

Rave

The word 'Rave' is written in a large, bold, black, stylized font. The letter 'R' is particularly tall and narrow. The letters 'a', 'v', and 'e' are more rounded and connected. The bottom of the 'R' and the 'a' are integrated into a musical staff that extends diagonally across the right side of the page. The staff contains several notes and rests, suggesting a musical theme.

USER'S MANUAL

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SETTING UP

Connect the MIDI out of your MIDI KEYBOARD to the MIDI in of the Atari computer, and the computer MIDI out to the keyboard MIDI in. Any other MIDI equipment can be linked into the system using MIDI thru's; the MIDI thru of the keyboard should be connected to the in of the first expander, and the thru of that expander to the in of the next, and so on.

Be sure to use MIDI leads with only the necessary 3 pins wired (1, 4 & 5) or you will have MIDI loop problems caused by the non-standard wiring of the Atari MIDI out port. If you are in doubt use high-quality MIDI leads as these will have the two incorrect pins removed completely.

If possible, turn the local keyboard control of your keyboard to 'OFF'. This is usually referred to as "LOCAL OFF". Consult your equipment manual if you are unsure of how to do this.

Switch on all your external equipment, and then your computer. Insert the RAVE program disc and open the window for disc drive A. The first thing to do is to make copy of your master disc, if you

haven't already done so. You will only be able to do this with a file-by-file copy process. If you are using a hard disc, copy all the files from the RAVE disc to the same directory on your hard disc.

You will only be able to run RAVE if you have the KEY disc (your original program disc) in your disc drive A at time of boot-up.

Once you have made your working copy of the program, click on the icon named RAVE.TOS to run the sequencer.

Once the program has been fully loaded you will be presented with the TRACKLIST page. If you press keys on your MIDI keyboard you will see the Velocity column for track 1 show a grey bar, indicating incoming MIDI data. If this does not happen then check your MIDI connections and leads carefully.

About MIDI

MIDI stands for Musical Instruments Digital Interface. In short, MIDI is the term given to the way in which electronic instruments, such as keyboards, talk to one another. MIDI is not just restricted to musical instruments, it can be used to control a great number of other things, like special effects, but all these things you will learn after you have taken your first step into the world of MIDI music.

RAVE, THE ST AND MIDI

By now you should have followed the above instructions on how to connect your MIDI keyboard and how to boot up RAVE. If you have not done so then go back and do this now as I am going to give you some examples to follow.

Think of RAVE as a big memory box recording the When and Where you play your notes, and then, when you press the Play button, RAVE will instruct your MIDI keyboard to play the exact notes, in the exact time and place that you first recorded them in at.

Try doing this now. Press the asterix (*) on the number pad of your ST. You will hear the metronome sound coming from your ST monitor. There will be a count-in of 8 clicks (2 bars). Anytime after the 8 count-in beats play any note on your MIDI keyboard, then press the '0' button on your ST number pad twice; the metronome will stop. GREAT! you have just made your first recording!!

To hear what you have just recorded press 'ENTER' and Rave will play your note in the exact time and place that you recorded it at.

Now try this: press the '0' button on your ST twice, then go to your MIDI keyboard and call up a new sound. Now press the ENTER button on your ST and note that the same piece of music will play, but, this time, it plays with the new sound that that you just called up. This is because when you record with RAVE you are not recording sound at all. You are, in fact, recording digital information regarding the note pitch, its length and whereabouts in your music that you want the note to be played. This information is stored inside RAVE's memory banks, and, when you press the play button (ENTER) all this information is sent from RAVE via MIDI back out to your MIDI keyboard and, Bingo!, RAVE is now playing your keyboard with whatever sound you chose. The magic of MIDI!

THE RAVE PROGRAM CONTROLS

RAVE is very fast and easy to use, so you can create your music very simply.

At all times you will see on-screen the page menu along the bottom of your screen and the control panel on the right of the screen, so you should firstly familiarise yourself with these.

THE PAGE MENU

See illustration on centre pages.

Clicking on any of the menu buttons calls up the particular page of the program asked for. You can also change pages from the Atari keyboard by pressing the first letter of the page name (except the Score Edit page! 'S' is already used for Set-up page, so pressing 'N' for Notation calls up the Score Edit page).

THE CONTROL PANEL

REAL TIME MARKER: This is a clock showing, in hours, minutes and seconds the play time of any piece of music you play or record.

TIME SIGNATURE: This shows the time signature you have selected for your piece of music. As with almost all number values in RAVE you can change these settings by mousing on the numbers with the mouse buttons ('mousing on' means positioning the cursor over the number and then pressing the left or right mouse button). Pressing the left button decreases the value and pressing with the right button increases the value.

THE CURRENT POSITION MARKER: This shows you, in bars, beats and clocks exactly where you are in your piece of music at any time (there are 120 clocks per beat). You can jump to any position you set up in this window by mousing on the values. Mousing with the Left button decreases the value and the Right button increases the value. Clicking on the little button to the left of the number values re-sets to bar 1, beat 1.

ZONE MARKERS: There are many operations in RAVE that can affect a particular section of music. For example you may wish to copy a section you have already recorded to another part of your music. You define the section you are dealing with by stating its Start point (Left Zone Marker) and its End point (Right Zone Marker). We call these sections 'zones'. You change the zone markers by mousing on the bar, beats and clock numbers. The right zone marker must always have a higher value than the left zone marker.

Clicking on the little button to the left of the number values re-sets to bar 1, beat 1; clicking with the right button automatically sets up the **Current position marker** to be the same as the left or right zone marker value (whichever little button was pressed).

TRACK WINDOW: This shows you which track you are working with. The name shown here is the name you have called your track. The small arrows to the left of the window is a scroll button which allows you to move tracks. Clicking on the scroll button with the right mouse button scrolls down the list of tracks and mousing with left button scrolls up your tracklist.

You can change the track name from the track window by clicking with both mouse buttons at the same time, on the track name; a black rectangle shows you your typing position. If there is a name there already, backspacing on the Atari keyboard will erase that name. Hit return after typing your name to enter it. Names entered here are also shown on the tracklist.

THE BLOCK WINDOW: This is the name box for your piece of music, which we call a block. Your block can be up to 32 tracks and any length - and each track's length can vary.

THE SCROLL ARROWS: Usually, mousing on these arrows will advance you through your music or rewind you, as shown by the current position marker, but on the Tracklist page these buttons scroll through the list of tracks.

INFO: Mousing on this calls up general information.

PANIC!: Sometimes, with MIDI instruments, you get a note being sustained when not required. When this happens click on the panic button to clear the note.

CYCLE: When this is highlighted RAVE will cycle between the Left and Right zone markers, either in Record or Play mode.

THE CONTROL BUTTONS: These act just like tape recorder controls.

Click once on Play to set your music playing; one click on Stop will stop play and a second click on STOP will reset the music back to the beginning. With record there is a 2 bar count-in before recording happens (can be switched off on the Set-up Page).

'Drop' allows you to Drop-in record i.e. to record only between the Left and Right zone marker positions. So, you can arrange to record, say, only two bars in the middle of an already-recorded piece of music.

TEMPO: You can change the tempo of your music by mousing on the numbers here. Maximum tempo is 240.

Name	Chan	Status	Value	Parameter
1 chorus	1	ON	OFF	Quantise
2 bass	1	ON	OFF	Prog No.
3 hi hats	1	ON	OFF	Volume
4 snare	1	ON	CENTRE	Pan posn.
5 elec piano	1	ON		
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

TRACK LIST	BLOCK INFO	DRUM LOOP	TUNE/A440
TRACKLIST	CUT/PASTE	SDEMO	EVENT GRID SET-UP DISK QUIT

HRS MINS SECS	0.00.00
TIME SIG	4/4
BARS BTS CLKS	001:01:000
	001:01:000
	009:01:000
	elec piano
	Unnamed *
	INFO
	PANIC!
	CYCLE
	PLAY STOP
	REC DROP
	TEMPO: 120.0

THE TRACKLIST PAGE

USING RAVE

The best way to get to know a program is to use it. So let's get to it!

the purpose of this manual is to show you, in very easy steps, how to create music with RAVE. By the time you have completed the following examples you will have used most of the major functions of RAVE.

Although RAVE can be used with any MIDI keyboard, it has to be said that the best kind of keyboard to use is one that is capable of being used in a multi-timbral way, that is to say, a keyboard that can play more than one sound at a time via different MIDI channels. There are 16 MIDI channels (1-16) and it is possible to get a keyboard that will play 16 different sounds (one for each MIDI channel) at the same time. In effect, this is equal to having 16 different keyboards all set on different sounds. Most budget keyboards are what is said to be 8-part multi-timbral (8 different sounds when used on 8 different MIDI channels). A good example of this kind of keyboard is the KAWAI K1-2. I know that not all of you will have one of the above style of keyboards, so I have more help later on for those with single sound keyboards.

Having all these sounds and nothing to control them with would be very frustrating. THAT'S WHY YOU NEED RAVE.

RAVE has 32 tracks on which to record your music. Do not confuse the word 'tracks' with 'MIDI channels'. The 16 MIDI channels are a totally separate issue. Tracks are for recording your music on; MIDI channels determine what sounds will be used when you hear your music played back. For example, you could have your drum sounds on your keyboard set to MIDI channel 10, so each time you turn any of the 32 tracks to MIDI channel 10, your drum sounds will be heard (to set MIDI channels on your MIDI keyboard refer to your instrument's manual).

O.K., let's try it.

Go to your MIDI keyboard and set a bass sound on MIDI channel 1. Set a piano sound on MIDI channel 2, and a drum sound on MIDI channel 10. Make sure your MIDI keyboard is set to multiple mode (look up the section that covers: 'Set-up for use with external sequencers', in your MIDI keyboard manual, or, 'Multi-timbral Set-up').

Return now to RAVE.

Play a note on your MIDI keyboard; you should hear your bass sound coming through. If not then re-read your MIDI keyboard manual and make sure that you have set your MIDI keyboard up correctly. If you are getting more than one sound, such as bass and strings together, then this also means that you are not set up correctly. Refer then to the part in your MIDI keyboard manual about OMNI ON and OMNI OFF.

O.K., you are now at the stage of hearing just the bass sound when you play your keyboard. Down the left side of your screen you will see the numbers 1 to 16. Press the down arrow on your ATARI ST and hold it down. The numbers 17 - 32 will then scroll through. These, combined with your first 16, are your 32 recording tracks. Now press the Up arrow on your ST and this will return you to your first 16 tracks. Note that track 1 is highlighted in black. This means that the track is 'active' and ready to record your first music part.

To the right of the words NEW NAME (in track 1) is another column with the number 1 in, above it is the word CHAN, this stands for MIDI CHANNEL. Click on the number 1 with your right mouse

MIDI CHANNEL. Click on the number 1 with your right mouse button and increase this to number 10, You have just set track number 1 to send and receive MIDI data on MIDI channel number 10 (drum channel). Now play your MIDI keyboard and you should now be hearing drum sounds and no longer hearing a bass sound.

Now move to the top right hand corner of your screen: you will see HRS MIN SEC. This will tell you the time span of your music. Below this is TIME SIGNATURE, you can change the time signature by mousing on the 4/4 sign with left mouse button to decrease and right button to increase the values.

Below the TIME SIGNATURE is the Current Position Marker, BAR BTS CLKS. This will tell you at what bar, beat and part of a beat you are at at any given moment. Part of a single beat is measured in Clocks (CLKS). You can move your Current Position within a song by mousing with the left or right buttons, moving you backwards or forwards through your song.

Below the Current Position Marker are the ZONE MARKERS. These 2 box's look like the current position marker except that they have an L and R next to them. L = Left and R = Right. These are used to define specific areas in your song which can cycle around (repeat). For example, if you had composed a song that happened

to be 16 bars long, with bars 1-8 being your Introduction and bars 9-16 your verse, and you are not happy with the bass line in the verse section and you want to change it then you would do this:

set up the left marker to bar 9 , like this:

BAR	BTS	CLKS
009:	01:	000 L = Left

and your right marker like this:

BAR	BTS	CLKS
017:	01:	000 R = Right

Now, if you highlight the CYCLE button (next tot he scroll arrows on the screen) and press RECORD, RAVE will cycle between bar 9 and th end of bar 16 for as long as you want it to. With each cycle you can re-record your bass line. RAVE will save the last complete cycle, so don't worry if you fluff it the first couple of times, just keep RAVE in record mode and it will rub over your mistakes, and, when you get it right, just stop the program by pressing STOP or ZERO on the ST keyboard) and you will have saved the last full cycle you recorded.

Now, let's record something.

1. Hit the '0' button on the ST twice. This will reset RAVE to bar 1, beat 1. Pressing '0' once simply stops record or playback; pressing '0' twice re-sets the program to the beginning.
2. Go to the Right position marker and, by pressing the Left mouse button, reduce the number 009 (bars) down to 005.
3. Click on the button 'CYCLE'. This means that all the recording you do will be over 4 bars.
4. Go to track 1 and make sure that its MIDI channel is set to 10 (drum sounds).
5. Make sure that the monitor 'Volume' control is switched on, so you can hear the count-in from your monitor speaker.
6. Mouse on the record button, or press * on the ST. You will hear a 2 bar count-in (8 beats). After the count-in play 4 bass drum beats in time with the metronome, then stop the program.

7. Go to the parameters value and mouse on the word 'OFF' next to the word QUANTISE. Change it to the number 4 (with the right mouse button) this will correct the timing of the bassdrum, it will now play back spot on the beat.

8. Now click with both mouse buttons on the area marked NEW TRACK and type in the name BASSDRUM.

CREATING A NEW TRACK

1. To create a new track, click with both mouse buttons in the name area of track 2. This will highlight track 2, calling it NEW TRACK. Double click here again, and call it SNAREDRUM.
2. Set the MIDI channel to 10 and, following the instructions above, record your snare drum. Whilst you are doing this you will be able to hear the bassdrum part you recorded. Remember to Quantise the snare drum, (time correct). Each time you start a new track the parameters are reset to the 'OFF' position for the new track.

THE NEXT STEP

1. Create a new track and name it Piano and select MIDI channel 2.
2. Record the chords C and then F with an 8th (semi-quavers) feel to them (something like C and 2 and F and 2). If you don't follow this, don't worry!, just play what you can.
3. Stop RAVE and set the QUANTISE number to 8.
4. Create a new track and call it Bass, select MIDI channel 1. Record as above and set QUANTISE to 8.

Well done, you have just done your first 4 bars of music. Now let's make that into a longer piece of music without playing another note:

THE CUT/PASTE PAGE

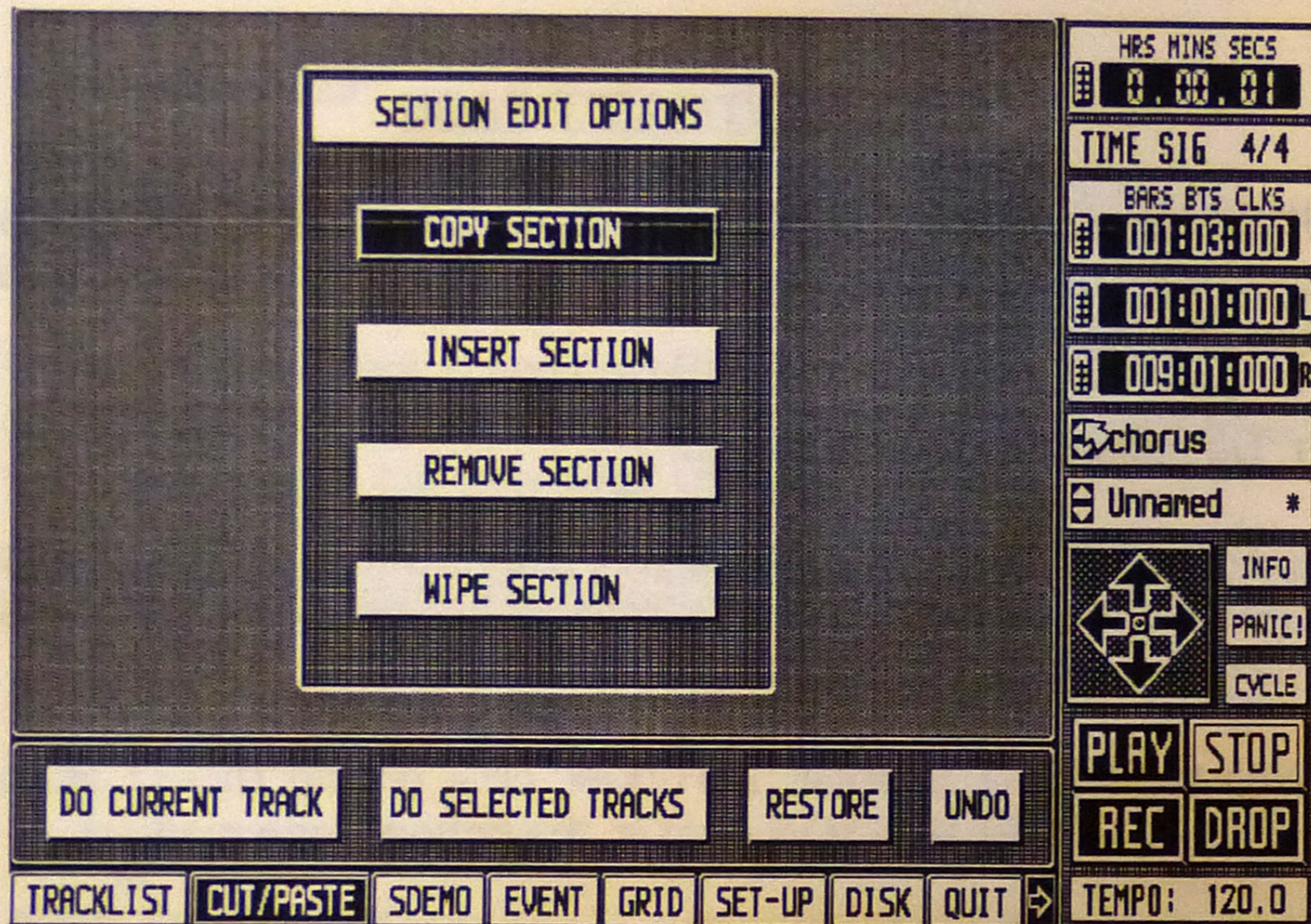
If you have not already done so press zero on your ST twice; the first press being to stop the music, the second to return RAVE to bar one, beat one.

1. De-select the CYCLE button.
2. To the left of the zone markers are 2 reset buttons. Please note carefully what we do next; in order to get this right you must press the correct mouse button at this point.

With the RIGHT MOUSE BUTTON, click on the RIGHT zone marker's RESET BUTTON (that is, the bottom zone marker).

Note that the CURRENT POSITION marker has now moved to 005:01:00.

3. What you are about to do is copy all of your music between bar 1 and the end of bar 4 (last beat), on all of the tracks you have recorded, to the current position at bar 5 (first beat). Now mouse on the button marked COPY/PASTE. The screen will change.



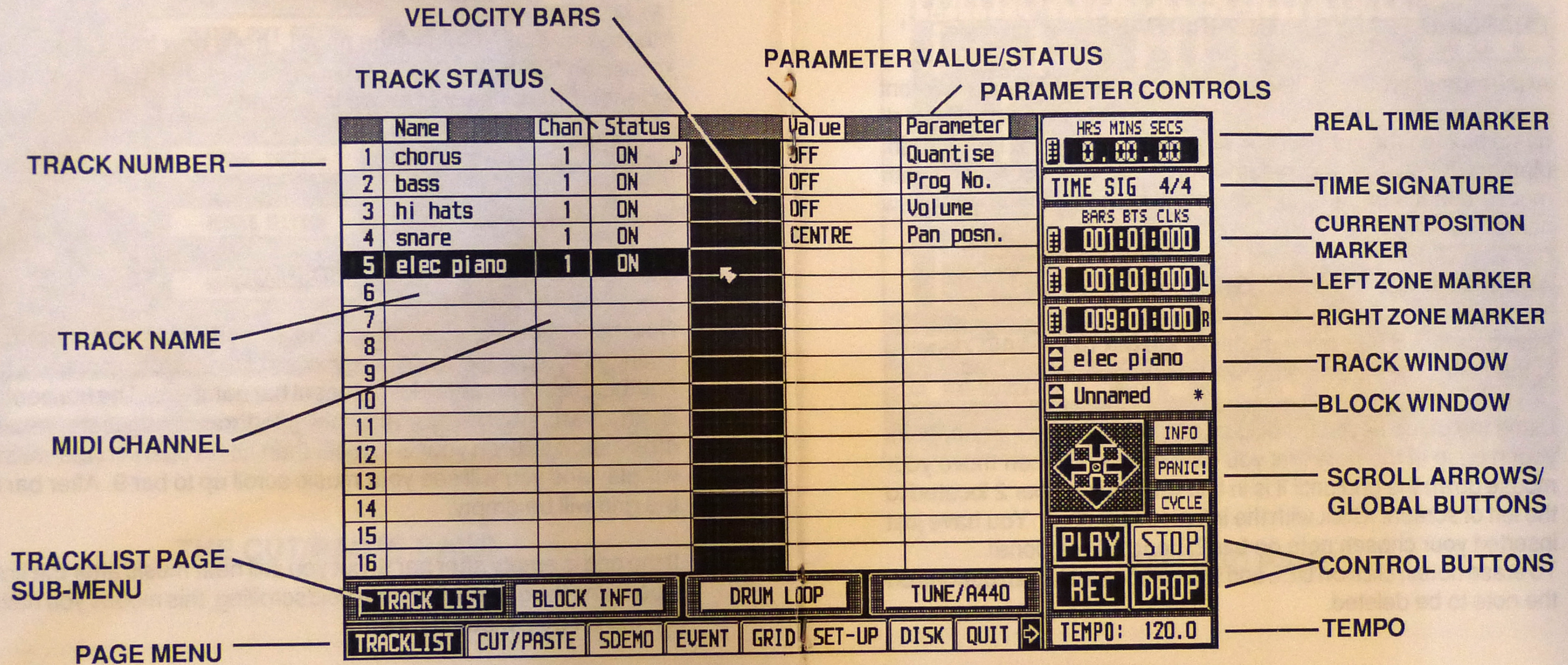
THE CUT/PASTE PAGE

Mouse on "COPY" (top of the page). It will now turn black. Now mouse on "DO SELECTED TRACKS". Well done, you have now extended your 4 bars of music to 8 bars!

THE GRID PAGE

Now mouse on the soft button marked "GRID". When the page changes you will see a piano keyboard at the top of the page. The numbers down the left side represent bar numbers. The horizontal lines represent 16th beats. The highlighted horizontal lines represent 4th beats. Hit '0' on your ST twice, then hit "ENTER". Your music will play and you will see your music scroll up to bar 9. After bar 9 the grid will be empty.

If the grid is empty after bar 9, but you still hear music after the first 9 bars and the grid still shows music scrolling, this means you have left the CYCLE mode on.



CHANGING TRACKS IN THE GRID PAGE

At the moment you are only looking at one track. To view a different track mouse up or down on the small arrows to the left of the track name box (on the right of your screen just below the Left & Right Markers). You can also rename your track by clicking with both mouse buttons on the track name area and typing in your new name.

ADDING NOTES INTO THE GRID.

After pressing STOP twice, highlight the box named ADD located to the bottom of the screen. It will turn black.

Using the piano keyboard display at the top of the screen, point your mouse at the note that you wish to insert. Then move your mouse down the grid until it is in line with the number 2 located to the left of screen. Click with the left mouse button. You have just inserted your chosen note on bar 2, beat 1. Well done!
To erase notes, click on DEL and then mouse with both buttons on the note to be deleted.

The screenshot shows the 'THE GRID PAGE' interface. At the top is a piano keyboard with five notes highlighted. Below it is a grid with three tracks (1, 2, 3) and five bars. Track 2 has a note on bar 1. The right side contains a control panel with a digital display showing '0,00,00' (HRS MINS SECS), 'TIME SIG 4/4', 'BARS BTS CLKS' (001:01:000), and '009:01:000'. It also has buttons for 'NEW TRACK *', 'Unnamed *', 'INFO', 'PANIC!', 'CYCLE', 'PLAY', 'STOP', 'REC', 'DROP', and 'TEMPO: 120.0'. The bottom of the screen has a menu bar with buttons: TRACKLIST, CUT/PASTE, SDEMO, EVENT, GRID (highlighted), SET-UP, DISK, QUIT. A central control area shows 'Time 001:01:000', 'J= A3', 'Vel ↓ 80', 'Len 000:00:028', 'Ch 1', 'Vel ↑ 0', and buttons for 'ADD Gate DEL REST' and '16 95 % EXT UNDO'.

THE GRID PAGE

CHANGING THE LENGTH OF THE NOTE BEING ADDED.

The note length must be decided before you insert a note. You can do this by changing the number in the box below the ADD box. The no. 1 means a whole beat, no. 4 a quarter beat and so on. 'T' stands for Triplet.

MIDI ADD

To add notes via your MIDI keyboard, highlight EXT in the panel, select your note length and then play-in your notes. The grid display steps on with each note played, so, to see what you have played you will need to scroll back.

The Note Information Box, which is the panel on the left, below the scroll window, gives you detailed information on any note selected (by clicking on the note with the left mouse button once), but this information cannot be edited via this window - although the values will change in the box if you mouse on them, these changes are not implemented in the data, and the program ignores them.

DETAILED EDITING SHOULD BE DONE IN THE EVENT PAGE.

The screenshot displays a music software interface. At the top, there is a musical score with two staves (treble and bass clef) and a 4/4 time signature. The score is divided into three measures, numbered 1, 2, and 3. Below the score is a MIDI ADD panel with two rows of keys: Major keys (C, G, D, A, E, B, F#, C#, F, Bb, Eb, Ab, Db, Gb) and Minor keys (a, e, b, f#, c#, g#, d#, a#, d, g, c, f, bb, eb). The 'A' key in the Major keys row is highlighted. Below the keys are buttons for NOTES, CLEFS, KEYS, MIDI ADD, INSERT, RESTORE, and UNDO. To the right of these buttons are input fields for Time, Len, J=, Ch, and Vel. Below these fields are buttons for Display 16, Split C3, Legato% 100, and MIDI **. At the bottom of the MIDI ADD panel are buttons for TRACKLIST, CUT/PASTE, SDEMO, EVENT, GRID, SET-UP, DISK, and QUIT. On the right side of the interface is a control panel with a digital display showing 0.00.00 (HRS MINS SECS), TIME SIG 4/4, BARS BTS CLKS 001:01:000, and three more digital displays showing 001:01:000 and 009:01:000. Below these displays are buttons for NEW TRACK * and Unnamed *. There is a directional pad with buttons for INFO, PANIC!, and CYCLE. At the bottom right are buttons for PLAY, STOP, REC, and DROP. A TEMPO: 120.0 display is at the very bottom right.

THE SCORE PAGE

THE SCORE PAGE

From this page you can see your music, one track at a time, in the form of written music. You can only change CLEFS and KEYS on this page. With RAVE there are no editing features on the SCORE page.

To change CLEFS simply click on the clef to be changed and then select the desired new clef from the clef menu by clicking on it. The new clef automatically replaces the old clef on the staff.

To change KEY, simply mouse on the desired new key; it will automatically be inserted on the score.

EVENT PAGE

This is the most powerful editing page in the program. The black line tells you the event that is currently playing. The note time, length, velocity and pitch can be altered by mousing with the left or right buttons. Try mousing on the DATA column and see how the note changes. Try mousing on the number beside the note, this is the velocity. Try moving the Event time.

Events can be any MIDI CONTROLLER data, such as pitch bend, program change etc., as well as notes.

To make it easy for you to see what you are doing we have put a visual filter in. If you highlight the type of event at the bottom of the page it will visually eliminate those events from the event list. To demonstrate this, you may have noticed that one or two of these boxes are already black - Note Off, for instance. If you click on it with the right mouse button so that it turns white, you will notice that the event list has now changed in order to show you Note Off information.

EVENT TIME	EVENT TYPE	CH	DATA	
001:01:000	Note on	1	D3 80	Len 000:01:108
	Note on	1	F#3 80	Len 000:01:108
	Note on	1	A3 80	Len 000:01:108
	Note on	1	D4 80	Len 000:01:108
	Note on	1	D2 80	Len 000:01:108
	Note on	1	D1 80	Len 000:01:108
001:03:000	Note on	1	E3 80	Len 000:00:000
	Note on	1	A#1 80	Len 000:02:114
002:01:000	Note on	1	F#3 80	Len 000:01:108
	Note on	1	A#3 80	Len 000:01:108
	Note on	1	C#4 80	Len 000:01:108
	Note on	1	D5 80	Len 000:01:108
002:01:030	Note on	1	D2 80	Len 000:01:108

DELETE MODE	CHORD MODE	SHOW DEFAULTS	RESTORE	UNDO	HEX
Note On	Pitch Bend	Channel Aftertouch	Prog Change		
Note Off	Mod. Wheel	Polyph. Aftertouch	Controllers		
TRACKLIST	CUT/PASTE	SDEMO	EVENT	GRID	SET-UP
				DISK	QUIT

HRS MINS SECS	0.00.01
TIME SIG	4/4
BARS BTS CLKS	001:03:000
	001:01:000
	009:01:000
Chorus	
Unnamed	*
INFO	
PANIC!	
CYCLE	
PLAY	STOP
REC	DROP
TEMPO:	120.0

THE EVENT PAGE

PITCH BEND INFORMATION

If you have a pitch bend on your keyboard, then stay on this page. Press zero twice to reset, then record something using your pitch bend. Then make sure pitch bend is white and then you will see your pitch bend data on the list. Now highlight Pitchbend and you will see the data disappear from the event list, but you will still be able to hear it when you play your music.

CHORD MODE

If you have played chords then selecting this will change the way in which the Event list is displayed so that chords can be seen in the list.

EVENT FILTERS

The lower two rows of buttons, above the Page menu, are event filters. The filters do not alter the data in memory, or the way that it is played; they just alter the display of that data. An event list full of notes and controller messages would look very cluttered and confusing if you only wanted to view and edit program change events, so, by filtering from the display those events you do not

wish to see you can find the specific data you want to edit immediately.

Black text on white indicates that the filter is off and that the named data is displayed. Clicking on one of the filter buttons with the left mouse button will switch the filter to ON, removing that type of data from the display, and highlighting the button in black with white text. A further press turns the filter off again.

The filters act on note-on, note-off, pitch bend, modulation wheel, channel aftertouch, polyphonic aftertouch, program change, and controller messages, and any combination of filters can be used at any time.

DELETING EVENTS

To delete an event from the list, select DELETE from the sub-menu and click on the event to be deleted.

SHOW DEFAULTS

Clicking on the SHOW DEFAULTS button will open a window in which can be set the default insert values for notes and controllers. For inserting notes there are default values for Midi channel,

velocity, and note length, while for controllers the only default value is the controller number. The window can be closed by using the close icon in the top left-hand corner of the window, or by clicking again on the defaults button.

INSERTING EVENTS

To add events to the list, click on the appropriate event filter button with the right mouse button. When selected with the right mouse button the event filter buttons, instead of selecting the display filters, become event insert buttons. A right mouse button press on any event label will insert a default event of that type into the display at the current position as shown by the current position marker on the main panel. Only one type of event may be selected at one time.

The event time, channel and data fields can then be directly edited with the mouse to set the desired parameters for the event. If you insert a controller, two items of data are listed in the data column, the first value is the controller number and the second is the level of that controller. Once inserted both the level and the controller type can then be edited to the precise values required.

Note-off events cannot be inserted on their own, but they are automatically entered when a note-on is inserted, the point at which they are added depending on the note length set in the defaults window

PROGRAM CHANGE IN THE EVENT EDIT PAGE.

IMPORTANT: First read the section "PARAMETERS AND VALUES".

You can insert program changes anywhere in your track via the **EVENT PAGE**. Try this:

1. Record 3 bars of music with a piano sound then stop RAVE and make sure that program change on the track parameter list is turned to OFF.
2. Enter the event page and hit zero on your ST twice. This takes RAVE to bar one, beat one.
3. Select the program change and insert as described in the above section on the Event page. After you have made your insert be sure that the program filter button is white.

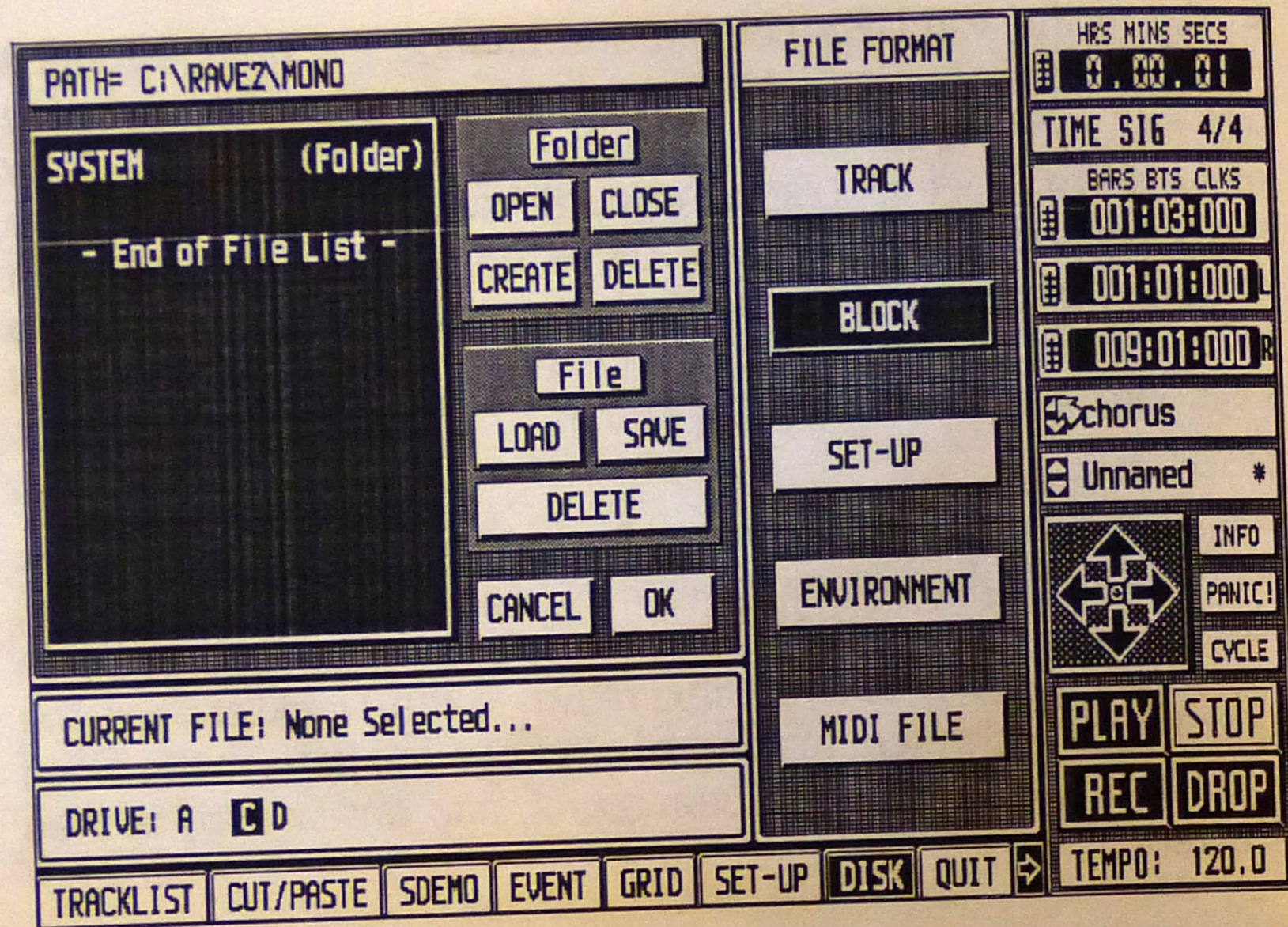
4. Go to the **VALUES** column and change the number until it corresponds with the number needed for your piano sound. You will see your programs changing on your MIDI keyboard. Now move down your event list to the fourth bar, first beat. You can use the down arrow on the ST to scroll through the events. Now insert another program change and select a new number. Press zero twice, then play. RAVE will now change the sound of your MIDI keyboard at bar 4 to your new sound.

RESTORE

Each time you leave the Tracklist page a safety copy of your work is saved in a buffer. If you make changes which end up sounding disastrous, selecting **RESTORE** will replace the edited piece with the safety copy. When you next return to the Tracklist page the safety copy is deleted, making all changes you have made since you left the Tracklist page permanent, and a new copy is then created.

UNDO

The **UNDO** menu option can be used to go back one step if you have made a mistake while editing. This can be selected with the **UNDO** key on the Atari keyboard. The **UNDO** function can be toggled back and forth to try out an edit and compare it with the un-edited version, as long as no further editing functions are performed.



THE DISK PAGE

N.B. The File Format buttons displayed here differ from those in your RAVE program

THE DISK PAGE

This is where you save all your work. Make sure you have a blank formatted disc in your drive. Down the right hand side it says TRACK and below that it says SONG. Choose what you want to save.

If you choose SONG, RAVE will save every part of your song, that is: all tracks in your song, or block of music, and all information about the data on those tracks. If you choose TRACK it will save only the track currently selected. Click on SAVE and, if it is a song without a name, you will be asked to give it a name. Type in a name and press return. If you have already saved a song to disc you will find that when you come to saving it again, the name will already be there. If you want to keep both pieces of work (the piece you already have on disc, plus the work you have just done) then you must rename the song you are about to save. Otherwise your work on disc will be replaced by the work you are about to save. To rename the song use backspace, then type in the new name.

Saving a track works in the same way.

WARNING!

DO NOT USE YOUR PROGRAM DISC FOR SAVING WORK

More about CUT/PASTE

We have covered the copy function already but I would like to go into it in a little more depth.

Copy is used when copying work into blank space.

Wipe will wipe all data between left and right locators leaving a space for new data to be placed into if required.

Chop will cut data between locators and close up the gap that is left.

Insert will insert the music that lies between the selected locators position into a pre-selected current play position. In doing this it will automatically make a space for itself by shunting all information after the current play position along the track by the same amount of bars that is defined by the left and right locators.

More about TRACKLIST

DRUM LOOP: This is an overdub facility between a pre-selected locator position. When this is selected Rave will cycle between your locators, recording everything you play on each cycle without wiping out what was recorded on previous cycles. This is great for building up drum tracks, but make sure you set a quantise before you start recording. Although we call it drum loop it is worth saying that this facility can be used for any MIDI sound.

TUNE: This will emit a pitch of 440, middle C.

DELETING A SINGLE TRACK: Mouse on the track number with both mouse buttons and drag the cursor to the far right of the screen and then release. This will delete all of your track information including your track name, MIDI channel settings and parameter settings. If you only wish to delete your music but still wish to keep the track name, MIDI channel, and parameters then just drag your track as far as the black parameter value panel. WITH BOTH THESE MOVES THE MOUSE BUTTONS MUST BE HELD DOWN UNTIL THE POINTER HAS REACHED THE CORRECT PLACE ON THE SCREEN.

Putting RAVE in RECORD will automatically delete any musical data already on the track (or everything between the left and right position markers if in cycle mode). Deleting can also be done in the CUT/PASTE page.

MOVING A TRACK: Mouse on track number with Left button and drag to any empty track number. KEEP THE MOUSE DOWN UNTIL YOU REACH YOUR NEW TRACK, THEN RELEASE.

COPY A TRACK: Mouse on track number with Right button and drag to any empty track. KEEP THE MOUSE DOWN UNTIL YOU REACH YOUR NEW TRACK, THEN RELEASE.

PARAMETERS AND VALUES

QUANTISE. This will correct the timing of your music. Select the value with left or right button.

PROGRAM. Program is the name that is given to the individual sounds in your keyboard, program number is the number that any one of the sounds are assigned to. An example would be as

follows: Program number one on your MIDI keyboard might represent the Electric Piano sound. If you change the program number you will see the names of the sounds on your MIDI keyboard also change as you do so. All program numbers, as well as the other parameters, will be saved to disc when you save your song. So, when you load your song up the next day, RAVE will automatically find all the sounds that you used.

Programs are sometimes referred to as PATCHES.

There is another way of using program change; for more information on this please refer to the section below: 'TIPS FOR SINGLE-SOUND KEYBOARDS'. The right and left mouse buttons will increase and decrease the program patch number on your MIDI keyboard. Your keyboard must be set up to receive program change.

VOLUME. The right and left mouse buttons will alter the volume for each MIDI channel. NOTE: if you have 3 recorded tracks, all on the same MIDI channel, altering the volume or pan value will have the same effect on the other two tracks.

PAN. This can only be used when you have a stereo output.

TIPS FOR SINGLE-SOUND KEYBOARDS.

SPLITTING THE KEYBOARD.

Most single-sound keyboards have the capability of allocating one sound to the lower half of its keyboard and another to the top half. Although it is common that both sounds normally share the same MIDI channel, sometimes you can even allocate them to separate MIDI channels when using with a sequencer such as RAVE. It would be worthwhile spending some time with your keyboard manual to make sure you are getting the best out of it.

THE SET-UP PAGE

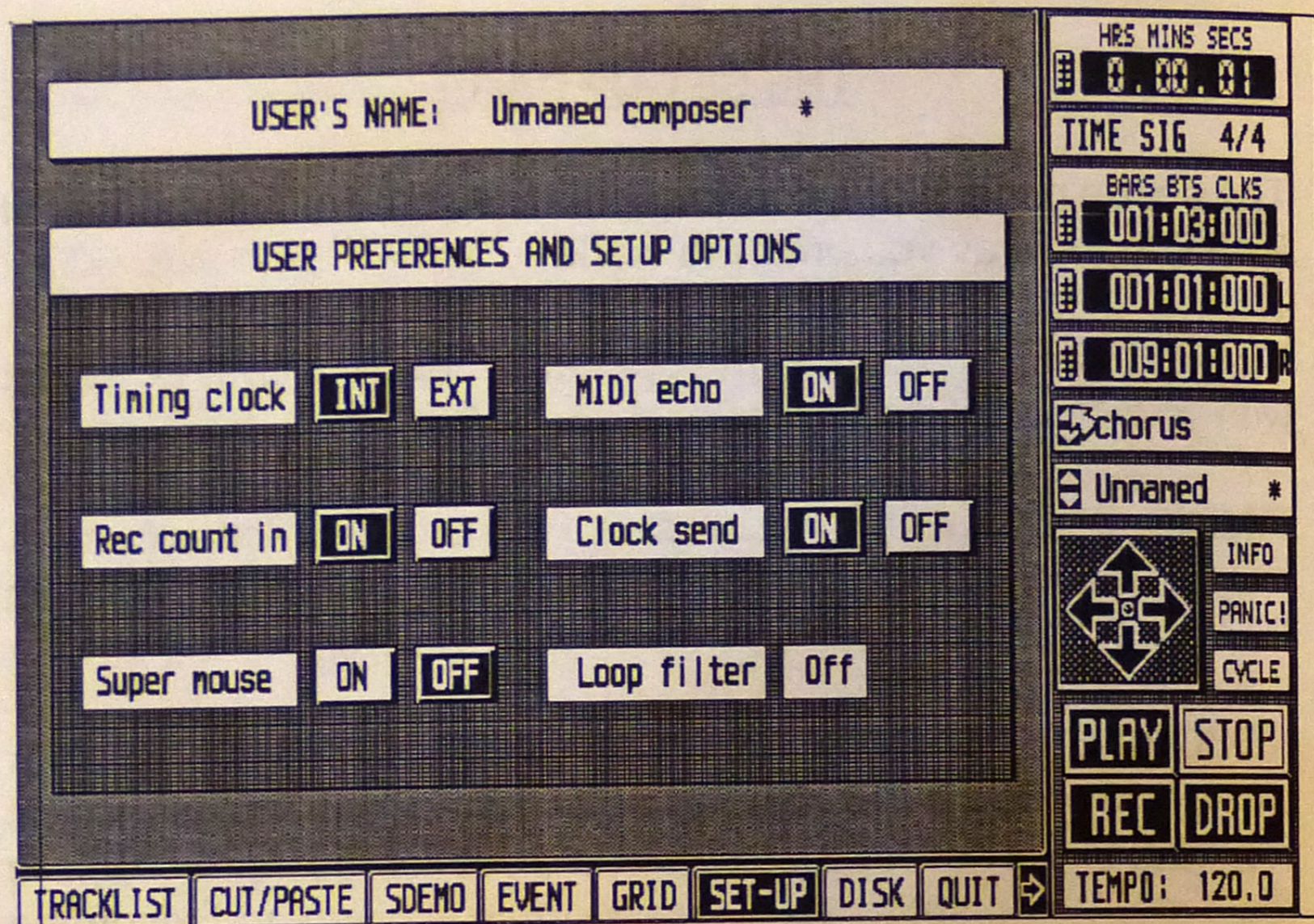
The set-up page allows you to customise some of the features of **RAVE** to the way you prefer to work.

USER NAME: You can enter your name here and it will be saved with your block of music.

TIMING CLOCK: This option sets **RAVE** to run either from its internal clock, or synchronised with an external MIDI clock. To run **RAVE** from a MIDI clock source, click in the box marked 'EXT'.

RECORD COUNT-IN: When 'ON' the sequencer will give a two bar count-in whenever RECORD is selected while the sequencer is stopped: this is necessary to provide a cue for recording music in real time. When set to 'OFF', no count-in is given and recording starts as soon as the first event is received.

SUPER MOUSE: Switching on the SUPER MOUSE option speeds up the response of the mouse pointer to your movement of the mouse.



THE SET-UP PAGE

MIDI ECHO: When switched to 'ON' this function, often called a software thru, echoes any data sent to the ST's MIDI in port to its MIDI out port. This allows you to hear the part you are playing on another synth or expander that is connected to the MIDI out socket, without having to use a complicated system of MIDI wiring to cope with the sequencer's recording and playback modes. In most cases you will want to set this to 'ON' and that is its default value.

CLOCK SEND: When switched 'ON' RAVE sends MIDI start, stop, clocks and song pointer messages, to allow external MIDI devices to be synchronised, using RAVE as the master. The default setting is 'ON', but, if you are not synchronising any external equipment to RAVE it may be best to switch to 'OFF', to make more space in the MIDI data stream.

LOOP FILTER: When selected the 'LOOP FILTER' switches off the software MIDI thru function (MIDI ECHO) for one channel only, the channel that is set in the value box next to the 'loop filter' label. If set to 'OFF' the software thru function passes all MIDI channels. This should be used if the keyboard you are using to play in your MIDI data does not have a 'local off' switch, to stop that keyboard being triggered twice - by its own keyboard and also by MIDI returning through the Atari.

Set the loop filter to the same MIDI channel as your keyboard, and that MIDI channel will not re-trigger the synth when it is played (but MIDI data on that channel that has been recorded into the sequencer will still be sent when **RAVE** is played).