

ST FREE SUPPLEMENT! FORMAT

SOUND & VISION

NO ST MAGAZINE GIVES YOU MORE FOR YOUR MONEY!

Your complete guide to getting started in SEQUENCER ONE



The complete music package:
nothing has been taken out!

- Discover how to make wonderful music with your ST
- All you need to program your ST's internal sound chip
- Stereo sound on an STE
- Professional MIDI sequencing using any MIDI equipment

PLUS! TURN THIS SUPPLEMENT OVER FOR YOUR GUIDE TO CANVAS

Your guide to Sequencer One

We thought we'd give you £89.95 worth of MIDI music software but then we thought "Na, that's not good enough". So we got Gadgits to write a sound-chip editor so that all ST owners could use it but that wasn't good enough either. You need more than that to join the music revolution - you need someone to tell you how. So here you are - all you need to start exploiting your fantastic musical talents

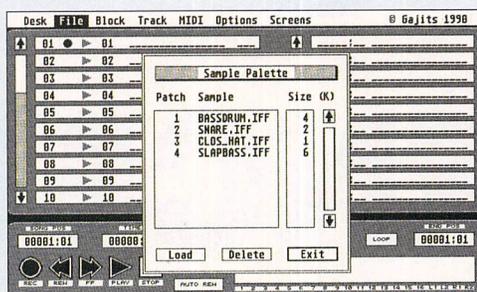
GETTING STARTED

Before running *Sequencer One*, open the folder on the disk and copy the contents of the SEQ_ONE folder to the root directory of a freshly-formatted disk. Now double-click on SEQ_ONE.PRG to start making musical magic. All the features in *Sequencer One* are explained here. Gadgits also sell the full manual - check out page 16. For now though, follow our guide and explore your musical talents.

Besides all the usual MIDI features there's also a sample replay facility so you can create music solely from your ST - you don't need a single piece of MIDI equipment!

How you hear the sounds depends on which ST you are using. If you have an STE, you can connect the two phono jacks on the back of your ST to an amplifier. Otherwise you can hear the playback through the internal speaker on the ST monitor, just make sure the volume knob is turned up.

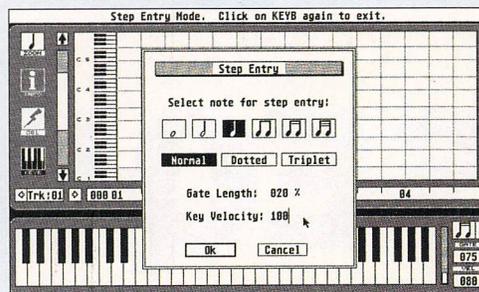
Now double click on SEQ_ONE.PRG and we'll look through some of the features of *Sequencer One*.



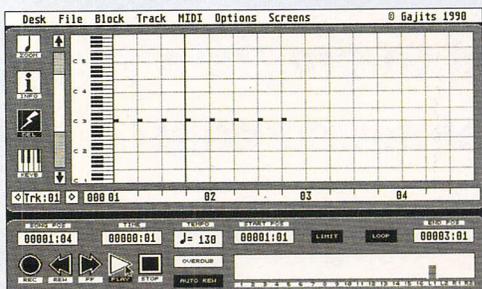
1 Pull down the "File" and click on "Sample Palette". A selector box appears. You'll see that sample 1 is called METRO.IFF. This is the sample for the metronome 'tick'. You won't need it in this example so click on it then click on the "Delete" button. Click on "Load" and open the Samples folder - they all end in .IFF. Open "BASSDRUM.IFF" and click on "1" beneath "Patch". Follow this process with "SNARE.IFF" placing it at patch "2." Continue and set up the first five samples as in the diagram and exit from the sample selector. The SLAPBASS.IFF sample was taken from Gadgits' sample series and will not be on your disk - choose an alternative sample (like PIANO.IFF and ACOUBASS.IFF) instead.

A LOOK ROUND THE SCREENS

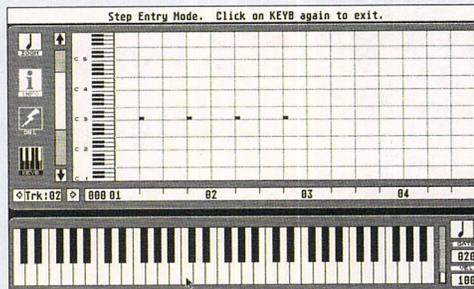
On loading up you see this screen, split into three parts. At the top is the Menu Bar from which you can select the various features of *Sequencer One*. It operates in exactly the same way as the menu bar for most of the other programs you use - move the cursor up to any of the headings, drop down the menus and have a look around. At the bottom of the screen is the Transport Control panel with the "tape deck" controls. We'll look at this in section 3 of the tutorial. The bulk of the screen is the Track List which lists the 32 tracks and their details such as MIDI channel, name and patch number of the sound to be selected from a MIDI sound module. However, this patch number is also used to select the correct internal sample, as we'll see in section 5 of this tutorial. Now go up to the Screens drop-down menu and select the "Step Editor." From here you can place notes where you want them via an on-screen keyboard, and correct mistakes that you make. Finally, go back to the Screens drop-down menu and select the "Bar Editor." This is where you can see the layout of your entire song and edit it. Feel free to spend a few moments looking at each of the screens and clicking on icons. Once you feel ready to go on, select "Track List" from the Screens drop-down menu.



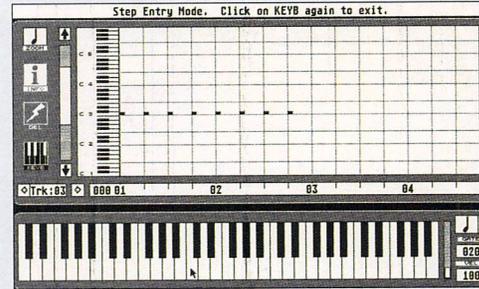
2 Each of your samples now has a "patch number". This is how you instruct a track to play that sample. Go to the first track of the "Track List," double-click on the MIDI channel number, (next to the play/mute triangle), and set it to "L." The sample track is played through the left channel of the STE. Click on the next part of track 1 and enter a track name, which becomes the bass drum. Now click on the last part and enter "1" so that sample 1 is played from this track. To hear the bass drum, snare, hi-hat and bass, set up tracks two to five in the same way. Now select the Step Editor from the "Screens" menu. On the left side of the Editor are four icons; take a look at the bottom one of these - the "KEYB" icon.



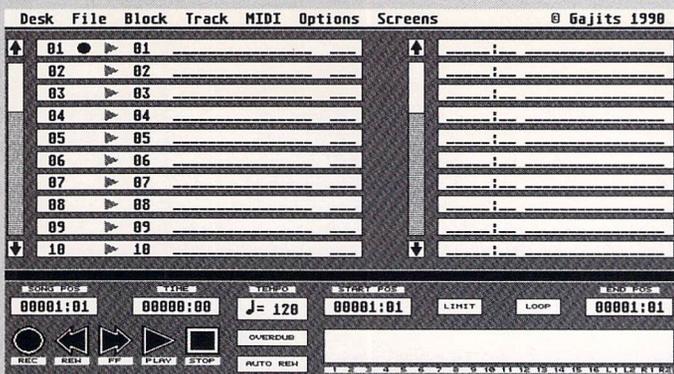
5 Want to hear the bass drum playing? Click on "Play" and you should hear the eight bass drums playback as a black vertical line moves across the grid. At the same time, the L1 meter on the MIDI Activity Indicator should be moving up and down. To make the bass drum repeat, click on the End Position display, change it to "3:01" and turn on the "Loop" facility. If you now playback, when the black line reaches the end of the two bar section, it repeats again from the start.



6 Underneath the "KEYB" icon is a box showing which track you're currently looking at. Click on the right hand arrow and you have a clean grid again. You are now looking at track 2 which we are going to use for the snare drum. Click on the "KEYB" icon again. This time, we want the snare to play on the "off-beat" so a gap is needed where the first bass drum was played. You can do this by pressing the [Spacebar]. So use [Spacebar], C3, [Spacebar], C3 and so on until you have four snare hits as in this screen shot: Exit from the keyboard and click on "Play." Now you should hear the bass and snare drums and see both the L1 and R1 meters moving. Carry on with track three for the closed hi-hat.



7 For track four, which needs to be slapped bass, there must be a melody. Set the "Gate Length" to 80% and click on the notes: C, D, E, F, G, E, F, D starting with C3...



● This is the screen you're presented with when you first load *Sequencer One* into your ST. From here on in, it only gets better!

USING THE TAPE DECK CONTROLS

Click on the "Play" icon and watch the Song Position display advance in bars and beats. The Time display also moves forward in seconds (and minutes). These displays tell you where you are in your song. Click on "Stop" and the two displays halt. Try using the "Fast Forward" and "Rewind" icons. These work just like a cassette recorder. If you turn on the "Auto Rewind" icon (it turns black), then each time you click on "Stop", the two displays go back to their start. For this tutorial, click on this and leave it on. On the right side of the Transport Control

panel are the MIDI Activity Indicators. These show which MIDI channels are being used. The last four of these indicators are for the internal samples; L1, L2, R1 and R2.

USING THE MOUSE

Click once on the "Song Position" box and the display turns black. Backspace three times and type "4:01" (not the colon) and hit [Return]. This method can be used for any of the display boxes. The Tempo display and MIDI channel numbers on the Track List are different. Change the Tempo by double-clicking and by then moving the

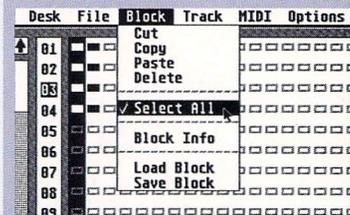
Hand cursor up and down as though there were a vertical slider there. Stop at 130 and click with the left mouse button. Change completed.

INSTANT GRATIFICATION!

Enough of the viewing - let's get some sound! In the "Option" menu, there is an "Output" option. Go to this and set it according to whether you're using the STE stereo outputs or the ST's monitor speaker. Also make certain that only the "Auto Rewind" box in the "Transport Control" panel is selected and that the current "Song Position" is bar 1, beat 1.

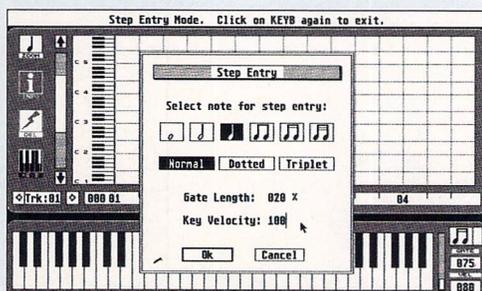
USING THE BAR EDITOR

Go to the "Screens" menu and select "Bar Editor." The main part of the screen fills with little grey boxes. In the top left corner are eight black rectangles, representing the four tracks of two bars you've recorded. The four to the furthest left are white as they are underneath the thick black strip showing the current bar. If "Loop" is selected, click on "Play" to play your two bar riff and move the vertical strip back and forth over the two bars. Let's copy these two bars three times over giving us an eight bar phrase. Click on "Select All" in the "Block" menu:

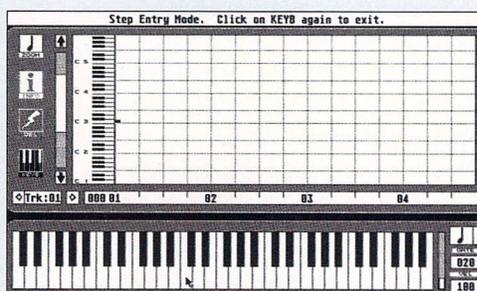


● Use this option to repeat the two bars you've already created.

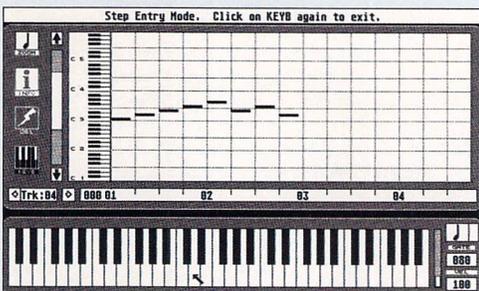
This ensures our actions are carried out on all tracks, not just the current track (the highlighted one on the left). Click on the vertical strip and follow the instructions. Move the hand to the end of the second bar, and click again:



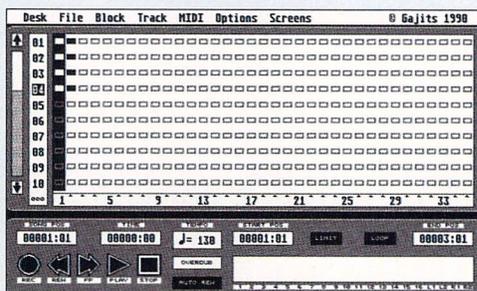
3 Click on this icon and the Transport Control panel changes to a keyboard from which you can record notes. On the right side of the keyboard are three more icons. Click on any one of these to bring up the Step Entry dialogue box. From here you set the step length of notes clicked from the on-screen keyboard and their volume. Select a crotchet, a gate time of 20% and a velocity of 100. Your screen should look like this screen shot. Now exit and enter a C3 note by clicking on the correct keyboard note. As you click, a small circle appears on the key. This disappears when you release the mouse button and the note appears on the grid.



4 Click a further seven times and then click on the "KEYB" icon to get the Transport Control panel back.

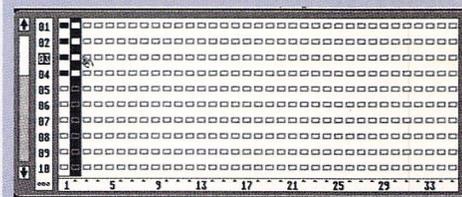


8 Play this back and you hear the bass and snare drums, hi-hat and slapped bass with all four sample replay meters moving. That's it - your first two bar riff! Save the song to a freshly formatted disk. Go to the "File" menu, click on "Save Song," hit [Escape], type in "STFORMAT.ONE" and click on OK. You can experiment with *Sequencer One's* transpose facility to shift pitches of the notes on each track up or down to get the best sound from each drum sample. Use "Alter Notes" on the "Track" menu. You can mute the other tracks while listening to a particular one. See section 5 and 9 for more on these operations. You should also copy the whole SAMPLES folder from the STF disk to your new disk.

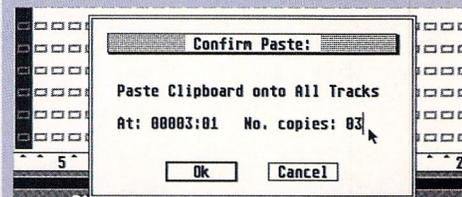


9 Now try out the bar editor detailed in the panel on the right. This lists even more things you can do using the ST's internal sound chip.

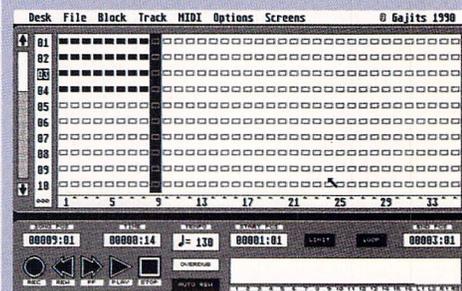
And so to the Manual and lots of experimenting! This tutorial has scratched the surface. If you already own some MIDI gear you can use it in earnest with the second part of this guide. Even if you don't have any MIDI gear, there are more samples to play with, so have fun and enjoy! You may also like to listen to the demo songs in the SONGS folder of your Cvoer Disk (use the "Load Song" option under the "File" menu heading.



Now click on "Copy" in the "Block" menu and up pops a confirm box. All tracks from bar 1 to bar 3 are now copied to the clipboard. Change the "Song Position" box to "3:01." The vertical strip should now move to the third bar. Select "Paste" from the "Block" menu. Set the number of copies from the Confirm box to "3":

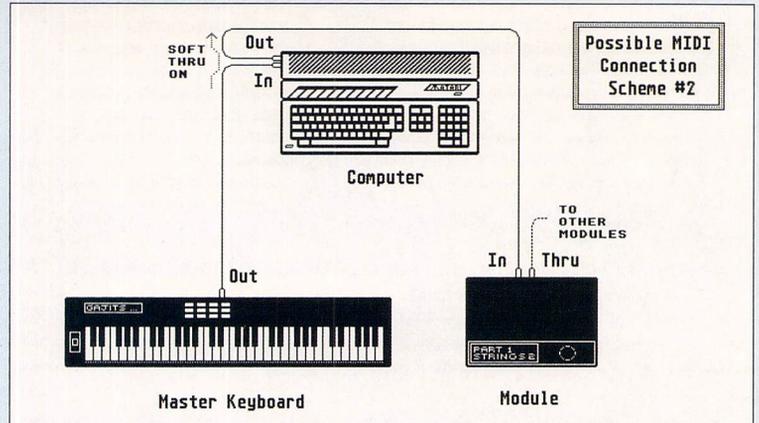
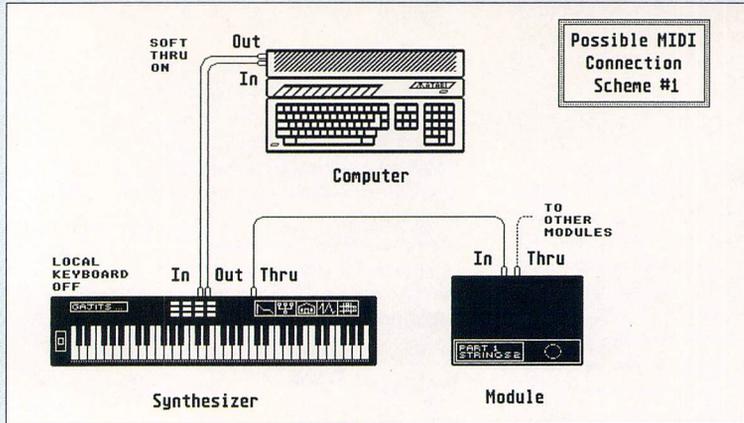


Now click on "OK" and watch the bars draw themselves.



One eight bar phrase completed - just don't forget to save it into one of your disks.

1. SETTING UP YOUR MIDI SYSTEM

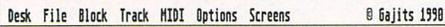


The MIDI connections between your keyboard and ST depend on whether you're using a keyboard with sounds on-board (the most common type) or a master (or "dummy") keyboard. This only sends MIDI information, and so has no sound module

built-in. Shown here are the connections for these two types of keyboard. You don't need to worry which MIDI channel your keyboard uses to send MIDI info because *Sequencer One* has a function called "soft thru" (see section 5).

2. LOADING UP

The screen is split into three different parts; The Menu Bar at the top of the screen.

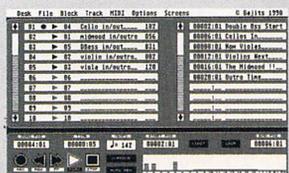


From here, you select your functions. This is similar to any other GEM menu bar on other programs.

The Transport Control panel at the bottom of the screen.



This gives you the usual "tape deck" controls of Play, Stop, Fast Forward, Rewind and Record along with various other functions.



The main part of the screen which can either be for Track List, Step Editor or Bar Editor depending on the function you want to perform. When you load up, you're presented with the Track List screen which lists the 32 tracks and their details along with a cue list of song position markers. Use the Step Editor to edit individual notes and the Bar Editor to create the arrangement for your song.

CHANGING VALUES USING THE MOUSE

If a number needs changing (like the MIDI channel for a track or the tempo), you have two options; single click, type in the new number and hit [Return]; double click and the arrow cursor changes to a hand, now move up and down as though you were moving a slider.



Once you reach the right value, click on the left mouse button to exit. If you want to type in a name something like a track or cue, click and type, but always remember to hit [Return] at the end. For methods to change bar numbers, see sections 3 and 5.

3. THE TRANSPORT CONTROL PANEL

Sequencer One works in terms of "blocks". A block can be a number of bars from one or all tracks. To the right of the Transport Control window are boxes for the Start and End positions which are used to set the start and end of the current "block" for recording purposes so that you can work on one part of your song at a time. There are a couple of other boxes shown here

HIDDEN FEATURE

There's a hidden feature that enables you to move through your song. Double-click on the "Rewind" button to move to the start of the song, or double-click on the "Fast Forward" button to move to the end of your song.

AUTO REWIND

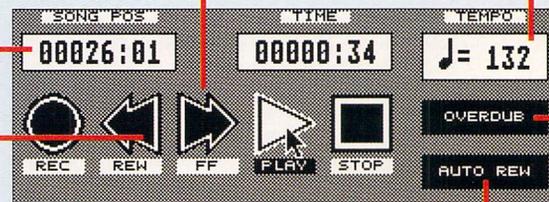
Next to the "Stop" button is the Auto Rewind box. Click on this to turn the function on or off. When on, the song position automatically moves to bar 1 beat 1 whenever you click on the "Stop" button.

SONG POSITION BOX

Above the "Record" button is the Song Position box which tells you where you are at any moment within your song in terms of bars and beats. If you click on this box, the numbers invert and you can then type in the position you want to move to in your song. Next to this box is the Time counter which tells you the current song position in minutes and seconds.

TAPE DECK

If you've used a tape recorder, you'll be familiar with the keys. The "tape deck" buttons work as you'd expect.



RECORD MODE

Next to the "Stop" button is the Overdub box which gives you two different options when you record. Let's say that you've recorded a piano part on a track and that you're unhappy with part of it. By setting the Start and End markers to the relevant places, you can re-record that part. This would occur in "Normal" record mode where the new recording replaces the previous recording. Now let's say that you've recorded a bass drum and snare drum part on a track and then you want to add a hihat part. By clicking on the "Overdub" button, the song you now play is recorded and mixed in with what already existed on the track. If you're in "Loop" mode, the MIDI info for the looped section of the track is only deleted if you press a note on the next cycle. This enables you to record and then listen back on the second cycle while your ideas are still fresh in your mind.

4. THE CLIPBOARD

- Block
- Cut
- Copy
- Paste
- Delete
- Select All

With *Sequencer One* you can grab part of a recorded track and either get rid of it, move it to somewhere else in your song, or copy it and use the copy in other places. This is useful if you've played the drum part for a verse and want to use the same drum part for all of the verses. *Sequencer One* has a "clipboard" which works like a real clipboard; you place something onto it and then decide what you want to do with it.

Once you've set the start and end points for a block, you can save it to the clipboard by either using "Cut" or "Copy," both found in the "Block" menu. "Cut" removes the bars from the song while "Copy" leaves them alone but saves a copy instead.

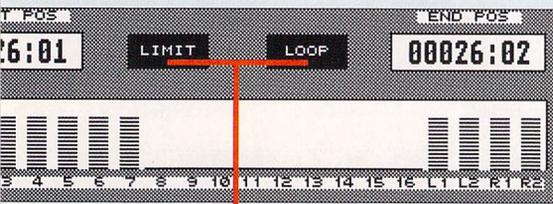
You can then place them elsewhere in the song using the "Paste" command, also found in the "Block" menu. This enables you to create a song much faster and easier. See section 7.



TEMPO
Above the Overdub box is the Tempo controller which enables you to alter the speed of the music between 30 and 240 beats

per minute. Change this value in the same way as you change a number.

The final part of this window is the MIDI Activity bar indicators. These give an idea of how much MIDI information is being received and sent on each of your ST's 16 MIDI channels.



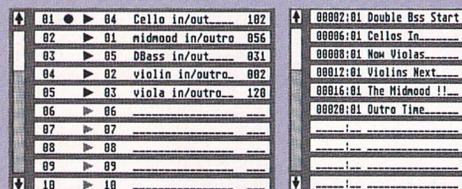
LOOP AND LIMIT

"Loop" is used to cycle round and round on the same block so that you can practice playing a particular part and then click on the "Record" button to record it. When you click on "Loop," "Limit" is switched on as well. "Limit" is used to ensure that any editing you carry out only happens on the part of the song between the start and end markers rather than affecting the entire song. For instance, one of the editing features within *Sequencer One* is that of "quantising". This is where you get the sequencer to move notes to the places where you intended to play them, rather than where you actually played them! This method of auto-correction may be used differently in different parts of the song; using "Limit" helps in this.

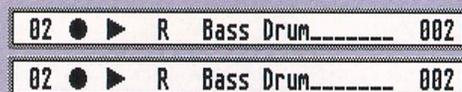
Selecting "Limit" also changes the way some of the tape deck functions work. Double-click on "Rewind" to move to the Start marker, not the start of the song. Double-click on "Fast Forward" to go to the End marker, rather than the end of the song. Similarly, Auto Rewind takes you to the Start marker each time you click on the "Stop" button.

5. TRACK AND CUE LIST SCREEN

This screen is in two parts; the left part lists the 32 tracks and their information in a Track List while the right part lists useful song cues which you can move to with a simple mouse click. As the window is only big enough to see up to ten of the tracks or cues, you use the scroll bars to move up and down. The white part of the bar shows what part of the 32 available tracks or cues is currently in view. Either click in the grey part of the bar or click and hold the arrow at the top or bottom of the bar.

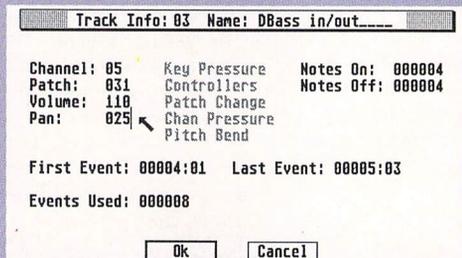


THE TRACK LIST



Any track on *Sequencer One* starts with the track number followed by a space. If you click on a track number or in the space next to it, then a filled circle appears showing this is the current track, and the one on which MIDI info is recorded. Next comes a sideways triangle, similar in style to the "Play" button. This is the mute/play indicator, which is grey if you haven't recorded anything but turns black when you record MIDI info. Click on it to make it shaded grey colour and mute the track. Next along is the MIDI channel which you can set in the normal manner for a number. Then comes the Track Name; here you have up to 16 characters to describe what you've recorded on a track. Make the names useful; for example, "Drums" isn't sufficient when you could have "bass,snare,hihat" instead. Finally, there's a space for you to set a MIDI Patch Number. This is a special MIDI command which enables you to preset the tone that's played for each MIDI channel of your sound module when you play a song from the start. You can find a list of these in the back of the manual.

TRACK INFO BOX



Once you start recording a song, you often need to know more information about what you've recorded, like "have I used pitch bend?" or "what was the last bar that I recorded on this track?" A double-click on a track name brings up the Track Info box. This gives you careful details of the make-up of your track. Details like the track title, MIDI channel and Patch Number are shown here. But it also tells you other things. The first block on the left enables you to set a Volume and Pan value. This acts in a similar way to the Patch Number, a special MIDI message is sent out at the start of a song to set the volume and stereo position of the instrument recorded on the MIDI channel for this track. A bit like an automatic mixing desk. These messages are automatically sent out when you first load an existing song.

The middle block shows whether you've recorded other aspects of MIDI onto this track, such as pitch bend, patch changes and MIDI controllers like sustain pedal or

the modulation wheel. If you've recorded this kind of MIDI info, the words appear in solid black, otherwise they're still shaded. Check this because it's easy to accidentally record patch changes and to find that the wrong sounds are being selected in the middle of your playback.

The right block shows how many Notes On and Off exist within the track. Since a Note On is sent when you press down a key and a corresponding Note Off is sent when you release that key, these two numbers should be the same. If they aren't, then you were probably holding keys down on your keyboard when you stopped recording. There is a Tidy Block option (see section 8.2) which can be used to cure this. At the bottom of this window is the bar and beat indication of the first and last events and the number of MIDI events used. If all of the words for the extra MIDI messages are greyed out, then this number should be the sum of the Notes On and Notes Off numbers.

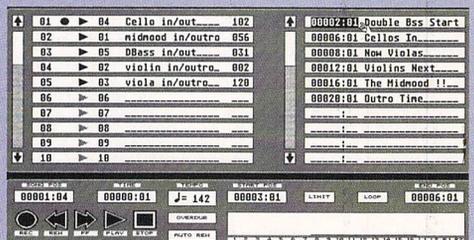
MIDI "SOFT-THRU"

If you're using a keyboard with on-board sounds, one important point is the "soft-thru" function which is in the "MIDI" menu. This ensures that the MIDI info received at the ST's MIDI In is re-transmitted on the MIDI channel that you've set for the current track.

You should hear the correct sound from your keyboard if you've set it to "Local Off" (which prevents the keyboard from playing the internal sounds; see section 10).

CUE LIST

The right hand side of the screen has a list of the 32 cues. These enable you to keep an account of where each section of your song begins. For instance, the intro might start at bar 2, verse 1 at bar 10 and the first chorus at bar 26. You can click on the bar number space and type in the bar number as usual (remember to hit [Return] at the end), or else there is a nifty way for moving bar numbers around the screen.



If you double-click on any bar number on the screen (Song Position, Start and End markers or on any of the 32 cues), the cursor changes to a hand and the comment "Click Left button on destination" appears at the top of the screen. Choose where you want this bar number to be copied to and click on this space to move bar numbers. Therefore, each time that you set up a Start and End marker for a new block, you can automatically transfer the Start point to the next cue by using this double-click method.

The Cue list helps you remember where the different sections of your song start and end, because the end of a section is usually the location of the start of the next section. If you want to playback the sequencer from a particular section in your song, use the double-click method to transfer the Start point from the Cue list to the Song Position box. Click on "Play" and your song starts from the correct place! Another tip is to copy the End point to the Start point when you finish one block and want to start the next. It saves you all the hassle of typing in the new Start point each time. The scroll bar down the left hand side of the Cue list works the same way as it does for the scroll bar on the Track List.

6. STEP EDITING

One of the major advantages of using an ST sequencer is the ability to edit your song simply by looking at a visual picture of the notes you've played in. *Sequencer One* has a versatile Step Editor to enable you to do just this. You can reach this screen simply by either pressing the "F9"

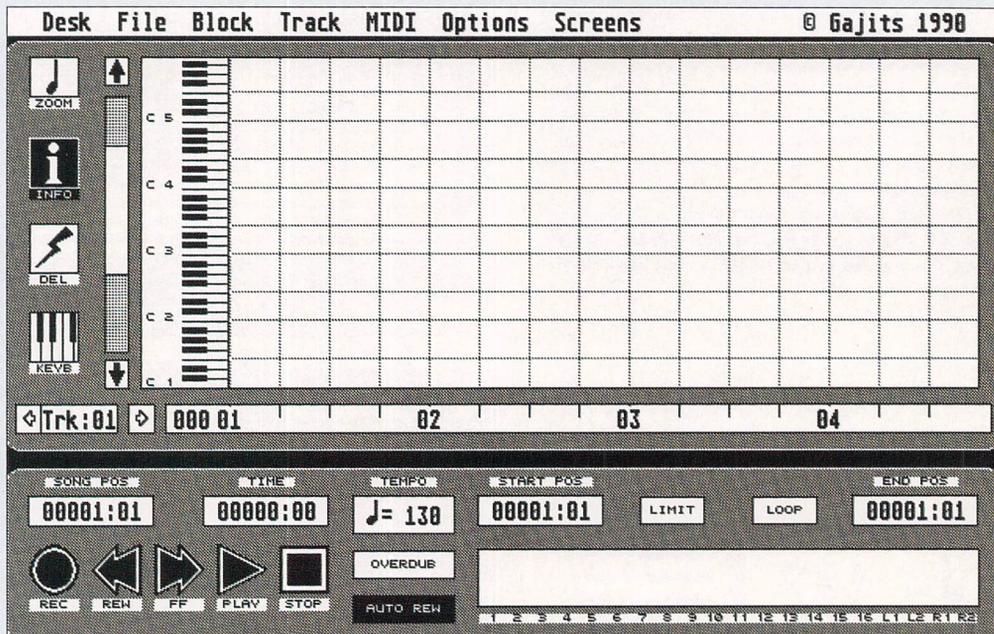
function key or by selecting the option from the "Screens" drop-down menu; the Track and Cue List screen becomes the Step Edit screen and shows all your note information for the current track (the one with the solid circle next to the track number).

STEP EDIT SCREEN LAYOUT

Let's have a careful look at this screen. The main part of it is made up of a grid containing solid, horizontal rectangles. These are the notes; the left edge of the rectangle shows you where your note starts, and the right edge shows you where it ends, each note lining up with the correct note on the vertical, piano-style keyboard on the left hand side of the grid. The horizontal lines on the grid are drawn for each "C" and "F" note and the keyboard shows each "C" with its octave registration; you can see a total of five octaves at any time and can use the scroll bar to move up and down if your notes extend off the top or bottom of the grid. Along the bottom of the grid are the bar numbers; if your song has more than 100 bars (unlikely, but possible!), there's a hundreds counter at the far left of the bar display. The vertical lines are drawn at quarter note gaps.

When the screen opens up with the notes for the current track, a track selector box at the bottom left hand corner enables you to move between the different tracks that you've recorded on. If you double-click on the track number box, it takes you to the Track Info box described in the last section.

Down the left hand side of the Step Editor are the four icons which enable you to select the mode you want to use for the Step Editor.



This is the Zoom icon. Click on this to bring up the Step Edit Zoom box where you can choose the magnification of the Step Editor. The choices change the physical size between the vertical lines on the screen. Start by choosing the quaver (eighth note) which is in the right hand box. Hit [Return] and you see the editor at its highest magnification.



A click on the next icon takes you into Info mode where you can edit existing notes. Click on the Info icon (so that its colour inverts) and then point to and double-click on one of the rectangles showing a note.

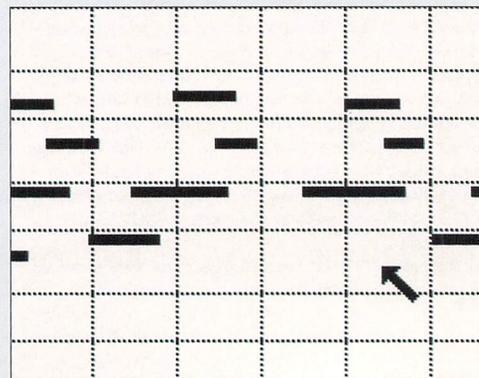
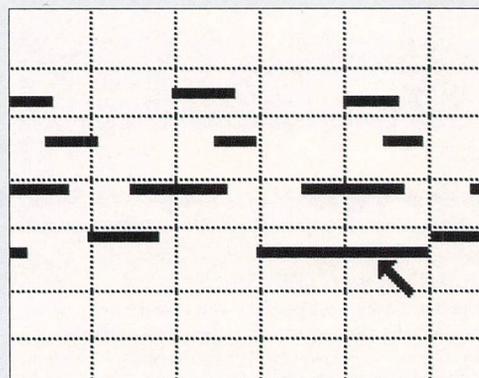
Up comes the Note Information box in the middle of the screen which shows you various aspects of the note, and also enables you to alter them.

"Note" tells you the current pitch of the selected note which you can change in the usual way - click, type and [Return]. "Velocity" shows you how hard you hit the key, and generally affects the volume of the sound, although it may also affect the tone - the higher the velocity, the brighter the sound. Again, you can alter this. Thirdly, is the "On time" which tells you the location of the left edge of the rectangle in bars, beats and 1/192nds of a beat. By changing this, you can move the position of the note. Finally, there's the note "Length" given in beats and 192nds of a beat. From here, you can make a note shorter or longer.

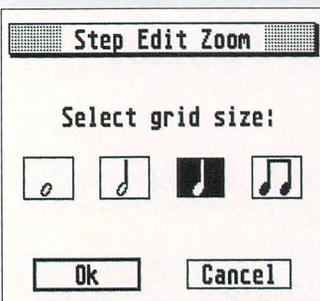
1/192nds of a beat are the smallest note length that *Sequencer One* can work with. (It is useful to know how the two most used values are written; a quaver as .096, and a semi-quaver as .048).



The next icon is the lighting flash which takes you into Delete mode when you click on it. Now all you need to do is to point at a note, click and bye bye! Take care though; once a note is deleted, you can't get it back. If you hold the left mouse button down, you can move around the editor and wipe out notes as you go.

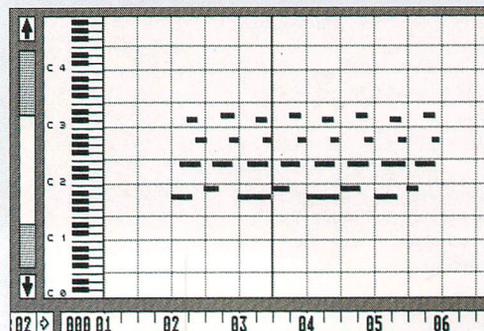


● In this example you can see the process involved in deleting a note from your song.

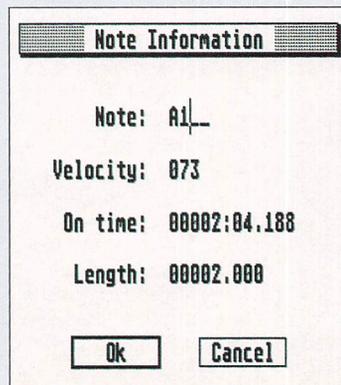


● Click on the zoom icon and you're transported to this Step Edit Zoom box.

Now click on the icon again and select the crotchet (quarter note) in the next box. Hit [Return], and you should be able to see twice as much of the track on the edit screen. The note value you choose replaces the icon in this top box.

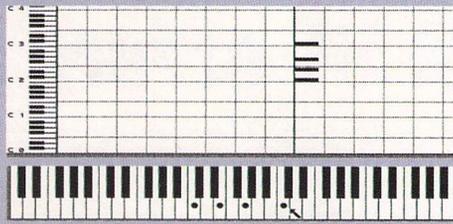


● Now twice as much of the screen is visible.



● View and alter your musical creations through this useful "Note Information" screen.

COMMON STEP EDITOR PROBLEMS



You want to leave a gap? Press the [Spacebar]. A gap the length of the current step size is left.

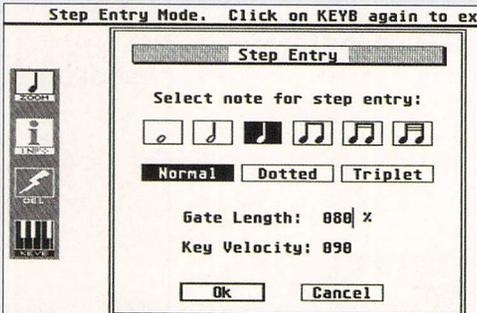
You want to enter a chord? Hold down either of the ST [Shift] keys and click on the notes of the chord one at a time. A black dot stays on the keys you've clicked on until you release the [Shift] key at which point all of the played notes appear on the grid as a chord.

If you make an error then use [Backspace] to move back one step at a time, deleting any notes entered in that step. If you're using a MIDI keyboard to step enter notes you follow the same procedure of pressing one note after the other. The Step Editor then moves forward to the next step. For a chord, press down the first note and hold it while you press down the remaining ones. As long as you keep at least one note pressed down, the notes are entered as a chord.

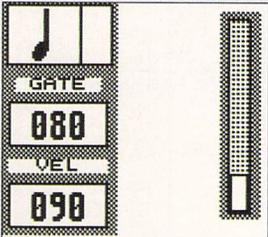


The final icon is for Step Entry. A click on this changes the Transport Control Panel to a five octave keyboard. To the right of the keyboard is an information icon for the current step size along with info boxes for the current gate time (what percentage the step size of the length of the note is) and velocity. If you click on any of these three, up pops the Step Entry box from which you can change the values.

There are six choices for the step size, and each can be dotted (which multiplies the note length by 1.5) or a triplet (which multiplies by 2/3). Below this are the options for typing in the Gate Length and Velocity. If you now click on a note on the on-screen keyboard, that note appears on the grid and the position for the next note advances by the step size.



● Click on the KEYB icon to call up the Transport Control panel.



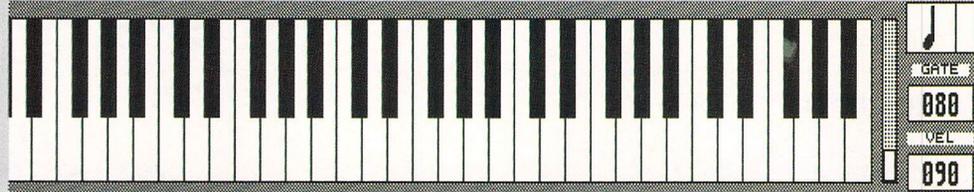
● Click on any of these three icons when you're in the Transport Control panel to bring up the Step Entry box (below). Here you have six choices available, affecting the step size.

CHANGING THE STEP VALUE

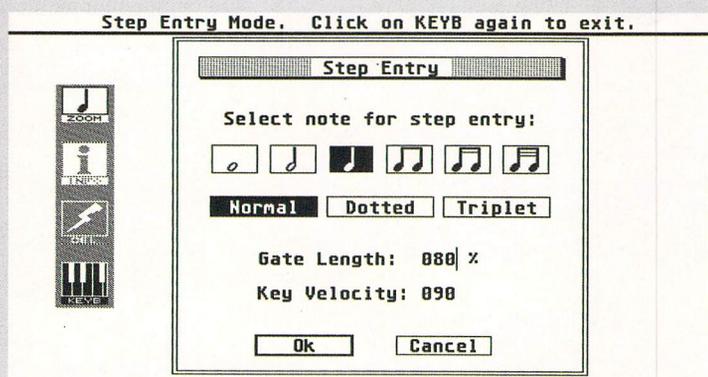
There is one other facility which you can only use if you're using a MIDI keyboard. What happens if you're set to 1/16ths and you want to input an 1/8th note? Press the note down on the MIDI keyboard and tap the [Spacebar]. This moves the current step size up by one value and there's a small vertical meter to the right of the keyboard which reflects this.

You can increase the step size up to four times like this and the meter moves up further each time. If you've increased the step size too far, [Backspace] takes it back one step at a time.

While you're in Step Entry, the "Zoom" icon remains black while the "Info" and "Delete" icons are greyed out.



This is because you can change the magnification while working in Step Entry mode, something you may wish to do if you start changing the step size. To quit from this mode, simply click on the "Step Entry" icon.



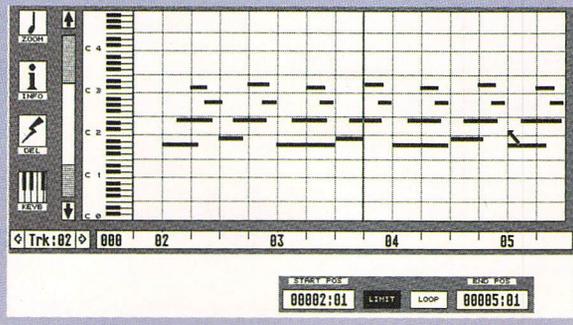
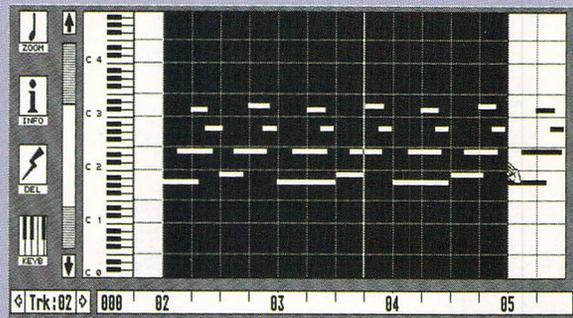
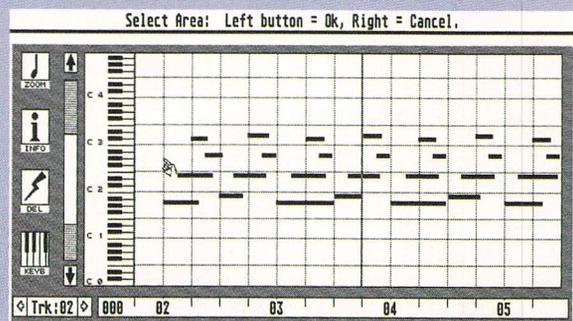
SELECTING AN AREA

Let's say you've recorded a piece of piano and want to add strings at a particular place, but aren't certain where to set the Start and End markers. Enter the Step Editor and make sure that none of the icons are selected. Click once where you want the block to start and you get the "Select Area" message at the top of the screen.

Now move to the right and click at the point where your selection ends.

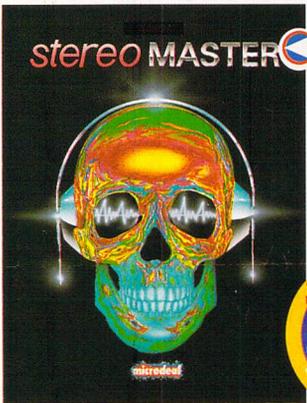
As you move, the grid inverts in colour and the cursor becomes a hand. When you get to the point where you want to stop recording, click again, and you've set a block whose start and end points have now been transferred to the Start and End markers.

Using the "Loop" option you can now cycle within this block, or you could Cut or Copy the block to the clipboard (see section 4), or even quantise it (see section 9).



STF SPECIAL

The latest and greatest ST offers at



STEREO MASTER

MICRODEAL

This sound sampler offers real-time special effects - echo, reverb and much more - plus STE stereo support

DESCRIPTION : Stereo Master

PRICE : £29.95 ORDER N° : ST394

SAVE UP TO £10



PLAYBACK & QUARTET

MICRODEAL

Playback stereo sound cartridge plus the excellent Quartet sample sequencer (RRP £49.95) for a tanner!

DESCRIPTION : Playback & Quartet

PRICE : £29.95 ORDER N° : ST372

DESCRIPTION : Playback ONLY

PRICE : £19.95 ORDER N° : ST379

SAVE UP TO £49.95



JIMMY WHITE'S SNOOKER

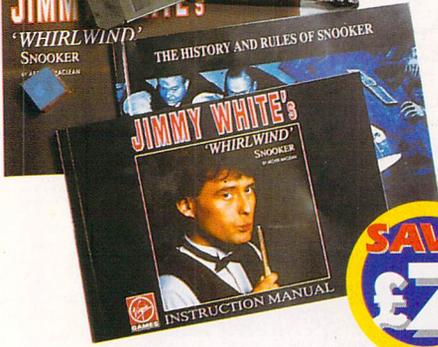
VIRGIN

The best snooker simulator in ST gaming history. Get your hands on this addictive **FORMAT** Gold winner and teach yourself how to play snooker with the professionals.

DESCRIPTION : White's Snooker

PRICE : £22.99 ORDER N° : ST388

SAVE UP TO £7



FUN SCHOOL 4

EUROPRESS SOFTWARE

The new follow-up to the classic educational packages from Europress. All three modules are available separately here.

DESCRIPTION : Teddy Disk

PRICE : £17.99 ORDER N° : ST389

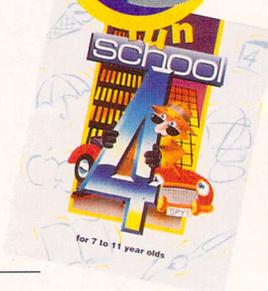
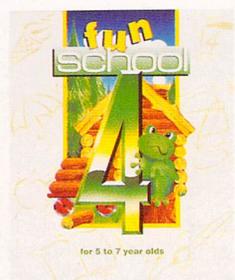
DESCRIPTION : Frog Disk

PRICE : £17.99 ORDER N° : ST390

DESCRIPTION : SPX Disk

PRICE : £17.99 ORDER N° : ST391

SAVE UP TO £5



ST FORMAT EVEN BIGGER VALUE

Get your hands on £25 worth of software and make certain you receive a copy of Britain's biggest-selling ST magazine each and every month for a whole year. Turn to page 130 now for our astonishing offer.



SAVE UP TO £9

RAILROAD TYCOON

MICROPROSE

Now you can make sure the trains run on time with this **FORMAT** Gold winning railway management strategy game. Hugely addictive.

DESCRIPTION : Railroad Tycoon

PRICE : £25.99 ORDER N° : ST387

OFFERS

the best possible prices

HOME ACCOUNTS 2

DIGITA

Now you can keep track of where all the money goes with the latest version of the hugely popular *Home Accounts* package.

DESCRIPTION : *Home Accounts 2*

PRICE : £44.99 **ORDER N° :** ST392

SAVE
£10



NAKSHA MOUSE & TRACEY

NAKSHA

A high-quality 280 dpi resolution mouse. Comes with a free tool (RRP £7.95) which enables you to trace pictures with the aid of your mouse.

DESCRIPTION : *Naksha Mouse*

PRICE : £28.99 **ORDER N° :** ST368



SAVE
£6

THUNDERHAWK AH-73M

CORE DESIGN

The *FORMAT* Gold winning helicopter flight simulator that soars above the others - with dazzling attention to detail, smoother graphics and simpler controls. (1MByte recommended)

DESCRIPTION : *Thunderhawk*

PRICE : £21.99 **ORDER N° :** ST393



SAVE
£9



STF BINDER

ST FORMAT

Keep your collection of the world's top ST magazine together in this high quality binder with *ST FORMAT* printed on the spine - now in a bigger size!

DESCRIPTION : *One Binder*

PRICE : £4.95 **ORDER N° :** ST112

DESCRIPTION : *Two Binders*

PRICE : £9.00 **ORDER N° :** ST1122



NEW
BIGGER SIZE

THE STOS COLLECTION

Mandarin Software

You don't need to be a dedicated programmer to write your own *FORMAT* Gold games. With *STOS*, the game-creator, you can create fast, exciting games quickly and easily.

Using an easy-to-understand BASIC language, *STOS* enables you to build versatile games - anything from shoot-'em-ups to adventures. When you've written it, compile it using *STOS Compiler* to make it run as fast as commercial games. As part of the collection, we're also offering *STOS Maestro* to add sound to your games, and *Sprite 600*, a collection of over 600 animated sprites for use in *STOS* games.



DESCRIPTION : *STOS collection*

PRICE : £49.99

ORDER N° : ST388



HOW TO ORDER

● Just make a note of the name of the package you want to buy and the order number next to it. Then fill in the handy coupon below.

● If you wish to order by credit card or have any queries, ring the *ST FORMAT* Mail Order Hotline on :

0458 74011

ST FORMAT Mail Order

No stamp required if posted in UK, Channel Islands or the Isle of Man

Name _____

Address _____

Postcode _____

Telephone _____

Description	Price	Order N°

TOTAL ORDER _____

● For overseas orders call Trevor Witt for prices on +44 458 74011

Method of payment - please tick appropriate box

Access Visa Cheque P

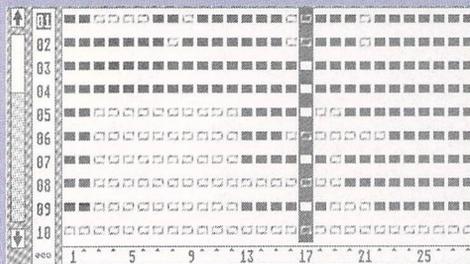
Credit card No _____

Expiry date _____

Please make all cheques payable in pounds sterling to :
Future Publishing Limited.

SEND THIS FORM TO: Trevor Witt, *ST FORMAT*, The Old Barn, FREEPOST, Somerton, Somerset, TA11 7BR.

7. BAR EDITOR



● Use the Bar Editor to edit a block of bars.

Having recorded lots of bars of music on lots of tracks, it's easy to lose track of what instruments are playing where. To help in this, and to enable you to edit a block made up of bars across all of the tracks, there is the Bar Editor. You enter this screen by either using the correct menu option under "Screens" or by pressing the [F10] function key.

The Bar Editor shows you 35 consecutive bars across ten of the sequencer tracks. You can use the scroll bar at the left hand side to decide which ten bars you're looking at. Each of the bars is shown as a small box which either has some MIDI information recorded in it (solid black) or is empty (greyed out). So from this screen you get a complete view of which bars have been played in for each track. The current bar is shown as a vertical black strip which moves from left to right along the screen until it

reaches the middle of the screen when the bars then move towards the left. The bar numbers are shown along the bottom of the editor and the current track number is inverted in the column down the left side of the editor.

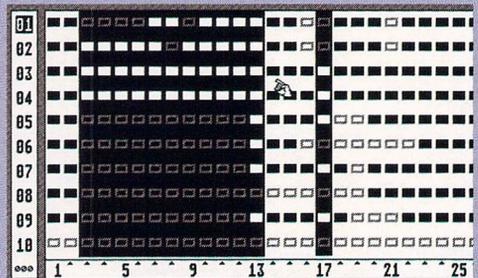
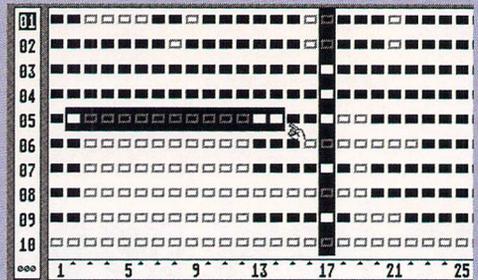
The vertical black strip always shows the current bar as indicated in the Song Position box of the Transport Control. You can use the tape deck controls as usual, but the horizontal bar number display gives you other facilities as well. Clicking on a bar number makes that the current bar. If the bar number is greater than 17, it automatically positions itself in the centre of the window. If the bar number is less than 17, the vertical strip moves itself to the position of the bar. This is the easiest way to change the current bar number; no need to click on a box, type in a number and hit [Return]!

WORKING WITH BLOCKS

One of the main uses for the Bar Editor is for block manipulation which uses the clipboard.

You can select a number of bars in a single track and either move or copy them one at a time, or perform the same job with a number of bars across all tracks. All of the block commands can be found in the "Block" drop-down menu.

To work with a single track, go to the "Block" menu and make sure that the "Select All" option is unticked. Now decide which track you want to copy bars from and click on the first bar to be included.



The top of the screen changes to the "Select Area" message while the cursor becomes a hand. Move to the right and watch the bars invert in colour like this:

When you get to the end of the block that you wish to use, click on the left mouse button again. If you make a mistake, cancel by clicking on the right button. The start and end bars are transferred to the Start and End position boxes, and "Loop" mode is entered automati-

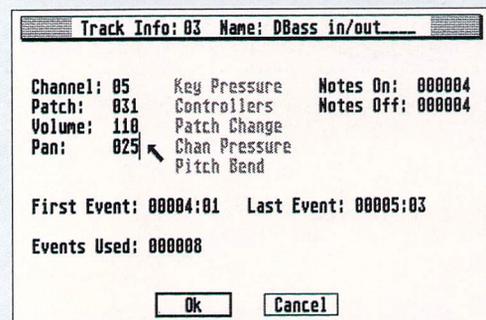
8. SAMPLE REPLAY

Sequencer One has a four note polyphonic sample replay system built-in. This facility is covered in detail in the guide on page 2, including how to load up the palette. In place of the MIDI channel on a track, you also have the letters L, R, LR, RL. L and R are for playing samples on the left and right channels respectively, while LR is for playing on left if possible, otherwise right, and RL is the opposite of this.

9. TRACK OPERATIONS

These are accessed from the Track drop-down menu.

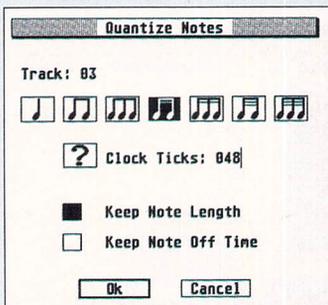
TRACK INFO BOX



The Track Info box gives details of the MIDI info in a track (see section 5 and section 6).

QUANTIZE

This enables you to alter the timing of your notes to make them play where you intended them to, not



● Use the quantize option to give your music that professional feel. Quantizing moves your notes to where you should have played them.

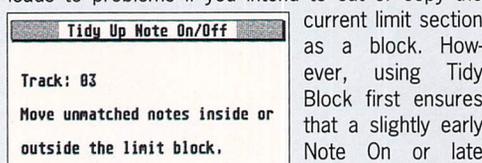
where you actually played them! The Note On time of a note can be shifted to the nearest quarter, eighth, 1/16 note and so on down to a 1/192nd. The most popular values are shown as icons, or else you can type in a number of clock ticks (remember 192 ticks make a quarter note).

You also have the choice of keeping the Note Length (the Note Off is moved by the same amount as the Note On) or keeping the Note Off Time (in which case the length of the note is changed).

If you make a mistake, you can use the "Undo Track" feature to return to your original. So you can happily experiment without doing any damage!

TIDY BLOCK

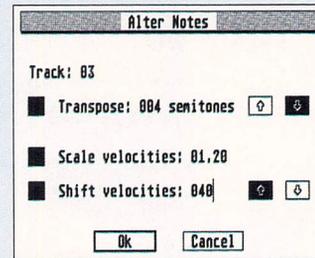
Sometimes, if you press the first note in a section of the song slightly early, or let go of the last note a bit late, part of the note will be outside the limit. This leads to problems if you intend to cut or copy the



current limit section as a block. However, using Tidy Block first ensures that a slightly early Note On or late Note Off is pushed into the current limit before you use any block operations.

● Tidy up your notes with the Tidy Block option.

ALTER NOTES

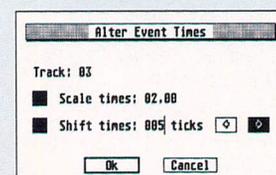


This enables you to alter the pitch (transpose) or velocity of notes. Transpose gives you the option of Up or Down and you can set the number of semi-

tones. Scale Velocity multiplies each velocity by the number you type in. Values less than 1.00 make the track quieter and less dynamic while values bigger than 1.0 make the track louder but less dynamic. Shift Velocity adds or subtracts a constant value to or from each current velocity making the overall sound louder or softer. Experiment with these; the "Undo Track" option can be used if you are unhappy with the result.

You can use Shift and Scale at the same time, but Scale happens first. So if you wanted to make all of the velocities equal to 64, you would set a Scale of zero, and a Shift of 64.

ALTER TIMES



This enables you to alter the time of every event on the whole track. Scale and Shift work in the same way as in Alter Notes (section 9).

Scale Time can be useful for compressing, say, two bars into one by using a figure of 0.5. A good use for Shift Time is if a sound you are using has a slow attack and so is playing late.

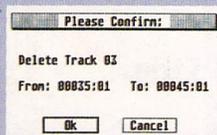
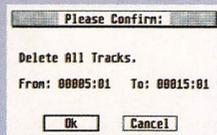
ALTER CONT

This is very similar to Alter Times except that it enables you to change times of any MIDI Control info.

cally. In this way, you can set up the bar markers for a loop without having to type in any numbers.

CUT, COPY & PASTE

To copy some bars to another point in your song, first decide whether you want to copy the MIDI info from one bar or all bars and set the "Select All" option accordingly. Now click on the first bar (the "Select Area" message appears at the top of the screen again), click on the last bar, and go to the "Copy" option in the "Block" menu.



Click on this and you get the Confirm box which you can "OK" or cancel. This leaves the original block intact on-screen. If you want to copy some bars, and delete them from their original place at the same time (which is really moving them), then go through the same process but choose the "Cut" option from the "Block" menu.

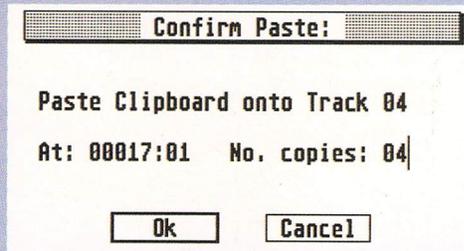
You can always go to the "Block Info" option to see what is currently saved to the clipboard. If there is nothing in there, you're asked to set up a block.

Both "Cut" and "Copy" place the block in the clipboard. If you select "Delete" from the "Block" menu instead, it simply removes all MIDI info from that block. You know that has happened by the way that all of the black boxes change to shaded grey.

Once you have something saved to the clipboard you can decide where you want to place it. If it's MIDI info for

a single track, select the track that you want to place it in, and set the starting point to the current bar by clicking on that bar in the bar number indicator. Now choose the "Paste" option and up comes the Confirm Paste box which tells you the location of the pasted track and the bar, and you can then decide how many times to paste. So if you've a good 1 bar drum riff which you want to use throughout the song, simply set the number of copies to whatever your total number of bars is. You can even use the "Save/Load Block" options to save your favourite riff to disk and load it into another song at a later date!

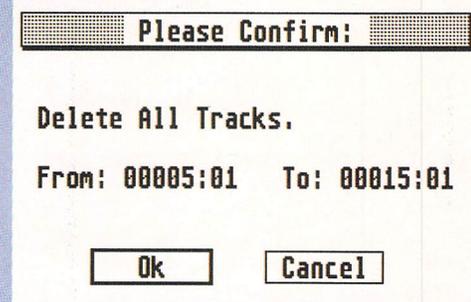
If you have "Select All" ticked, then when you come to use the "Paste" function you don't need to give the destination track. The Confirm Paste box still asks you how many times you want to paste this in, so you use this to copy an entire section. For example, you might have all the instrumentation the way that you want it for the eight bars of the first verse and decide that it's what you want for the second verse as well. Copy the eight bars to the



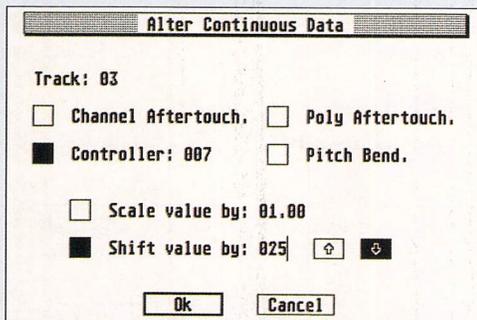
● This is the last stage before you copy MIDI info from one or all bars – confirm only if you're sure.

clipboard, click on the bar number which is going to be the starting point, select "Paste" and it's done! Another situation where pasting all of the tracks is useful is where you have a number of identical outro bars over which you're going to fade out the music. Copy, click on the bar number for the first outro bar and set, perhaps, five copies from this point.

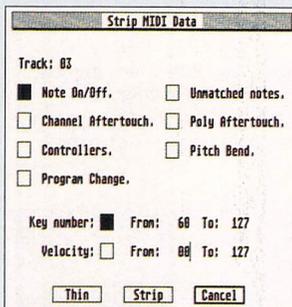
Instead of always having to click on the first and last bars of a block, there is another method. If you have "Limit" selected, "Cut," "Copy" or "Delete" work on the bars between the Start and End markers. This is useful if you want to use the "Paste" facility on a section you have just recorded in "Loop" mode because the Start and End markers are already set.



● You can decide to erase one or all the tracks in a bar if you choose. This box pops up when you select the delete option to give you the chance to choose the number of tracks you erase – remember once they're gone, you can't get them back again.



STRIP / THIN



This enables you to thin out (remove every other MIDI event) or remove certain types of MIDI info. One or two ranges are offered depending on the MIDI info being stripped or thinned. As usual,

you can "Undo" the operation if you are unhappy with the result. For instance, you might find that your keyboard sends out channel aftertouch (which takes up sequencer memory) and that you don't want it. You could Strip Channel Aftertouch across the range 000 to 127. Or you might want to remove the top notes from a keyboard part to play them in again. In this case, you Strip Notes On/Off with the first range set for the notes you want to remove.

UNDO TRACK

Any track operation, block operation on a single track, or recording can be undone if you make a mistake. The track is then restored to the state before the last action you carried out.

10. MIDI OPTIONS

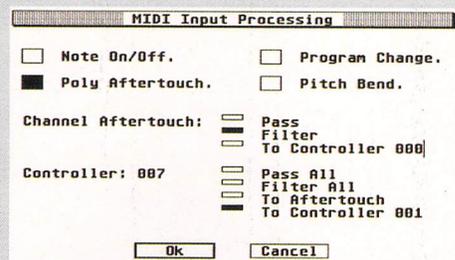
Find the MIDI options under the "MIDI" drop-down menu.

SOFT THRU

Please see section 5.

SET FILTER

To save you the problem of having to strip MIDI info from a track, you can filter out the MIDI info from your recording in the first place. You also have the option to remap one controller to another. This is useful if you want to use a MIDI controller which you don't have. For instance, you might want MIDI Volume (controller #7) to do fade in and outs, but might only have a modulation wheel (controller #1). In this case you can remap controller #7 to #1.



SYNC SEND

If you're using another sequencer or drum machine, you need to send out sync signals to it. MIDI Clock, Start, Stop, Continue and Song Position Pointer are all sent out which should be sufficient for practically any device you have.

INTERNAL SYNC

Sequencer One uses the Tempo to control its timing.

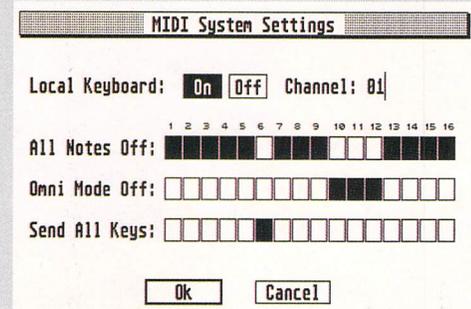
EXTERNAL SYNC

This enables you to control Sequencer One by another sequencer or drum machine. Once in External Sync, click on either "Play" or "Record" and Sequencer One enters a "standby" mode. It now responds to Start, Stop, Continue, MIDI Clock and Song Position Pointer commands. Clicking on "Stop" exits standby mode.

Auto Rewind doesn't work in External Sync, and any sync signals received at the MIDI In are automatically sent from the MIDI Out.

MODE MESSAGES

This decides what messages are sent out to your sound module when you press the "Stop" button to ensure that no notes are left "hanging". Generally, All Notes Off should be selected although many Yamaha instruments need Omni Mode Off while many Casio synths need Send All Keys. Avoid this last one if possible; it slows down your operation of Sequencer One. You can also send out a Local Control On command (Local Keyboard) which separates your keyboard from its internal sounds and effectively gives you a master keyboard and sound module. Check the MIDI Implementation Table in the back of your synth manual to see if this is supported.



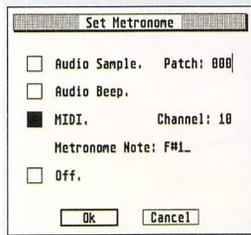
11. SEQUENCER OPTIONS

Find these under the "Option" drop-down menu.

SET TIME SIG

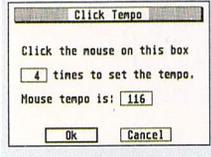
From here, you can set the time signature. The number of beats per bar can be between 2 and 16, while the beat size is either quarter or eighth notes.

SET METRONOME



You can either have the metronome coming through the monitor speaker or as a note sent over MIDI. For MIDI output, choose the MIDI channel and note number. Output through the monitor can be in the form of an audio "beep" if you are not using ST sample replay mode (ie. a mode other than the "To Monitor" output mode on the Options menu). If you are using any sample replay output mode, the metronome can be any sample played on channel L1 (choose the sample patch number and note).

CLICK TEMPO



Instead of just having to set a tempo by click and type, you can tap the mouse button four times in time with the feel of the music and create the tempo that way.

OVERDUB MODE

See section 3

AUTO REWIND

See section 3.

ENABLE UNDO

You can choose whether or not the "Undo" facility is active (This has been explained in greater detail in section 9). If you disable the "Undo" facility, less of the ST's memory is used. This has the effect that some functions work a little faster.

SONG NOTES

A notebook for keeping notes on your song which is saved with the song (see left).

KEYBOARD HELP

Shows all of the keyboard shortcuts. You can also

Sequencer One Keyboard Controls

<p>Help : Display this box.</p> <p>A : Toggle Auto Rewind.</p> <p>K : Toggle Limit Mode.</p> <p>L : Toggle Loop Mode.</p> <p>O : Toggle Overdub Mode.</p> <p>T : Set Tempo.</p> <p>0 - 9 : Track Mutes.</p> <p>↑ , ↓ : Track Up/Down.</p>	<p>Undo : Cancel last edit.</p> <p>F1 : Record.</p> <p>F2 : Rewind.</p> <p>F3 : Fast Forward.</p> <p>F4 : Play.</p> <p>F5 : Stop.</p> <p>Space : Play / Stop.</p> <p>Enter : Record.</p> <p>◀ , ▶ : REW, FF.</p>
---	---

Ok

● This is the Keyboard Help option – it lists all the keyboard shortcuts you can use. Hit the [Help] key to call up this panel at any time.

get this by pressing [Help] on the ST keyboard.

SAVE / LOAD SETUP

A setup consists of the settings for Select All, Quantize, Soft Thru, MIDI Filters, Sync, MIDI Mode, Time Signature, Metronome, Tempo, Overdub, Auto Rewind, Undo Enable/Disable, Step Editor Mode, Zoom Interval and the Step Entry Gate, Velocity and Interval. All of these can be saved to disk as SEQ_ONE.CFG and loaded when you double-click on Sequencer One..

OUTPUT

Enables you to decide whether the output is to MIDI only, the ST monitor speaker or the STE stereo outs.

Important Notes

Song Title: Crowned Penguins_____

File Name: STFORMAT_____

Must remember to adjust the level of the Double Bass in the outro._____

Violin to be replaced by the real thing!_____

Cellos make a hole in the floor!|_____

Ok **Cancel**

● This panel enables you to enter text relating to your song. This information is saved with your song and then each time you load a song this information is loaded along with it. You could use Song notes to store useful information about the source of your song or how it can be modified – whatever you want!

12. SONG FILES



● Use the drop down menus to locate the Song Files.

NEW SONG

Deletes any current song which may be resident in memory at the time and takes you back to the original load-up position.

LOAD / SAVE SONG

Saves and loads your songs from disk as a .ONE file. These files include the sequencer configuration at the time you saved.

IMPORT/EXPORT MIDI

Saves and loads your songs as MIDI files so that you can load your songs into other sequencers which support MIDI files. You can also load your friend's songs from another sequencer into Sequencer One as long as it is a .MID file.

Sequencer One supports two file formats. Format 0 files contain

sequencer information compressed into one track. Format 1 files contain your data on a number of tracks. Format 0 tracks use less memory.

SAMPLE PALETTE

For loading .IFF samples into the internal sample replay facility.

QUIT

Bye bye!