



INSTRUCTION LEAFLET

ATARI ST

Features:

- o 20 Sample memories.
- o 50 Step sequencer with loop function.
- o 50 Variable length segments.
- o Easy to use segment and sequence editor.
- o Full 3 Note polyphony.

EDITING SEGMENTS: The main part of the screen shows the segment currently being edited. This can consist of 1 to 4 bars (each bar being 16 beats long).

The size of the current segment can be changed by clicking the arrows in the WIDTH box. Note that the upper bars are not lost when the segment width is changed. This is useful when first writing a segment as the first bar or two can be heard on its own or looped.

To edit or view another segment, click on the arrows in the SEGMENT box. You may listen to the current segment as you are editing it by clicking on PLAY SEGMENT.

Editing the segment is simplicity itself. The left mouse button toggles the cell under the pointer on or off, the right button erases cells. To erase a large section, hold the right mouse button down and "wipe" the cells clear with a slow sweep of the mouse.

The mouse position is repeated at the top of the screen as a short red bar above the bar guide to make life a little easier when trying to edit cells near the bottom of the screen.

Alternatively, you can enter notes live by selecting PLAY SEG. Point to the box to the right of the sample name and tap out the beat with the left mouse button. The current playback position is shown at the top of the screen as a moving red bar.

A bar may be copied to any of the other three bars in the segment. Click on COPY BAR and then on the bar number you wish to copy FROM and then the bar to copy it TO. Hit OK and all 20 tracks in that bar will be copied. Nothing will happen unless you select both the FROM and the TO parameter. QUIT will exit without copying anything.

You may also erase an entire bar with CLEAR BAR, select the bar to clear, hit OK and all 20 tracks in the bar will be erased.

Likewise, whole segments can be erased or copied to other segments. Click COPY SEG and click on the arrows in the box to select which segment to copy the CURRENT segment to. Note that the entire segment will be copied to the destination (even if the width is set to 3 or less) completely overwriting anything that was previously stored there. Note that the width of the destination segment will also be set.

To clear a whole segment, click CLEAR SEG and select the segment to clear with the arrows and hit OK. The width setting will remain the same and all 4 bars in the segment will be erased.

Note that there is NO undo feature on any of the copy or delete features so be sure that you know what you are doing before using them. Once a segment or bar is erased or copied over, it's gone forever!

SEQUENCE EDITOR: The box in the bottom left part of the screen displays 5 lines of the song sequence. When the PLAY SEQUENCE icon is clicked, drum studio will begin playing from the point shown at the TOP OF THE WINDOW.

Click on one of the numbers in the window (they represent segment numbers), the entry will turn to dashes. Now enter a two digit number from 01 to 50 from the keyboard (Don't forget the leading zero for numbers less than 10!). OR press either "E" to set the end marker or "L" to set the loop marker.

When drum studio comes across the END marker, it will stop playing the sequence. Note that if any long samples are still playing at this point, they will be cut off so it is wise to include a blank bar at the end of your song to tidy up the end.

The LOOP marker causes drum studio to jump (back or forwards) to the point there the loop pointer is. Simply click with the left button to the left of the segment numbers at the point where you want the loop pointer to be. (Or drag it about

with the left button held down).

The two arrows in the sequence box are used to scroll the sequence list up or down.

REMEMBER that the sequence will be played from the position of the top of the window. To hear the entire song from the beginning, scroll to the top of the list. This feature allows you to hear and edit later parts without having to listen all the way through.

DRUM KIT: Drum studio can store up to 20 sample tracks in memory at a time. The area to the left of the segment display shows the samples currently in memory. Click on the sample name with the left mouse button to load or change the sample.

The load and save kit feature allows you to reuse drum kits. This only saves the drum configurations not the samples.

You may test the sample by clicking on the sample name with the right mouse button, this still works while Drum studio is playing so you can experiment a bit.

SAVING AND LOADING SONGS: Saving a song will save the entire data set to disk except for the actual Sample data (The kit data contains the filenames of the drum samples which will be loaded from disk when you use the LOAD SONG option). Make sure that the disk is write enabled before you attempt to save otherwise a disk error will occur.

When you load a song from disk, any song data that is currently in the computer's memory will be erased when loading starts.

If you load a song from your own disk or one without the sample data stored on it, then you will be asked to insert the drum studio disk halfway through loading so that the drum samples can be loaded. You may copy the drum studio samples across to your own disk for your own convenience provided that you observe the laws of copyright!

The drum studio file selector is a little different to the Atari GEM file selector. The small box underneath the yellow title shows the file selection. Click this to type a new filename or click one of the files in the directory to the left. You cannot double click to load. Instead, you must either click OK or hit return if you have typed the filename from the keyboard. Any spaces show up as underscores. ("_")

The single arrow scrolls up or down by one entry, the double arrow scrolls by a whole page. The amount of free space on the disk is shown in bytes.

DISK ERRORS: Disk errors can occur at any point. If drum studio is unable to carry out a disk function then it will present you with an alert box giving you the option to retry or abort the load/save operation.

If there is insufficient disk space for a save operation then RETRY will take you back to the file selector, NO RETRY will abort without writing to the disk at all. This is the same for load or save song or kit.

Disk error OOI is usually caused by saving with write protect on or no disk present in drive A. Correct the fault and click on YES.

File not found gives you an option to put another disk in the drive or ignore the error. This may give odd results if you ignore samples that could not be found but has been included to allow for drum studio sample expansion disks.

Technical: For those of you who wish to know the gory details, Drum studio plays its samples from a 10Khz Signed 4-bit sample packed low nibble first through the 3 volume registers of the ST sound chip.

Due to the Interrupt priorities in the ST, moving the mouse will slow the sample player down distorting playback. Instead of turning the mouse off whilst playing samples or interrupting the IKBD I have come up with the following solution to the problem... If you don't want the samples to slow down don't move the mouse about when Drum Studio is playing!

The original sounds were samples on an AKAI S1000 sampler and then re-sampled using the Microdeal REPLAY ST sampler.

Drum studio has 3 note polyphony, meaning that up to 3 samples may be played simultaneously. If you try to play more (or a long sample is still playing) the oldest sample will be cut. Samples lower down the kit list have higher priority ie: if you attempt to play a sample on the first four tracks then only the lower three will be heard.

Credits:

Atari ST programming

Program Design

Original Samples

Example Drum tracks

Graphics

ANDY SEVERN

Sample processing

TAU ZERO

Program Testing

JABBA