CONTENTS

1 INTRODUCTION

Simmons XSEQ is a powerful sequencer designed to help you take advantage of the full creative potential of SDX. It combines the ability to precisely edit a piece of music, down to the last note if you wish, with a simple to understand approach to music technology.

In addition, XSEQ features a unique automated mix down facility enabling you to record movements of faders on the SDX Patch Mixer Screen and build a complete piece of music on the Stereo Out socket and giving you the facility to use SDX as a stand alone music workstation.

XSEQ bases itself on the concept of patterns. The term **Pattern** is used to describe a sequence of drums or notes forming part of a song. These Patterns are played from a list called a **Song Entry** List which is displayed on the **SONG EDIT SCREEN**. XSEQ allows up to four **Patterns** to be played at once completely independent of each other.

Each pattern consists of 16 parts called **Tracks**, playing either external MIDI instruments or internal SDX instruments. These are displayed on the **PATTERN EDIT SCREEN**. A track can be edited either as a rhythm track or as a keyboard track and can be individually edited down to the level of a MIDI event using one of the two **TRACK EDIT SCREENs** (there is one for keyboard tracks and one for drum tracks).

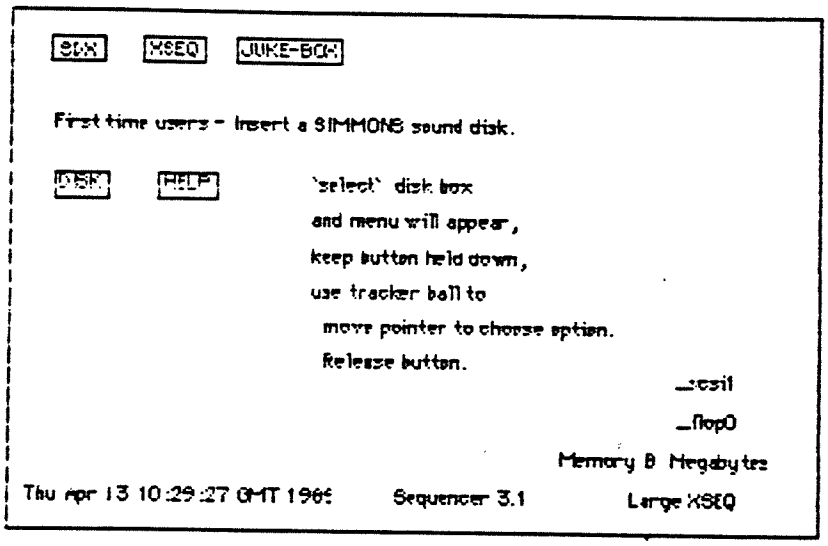
You can piece together your recorded music using the **BLOCK EDIT SCREEN**. This shows a clear display of where music has been recorded on tracks and allows you to perform sophisticated editing operations on **blocks** of music as well as standard copying and repeating operations.

Tracks and patterns can be transposed and tracks can be moved against each other in time to create 'feel' as well as to compensate for MIDI delay and sounds with slow attacks.

A complete set of patterns and tracks is called a **Song**.

1.1 The new Welcome Screen

When you power up your SDX with the new XSEQ software, you will notice that there is a new **Welcome** screen :



This screen allows you to select whether you want to go to the **Patch Select Screen** as normal or whether you want to go straight to **XSEQ**. It is always possible to swap between the two at a later stage so that you may load new sounds to use with the sequencer so you do not need to worry too much about which one to go to first : It is also possible to go to a special JUKE-BOX screen which allows you to play songs back- to- back like a juke-box.

SDX XSEQ JUKE-BOX

Click on SDX to go to the Patch Select Screen.

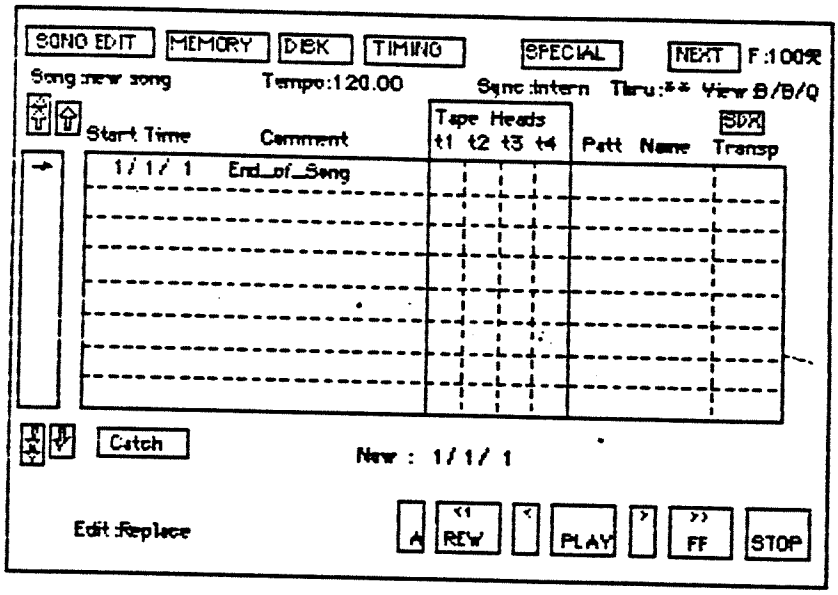
Click on XSEQ to go to the sequencer.

Click on Juke Box to go to the Juke Box.

2 THE SONG EDIT SCREEN

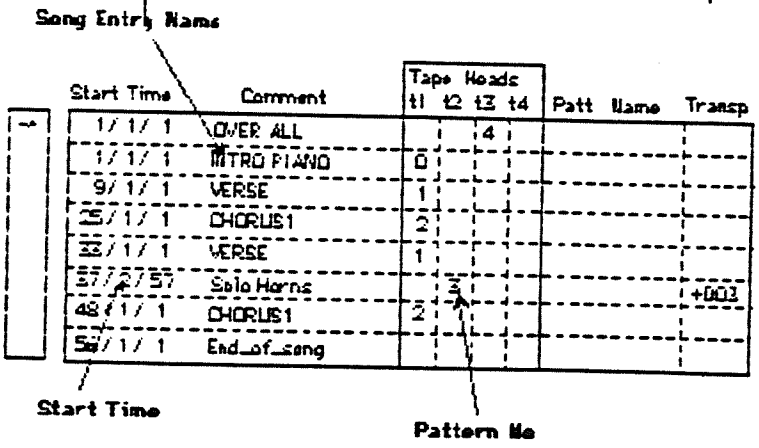
Description

The first screen you will see on entering XSEQ is the song edit screen :



The main purpose of the **SONG EDIT SCREEN** is to arrange and playback patterns that you have recorded in either the **PATTERN EDIT SCREEN** or one of the two **TRACK EDIT SCREENS.**

Displayed down the left hand side of the screen are **Song Entries** which signal the start points of all the **Patterns** in the Song e.g. Intro, Verse1, Chorus, End of Song. The names of these **Song Entries** are listed in the '**Comment**' column. The name of the pattern which they start is listed in the 'Patt Name' column. For example :



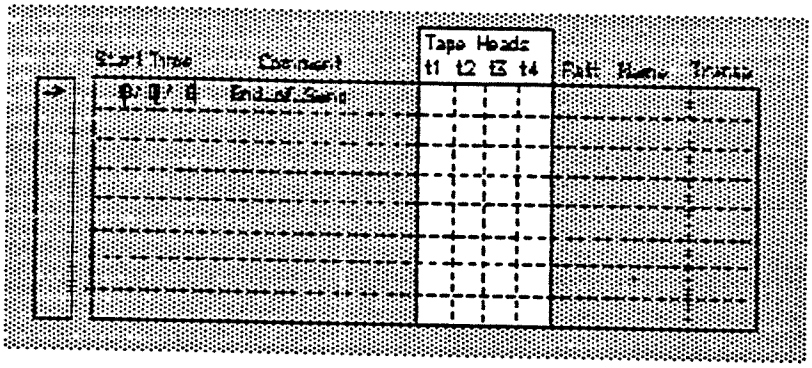
Song Edit Screen

The time at which they are started is listed under '**Start Time**' on the left hand side of the screen. The start time can be shown in three ways:-

B/B/Q - Bars/Beats/Quanta (1/192 beat). e.g. 1/3/1
SMPTE - Hours: Minutes: Seconds. Frames.
e.g. 00:13:34:30
mSecs - Seconds, mSecs. e.g. 000051.996

To change the current method of display see **Functions of the Song Edit Screen/ The view function.**

In the middle of the screen, four columns of boxes are shown :

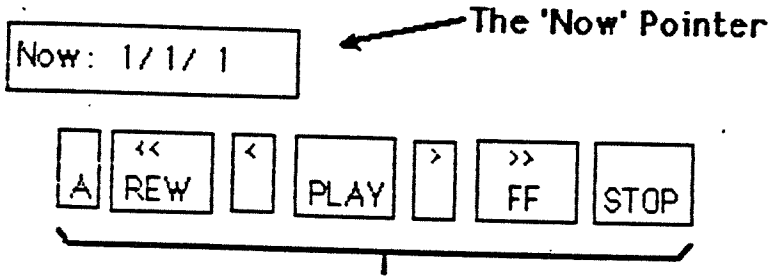


The four columns labelled **Tape Heads t1 - t4** represent four different independent **Pattern** playing systems. In the boxes the pattern number of the Pattern to be played by a particular **Song Entry** is displayed. If a **Pattern** is to be played simultaneously with another **Pattern** then they can be placed on different **Tape Heads**, if they are not to be simultaneous they can be placed under the same **Tape Head** e.g.

	Start Time	Comment	Tape Heads t1	t2	t3	t4	Patt Name	Transp
→	1/1/1	OVER ALL				4	STRINGS	
	1/1/1	INTRO PIANO	0				INTRO1	
	9/1/1	VERSE	1				VERSE	

The **Song Entry** 'Over All' starts a pattern which is played alongside the 'Verse' and 'Chorus' **Patterns.**

At the bottom of the screen the **Transport Controls** are displayed :

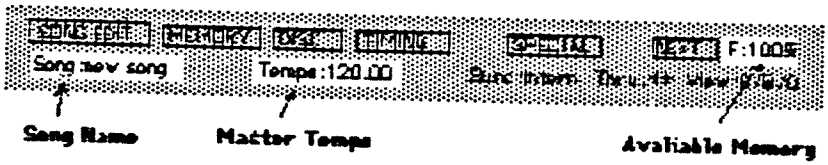


The Transport Controls

These look like tape controls and in fact function in a fairly similar way - see **Functions of the Song Edit Screen/ Transport Controls.** If you have used other screen based sequencers you will notice the absence of a RECORD 'button' - this is because there is no recording function in the **Song Edit Screen** - it is used purely for arrangement and playback purposes.

Displayed just above the transport controls is the '**Now**' pointer. This functions in a similar way to a tape counter and displays your current position within the song.

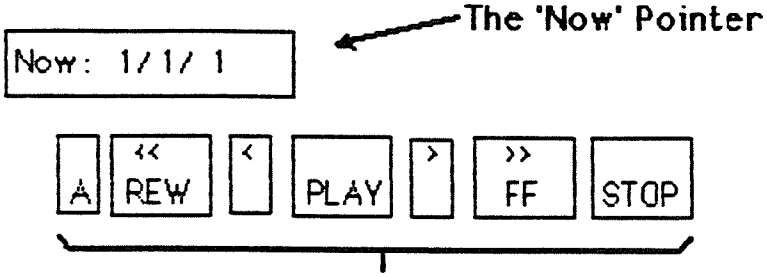
At the top of the screen, the name of the song, and it's master tempo are displayed together with an indicator marked 'F:' showing how much memory is left as a percentage of the whole memory :-



2.1 Funtions of the Song Edit Screen

The Transport Controls.

These are shown at the bottom of the screen and look like tape transport controls :-



The Transport Controls

They work as follows:-

PLAY — Plays the song normally from the position where it was last stopped shown by the 'Now:' indicator.

STOP — Stops playback of song

A — When clicked upon an asterisk will appear to show that Auto reverse is engaged. This causes playback to begin from the last place the song was played from. This is very useful for hearing the same bit of the song several times.

<< REW — Clicking and holding on this causes the song position 'Now:' to be wound back bar by bar. Double clicking in this causes it to be wound instantly to the beginning.

< — Winds back slowly when clicked and held - by bears and quanta.

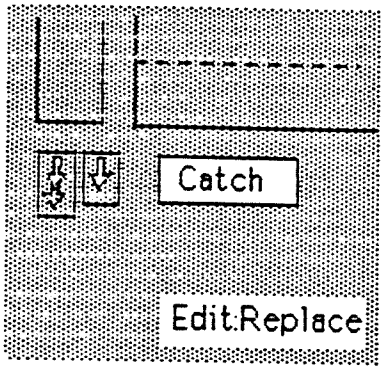
>> FF — Clicking and holding causes the 'Now' indicator to go forwards. Double clicking has no effect. Clicking on this control whilst the song is playing causes the song to be played very quickly (like Cue on a tape player)

> — Causes the song position to be wound forwards slowly by beats and quanta.

There is no record function implemented on this screen. Recording is performed from the PATTERN EDIT SCREEN and the TRACK EDIT SCREEN.

Edit and Catch functions

These functions are found at the bottom left of the screen :



Edit mode:

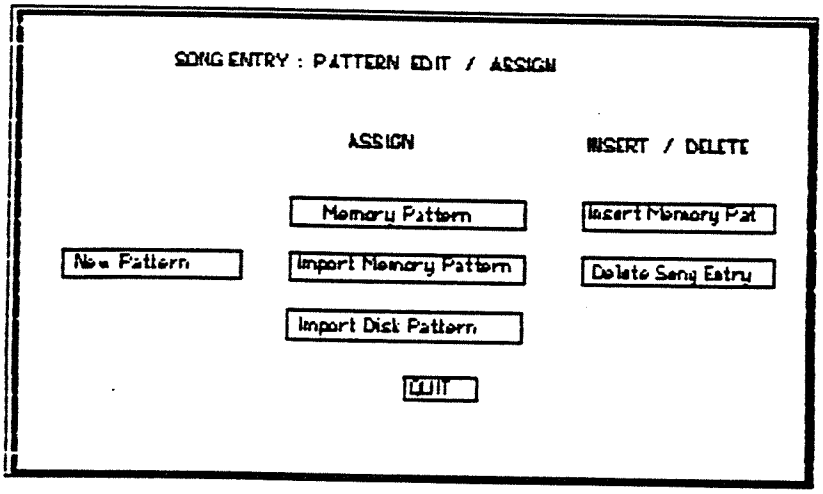
This function determines whether inserted patterns will change the start times of all the subsequent patterns. It is located at the bottom left of the screen and clicking on the current option toggles it between 'Insert' and 'Replace' mode. 'Insert' mode causes the start times to be pushed forwards after a pattern has been inserted. 'Replace' makes sure that start times are not updated.

Catch :

The **Catch** function causes the display to be updated to the current position of the '**Now**' counter and shows the song entries at that point of the song. The screen display 'catches up' with you. This function is engaged by clicking on the **Catch** box.

Inserting and deleting Song Entries, creating and editing Patterns

To insert a song entry, the XSEQ must be in *Insert* **edit mode**. This is changed by the **edit mode** function (see above).
To create a new song entry simply click on any of the pattern number boxes (in the Tape Heads section), next to a current song entry. This will bring up the SONG ENTRY; PATTERN EDIT/ASSIGN window :-



You can then click on either the **Insert Memory Pat** box or the **New Pattern** box. **Insert Memory Pat** is for inserting a pattern already stored in memory using the usual SDX item selector window and **New Pattern** enables you to create a new pattern by taking you to the **PATTERN EDIT SCREEN**. Note that the effect of inserting creating patterns upon **Song Entry** times will be altered depending on which Edit mode you are in.

To delete a song entry, click on the pattern no box next to the song entry you wish to delete and then click on **Delete Song Entry** in the **SONG ENTRY : PATTERN EDIT/ ASSIGN** window as shown above.

Click on the pattern no box of the pattern you wish to edit, then click on the **Pattern Edit** option on the **SONG ENTRY : PATTERN EDIT/ASSIGN** window. This will take you to the **PATTERN EDIT SCREEN**.

Quick copying and deleting of patterns / song entries

Patterns can also be deleted by dragging them off the **Tape Heads**. This is done by clicking and holding with the right hand button on the relevant **pattern** box and moving it off the screen using the tracker ball.

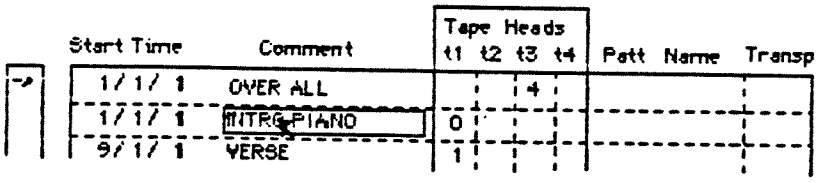
Quick copying of a pattern can be performed by dragging it to another box which you want to copy it to.

Importing Patterns from other songs

If you wish to use patterns from other songs that you have created then this may be done using the Import Disk / Memory pattern functions. Click on the IMPORT MEMORY PATTERN box or the IMPORT DISK PATTERN box and you will be presented with the normal SDX ITEM SELECTOR window

Changing a Song Entry Name

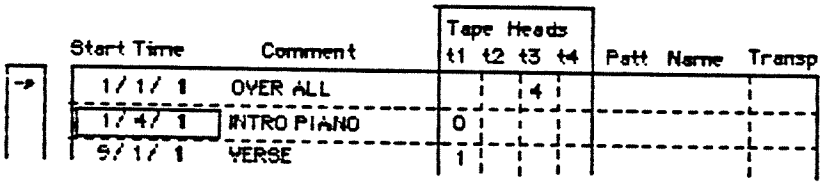
The Song Entry name can be changed by clicking on the existing name :-



This will bring up the standard SDX text input window.

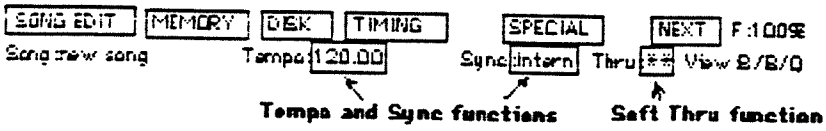
Changing a Song Entry start time

The **start time** can be changed by clicking and holding on the existing start time and altering the value with the tracker ball :-



View, Sync, Tempo and Thru functions

All these functions are located at the top of the screen.



View function :

Clicking the current option toggles it between the following:-

B/B/Q -	Bars/Beats/Quanta (1/192 beat)
SMPTE -	Hours: Minutes: Seconds. Frames.
mSECS -	Seconds. mSecs.

Changing the setting means that SDX will display all times in the song in the format you have chosen.

Tempo :

Clicking and holding on the current value enables you to alter it using the tracker ball. Tempo is displayed in b.p.m. - beats per minute.
Double clicking on the value restores it to the default value of 120 b.p.m.

Sync :

Clicking on the current option toggles it between all the available options. XSEQ is capable of Synchronising to a variety of sources:

SDX internal clock.
SMPTE.
MIDI.

When SDX is set to midi sync the PLAY function is disabled and the sequencer will not play unless prompted by an external sequencer.

SDX Function

In the right hand top corner of the screen is the **SDX** function box. This box is a quick way of getting to the **PATCH SELECT SCREEN** so that you may change or edit the patch that you are using with the sequencer. This box is on all **XSEQ** screens and when you have finished using the **PATCH SELECT SCREEN**, **quitting** from it will take you back to the **XSEQ** screen from which you came.

2.2 Menus on the Song Edit Screen

The available menus are :-

Song Edit
Memory
Disk
Tuning
Special
Next

Song Edit

This menu has three items :-

Choose Info
Patch Mixer
Control Panel

Selecting these takes you to the Help screen, Patch Mixer and Control Panel in the normal SDX manner as on other SDX screens e.g the PATCH SELECT SCREEN

Memory

This menu has seven options:

Save Song
Save Song As
New Song
Load Song
Delete Song
Other
Info

Disk

This menu has six options:

Save Song
Save Song As
Load Song
Delete Song
Other
Info

These work in the same way as on the Patch Select Screen.

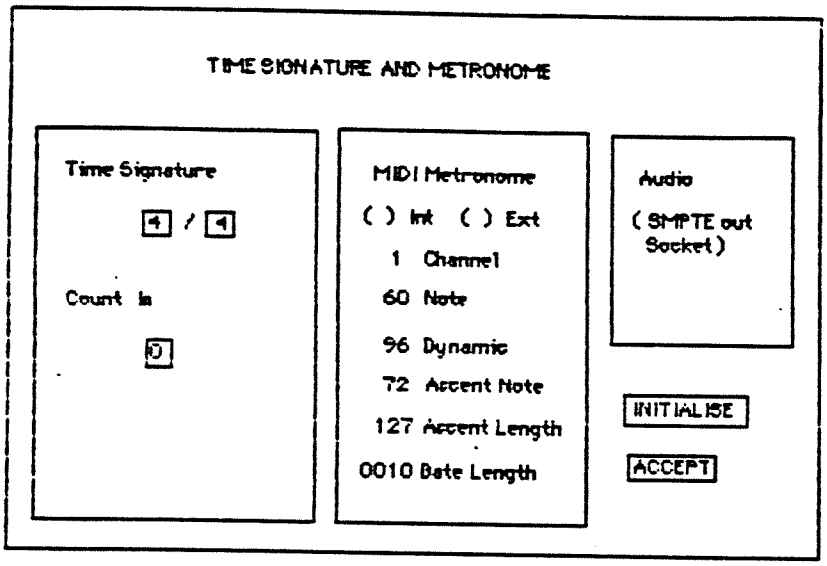
Timing

The options on this menu are:

Quantise
Metronome

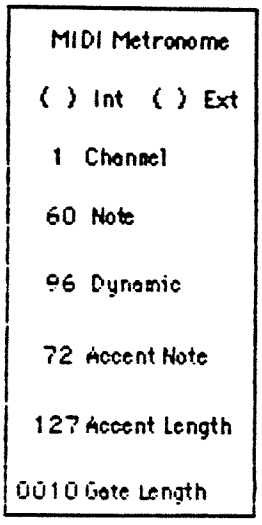
Metronome :

Selecting the Metronome option brings up the Metronome window :-



This window allows you to set up which internal or external midi channel will be played as a metronome. It is also possible to play an audible metronome on the 'SMPTE out' socket which can be engaged from here. In this case simply amplify the 'SMPTE out' to hear a metronome beat. The time signature and count in length (used for recording purposes) can also be changed from here.

If you wish to use a MIDI metronome, this is altered using the MIDI metronome box :-



All the values are altered using the select or button and tracker ball in the usual way :

1 Channel	- this determines the Midi channel used for the metronome
60 Note	} - these determine the note and velocity that
96 Dynamic	} is played on a normal metronome beat.
72 Accent Note	} - these alter the note and velocity of the ac
127 Accent Length	} centred note of the metronome (the first in the bar).
0010 Gate Length	- this determines the length of the metro nome note

INITIALISE - use this box to reset all of the above to their initial values.

Time Signature - this sets the time signature in beats per bar

4 / 4

Count In - this sets the number of bars count in you wish to hear before recording. If you do not wish to hear a metronome count in set this to zero.

0

It is also possible to have an audible metronome played on the SMPTE out socket when it is not in use :-

click in the brackets to switch on / off

Special

NOT IMPLEMENTED YET.

Next

The options on this menu are : **Pattern Edit**
Quit

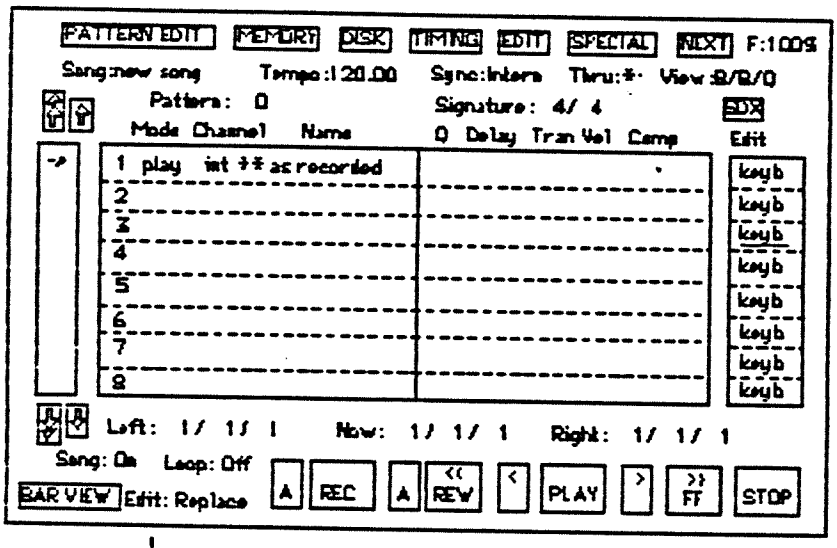
Pattern Edit takes you to the pattern Edit Screen. **Quit** takes you back to the PATCH SELECT SCREEN.

3 THE PATTERN EDIT SCREEN

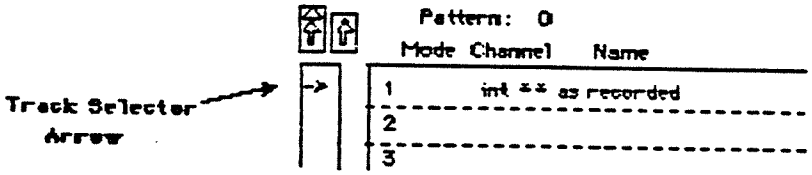
Description

The purpose of this screen is to enable you to record and edit a multitrack **pattern** to be used as part of your **song**. On SDX a **pattern** may have up to 16 **tracks** any of which can be assigned to play either an external Midi sound generator or SDX's internal voices. The **BLOCK EDIT SCREEN** is designed to be used alongside the **PATTERN EDIT SCREEN** for editing.

The screen displays a list of tracks, the Midi Channel(s) which they are using and the channel names :-



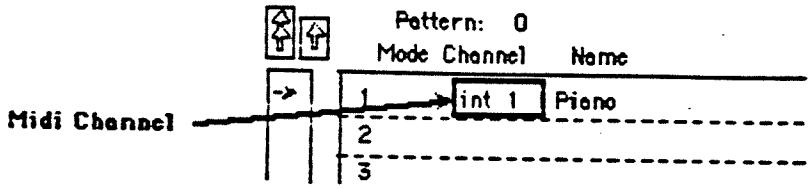
The current track selected for recording or editing is shown by the track selector arrow :-



It is possible to move the screen to see other tracks using the up and down arrow boxes on the left of the screen :-

The pattern number and time signature are shown at the top of the screen.

The Midi channel number for a track is shown next to the Track number across the screen :-



The channel number for a track can either refer to **internal** or **external** channels. Internal channels play instrument slots in SDX, external ones play Midi devices connected to the Midi out socket. These channel numbers do not denote which channels will be recorded on a particular track - they are only playback functions which force all the notes from one track onto one channel. If this is undesirable it can be set to play on all channels (or the original channels used when recording) and this will appear as '**AS RECORDED**'.

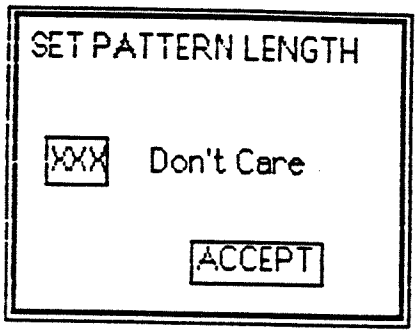
At the bottom of the screen there are two locater memories (like tape locaters on a multitrack tape machine) as well as the 'Now:' indicator. These are used when recording to decide where you are going to record.

Across the screen are values for **Q Delay, Transpose, Velocity** and **Compression**. These are functions for quantising tracks, altering their velocity information and moving tracks in time and patch. All these functions are independent of other tracks and, with the exception of Quantise, they affect playback only, not the recorded data.

The figure listed under 'Q' (for quantise) indicates what that track was last quantised to and before editing it will normally be blank.

3.1 Functions on the Pattern Edit Screen

When you first enter the PATTERN EDIT SCREEN a window will come up in order for you to set the pattern length.

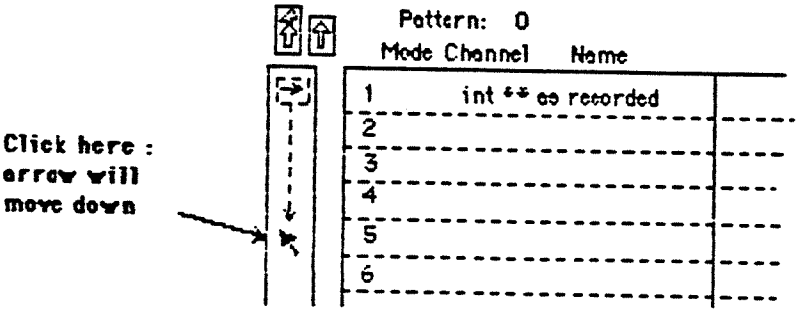


The length is set by clicking and rolling in the normal way and is always measured in bars. Setting it to "Dont care" will allow the length to be set as long as needed.

If you want to change the pattern length later on this function can be accessed from the SPECIAL menu at the top of the screen.

Recording a Track

1.) Select the track you wish to record on by moving the track indicator arrow in its box on the far left of the screen. Clicking in this box next to the track you wish to select moves the arrow :-



2.)
- Connect up your means of input.
- pads into SDX pad inputs.
- keypad on front of SDX
- external mother keyboard into 'Midi In'
- socket on SDX

3.)
- Set up what type of track you are recording : KEY B or DRUM see channel select and Edit Type function.

- n.b. If you intend to play external sound modules e.g. a synthesizer you will need to connect this to your Midi Out and select XSEQ's soft thru facility to play the sounds whilst recording see **soft thru function**. If you are using an external input ie a mother keyboard SDX instruments will also be triggered by the right channel and midi note information. To turn these off you may have to edit the SDX patch you are using by returning to the **PATCH SELECT SCREEN** and selecting the **Patch Configuration** option. For a more detailed overview of how SDX instruments and MIDI channels are related using XSEQ see **INTERNAL AND EXTERNAL CHANNEL FUNCTION.**

4.) Set the Tempo and Sync source you intend to use (see **Tempo function**, **Sync function**).

5.) Set up the metronome if you have not already done so. (see **SONG EDIT/ MENUS/ TIMING**).

6.) Set the left and right locaters to where you wish to start and stop recording (see **SETTING RECORD LOCATERS**).

7.) If you are using an external sound module and an external inputsource (e.g. mother keyboard), set the channel playback on the track you are recording to the channel you wish to send to the module (see **Channel Select** function).

8.) Click on **REC** (see Transport functions).

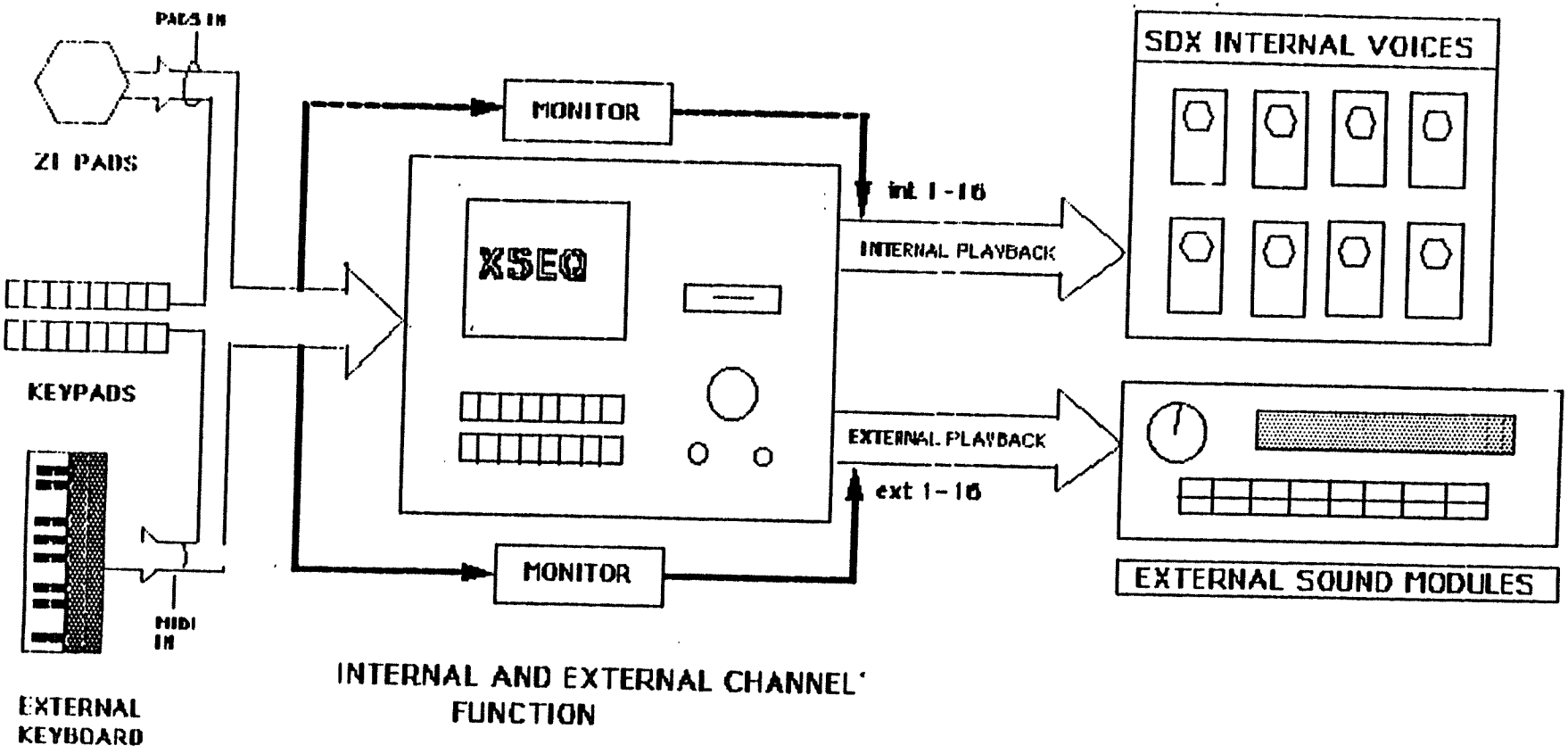
Internal and External Channel Function

When a pattern is played back, SDX can split the Midi Channels it uses into two sets of 16:-
int 1-16 Control Internal SDX instruments by MIDI channel.
ext 1-16 Control External Midi Channels from Midi Out.
However, when a pattern is being recorded, SDX XSEQ does not differentiate between the two, so Midi Channels that overlap may have to be altered

(see fig1 on page 22)

Monitoring while you are recording happens like this:-

- Internal SDX instruments will play as normal from pads and from midi in.
- External sound modules will play from Midi Out if the soft thru function is engaged (see soft thru function) and the Midi channel information is controlled from the Track channel select boxes (see channel select function).



INTERNAL AND EXTERNAL CHANNEL FUNCTION

RECORDING

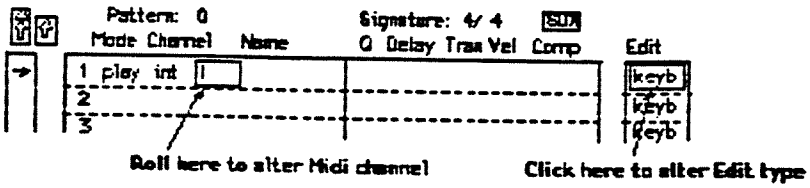
16 Channel Record

PLAYBACK

2 x 16 = 32 Channel Playback

Channel Select and Edit Type Functions

These are located in the centre of the screen :



Channel Select :

The channels available are **int 1-16** and **ext 1-16.** To change a track from internal to external playback or vice versa click on the current selector. To alter the channel, click and hold on the current selection and change the value using the tracker ball. You will notice that if you try and set the channel number to higher than 16, a special setting comes up , the `**\*AS RECORDED\***' setting. This is used because SDX records all Midi channels on a track and then forces the data onto one track for the purposes of playback. If you wish to use the Midi Channels you had when you were recording you can set the channel to `***AS RECORDED***'. An alternative is to **de-mix** the channels from the one track onto sixteen tracks (see **Menus/ Special/ De-mix by channel**).

Edit Type :

This tells XSEQ how you want it to treat the track - whether as a **keyboard** track or a **drum** track.

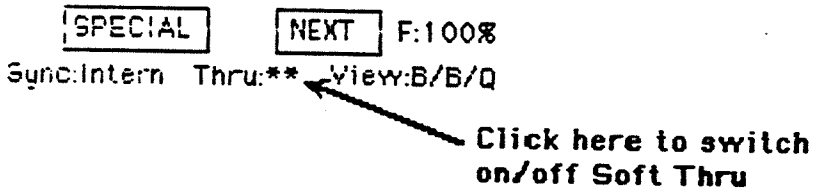
When you wish to edit a track it will be edited differently if it is a drum track than a keyboard track : there are two different track edit screens for keyboard and drum tracks (see **Keyboard Track Edit Screen**, **Drum Track Edit Screen**).

In addition, drum tracks will not be transposed by any **Transpose Function** operations - this is so that drums which are assigned to individual midi notes (as is usual) will not lose their sound!

It is important to remember when recording to set the track to '**drum**' if you are using SDX pads - as XSEQ has special capabilities for dealing with the complicated information from these pads. If you do not do so you may encounter problems.

Soft Thru Function

This function is found in the top right of the screen. Clicking the currently selected option toggles it between on and off. When thru is on it means that information coming in from Midi is sent out on the channel of the track selected or it's original channels (if set to *AS RECORDED*) on the Midi Out socket along with information from tracks and patterns previously recorded on the song. This means that you do not need to worry about changing channels on your master keyboard as you can always direct the information to the correct channel using XSEQ.

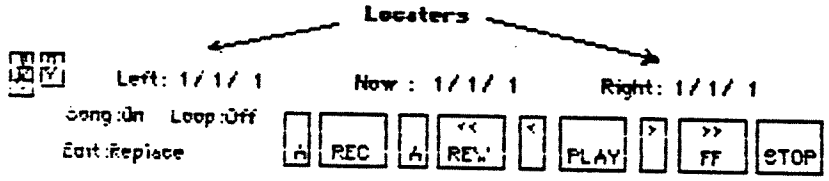


SDX Function

In the right hand top corner of the screen is the SDX function box. This box is a quick way of getting to the PATCH SELECT SCREEN so that you may change or edit the patch that you are using with the sequencer. This box is on all XSEQ screens and when you have finished using the PATCH SELECT SCREEN, quiting from it will take you back to the XSEQ screen which you came from.

Setting Record Locaters

There are two locaters on the PATTERN EDIT SCREEN :

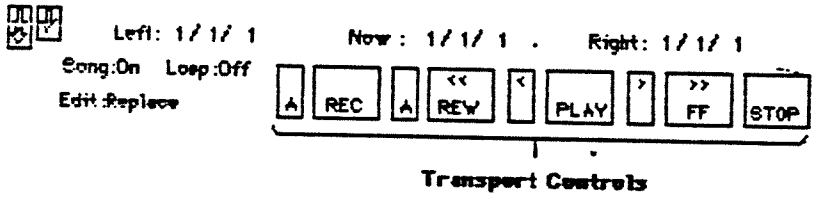


These locators are used to mark the beginning and end or where you want SDX to record on a track. It is important to remember that these values are relative to the beginning of the song not the beginning of the pattern. (unless you are in Pattern MODE- not implemented yet).

The left locator marks where you wish to start recording, the right where you wish to stop recording. You can change the times shown by the locators by rolling using the tracker ball. These locaters also perform a variety of other functions in other parts of XSEQ and in fact behave much like general purpose markers. If you are not sure where to set the locaters within a track, remember that you can see an overview of both that track and the rest of the pattern using the **BLOCK EDIT SCREEN**. This is selected by clicking on the **BAR VIEW** box. See **BLOCK EDIT SCREEN**.

Transport Functions

Most of these are the same as on the **SONG EDIT SCREEN** with the addition of the **RECORD** box and another `A' box next to it :-



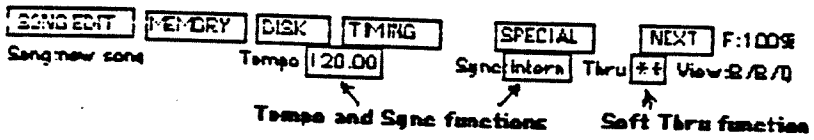
Transport Controls

The **RECord** box is used to start XSEQ recording on the currently selected **track**. The second auto rewind `A' box is normally set to `*', showing that it is on. In this case, clicking on the **REC** box causes XSEQ to start recording from the position of the **left locater**. However, if the second **A** box is set to `off' (no asterisk), XSEQ starts recording from where you last STOPPED (the position of the **Now pointer**) UNLESS this position is not between the left and right **locaters** in which case it will not record. This may seem complicated but in practice it is very simple:-

Most of the time XSEQ will record from the beginning of the pattern to the end of the pattern. If you want to start or stop recording at different places, move the left and right locaters of these patterns. If you want to continue recording where you left off simply click on `**A**' (the one next to REC) to take **auto rewind** off and then click on `**REC**' to begin recording.

Tempo and Sync functions

The **Tempo** and **Sync** functions are found at the top of the screen :



Tempo :

Clicking and holding on the current value enables you to alter it using the tracker ball. Double clicking on the value restores it to the default value of 120 b.p.m.

Sync :

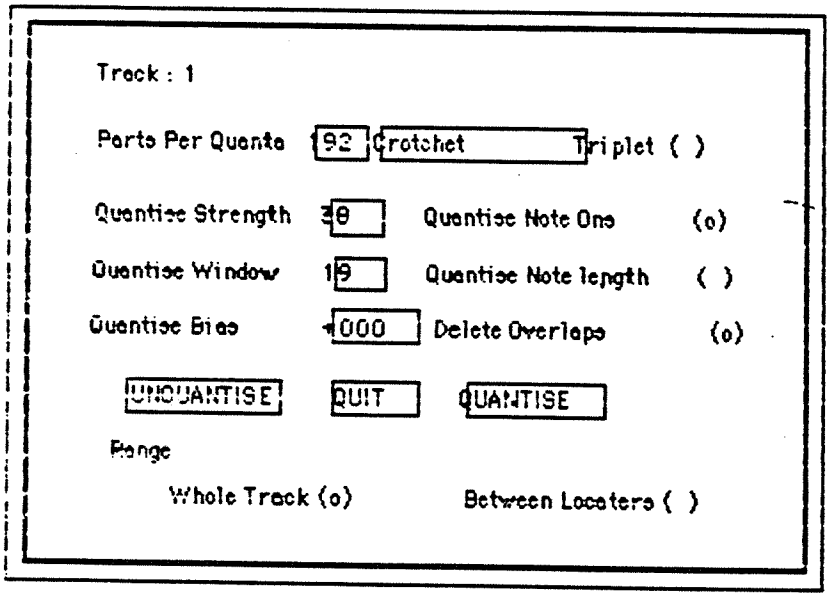
XSEQ is capable of Synchronising to a variety of sources:
SDX internal clock.
SMPTE.
MIDI.

To alter the **Sync** option, position on the current option and you can toggle between the three options by clicking.

When SDX is set to MIDI sync, the PLAY function is disabled and the sequencer will not play unless prompted by an external sequencer. In order to record a sequence from another sequencer into SDX it is necessary to press RECord on SDX and the play on your external sequencer.

Quantise Function

On the right hand side of the screen are the Track **quantise, delay, transpose velocity** and **compression** boxes. In these boxes are numbers representing what that track is currently set to. Most of these are rated using the tracker ball and affect playback only but **quantise** is slightly different in that it is not a playback function but it is always reversible. The number in the 'Q' column represents what that track was last quantised to. If no quantising has been done at all on a particular track then the 'Q' box will be blank. Clicking on the number in the 'Q' box (or the empty box) will take you to the **Quantise Window** :-



The **Quantisation Window** allows you to **quantise** music recorded on the currently selected tracks. Quantisation is a means of rearranging the notes you have recorded so that they fall in time with the current tempo. This is not only useful for correcting timing errors you have made when recording but also for creating certain rhythmic effects. **Quantising** a track alters the recorded data but it is always reversible as XSEQ not only remembers what the track is like after quantisation but also what it was like before. Using the XSEQ **Quantisation Window** it is possible to **quantise** with a fair degree of subtlety and control. The first control that you have over quantise is to decide what note value you wish XSEQ to correct the recorded notes to and this is done using the **Parts Per Quanta** boxes.

There are two boxes : one represents the quantise in SDX clock ticks per quanta where real time is 1 and a crotchet is 192 and the other names these values in more musical terms ie. quaver , crotchet, demisemiquaver (represented as **D S Quaver**). Either of these boxes can be clicked and rolled in the normal way :-

Clicking in the 'Triplet' brackets selects quantisation to triplets of the current note value (2/3 of the length the note would be normally)

The second control over quantisation is the the **Quantise Strength**. This means exactly what it says and quite literally affects to what extent the music will be quantised. It is expressed as a percentage where 99 % is complete quantise 0 % is no quantisation at all. **Quantisation Strength** is set by clicking and rolling in the box.

The third control over quantisation is **Quantise Window**. This is a function that *disallows* small deviations but *allows* big ones - so you can use it to preserve intentionally 'out' notes while correcting the small deviations. 'Opening' the **quantise window** widens the amount around the quantise points which will be quantised. Its value varies from 0 - 99 % where 99 % allows all notes .and does not quantise and 0 % quantises everything. For instance, when quantising to crotchets, a value of 50 % would mean only notes 'out' by more than a semi-quaver would be preserved. **Quantise Window** is set by clicking and rolling in the adjacent box.

The last control is **Quantise bias**. This a difficult function to understand, and its results are a little unpredictable, but it has many applications and can be very creative ! Basically, it moves the points which XSEQ is quantising towards ie. it can be made to quantise towards a point either behind or in front of the beat. The effect of this is to lean the beat backwards or forwards and thus create a 'groove'. Depending on which way you *bias* you will create either an 'up front groove' or a 'laid back groove' in practice, because altering the *bias* will alter which way each note will be corrected (either backwards or forwards in time) you will probably need to try a few **Quantise bias** values before you will find a suitable one. **Quantise bias** is altered by clicking and rolling in the adjacent box.

Down the right side of the window are three further options. All of them are engaged/ disengaged by clicking in the adjacent set of brackets :

Quantise Note Ons (normally **on**) means that Note ons will be quantised

Quantise Note length (normally **off**) means that note length will be quantised. This is normally off because you don't want the length of the notes you are quantising to be altered. If it is 'on' then every note off will quantised in the same way as note ons.

Delete Overlaps (normally **on**) means that if the same note has been played twice in quick succession and after quantise end up on the same beat, one of them will be deleted.

At the bottom of the **Quantise Window** are three boxes :

UNQUANTISE QUIT QUANTISE

Range

Whole Track (o) Between Locaters ( )

QUANTISE performs a quantise
UNQUANTISE reverses a quantise
QUIT leaves the **Quantise Window**

Below these is the range selector :
Selecting **Whole Track** quantises the whole track.
Selecting **Between Locaters** quantises only the notes between locaters

Delay, Transpose, Velocity and Compress functions

These functions are playback functions only - any changes you make will not be permanent. They are situated next to the track channel information columns. To edit them simply click on the number you wish to edit, hold the selector button down and move the tracker ball to alter the number

When set to zero all boxes appear blank. The functions work like this:-

Delay - alters the position of a track in time by up to two bars. The amount of movement is shown as quantas - (not an Australian airline but a measure of time!) Positive numbers move the track forwards in time, negative numbers move the track backwards in time. Range: +384 -> - 384.

Transpose -

This moves the patch of notes in a track up and down in semitones. (**drum** TRACKS WILL NOT BE AFFECTED). Range: +/- 127 semitones

Velocity -

This pushes all the key velocity information is a track up or down by a certain amount. Positive numbers push it up, negative down. (harder & softer respectively).

Compression-

This brings all the key velocity information closer together, having the affect of compressing it. Range: 1 - 255.

A typical use of these functions would be:

You have a track of brass stabs. They have been played a bit unevenly, too quietly overall and need to be moved a bit off the beat (forward in time) to create a better feel for the song. To compensate for the uneven playing you simply compress the track using the Compress function, to make it louder push all the velocity values higher using the Velocity function, and to move the track forwards in time use a positive Delay value.

Copying and Deleting Tracks

Tracks are copied by picking them up and dragging them to the track you wish to copy them to. To do this, you must move the pointer arrow over to the mode box of the track you wish to copy, click and hold the right hand selector button and move the tracker. You will see a cross appear which you must 'aim' at the track you wish to copy to. When this is lined up correctly, releasing the selector button causes the track to be copied.

Deleting a track is very similar except you must 'aim' at a point outside the track list (e.g the **Transport Controls**). When you release the selector button a window will come up warning you of the erasure of one of your tracks which you must either **ACCEPT** or **QUIT** from.

Track Edit Function

Clicking on the track number takes you to the **TRACK EDIT SCREEN** to edit that track.

Song On/Off

This function allows you to decide whether you want to hear the current pattern as an entity on its own or as part of the song. If it is set **On** then all the times that you see on the screen will be shown relative to the beginning of the song. If it set **Off** then all the times will be shown relative to the beginning of the pattern.

Block Edit Function

Clicking on the Block Edit box in the bottom left corner of the screen is used for repeating, moving and copying 'blocks' of music.

3.2 Menus on the Pattern Edit Screen

Menus are 'pulled down by clicking on the relevant menu box and holding the button down. Items on the menu can then be selected by rolling the tracker ball to select and then releasing the selector button

Pattern Edit

Same as **SONG EDIT SCREEN/ MENUS/ SONG EDIT**

Memory

Options: New Pattern, Load Pattern, Input Pattern, Delete Pattern, Other, Info Similar to SONG EDIT SCREEN only Patterns replace songs.

Disk

See memory

Timing

The items on this menu are :

Quantise
Metroname / Time Signature

With the exception of **Quantise**, these are all the same as the Timing menu on the **SONG EDIT SCREEN**. See **SONG EDIT/MENUS/TIMING**

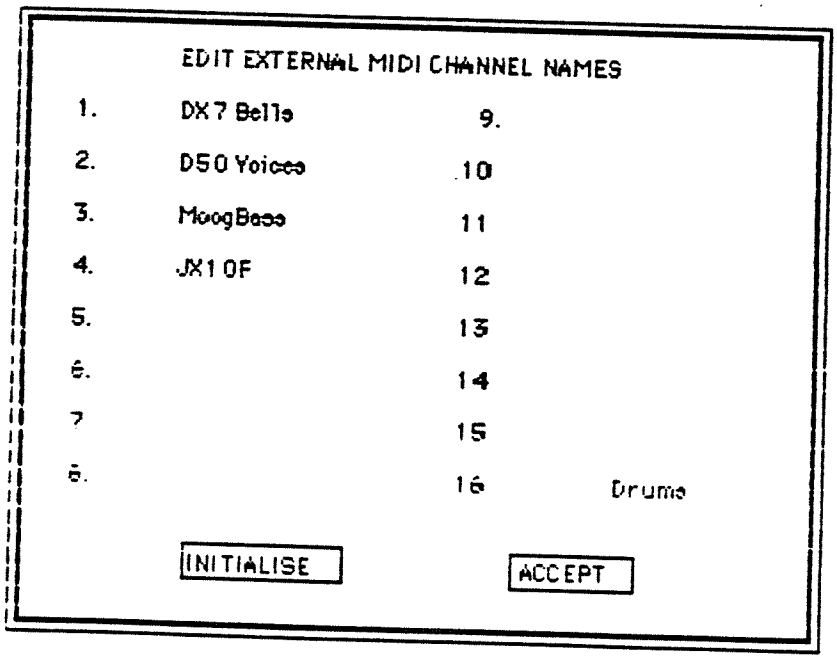
Quantise takes you to the **Quantise Window** in the same way as clicking on a 'Q' box. See **PATTERN EDIT/FUNCTIONS/QUANTISE** for details of this window.

Edit

Options:

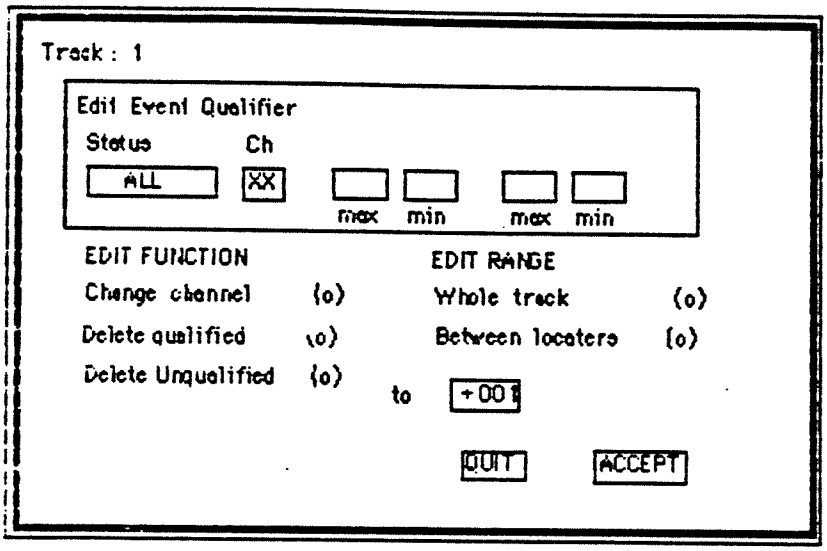
Ext. Midi Channel names
Int. Midi Channel Names
Logical Edit
Track De-Mix

Int Midi Channel Names and **Ext Midi Channel Names** allow an overview of the internal and external channel names currently in use. They both call up the **Channel Names Window** :-



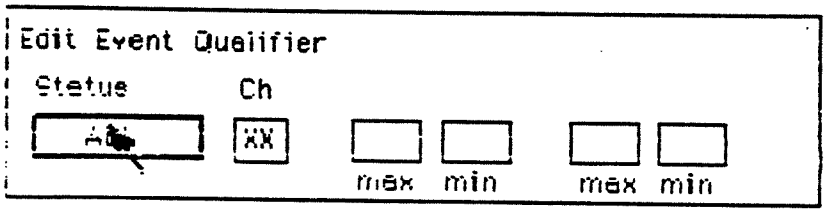
This is a window showing the sixteen current Midi channel names in use either for Internal or External Midi channels. Clicking on a name takes you to the SDX standard text input window for renaming. INITIALISE sets them to default names.

Selecting the **Logical Edit** option calls up the **Logical Edit Window** :



This window allows you to perform a variety of editing operations on the currently selected **track**. It may be easier to use this in the **BLOCK EDIT SCREEN**. It consists of three parts : the **Edit Event Qualifier** chooses what information you are going to edit, the **Edit Function** decides what you are going to do to it and the **Edit Range** decides whether you will edit the whole track or just the information between locaters.

The **Edit Event Qualifier** allows you to select very precisely the type of Midi data you wish to work on. The first parameter to select is **Status** as this affects what options will be available throughout the window. **Status** is altered by clicking & holding in the box on the current option and rolling the tracker ball :

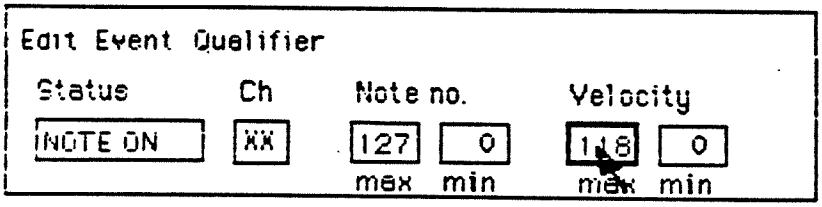


The available options are:

ALL (affects all Midi Data
NOTE ON
POLY AFT (Polyphonic After- touch data)
CONTROLLER
PROG CHNG (Patch changing data)
CHANNEL AFT (Channel After-touch Data)
PITCH WHL (Pitch Wheel)

Depending on which **Status** is selected, different options will come up in the other boxes in the window. The box next to **Status** always selects the Midi channel and the number is rolled using the tracker ball. If it is set to '**', then all Midi channels have been selected.

The four small boxes towards the right in the **Edit Event Qualifier** allow you to select a range of values that will be operated upon e.g a range of notes. The type of value range being decided is shown above the relevant box e.g. :



The values are altered by rolling using the tracker ball.

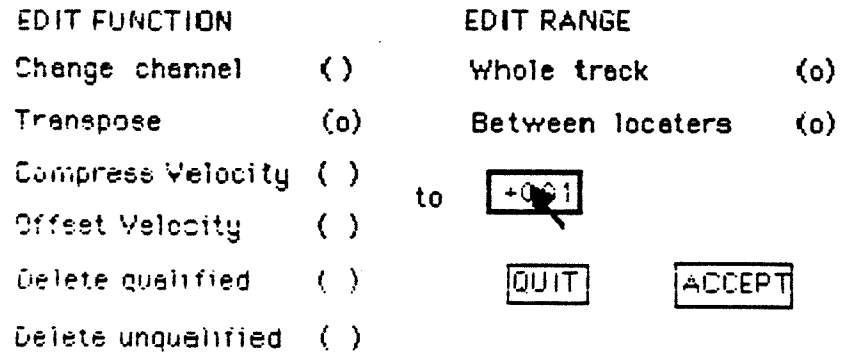
The Midi information selected using the **Edit Event Qualifier** is referred to by the window as **Qualified** information and it is this information that will be edited by the various options listed under **EDIT FUNCTION**. The options available vary depending on which **Status** has been selected in the **Edit Event Qualifier**. They will come up in the **EDIT FUNCTION** area as soon as the **Status** is selected. The possible operations for each **Status** are shown below :

Edit Event Qualifier Status	EDIT FUNCTION Options
ALL	Change Channel Delete qualified Delete Unqualified
NOTE ON	Change Channel Transpose Compress Velocity Offset Velocity Delete qualified Delete unqualified
POLY AFT	Change Channel Transpose Compress Pressure Offset Pressure Delete qualified Delete unqualified

Edit Event Qualifier Status	EDIT FUNCTION Options
CONTROLLER	Change Channel Change Controller Delete qualified Delete unqualified To chan pressure
PROG CHNG	Change channel Change patch Delete qualified Delete unqualified
CHAN AFT	Change channel Delete qualified Delete unqualified To controller
PITCH WHL	Change channel Delete qualified Delete unqualified

To select any option simply click in the brackets next to it and an 'o' will appear to indicate that it has been selected.

With certain functions, you will need to enter a number in the box above QUIT & ACCEPT boxes to indicate by how much you want that function to alter information by e.g Transpose :



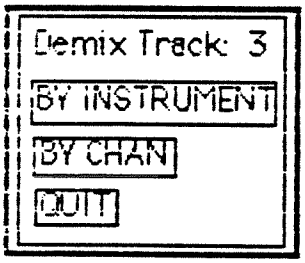
A number is entered by clicking and rolling in the usual way.

NOTE : It is important to remember that the recorded data selected by the **Edit Event Qualifier** is referred to as the **qualified** data and any data not selected is referred to as the **unqualified** data. So **delete qualified** will remove all the data you have selected and **delete unqualified** will remove all the data not selected. Remember also that only the information on the currently selected **track** will be deleted.

The last part of the window is the **EDIT RANGE** area which simply selects whether the whole track will be affected by the edit or just the area between locators and this is selected by clicking in the appropriate brackets

Track De-Mix

When a track is recorded many different channels of MIDI may be recorded. However, it may be desirable to place each channel on a different track. This option places all the information on different tracks, channels 1-16 on tracks 1-16. Selecting this option brings up the Track De-Mix.

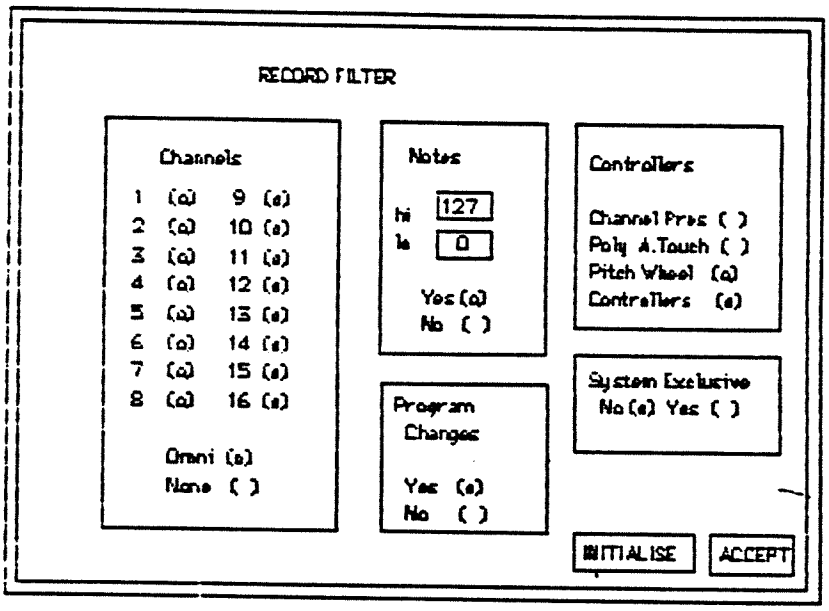


Clicking on the **"BY MIDI CHAN"** box causes the selected track to be split into separate tracks for channels as described above. Clicking on the **"BY INSTRUMENT"** box causes the track to be split up according to the *instrument slots* it triggers within SDX ie track one for slot one, track two for slot two etc. This means you end up with each track on XSEQ corresponding to one SDX instrument slot and this is very useful if you are mainly using XSEQ to play SDX internal voices: having de-mixed in this way you can then 'slide' different drum instruments backwards and forwards in time using the **delay** function for instance. This option will only be useful if the track you are de-mixing is assigned to an internal channel.

Special Menu

Options on this menu: **Record Filter**
Pattern Length

Record Filter takes you to the **Record Filter Window** :-



This window allows you to filter out certain information from the MIDI data that you want XSEQ to record. This can be used to cut out any unnecessary information e.g. polyphonic aftertouch data which would take up memory and increase the risk of Midi delay. Typically you would also use it if you were dumping a song from an external sequencer and only wanted certain Midi channels to be recorded. The parameters you can filter are :

- Channels: Clicking in the brackets by 'Omni' sets all channels to be recorded. Clicking in the brackets by individual channels cause that channel to be switched on/off for recording purposes.
- Notes: Here you can specify a range of notes to be recorded. The notes are expressed in midi note values.

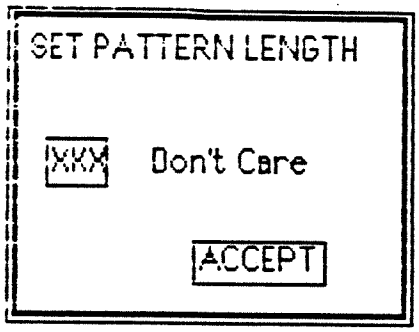
Program Changes: Toggled on/off using the Yes/No brackets.

Controllers: Here you can specify how much controller information you want to be recorded. Channel pressure, polyphonic after-touch (frequently annoying), pitch bend and controllers can all be toggled on/off.

Sys Ex: This switches off recording system exclusive dumps and information.

Pattern Length

This window allows you to set the length of the pattern as used by the SONG EDIT SCREEN to determine how long a Tape Head is being used for so that a new pattern can be played.



Next menu

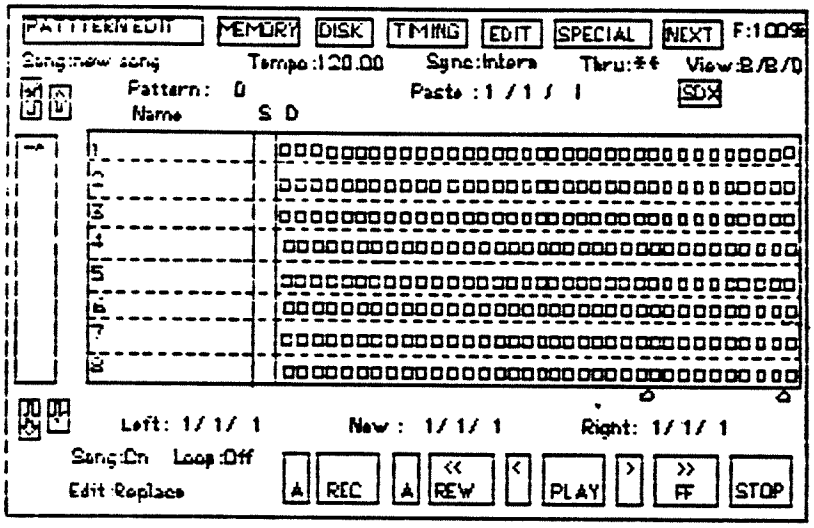
Options: **Track Edit**
Quit

Selecting **Track Edit** takes you to the **TRACK EDIT SCREEN**. Selecting **Quit**, quits you from the **PATTERN EDIT SCREEN** back to the **SONG EDIT SCREEN**.

4. THE BLOCK EDIT SCREEN

Description

The **BLOCK EDIT SCREEN** is only slightly dissimilar from the **PATTERN EDIT SCREEN** :-



The purpose of this screen is to display the recorded music in a pattern as clearly as possible so that it can be easily edited. To this end it displays the recorded information in all sixteen tracks as boxes representing bars of music which are lit if there is information recorded in them. This makes it easy to find a particular chunk of music and copy it to somewhere else for instance. It also aids you in the positioning of locators for quantising/ logical edits.

The design of the **BLOCK EDIT SCREEN** is such that it really a screen to be used in parallel with the **PATTERN EDIT SCREEN**. The two screens share the same menus and many of the same functions and it is very quick to flip between the two :

On the **PATTERN EDIT SCREEN** simply click on the **BAR** BLOCK EDIT ~~VIEW~~ box to get to the **BLOCK EDIT SCREEN** -

On the **BLOCK EDIT SCREEN** simply click on the **TRACK** box to go back to the **PATTERN EDIT SCREEN** -

4.1 Functions of the Block Edit Screen

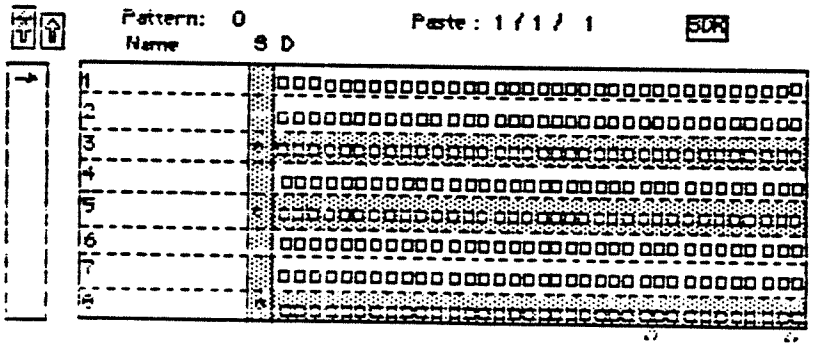
The functions of the **BLOCK EDIT SCREEN** are identical to those of the **PATTERN EDIT SCREEN** except for the following :-

Displaying what you want on the screen

There are 8 rows of 36 boxes displayed on the screen. Each row represents a track (the track no. is displayed on the left). Each box in a row represents a bar of music. The first box in each row represents the bar that you are in at the moment - the bar no. of the **Now locator** in fact The screen display will be altered if you either move the **Now locator** by using the **Transport Controls** or if you change it manually using the tracker ball and by manipulation of this you should be able to find the display you want

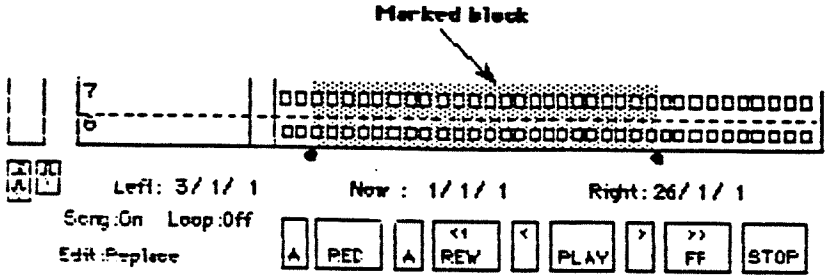
Setting Source and Paste markers

With this screen it is possible to delete, move and copy **blocks** of music very easily. The marking of the **blocks** you wish to use is done usingthe **Source markers.** The first thing you need to do is mark which tracks you are going to use by clicking in the relevant bokes in the source "S" column e.g :-



The tracks marked here are 3,5 & 6.

It is now necessary to mark the part of the tracks you want to use. This is done using the left and right source locaters which appear as arrows at the bottom of the screen below the boxes :-



The locaters are moved by rolling the left and right locater times. Altering one of the locater arrows moves the relevant pointer on the screen. The area between the locaters in the marked tracks is called the **block.**

Marking the destination is done using the **Paste** locater which appears as an arrow at the top of the screen and is moved by rolling the **Paste** locater time.

The actual edits available are :

Copy (to destination)
Repeat to end of pattern / *x* times
Delete block

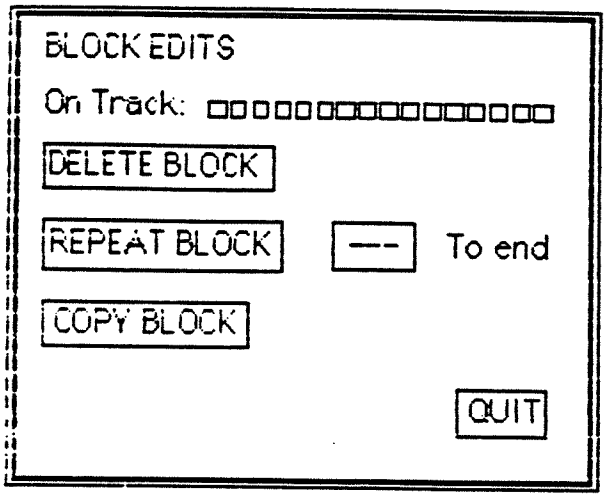
These functions are accessed from the **Block Edit** item on the **EDIT** menu.

Other functions are the same as the PATTERN EDIT SCREEN

4.2 Menus on the Block Edit Screen

The menus on the **BLOCK EDIT SCREEN** are the same as those on the **PATTERN EDIT SCREEN,** with the addition of two new items on the EDIT menu : Block Edit & Track Merge.

Block Edit: Selecting the Block Edit option takes you to the Block Edit window:



At the top of the window is a display showing which tracks have been selected:

BLOCK EDITS

On Track:: □□□□□□□□□□□□□□□□

Here blocks marked using the **BLOCK EDIT SCREEN** can be deleted, copied or repeated.

Selecting **COPY** makes a copy of the currently selected Block at the point marked by the **destination** pointer.

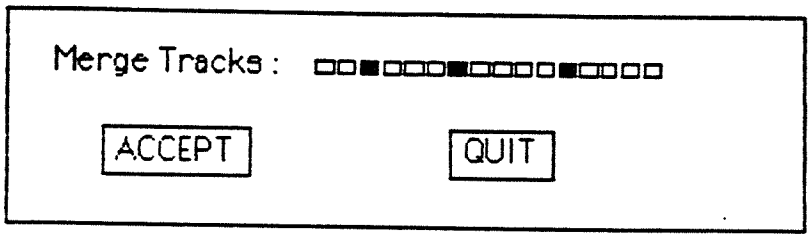
Selecting **DELETE** deletes the currently selected **block**. The **track** will 'heal up' after a **delete** like this: music after the deleted **block** will be moved backwards in time. If you want to delete the music in a block and leave it as empty then you can do this using the **Logical Edit Window**.

Selecting **REPEAT** repeats the currently selected **block** as many times as is selected using the box next to **REPEAT**.

The figures are rolled using the tracker ball in the normal way. If the box is set to '---' the **block** is repeated to the end of the **pattern**.

Track Merge

This option allows you to merge several tracks together. The tracks you wish to use are marked in the same way as when marking a **block**. Selecting the **Track Merge** option takes you to the **Track Merge** window :

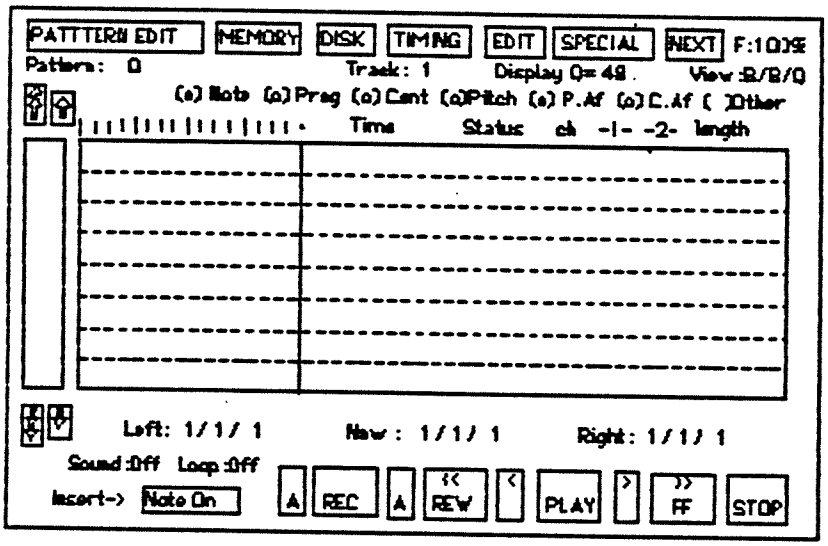


At the top of the window is an indicator showing which tracks have been selected. Clicking on the **ACCEPT** box merges all the selected tracks on to the first one.

5. THE KEYBOARD TRACK EDIT SCREEN

Description

This screen is used for close editing of a particular track. On the **TRACK EDIT SCREEN**, individual notes can be altered deleted and moved about in time. Such changes will be <u>permanent</u>. There are also sophisticated editing functions allowing insertion of bars and individual quantisation of notes, bars etc.. tracks can also be rerecorded in real time using the **TRACK EDIT SCREEN** as on the **PATTERN EDIT SCREEN**. The screen uses both textual and graphical displays to show you what has been recorded on the **track** :



The screen displays a list of Midi events on the track being edited. It is possible to select what type of information you wish to look at using the information select function (see **TRACK EDIT SCREEN/ FUNCTIONS/ INFO SELECTION**).

The pattern number and track number is displayed at the top of the screen. On the left hand side of the screen is the grid display box graphically showing notes as strips going from left to right. Notes are shown stating across the screen relative to the start time of the first MIDI event on the screen. The time and type of each MIDI event is shown across the screen.

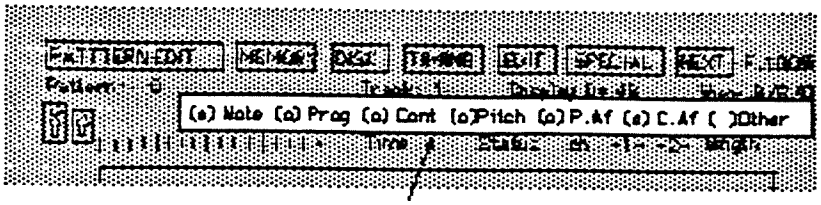
If the event is a **note on** then the length of the note is displayed in the length column and normally note off - function is displayed (it can be if you wish, but it is generally better to avoid cluttering up the screen with unnecessary information). Length is defined in quantas. Moving around the midi event list is done using the up/down vertical arrow boxes in the normal way.

It is important to understand that what you are looking at is raw MIDI data and that it will not necessarily be the same as what you are hearing due to the effects of using Delay/Transpose/Velocity/Compression functions on the **PATTERN EDIT SCREEN** which affect <u>playback only</u>.

5.1 Functions on the Track Edit Screen

Information Selection

At the top of this screen is a set of data type selectors :-



Data Type Selectors

These toggle on/off by clicking in the brackets (a dot appears - (o) - to indicate on) These decide what information the screen will display and what it will not.

Note ( )	switches note on information on/off.
Prog ( )	switches Midi program change information.
Cont ( )	switches controllers e.g. modulation wheel on synthesizers.
Pitch ( )	switches pitch bend.
P.Af ( )	switches polyphonic after-touch information. (advisable to leave this off most of the time).
C.Af ( )	switches channel after-touch information. Note: velocity is displayed as the second figure in a 'not on' event.

It is possible to switch SDX to display midi note numbers chromatically (e.g. C=4) and this is done using the **SPECIAL** menu on this screen (see **TRACK EDIT - MENUS - SPECIAL**).

Pattern Number

To be IMPLEMENTED.

Track Number

To be IMPLEMENTED.

Transport Functions

Work in an identical way to those on the **PATTERN EDIT SCREEN.**

Time

The time of any midi event is displayed next to the event and is altered by clicking and holding the relevant part you wish to edit and altering with the tracker ball (ie Bars/Beats/Quantas if you are in the B/B/Q view mode). Note that a note off will be moved relative to a note on that is moved in this way.

Channel

The midi channel of an event can be altered by clicking and holding on the current number, and altering it using the tracker ball.

Midi Note

Alters midi note in the same way as '**Channel**' alters Midi channel. This is only relevant if the event is a note on, in which case the Midi note no. is the number directly after the channel no.

Velocity

Where the midi event is a midi note on/off, the dynamics of that note (velocity) can be made harder/softer by editing the number after midi note.

Length

The length of a note is displayed in the 'length' column of the relevant midi note on. It refers to the length of the note in quantas and is altered in a similar way to midi note.

REMEMBER: ANY ADJUSTMENTS YOU MAKE HERE WILL BE VISIBLE ON THE GRID DISPLAY ON THE LEFT OF THE SCREEN.

Sound On/Off

NOT YET IMPLEMENTED.

Loop On/Off

This function allows you to loop a piece of the pattern between the two locators. It is set On/Off by clicking.

Catch

Updates the display after you play a track in a similar way to the 'Catch' box on the **SONG EDIT SCREEN**. Appears as a 'C' box next to the vertical down arrows. This makes it easy to find that 'problem' note by playing the track,stopping it at the problem point and using catch.

Deleting Midi Events

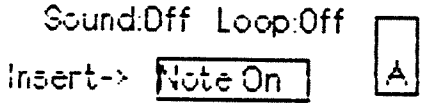
Midi events can be deleted by dragging them off the event list using the tracker ball. You do this by moving the arrow over the event you wish to delete, clicking and holding the *right* hand selector button and moving the tracker ball to 'drag' the event off the window.

Playing Midi Events

Midi events can be played by clicking in the L.H. column next to the event you wish to hear. If you want to hear a whole string of events played you can click next to the first event and then roll the tracker ball downwards.

Inserting Midi Events

In the left hand corner of the screen is the insert event box :



This allows you to insert an event of any kind at any point. You change the status of the inserted event by rolling it. The options are :-

Note On :	Inserting a new note
Poly Aft:	Inserting Polyphonic Aftertouch information
Prg Chng:	Inserting program changes

Ctrl : Inserting controllers e.g. modulation - the actual type of controller can be decided after it has been inserted.

Chn Press : Inserting channel pressure information

The event is inserted by clicking and holding with the right hand button on the 'dummy' event and 'dragging' it using the tracker ball. You will notice the appearance of a cross hair 'sight' which you should aim at the status part of the event *before* the position where you want to insert the new event. A box will appear around this event and releasing the button will insert the new one :

Having inserted the event, its details can be edited. The most important of these is the **Start Time**. The columns which affect most what the event does are the -1- and -2- columns. The following table gives a summary of what these do with different types of event :-

Status	-1- no.	-2- no.
Note On	Note number	Velocity
Ctrl	Controller no.	Amount
(This will default to Modulation but will change when the controller no. is changed)		
Poly Aftertouch	Note no.	Pressure
Chan Pressure	Pressure	(- not used-)
Pitch Wheel	Amount1	Amount2

The channel and note length (where applicable) can also be edited as usual.

Tempo

See **SONG EDIT SCREEN/ FUNCTIONS/ SYNC**

Sync

See **SONG EDIT SCREEN/ FUNCTIONS/ SYNC**

5.2 Menus on the Keyboard Track Edit Screen

The menus on this screen are:-

TRACK EDIT, MEMORY, DISK, TIMING, EDIT, SPECIAL and **NEXT**

Track Edit

identical to **Pattern Edit** menu on **PATTERN EDIT SCREEN**.

Memory

Options available: **Import track, Others, Info** works in the same way as Memory on the other SDX screens - NOT YET IMPLEMENTED.

Disk

Same as memory but applies to disk.

Timing

See **SONG EDIT SCREEN/ MENUS/ TIMING**

Song On/Off

This function allows you to decide whether you want to hear the current pattern as an entity on its own or as part of the song. If it is set **On** then all the times that you see on the screen will be shown relative to the beginning of the song. If it is set **Off** then all the times will be shown relative to the beginning of the pattern.

Special

- **Display in decimal:-**
  Displays midi note numbers in decimal

- **Display in Hex:-**
  Displays midi note numbers in hex & decimal.

- **Display Chromatically:-**
  Display midi note numbers chromatically (e.g. C3)

Next

Options: **Quit**

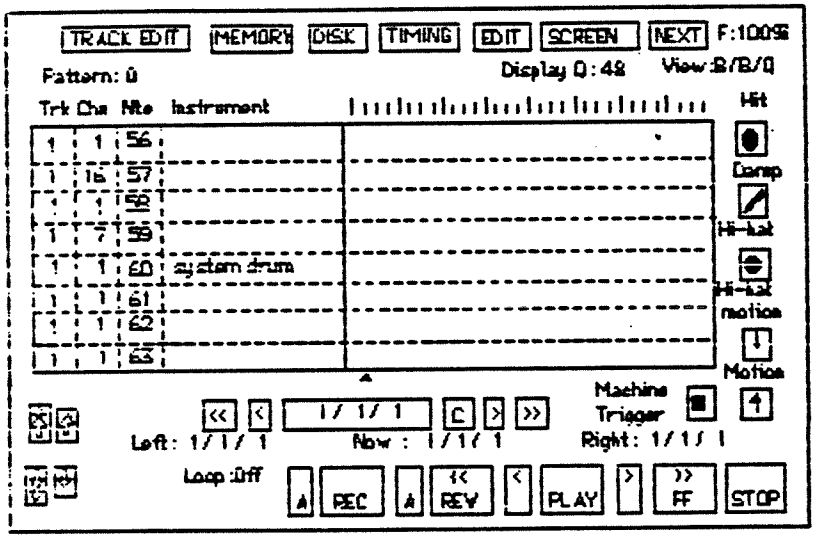
Quit:-
Quits from **TRACK EDIT SCREEN** to **PAT TERN EDIT SCREEN.**

6. THE DRUM TRACK EDIT SCREEN

Description

The **Drum Track Edit Screen** is used to enter drum rhythms in a step by step manner, or to provide an easy way of editing existing drum parts.
The screen is entered from the **Pattern Edit Screen** by clicking on the track no. of a track which has been assigned as a **drum** track.

The screen shows where 'hits' have been played on different instruments :



The instrument names are shown down the left hand side of the screen as are their associated tracks,channels and notes. It is possible to edit instrument parts from other tracks alongside those of the current track. Hits are shown with time progressing from left to right. Different types of hits are displayed using different symbols and the meaning of these is shown by the 'dummy' hits displayed down the right hand side of the screen. As well as hits, hi-hat movements are also displayed. At the bottom of the screen, the transport controls are displayed.

Above the transport controls are special transport controls used for moving around the displayed part of the pattern. These include a position indicator which shows where the first beat shown on the screen corresponds to. The design of this screen allows for very quick and easy programming of drum parts and should be equally useful to drummers and non-drummers alike.

6.1 Functions on the Drum Track Edit Screen

Placing a hit

First you must decide which type of hit you wish to use - there are basically three types and are represented as follows :

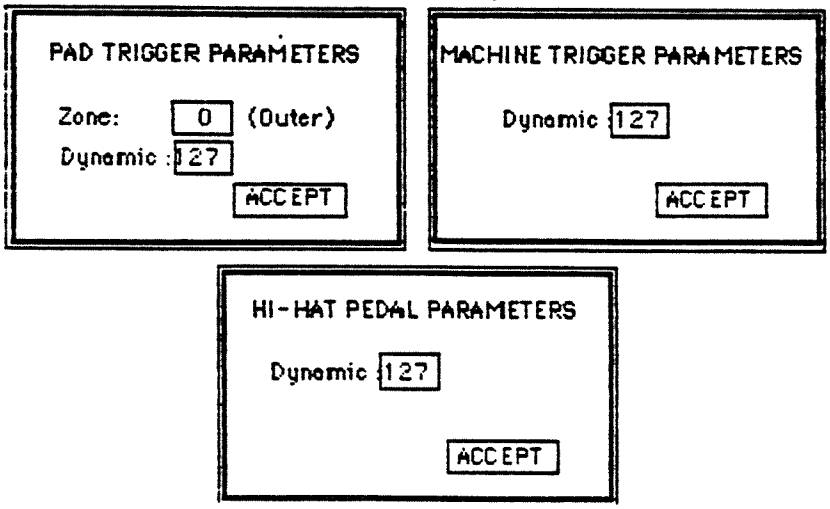
This is a **Pad Hit** which has been generated by an SDX Zone Sensitive pad or by the SDX keypad. It includes information about the **position** where the drum was hit which will be used by internal SDX drum slots.

This is a **machine trigger** which is generated by an external Midi device like a drum machine or keyboard and contains no **position** information.

This is a **hi-hat** pedal trigger. A normal hi-hat hit is shown by a **Pad Hit**.

These are selected by clicking on the appropriate icon shown down the right hand side of the screen. Clicking on a symbol box makes it turn bold to indicate that it is selected. Moving onto the grid in the centre of the screen enables you to place a hit by clicking with the right hand button in the appropriate place.

Once the hit is in place you can alter the velocity of the hits by double clicking on them which brings up the appropriate window :



The figures in the window can be rolled using the tracker ball.

Placing Cymbal Damps and Hi-hat motion

These are represented as follows :

- Cymbal damp

- Hi-hat motion

They can only be placed on an instrument which will respond to them ie. a cymbal damps only for cymbals, hi-hat motion only for hi-hats. They are placed in the same way as you place hits, and their parameters can be altered by double clicking as before.

You will notice that there are two hi-hat icons : this is because they are assigned different values so that one can be used to close the hi-hat and one to open it. The position of the hi-hat pedal can be altered by double clicking on the hi-hat icon. The symbol for the hi-hat will automatically be altered depending on the assigned value.

Setting the default trigger values

It is possible to set the values for the hit selectors also by double clicking on the appropriate icon. When you have altered these values,any new hits entered on the grid will be assigned the new values unless you alter them separately.

Deleting Hits / Movements/ Damps

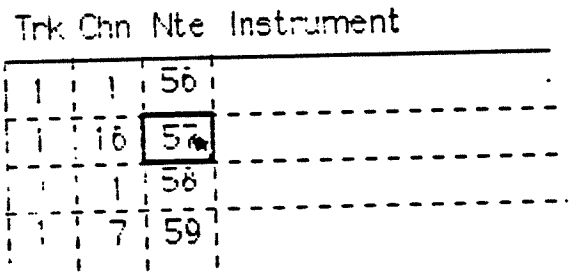
This is done by clicking with the right hand button on the appropriate icon.

Altering the displayed instruments

You may use the **Drum Track Edit Screen** to alter any selection of instruments. The instruments you edit do not necessarily even have to be on the same track. You can edit up to 16 instruments at once - when you enter the screen you will see the first eight instruments, clicking on the double arrows displays the other eight instruments. These 'instruments' refer to either **internal** or **external** Midi note and channel allocations and also which **track** the instrument is recorded on.

f you have entered the screen from an **internal track** then then you will be using the **internal** Midi channels. It is possible to use a special function which sets up theMidi note and channel allocations for the current patch ie. the contents of the 16 **slots**.

see **Functions of the Drum Track Edit Screen/ Setting Slot Defaults**. You alter the channel, note and track no.s by rolling in the normal manner :



If you select a channel and midi allocation which is also allocated to an internal SDX slot then the name of that slot will also appear. Midi note and channel can also be easily altered by clicking and holding on the value you wish to alter and playing the note from an external Midi device ie. a keyboard.

Changing which part of the track is displayed

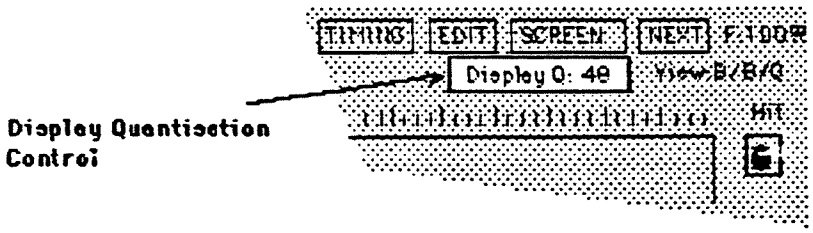
It is possible to alter which part of the **track / pattern** is displayed without altering the position of the **Now:** locator. This is done using the **display controls** which work in a similar way to the **Transport Controls** :

Catch

Updates the display after you play a track in a similar way to the '**Catch**' box on the **SONG EDIT SCREEN**. Appears as a 'C' box next to the vertical down arrows This makes it easy to find that 'problem' note by playing the track,stopping it at the problem point and using catch. Remember that this will only **Catch** to the position of the **Now:** locator not to the position of the **display locator**.

Changing the amount of time shown on screen

It is possible to change the amount of time seen on the screen at any one time by altering the display quantisation **Q**. The **Q** function is found in the top right hand part of the screen :



Display Quantisation Control

The **Q** value shown represents how many quantas (192 per crotchet) is represented by one small grid mark (the grid marks run along the top of the grid). This value varies between 1 and 192 in logical steps and is altered by clicking and rolling in the usual manner. A setting of 192 shows the largest amount of time in the least detail, a setting of 1 shows the least amount of time in the most detail.

The View Function

The **View** function is found next to the **Q** function in the top right hand corner of the screen.

Clicking the current option toggles it between the following:-

B/B/Q	-	Bars/Beats/Quanta (1/192 beat)
SMPTE	-	Hours: Minutes: Seconds. Frames.
mSECS	-	Seconds. mSecs.

Changing the setting means that SDX will display all times on the screen in the format you have chosen.

6.2 Menus on the Drum Track Edit Screen

The menus available on this screen are : **TRACK EDIT**
MEMORY
DISK
TIMING
EDIT
SCREEN
NEXT

Track Edit

This menu is identical to the **SONG EDIT** menu and gives you access to the **Control Panel, Patch Mixer** and **Help** windows

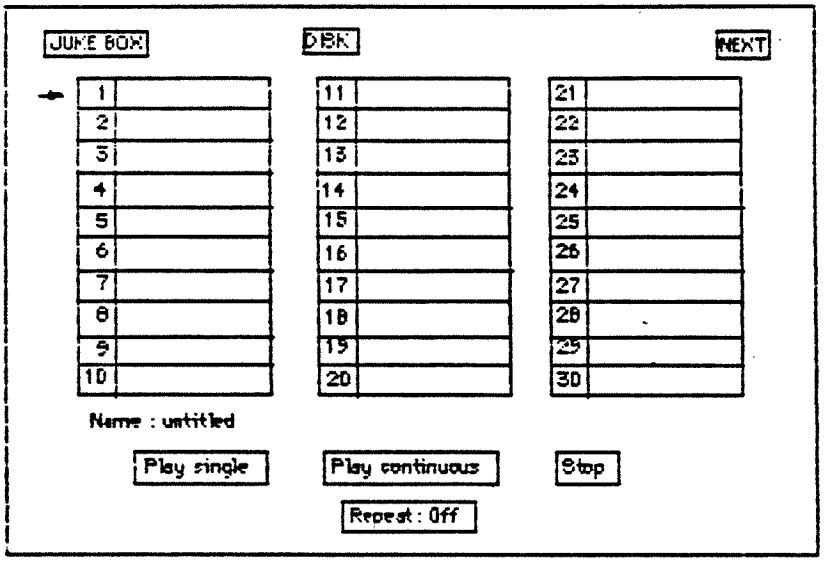
Memory

This functions in the same way as the **Memory** menu on other pages except that **Tracks** may only be imported/ exported from/to other patterns - they are not a seperate entity on their own.

7. THE JUKE BOX SCREEN

Description

The **JUKE BOX SCREEN** is designed to enable the playback of several different songs and their associated patches. Selecting the **JUKE BOX** option from the **Welcome** screen takes you to the **JUKE BOX** screen :

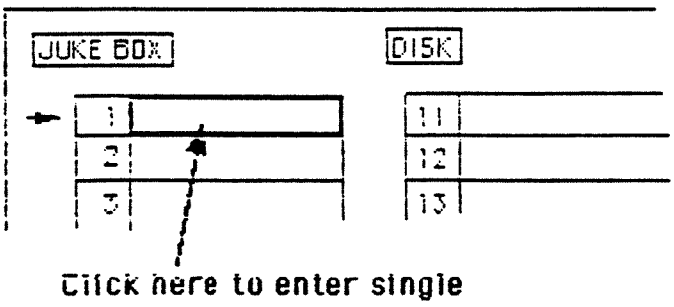


The screen consists of three columns of boxes which represent the **'singles'** played by the **Juke Box.** Each **single** contains a **song** and a list of **patches. Singles** can be played on their own or in sequence starting with no.1 and ending with no. 30.

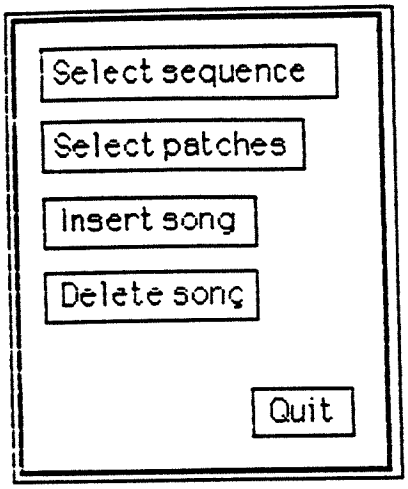
7.1 Functions of the Juke Box Screen

Making a single

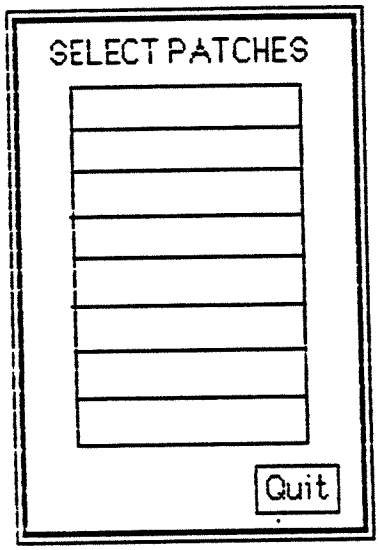
To make a single you need to click on the box next to its number :



This will bring up the selection window :

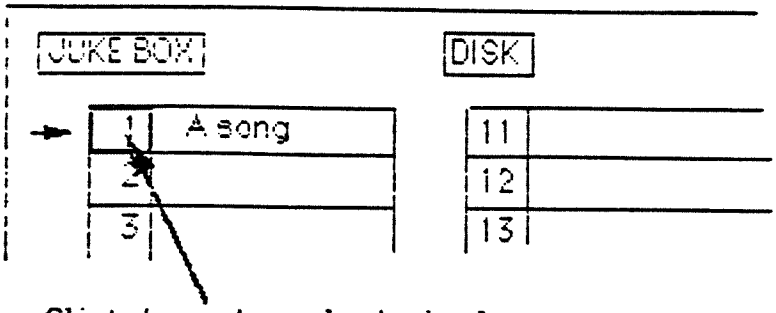


Clicking on '**Select Sequence**' enables you to select the song you want using the normal SDX item selector windows. When you have selected the song you wish, the **Patch list window** will come up :-

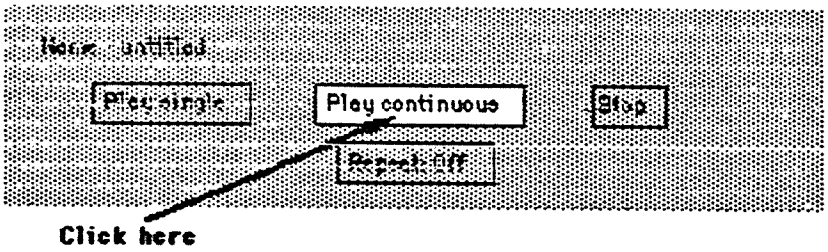


Clicking in the first available box allows you to select a patch in the normal way. The **Patch list window** allows up to eight patches to be selected per **single**. They can be individually selected by Patch changes from within the song.

To play a **single**, click on the number box next to the **single** you want to play :

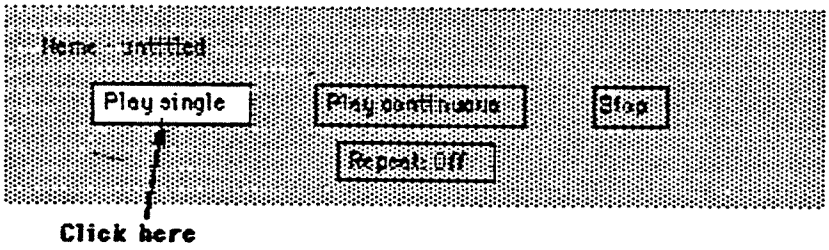


This will load in the relevant songs and patches. To play simply click on the **Play Single** box :



Playing a continuous chain of singles

Clicking on the **'Play Continuous'** box plays all the singles on the screen in order 1-30

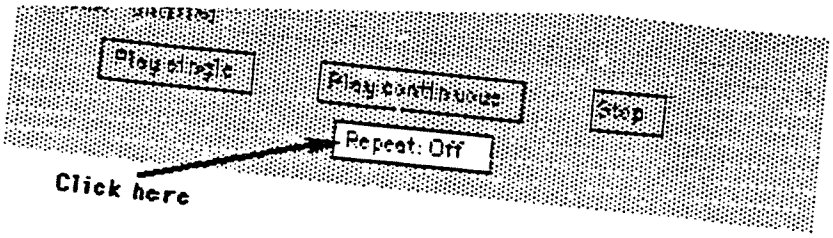


Stopping playback

Click on the **Stop** box next to the **Play Continuous** box.

Repeating play

Clicking on the **Repeat** box causes the **Juke Box** to repeat anything it plays until **Stop** is pressed. Clicking on it again turns this function off :



7.2 Menus on the Juke Box Screen

The following menus are available : JUKE BOX
DISK
NEXT

Juke Box

The options on this menu are : Choose Info
Patch Mixer
Control Panel

This menu functions in the same way as the **SONG EDIT MENU**

Disk

The options on this menu are :

- **Save JUKE-BOX**
- **Save JUKE-BOX as**
- **Edit JUKE-BOX**
- **Delete JUKE-BOX**
- **Other**
- **Info**

These function in the same way as on other screens with **JUKE-BOX** replacing **Song/ Patch** etc.

Next

The options on this menu are :

- **Quit**

Selecting this option returns you to the **Welcome** screen. You may be asked whether you want to save the **JUKE-BOX** first.