THE ADVANCED
MUSIC SYSTEM

RAINBIRD

USER

MANUAL

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Contents

Introduction

The Advanced Music System (AMS) is a complete disc-based music program which offers not only the same Editor-Keyboard module as the original Music System (TMS) but also Linker and Printer modules. To add refinement to the package the three modules are linked together by an icon-driven Control screen.

The Linker module enables you to play back large compositions consisting of up to 13 music files as one piece of music. Each music file is created either using the Editor-Keyboard module in AMS or from files you may already have composed on TMS. The separate files can be arranged in any order in a sequence of up to 99 files long. Enough for several hours playing time! The Linker makes it possible to easily incorporate tempo, key and time signature changes within a large composition. Furthermore your epic music extravaganzas can be saved on disc as one huge file for reloading, editing or performing.

The Printer enables you to print out your compositions in proper musical format using a dot matrix printer. The range of layout options is enormous. Two music files may be loaded giving the possibility of printing up to six parts on one stave. Lyrics can be added and saved separately. There are options for having treble, bass or both treble and bass staves and for automatic beaming (or grouping) of notes. Suitable manuscripts can therefore be prepared for keyboard players, vocalists and other instrumentalists.

Users who have upgraded their TMS disc or cassette to the Advanced Music System will already know their way around the system. For instance they will be familiar with the Command Line and the common control keys which make the system so easy to use. Those users who might not have used TMS before should first load up the Editor-Keyboard module from the Control screen and work their way through the TMS User Manual to become familiar with the pop up menus and controls. Exactly the same design ideas have been used in the Linker and Printer modules and we have assumed that you already know the basics such as loading and saving files. The Index at the end refers only to this manual. If you have a problem please look up the information in the TMS User Manual Index.

A Song and Sound Library is included on your system disc. This contains examples of music files. You may use these files when first experimenting with the Linker and Printer modules. Details are given in the section on the Song and Sound Library.

Getting Started

Before starting make sure that you have a spare formatted data disc ready
to save any tunes you create. Consult your Amstrad User Instructions for
help on formatting discs.

Insert the system disc into the disc drive with side A facing upwards. Type
RUN"TMS" and press **ENTER**. The program will load and run
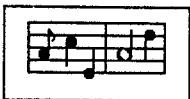automatically.

After the title screens comes the Control screen. From here you can
select any of the three modules and change the screen colours to suit
your decor/mood. When moving from one module to the next you must
always pass through this screen. One of the module icons will be
highlighted.
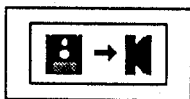
   Linker

   Printer

   Editor   Keyboard   Synthesiser

The main composing and editing module consists of the three utilities
shown by the Editor, Keyboard and Synthesiser icons. For brevity we
have called this the Editor-Keyboard module. Press **SPACE** to highlight
the next module. Keep pressing to return to the original. You may also
press **CTRL-SPACE** to highlight the previous module. The key pair

CTRL-SPACE means hold down the **CTRL** key and press **SPACE**.
Once you have highlighted the module press **ENTER**.

SPACE	move clockwise
CTRL SPACE	move anticlockwise
ENTER	enter module
f8 <> f9	change screen colours

You can change the screen colours by pressing f8 and f9. You can also change colours within each module from the Values pop up.

Make sure that the AMS disc is in the disc drive before you try and enter a module, otherwise an error pop up 'Insert System Disc' will appear. Likewise, when you exit a module to return to the Control screen you must make sure that the AMS system disc is in the drive. Each of the modules is now considered separately.

The Editor-Keyboard

The Editor-Keyboard moduel is exactly the same a the original TMS package except for the extra *Exit* facility in Commands. All details are given in the TMS User Manual. If you save to or load from your own data disc whilst in the Editor-Keyboard module make sure that you replace the data disc with your AMS system disc before accessing Commands: *Exit.*
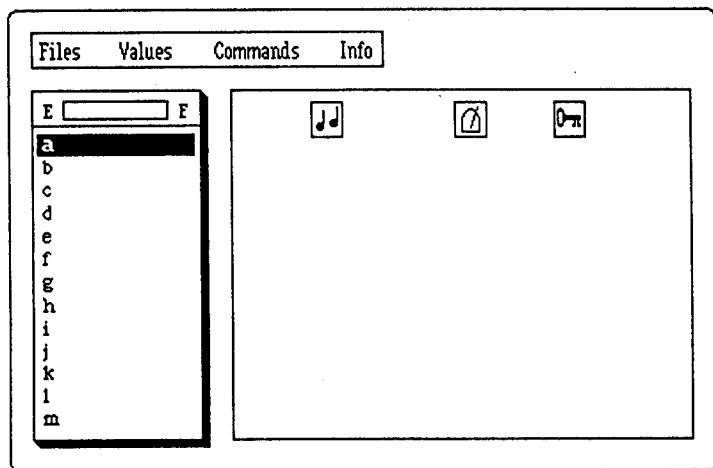
The Linker

The Linker module allows you to chain together up to 13 different music files that have been created in the Editor-Keyboard module. You will, of course, be able to use compositions made using the original TMS system since these are entirely compatible. The Linker can either be used to produce a performance of several different tunes - just like a concert or to create large compositions by linking together individual sections of the composition in a particular sequence. The sections are separate music files with their own sound set, tempo, key and time signatures. In this way quite complex musical pieces can be easily created.

The Linker also allows you to play the sections in any order and to repeat them as many times as necessary. You may play up to 99 sections in any

sequence, which should be enough for any budding composer! As an extra facility, you may also change the tempo of any section giving you the option of playing the same music file again and again at different tempos......... a pseudo Bolero effect?

There is space for over six maximum-sized music files in the Linker. However, since compositions are often made up of shorter sections in perhaps different key and time signatures you will be able to load quite a few more music files than this. You can save all the music files and sequence information in one go as a Linker file. This can then be reloaded for playing and editing. So producing musical soirees couldn't be easier!

The Linker Screen

The Linker screen consists of two windows, the file list on the left and the sequence list on the right. The highlight shows which window is active. Press **SPACE** to switch between them. You will only be able to move the file highlight when the file list selected and the sequence highlight when the sequence window is selected. The file list displays any music files that have been loaded either as individual music files or together as part of a Linker file. The music files are labelled *a........m* . These letters are used to identify the music files in the sequence. There is no significance in the order of the music files. When files are loaded they are

automatically entered in the first available space in the list. They are then available for use in the sequence. The same file may be loaded more than once (if you really feel like it) and there may be spaces in the list if necessary.

The sequence window displays the order in which to play the individual music files, together with their tempo and key signature. Only music files that appear in the file list can be included in the sequence. Files may be repeated as many times as you want in the sequence. However there is a maximum of 99 sections in any sequence. The sequence can be played from any point.

Entering and Playing a Sequence
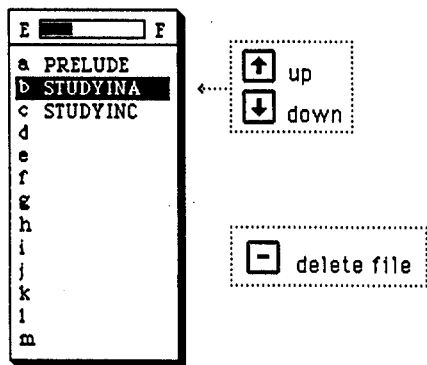
Music files are loaded in the normal way through Files (f4). You will only be able to load music files (.MUS) or linker files (.LNK). More about linker files later on. You can load a music file into any slot from a.....m by moving the highlight up or down before loading. Otherwise the music file will be loaded into the next available empty slot. As files are loaded the note gauge will move from Empty to Full just like a fuel gauge on a car. You can load the equivalent of over six full music files at any one time. A warning pop up will tell you if there is no room to load a music file. You can delete any file by highlighting and pressing − . Note that the file window must be highlighted itself before you can move the file highlight. You will not be able to delete a music file from the list if it is included in the sequence. The message 'Can't delete - File in sequence' is displayed.

Having loaded a few music files press **SPACE** to select the sequence window.

♫♫	🎵	0━π
a PRELUDE	107	C
b STUDYINA	83	A♯m 7 sharps
c STUDYINC	125	C

ENTER	enter section in sequence
⊟	delete section
⊞	insert section

Initially the name of the first music file in the file list will be highlighted. Press f9 to show the next file in the list. You can move backwards and forwards through the files with f8 and f9. The file name will be shown in *italics* because it is not yet a real section in the sequence. This is exactly like the null note at the end of a voice in the Editor. Press **ENTER** to enter this section in the sequence. This section appears again in italics ready for editing (f8 and f9) and entering. Choose another file and press **ENTER**. Move to the top of the sequence with ↑ . You should now have two sections. Note that there will only be a sequence section in italics if you are at the very end of the sequence list ready to edit and enter another section. Press f0 to play the sequence. Press **ESC** to stop.

f0	play sequence
ESC	stop
CTRL ⬆	to top of sequence
CTRL ⬇	to bottom of sequence

You may play from any point in the sequence. This does not include the null section at the end. With a long sequence you can move directly to the top or bottom using **CTRL- ↑**   and **CTRL- ↓**

You can change the tempo of any section by highlighting (press **→**) and using **f8** and **f9** to go through the whole range of tempos. The key signature can not be changed - it is displayed for reference only. You can, of course, pop back into the Editor-Keyboard module to transpose a music file. You will probably want to save you current set of music files and sequence as a Linker file before doing this (see below).

You can edit the sequence at will and load additional music files as necessary. Press **–** to delete the highlighted section and press **→** to add an extra section in the middle of the sequence.

Linker files

Having loaded a set of music files and entered the sequence you may like to save the entire composition as one file ready to be loaded again for the next performance! The *Save* option in Files allows you to save the music as a linker (.LNK) file. Make sure that you have plenty of room on your library disc as linker files can be quite large (up to 24K bytes). You can use the *Load* option to reload a linker file. you must confirm that you really intend to load a linker file because *you will destroy all the current files and sequence in the linker.* Make sure that you don't load a linker file instead of a music file by mistake!

The Command Line

Apart from the Filing operations mentioned above, the Command line is used to access the status information of each music file, change screen colour and access a number of commands.

Values   f5

You may change the screen colours using the *Colour* option.

7

Files	Values	Commands	Info
		Clear sequence	
		Clear files	
		Exit	
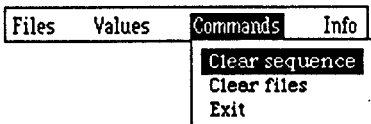
Clear sequence is used to delete the sequence, leaving only the first real section. Press **Y** to confirm. ¯

Clear files deletes all music files from the file list and the entire sequence.

Exit will return you to the Control screen. Remember to save the set of music files and sequence as a linker file before exiting.

Info **f7**

The file list must be highlighted before you press **f7**. The status information is given for the current highlighted file in the file list. Use ↑ and ↓ to show the status information for other files. Press **f7** again when finished.
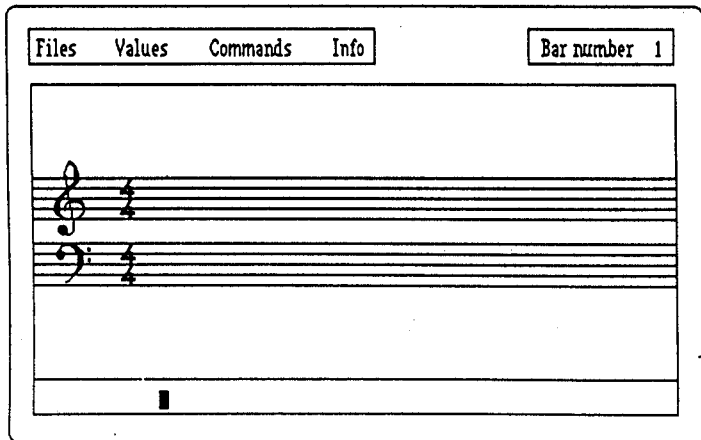
The Printer

The Printer module allows you to print music files in various formats on standard continuous printer paper. Several different dot matrix printers are suppported including the Amstrad and Epson range. Many 'Epson compatible' printers will also work. The Printer module has been designed to enable as many printers as possible to be used with it. A complete list of those printers explicitly supported is given in the section 'Printer list'.

Up to six voices (from two music files) can be printed together on treble, bass or treble and bass staves across the page. Chords can therefore be printed. Lyrics can be entered and printed under the stave(s). Lyric files (.LYR) can be saved separately from the music for reloading and editing. A special feature of the Printer is the automatic beaming (or grouping) of notes. This technique is sometimes referred to as barring. Using these options very readable musical manuscript can be produced for a wide range of instrumentalists and vocalists.

Warning: before attempting to print music read the section about The Command Line.

The Printer Screen

The Printer screen displays one bar of music at a time on the Voice

Monitor Window (VMW) together with any additional lyrics. The notes are automatically spaced out and each voice lined up correctly. The lyrics can also be spaced out to fit the music. The music is printed out exactly as it is displayed on the screen. Press **SHIFT-** → to move to the next bar and **SHIFT-** ← to move to the previous bar. The current bar number is displayed at the top right of the screen. The maximum bar number is determined by the longest voice in the music file(s). You may load one or two music files providing up to six voices, any or all of which may be displayed together. The display parameters are changed from the Values pop up as usual.

The lyrics are entered in the text window under the VMW. Characters are typed at the text cursor which can be moved left and right using ← and → . Use **CTRL-** ← and **CTRL-** → to move quickly to the first or last bar of your composition. Note that you are always able to display every bar even though some of the voices are set to *don't print* in Values. You can see how many bars there are in each voice by accessing Info (**f7**).

SHIFT →	move to next bar
SHIFT ←	move to previous bar
CTRL →	to last bar
CTRL ←	to first bar

Displaying Music

Music files can be loaded into either file 1 or file 2. When loading a music file press · to switch between loading into file 1 or file 2.
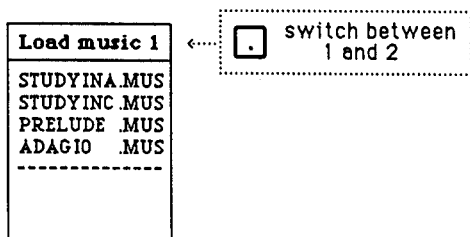
New music files can be loaded over the top of either of the current files. You can, of course, even load completely unrelated music files - thereby displaying Carcassi's Study in A minor and one of Corelli's Sonatas on the same set of staves. The Printer does not check if both music files are part of the same piece of music! Because the Amstrad sound hardware does not allow you to play more than three voices at any one time you will not be able to play the four, five or six part music you can print from this module.

All the controls for displaying the music are in Values (f5). They are explained in detail on page 14, together with set up details for using your printer. Basically, you are able to print any of the voices currently loaded into file 1 or 2. Voices 1-3 are in file 1; voices 4-6 are in file 2. As you switch voices on and off the note spacing on the VMW will change. This is because the notes are being spaced out and lined up correctly. A bar may be longer than the VMW itself. A barline shows the end of the bar. To display the notes off screen keep pressing → to move the text cursor right until the music has scrolled far enough to reveal a barline (the cursor will stop at this point). Press ← to scroll the music back again.

You may automatically beam the notes in a voice. This means that quavers, semiquavers and demi-semiquavers within a beat are grouped together if possible and joined by a beam. The single beam denotes quavers, a double beam - semiquavers and a triple beam - demi-semiquavers. Mixed beams are not catered for although dotted notes are beamed. Hence quavers are not joined to semiquavers for instance. The first note in the beamed group determines whether the note tails point up or down for the whole group. To override this you will need to edit the note tails in the Editor-Keyboard module. To sum up, any group of 2 or more notes of the same duration (less than a crotchet) within a beat and not crossing a barline will be beamed if that voice is set to *print & beam* in Values. Beamed groups do not cross whole beats and are therefore dependent on the time signature. Note that beamed groups may overlap or cross each other if you are not careful. Each voice is beamed quite independently of the others. However, beamed groups do tend to line up between voices because they are associated with beats.

You can display your selected voices on both the treble and bass staves or on a single treble or bass stave. In all cases ledger lines are inserted where necessary. You can swap between the different display modes at will. It would be usual to print out voices separately for different musicians. Tenor and bass trombonists for example would expect their music written on a bass stave whereas a clarinetist would expect their music written on a single treble stave.

If you want to display the dynamics already entered with the music you may set *Dynamics* to *on* . The dynamics are taken only from voice 1 (of file 1). Therefore if you want to include the dynamics make sure they are entered in voice 1 in the Keyboard-Editor module. If you do not want any lyrics you could just as easily add your own dynamic markings as well as other musical notation such as *Rit., A tempo, Misteriso* and *Con sordino* on the lyric line instead.

The VMW does not show you where each line of music will end. This depends on the width of your printer paper. There are settings for 80 and 132 column paper widths from the printer menu pop up. You can also choose between continuing the printout right across the page and splitting bars that do not fit exactly or having the equivalent of a 'ragged right margin' and not splitting the bars. Of course, if a bar is so long that it cannot fit across one line then it will be split.

Entering Lyrics

You can type lyrics in both upper and lower case directly in the text window. Use ← and → to move the text cursor. Once entered, the lyrics are not changed by altering the display options outlined above. Even if voices are all turned off the lyrics will remain. However, you will not be able to scroll the VMW past the end of a bar. There could be text that cannot be displayed because the bar has been made shorter since entering the lyrics. Lyrics are not cut short by the VMW. In fact you are allowed 640 characters per bar irrespective of the number of notes actually displayed. There is one snag though .... characters to the right of the barline are not printed out. You will not actually lose any text you have entered whatever music is loaded in or display options you have set. Whether the lyrics fit the notes or are even displayed is completely up to you.

When entering text you are always in 'insert mode'. This means that any text to the right of the cursor is pushed to the right as you insert characters. You can use **SPACE** to spread your lyrics out. Use **DEL** to delete left and **CLR** to delete right in the normal way.

←	text cursor left	→	text cursor right
DEL	delete left	CLR	delete right

The warning pop up 'No text space' is displayed if you have used up the 7423 character text space!

You can save your lyrics as a lyric (.LYR) file on disc in the same way as for music. Note that you cannot save a music file from the Printer module. It is suggested that you save your lyrics before attempting to load a second or alternative large music file. It is possible under certain extreme circumstances for the warning 'No room for lyrics' to appear. In this case **your lyrics are automatically deleted** to make room for the extra bars when they are expanded. It would be a shame if you lost them. *As part of normal safe working practice you are encouraged to save your lyric file whenever you make significant additions or edits.*

The Command Line

Apart from the Filing operations mentioned above, the Command line is used to select the printer and display options and to access a number of commands and status information.

<u>Values</u> **f5**

Files	**Values**	Commands	Info

Printer mènu	off
Voice 1	**don't print**
Voice 2	empty
Voice 3	print
Voice 4	print & beam
Voice 5	print & beam
Voice 6	empty
Staves	treble & bass
Dynamics	off
Lyrics	on
Colours	1

To set the printer parameters highlight *Printer menu* and press **f9** to switch to *on.*   A secondary Values pop up will appear. See below for details. Press **ESC** or **ENTER** to return to the main Values pop up.

Each *Voice* parameter can be set to *print, print & beam* or *don't print* if there are notes in that voice. If not, *Voice* will be set to *empty.   Staves* allows you to *display* all selected voices on either single treble or bass staves or on combined treble and bass staves.   Ledger lines are automatically inserted where necessary.

With *Dynamics* set to *on* the dynamic marking (eg. *ff* and *mp*) in voice 1 will be displayed under the stave(s). It doesn't matter whether voice 1 is printed or not. The lyrics are always displayed on the screen. If you want to print them out under the music set *Lyrics* to *on.* You can print out parts without the lyrics by setting to *off.*   The *Colours* may be selected as normal.

Printer	Epson
Printer type	parallel
Baud rate	300
Paper width	80 columns
Paper length	66 lines
Split bars	no
More files	no

```
............................
: [ESC]  quit :
:..........................:
```

The printer menu is used to select your printer parameters. The Printer module prints its image in high resolution graphics. You therefore need a suitable printer with graphics capability. Unfortunately not all printers use the same method of printing graphics, although many emulate the Epson range. AMS can be used with a wide range of printers - these are listed under the *Printer* setting. If your particular printer is not in the list, refer to the 'Printer list' on page 19. If your printer is not explicitly mentioned try using some of the other settings to see if your printer is compatible with them.

AMS caters for printers plugged into the parallel or Centronics interface (labelled PRINTER on your Amstrad) or printers connected to a serial interface which is plugged into the EXPANSION port. If a Serial Interface is not connected you will not be able to set *Printer type* to *serial*. The *Baud rate* only applies to serial printers. Refer to your printer handbook for a suitable baud rate setting. If in doubt set to *300*. There are two *Paper width* settings. The majority of printers use 80 column paper which is close to A4 paper width. If you have a wide printer you can select *132* which will give you a much wider printout with more bars per line. Standard computer paper has a *Paper Length* of *66 lines*. If you want to print out on A4 length continuous paper use the *72 lines* setting. AMS will paginate the music printout in order to miss the perforations in continuous listing paper. If your printer is not listed then this facility might not operate correctly.

With *Split bars* set to *no*, where possible only whole bars are printed out. The barlines at the end of each line are lined up at the right hand edge of the printout. If you are not worried about splitting bars across staves set to *yes*. The *More files* parameter allows you to link together several music files in one continuous printout. If set to *yes* AMS expects you to load in another file or files and will continue printing from the next stave. The pagination will not be affected. This facility can be used when printing the separate music files that make up a Linker file. The correct key and time signatures will be printed at the start of each new section. When printing single files or the last section set *More files* to *no*.

| Files | Values | Commands | Info |

Print music
Clear music
Clear lyrics
Exit
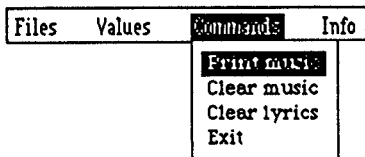
**Before accessing _Print music_ make sure that your printer is
properly connected to your Amstrad and is turned on.**

If the printer is disconnected from the computer at either end of the printer
lead, turned off or not-on-line then the program will freeze. It is waiting for
a 'ready' signal from the printer. If the printer fails to start printing after
accessing _Print music_ check both the lead and the printer and if
necessary turn the printer off, then on again. Check also that the printer is
'on line'. Refer to your printer manual for details. If you cannot encourage
your printer to whirr into action try pressing **ESC**. If the pop up does not
disappear you will have to remove your disc and turn the computer off and
on again. Before reloading AMS you should check that your printer is
properly connected and working satisfactorily. Refer to your Amstrad User
Manual for help.

Once printing has begun you may stop printing by pressing **ESC** at any
time.

Clear music deletes all music in voices 1 to 6 but will leave any lyrics
intact. You will only be able to see the lyrics in bar 1. You cannot move
forward to bar 2 since there are no notes currently in memory. If you load
a music file you will be able to move through the tune and lyrics again.

Clear lyrics deletes all lyrics but leaves the music intact. To clear memory
entirely of music and lyrics you will need to access both _Clear music_ and
Clear lyrics.

Exit will return you to the Control screen. Remember to save your lyric file
before leaving the Printer module.

Look at the status information for the number of bars in your composition.
If you have both file 1 and file 2 loaded then the longest voice in either file
is given. The *Free space* gives the amount of text space available. The
names of the current music and lyric files are also given.

Song and Sound Library

The Song and Sound Library contains a selection of tunes for your enjoyment. They are to be found on your system disc. Many of these tunes were released with the original TMS disc. Two new linker file collections have been included. To assemble a whole linker file load each file into the Linker and play in the sequence given below. Other titles may also be included. Please feel free to experiment with them ... change the tempo, key, volumes, envelopes, etc. You can save the sound sets from any of the tunes and use the envelopes in your own compositions.

HORNPIPE	. MUS	Jolly hornpipe arranged by Tony Selinger
SONATA 1	. MUS	Sonata da chiesa in E minor, Op.3, No.7
		(Corelli): - movement 2
SONATA 2	. MUS	- movement 4
JIGINA	. MUS	A jig in A!
BORONG	. MUS	By Robert Hunsu.
BLUES	. MUS	A blues by Stew Wallphones.
STUDYAM	. MUS	Study in A minor by Matteo Carcassi

Entry of the Gladiators by Julius Fucik arranged by Diane Swallow (GLADIAT. LNK)

a	GLADD	. MUS
b	LASTBIT	. MUS

A selection of commissioned pieces composed and arranged by Simon Jay (SIMON .LNK)

a	EXPERIM	. MUS
b	THEGOOD	. MUS
c	HOOKED	. MUS
d	DECEIPT	. MUS
e	RIFF	. MUS
f	DADMUSIC	. MUS

Remember not to save any files onto your system disc - always use your own formatted data disc.

Printer List

The following list of printers explicitly supported by AMS is based upon information supplied by printer manufacturers and suppliers. The list is not exhaustive and is given as a guide only. AMS has not been tested on the majority of these printers and cannot be guaranteed to operate correctly.

Printer (in Values)	Printer names
AMSTRAD	Amstrad range of dot matrix printers
BROTHER	Brother M-1009, HR-5.
CANON	Canon A-50, PW-1056A/1080/1156A
CENTRONICS	Centronics GLP
CORONA	Smith-Corona D-100/200/300
EPSON	Epson MX MkIII, RX, FX, LX
HONEYWELL	Honeywell L12/32, S12/32
KAGA	Kaga/Taxan KP810
MANNESMANN	Mannesmann Tally MT80/85/86/290
MICROLINE84	Oki Microline 84
NEC	Nec P5
OLIVETTI	Olivetti DM 280/290
SEIKOSHA GP	Seikosha GP
SEIKOSHA SP	Seikosha SP series
STAR	Star

AMS Development Team   (Linker and Printer)

Philip Black	System design
Rob Brown	Linker . Control screen
David Ellis	Design . User manual
Bourne Hurst	Design . Printer

Quick key guide

```
Linker

[SPACE]  swap between file list and sequence window

[f0]  play                              [f8]  [↓]  file/tempo in sequence
[ESC]  stop playback                    [f9]  [↑]  file/tempo in sequence

[−]  delete file or sequence section
[+]  insert section in sequence
[CTRL][↑]  to top of sequence
[CTRL][↓]  to bottom of sequence
```

```
Printer

[←]  text cursor left                   [→]  text cursor right
[SHIFT][←]  previous bar                 [SHIFT][→]  next bar
[CTRL][←]  to first bar                  [CTRL][→]  to last bar

[DEL]  delete left
[CLR]  delete right
[.]  switch between file 1 and file 2
```

Index

RAINBIRD