

AMRAM-2 HELP FILE

The AMRAM-2 is the new version of the AMRAM and WILL work with the old AMRAM to give you a total of 48K of user writable space. All references throughout this document to ROM 5 assume that you have the old AMRAM attached to the back of AMRAM-2.

If you don't have an old AMRAM, they are still available and as an AMRAM-2 owner you may purchase one at the special offer price of #30.00 using the attached order form.

HARWARE INSTALLATION

IF YOU HAVE A ROM BOX FITTED, YOU MUST HAVE ROM POSITIONS 1 & 2 DISABLED. IF YOU DO NOT DO THIS, THEN NEITHER AMRAM-2 OR YOUR ROM BOX WILL FUNCTION CORRECTLY. YOU MAY ALSO DAMAGE THE AMRAM-2 AND YOUR ROM BOX - YOUR GUARANTEE DOES NOT COVER YOU FOR THIS AND WE KNOW THE UNIQUE FAULT THAT IS PRODUCED, WHEN THIS HAPPENS. YOU HAVE BEEN WARNED.

1. Switch the computer OFF, both on the keyboard and on the monitor.
2. If you have anything connected to the expansion port, please remove it.
3. Fit the AMRAM-2 to the expansion port and refit any other peripherals to the through port on the AMRAM-2, taking note of the warning above.
4. Switch the computer ON.
5. The disc supplied with the AMRAM-2 contains all the software required and a simple RUN"DISC will get you started.

HARDWARE CONFIGURATION

To get at the main printed circuit board, first turn the computer OFF, preferably at the mains, take the AMRAM-2 box off the edge connector. There are 4 philips screws an the underside of the box, use the correct type of screwdriver and remove these screws. The AMRAM-2 will then slide out of the case. Re-assembly is the reverse of the above procedure. **PLEASE BE CAREFUL WHEN REFITTING THE PRINTED CIRCUIT BOARDS, THEY ARE FAIRLY ROBUST BUT WILL NOT STAND MUCH 'MUCKING ABOUT'.**

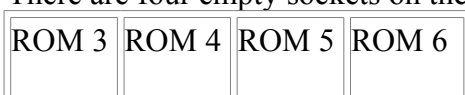
WARNING

THE TWO CIRCUIT BOARDS ARE DESIGNED TO BE TAKEN APART-THIS IS FOR POSSIBLE FUTURE EXPANSION-IF YOU DO SEPARATE THEM YOU WILL LOSE ANY DATA STORED IN AMRAM-2'S RAM AREAS-THINK BEFORE TAKING THEM APART.

ROM 1 = 16K of battery backed RAM

ROM 2 = 16k of battery backed RAM

There are four empty sockets on the top of the AMRAM-2 board:



There is a row of eight dip switches to the right of the board.

The first six of these control whether the various ROM numbers are enabled or not (Roms 1 to 6). The last two are NOT USED.

The switch to the left of the board controls the WRITE ENABLE for the AMRAM-2. If this switch is in the left position, then the RAM cannot be written to. If it is in the right position, then the software CAN write enable the RAM and write to it. The switch alone does not write enable the RAM. The RAM is write enabled when the Red Light is on.

SOFTWARE CONFIGURATION

Write enable and write disable:

To write enable the AMRAM-2:

Flick switch to the right,

TYPE: OUT &FBF0,1 <return>

Machine code equivalent = LD BC,&FBF1:OUT (C),C

The AMRAM-2 can be write disabled from software,

TYPE: OUT &FBF0,0 <RETURN>

Machine Code equivalent = LD BC,&FBF0:OUT (C),C

There are several other machine code methods of write-enable and write-disable, the above examples are the ones normally used.

DISC SOFTWARE

Please note that using the ESCAPE key will return you to the main menu in most cases.

The software supplied has several options:

X.... Exit program and reset computer

H Display this Help file from the currently selected Input device: TAPE, DRIVE A, B or C

R Read any rom into the 16k buffer.

This routine will read any rom number from 0 to 252 into a 16k buffer at &4000 in memory. If the rom number selected is empty, then it will read the BASIC rom.

L... Load a file into the 16k buffer

This will ask you to enter a filename and will then proceed to load the file specified. The file must NOT be larger than 16k or 17k on 3" discs or 18K on a MEGADRIVE.

The filename extension is not normally required unless it is a non standard one, e.g. ".HLP" or there is more than one file with the same name but different extensions on the disc or tape.

S Save the 16k buffer as a file to DISC/TAPE

This will ask you to enter the filename and will then save the 16k buffer as that file name. Extensions are not needed.

PLEASE NOTE if you do not specify an extension the program will automatically put a ".BIN" extension on the file for you.

C This will produce a catalogue of Disc/Tape

if TAPE is selected then pressing ESCAPE will return you to the the Menu Prompt and stop the cassette motor.

T Select TAPE as input/Output device

D Select DISC as input/Output device.

This option will then prompt for a drive letter (A, B or C) The C option is for a Silicon Disc.

M Map Roms

This is a ROM MAP which will show you what ROMs you have installed in the computer.

O On/Off ROMS

This gives you the facility of switching ROMs ON and OFF under software control, and is very useful for seeing what minor changes in coding can make to the way a ROM works.

ROMs are selected using the RETURN key and are "toggled" on and off with the SPACE BAR..

PLEASE NOTE that the on/off selections are only put into effect if you finish the command sequence from this option with a 'Y'.

W... Write to AMRAM-2

This will ask you which ROM number to write to:

1	ROM number 1 (Lower 16k of Battery backed RAM)
2	ROM number 2 (Upper 16k of Battery backed RAM)
5	ROM number 5

Press the correct key for your choice.

E Edit 16k buffer

This allows you to alter the contents of the 16k buffer before saving it to DISC/TAPE or writing it to the AMRAM-2.

You will be asked to input a start address, which should be input as a HEX number of up to four digits, pressing return will automatically start the editor at address 0000.

P Print 16k buffer to Screen/Printer

This option will print all of the buffer between two addresses. You will be asked for a start address, (RETURN will start at address 0000), and for an end address, (RETURN will print to the end of the buffer from the specified start address.)

A Create Autoload file

This option allows you to create a file which can be loaded into the AMRAM-2 without the necessity of loading all of the AMRAM-2 software.

To use this option proceed as follows:

1. Read the required file into the buffer, the file can be any file that will run from a ROM.
2. Select option 'A' from the main menu.
3. When prompted, enter a filename and extension. if required, please bear in mind the note on file name extension in the paragraph on saving. The file will then be saved.
4. To AUTOLOAD the file type in, from basic:

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RUN"filename.ext <return>
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You will then be asked where you want to write it to, as in the section on Writing. The computer will then reset if the writing is successful, if not the computer will give a 'WRITE ERROR' and prompt for a ROM number again. If you are still unable to load the file, then use the EXIT option to leave AUTOLOAD and check that the file is correct.

Silicon Systems is run by humans and these humans have been known to make the odd mmiissttaakkee!! If you do have any comments or criticisms please do not hesitate (as if you would) to get in touch with us .

We are always interested in high quality hardware and software additions to our range. If you have written or designed anything that you think may meet our high standards, please write to the Technical Director at the above address.

We also have a range of ancilliary products which may be of interest:

The MEGADRIVE is a second disc drive which makes use of one 16k bank of AMRAM-2. Since you already have the AMRAM-2 then you only need the disc drive and software. The MEGADRIVE is available either as a 5 1/4" or 3 1/2" disc drive that goives you 1 Megabyte of unformatted storage under AMSDOS, CP/M+ and CP/M 2.2. The software provided gives you the option to format a disc with up to 796k and with up to 256 directory entries per disc.

The MEGADRIVE is availabie from stock #159.95 for the 5 1/4" version and at #139.95 for the 3 1/2" version.

The AMDRIVE is a 3" second disc drive which is identical to AMSTRAD's own second disc drive in performance. The AMDRIVE differs from AMSTRAD's in that the disc drive and power supply are in two seperate units. The drives is housed in our own Hi-Tech Aluminium case and is designed to sit on the existing first disc drive. The power supply can be set remote from the computer.

The AMDRIVE is available from stock at #79.95

The MIDI interface.

A true MIDI interface for the CPC computers, will drive any MIDI instrument from the AMSTRAD, it

uses the expansion port on the computer and software is available for a number of Synthesizers. More software is being written all the time, please contact us to see if yours has been written yet.

The MIDI interface is available ex-stock at #49.95.

EPROM PROGRAMMER

By the time you read this the EPROM programmer will nearly be ready. At the moment we are working on an all singing, all dancing, make your tea in the morning version, the straightforward 'cooking' model will follow later. For details of specifications and prices please contact us at the above address

D I S C S

Three inch branded discs in library cases, either AMSOFT or Tatung, both at the same price of #26.00 per box of 10.

5 1/4" SKC lifetime guaranteed disks at #7.90 per box of 10

3 1/2" Double sided SKC lifetime guaranteed at #24.00 per box of 10.

All the above prices include VAT & P+P except for discs which are charged at #1.00 P+P for any quantity.