are put up and corrected by the sysop or
other users. Periodically, these people will put up new
question sets and put the old scores, answers, and questions
into the last score/answer set.

4.9.1 Trivia Commands

The Trivia utility is entered from the main menu with the
[T] command. Once inside the utility, the following
commands are available:

  1. [A]nswer questions will display 10 questions for the
      subject that you are currently set at and allow you to
      input one line answers to these questions. If you do
      not want your trivia score compiled, just type 'quit'
      at any question prompt.
  2. [C] will show all the current scores that have been
      tallied for the set of questions.
  3. [LA] shows the questions and answers for the last set
      of questions, if there is one.

_____

  4. [LS] shows the scores for the last set of questions,
      if there is one.
  5. [S] shows you what sets of questions are available.
      If you have answered any of the question sets, an '*'
      will appear next to that section name. If you are
      running a trivia section and have maintenance
      privileges to that section, a '-' will appear next to
      that section name. If you do maintenance on a trivia
      section, the sysop will inform you of the additional
      maintenance commands that are available.

6.   [G] allows you to go to another set of questions.
     Supply the number of a different trivia section after
     the 'G'.
7.   [Y] will show just your score in a particular trivia
     section.

4.10   Voting Booth Utility

In the 2AM-BBS voter, you can vote on a variety of topics

4.10.1   Voter Commands

The voter is accessed with the [V] command at the main menu.
Once inside, the following commands are available:

1.   [L]ist vote topics. The topic titles are listed. If
     you have voted on the topic, an asterisk will appear
     next to the title.
2.   [V]ote on a topic. You are asked for a topic number.
     You are then presented with the title, description and
     choices and are asked to vote. If you hit return at
     the ballot prompt, the vote is aborted. You can still
     vote on the topic later on.
3.   [D]isplay tally. This feature shows the percentage of
     the vote recorded for each choice. You give a topic
     number here along with the 'D'. Ranges are also legal
     here (i.e. 'D1-3' will display tallies for topics 1
     through 3).

4.11   Other Main Menu Options...

Most of these options are so straightforward that they only
bear a few comments.

_____

4.11.1   Chat

Chat is available from the main menu by typing in [CHAT] at

the prompt. The utility is available so that, if you have
to speak directly with the sysop, you can page him or her.
After selecting this option, you will be asked for a reason
for the chat (sysops can be real busy and like to know what
the problem is in advance). If the sysop is available, he
or she will then pull you into the chat module. In this
module, both you and the sysop just type away and everything
typed will appear on both the sysop's and your screen. You
can just type away to your heart's content. Hit return
twice when you are finished to let the sysop know you are
done, but when you are typing out your message, you don't
have to hit return; if you go over the end of a line, the
words will wrap around to the next line (like in any good
word processor). You should also note that the sysop can
pull you into chat from any place in the BBS program if he
or she has to speak to you. If the prompts go away and
someone starts typing at you, know that you are in chat.

4.11.2 Feedback

This utility is available during logoff or if you hit [F] at
the main menu. It allows you to leave a private message for
the Sysop. You are placed into the editor. Type your
message and save it, and the sysop will get it. Feedback is
useful for questions pertaining to the BBS or any other
business you might have (or even a friendly hello!).

4.11.3 Help!!!

The help files for 2AM-BBS can be accessed by typing 'H' at
the main menu prompt. This utility offers explanations on
all of the 2AM-BBS features and is very easy to use (since
you are here for help, you don't need any confusion).
Follow the instructions on the menu that comes up and you
can ask for help on any of numerous topics in the help
library. Also, from ANY other menu, typing help will give
some help on the section that you are in.

4.11.4 System Info

This command is invoked by typing [I] at the main menu.
This option normally displays:
  1. Computer Type
  2. Memory and Storage

3.   Peripherals on system (printer/modem/etc.)
   4.   Serial number of 2AM-BBS the BBS is running
   5.   Any other system specific information.
However the information contained in it is totally up to the
sysop.

4.11.5 Message Base List

This is the [S] option at the main menu and is also the [S]
option in the message base menu. It's function is to show
you a list of message bases you have access to. An '*'
before a message base title means you have read access but
no write access to that base. A '-' before a message base
title means you have maintenance privileges for that base.
This option is described in more detail in the message base
utility chapter.

4.11.6 Off

This procedure can be called from almost anywhere on the BBS
by typing 'OFF'. When logging off, you will first be asked
if you want to leave feedback (default answer is NO). A 'Y'
answer here will put you into feedback and then continue
with the logoff sequence when you leave the editor. Hitting
RETURN or N will skip feedback. You will then be asked if
you want to set all new messages to old (default answer is
YES). If you hit 'Y' or RETURN, any message that was marked
as new on this visit will be marked as old on the next
visit and will not appear in new message reads (r* or ra or
q* or qa). If you say 'N' here, any messages that were new
during this login will remain new for the next login. Wait
for the (brief) logoff notes to type out, and then hang up.
Take care not just to hang up when you are done answering
these questions; it could be considered a carrier drop, and
your time limit could be dropped.

4.11.7 Daily Log

This section is accessible by typing [D] at the main menu.
You will be then asked for a date to show the caller's for.
If you hit return, you are shown today's log. Otherwise,
you can select any date (in the form mm-dd-yy), and the log
for that date will be output if it is available. If you are
set up for an 80 column screen (an option in both the user
application and in Configure), it will also display the time
and baud rate of each caller. At the end of the list, the
percentages of calls for each baudrate will be output.

4.11.8   TIME

 This utility is accessible by typing [TIME] at the main
prompt and displays:
   1.   Login time
   2.   Current time
   3.   Current date

4.11.9   Userlog

 This utility can be invoked from the main menu by typing
[U]. You can also invoke it from Email. It will give you
either a full userlist or search the userlist for users
matching a pattern you supply. Although backwards
references are the bane of existence, please check the Email
utility section for a further description of this utility
with examples.

4.11.10   Expert Mode

 This section is available at the main prompt by typing [X]
and toggles you in and out of expert mode. It works exactly
as the same option in the Configure utility.

4.11.11   Your Status

This section is available at the main prompt by typing [Y].
It outputs your user record. Using this utility, you can
view your own record, but, of course, no one else's.

4.11.12   Bulletins

If you hit [+] at the main menu, the login notes will again
be displayed. These notes normally contain public
announcements and a welcome. They are written by the sysop.

4.11.13 ERROR!

 This is the least fun section to run into. If 2AM-BBS
encounters an error that it does not know how to deal with,
it will give the following message:

        Error encountered... system shutdown initiated.
        The system will be back up in 1 minute.
        Disconnecting....

If you get this message, we very much hope that you will
write down EXACTLY what you were doing, log back in, and
inform the sysop of what happened. This is the best and
brightest method we have for improving the software.

2AM BBS
User's Manual   2AM-BBS Command Set
_____

                            Appendix A

                      2AM-BBS Command Set

This appendix provides an outline of all commands that 2AM-
BBS uses. It is for reference and for syntax freaks like
the software authors. We pray it is orthogonal.

Semantic layout: Main is a hub for a set of utilities. You
get to a utility by typing the abbreviation for the utility
name at the main prompt. Once you type the utility name,
you are at the base level for that utility. Main also acts
as the base level for the most important part of the board,
the message bases, thus the command set [R,Q,G,S] works from
main as if it was the base level for the message bases.

A - Archives
        G - Goto a new library (also '>' and '<')
        L - List files
                B - Brief
                V - Verbose
        R - Read a file
        S - Show libraries available
        [Off,Main,Help,?]
B - Goto base (V1 Compatibility - See G)
BBS - BBSlister
        L - List BBS's
                L - Local
                N - Nonlocal
        A - Add
        S - Scan
        [Off,Main,Help,?]
C - Configure

```
        T - Terminal Configure
        U - User option configure
        C - Change Password
CHAT - Page system operator for chat
D - Daily Log




                              A-1




2AM BBS
User's Manual                          2AM-BBS Command Set
_____


E - Email
        R - Read
                I - Incoming
                O - Outgoing
        P,S - Post/Send [User {,User, ...}]
        U - Userlog
                F - Full
                S - Search
        [Off,Main,Help,?]
F - Feedback
Files - Files
        D - Download file name/number
        G - Goto another library (also '<' and '>')
        S - Show libraries
        L - List files
                B - Brief
                V - Verbose
        N - New
                [Range]
        F - Find
                [Range]
        U - Upload
        [Off,Main,Help,?]
G - Goto a message base
        B - Goto another base name/number (see G below)
        E - Edit a message
        G - Goto another base name/number (also '>' and '<')
        P - Post message
        R - Read message
                [Range]
                A - All
        Q - Quickscan message
                [Range]
                A - All
```

```
              D - Delete message
              S - Show message bases available
              [Off,Main,Help,?]
H - HELP
I - System information
J - Jump Doors
L - List mbases you have access to (V1 Compatibility - See S)
Q - Quickscan
                      Base [range]
                      A - All
R - Read
                      Base [range]
                      A - All
S - Show message bases available
STAT - System stats
TIME - Current time
```

A-2

2AM BBS
User's Manual   2AM-BBS Command Set
_____

T - Trivia
        G - Goto another question set (also '<' and '>')
        S - Show question sets available
        A - Answer questions
        C - Current scores
        Y - Your score
        L - Last
                A - Answer set
                S - Score set
        [Off,Main,Help,?]
U - Userlog
        F - Full
        S - Search
V - Voter
        L - List topics
        D - Display Tally
        V - Vote on a topic
        [Off,Main,Help,?]
X - Xpert mode
Y - Your status
+ - System Bulletins
[Off,?]
Unused: [K,M,N,P,Z]

Rules:
1. If there is more than one "set" of something, you Goto it.
2. You can Goto the next/previous set with < and >
3. If you can Goto another element of a set, you can show the set with

S
4. M leaves a utility
5. H is for help and can be used ANYWHERE
6. Off exits the board from anywhere. It must be typed out in full

A-3

Index

Table of Contents