

Editing Tools



Create Tool “Alt+1”

The **Create tool** is used exclusively in the Mixer window. Clicking anywhere in the mixer window will create a new channel. Clicking in the free space of a mixer channel will provide a list of “elements” available to create your own mixing configurations. See the **Mixer chapter** for more details.

Note: It is necessary to enter the mixer’s “edit” mode (E key) in order to use the create tool.



Track Assign Tool “Ctrl+1”

The **Track Assign tool** allows you to select which physical track is assigned for each part in the arrangement. To assign a track to a particular part, just select the tool to a mouse button and click on the part or parts. A drop down menu will appear with a list of available tracks. If you have more than one Soundscape, only the relevant outputs will be available. *i.e.* For audio stored on Unit 1, it will display tracks 1-12 and for Unit 2 it will display 13-24.

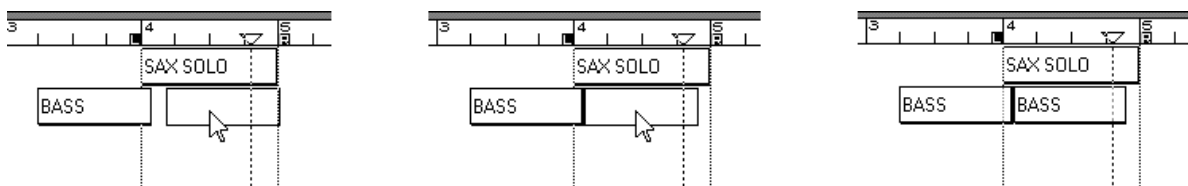
There are 8/10/12 tracks for each rack unit, so you can only have one part assigned to each physical track at any instant. If a part on another virtual track is already assigned to the output you have selected and the part overlaps the part you are assigning, it will be muted automatically.



Move Tool “Ctrl+M”

The **Move tool** allows any part or group of parts to be moved to any position in the arrange window.

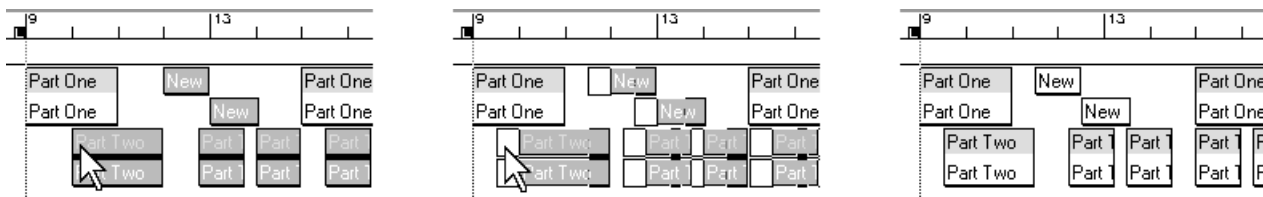
To move a part, first select the tool to one of the mouse buttons and then click and hold on a part and drag it to a new location. If you want to move to a position which is outside the current arrange window, just drag the part to any edge of the window, and the arrangement will auto-scroll in the required direction. When you release the mouse button, the part will be dropped at the current position. If you have a snap value set, the beginning of the part will ‘snap’ to the nearest part of the snap grid.



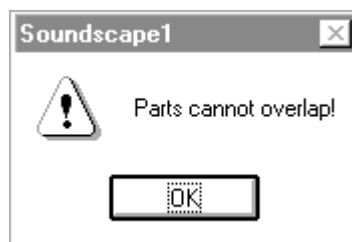
If you are moving a group of parts, after selecting the group, click and hold on one of the parts in the group and drag the group to a new location. The part

Soundscape

selected for dragging will have its start point snapped to the selected snap grid, but the overall layout of the group relative to that part will be unchanged with respect to the timing or track assignments.



In either case, if you overlap other parts, this warning box will be displayed.



With the snap set to off, Soundscape automatically butts the part to the start or end of the overlapped part, depending upon which is closer.

Joining Parts Together - Automatic De-glitching

When a part is moved so that the start of part is joined to the end of the previous part, Soundscape performs an automatic glitch removal algorithm (like a very fast automatic cross-fade), to remove the nasty click which is normally generated when editing digital audio.

With many other systems which allow digital editing, you would have to perform a manual cross-fade at every join to remove clicks, usually a very time consuming process. Even if you make edits with no regard to the actual waveform, Soundscape will not generate a click due to the edit.

Under the **Settings** menu in **Preferences**, you are able to turn the **De-glitching** on or off.

Nudge

It is possible to “nudge” using the copy, move, trim and slip tools by selecting and holding the part with the mouse and using the arrow keys. The snap value determines the amount of each increment from the original position.



Copy Tool “Ctrl+C”

The **Copy** tool allows any part or group of parts to be copied to any position in the arrange window. The operation of the copy tool is similar to the **move** tool, except that the original part or group will be left unchanged. The copied part or group will be identical to the original, but as Soundscape uses random

access on the hard disk, no additional hard disk space is required for the copy.



Move & Copy Vertical Tools “Ctrl+Shift+M (or X)”

The **Move Vertical** and **Copy Vertical** tools only allow edits in the vertical direction (*i.e.* from one virtual track to another). This ensures that no change in timing occurs.

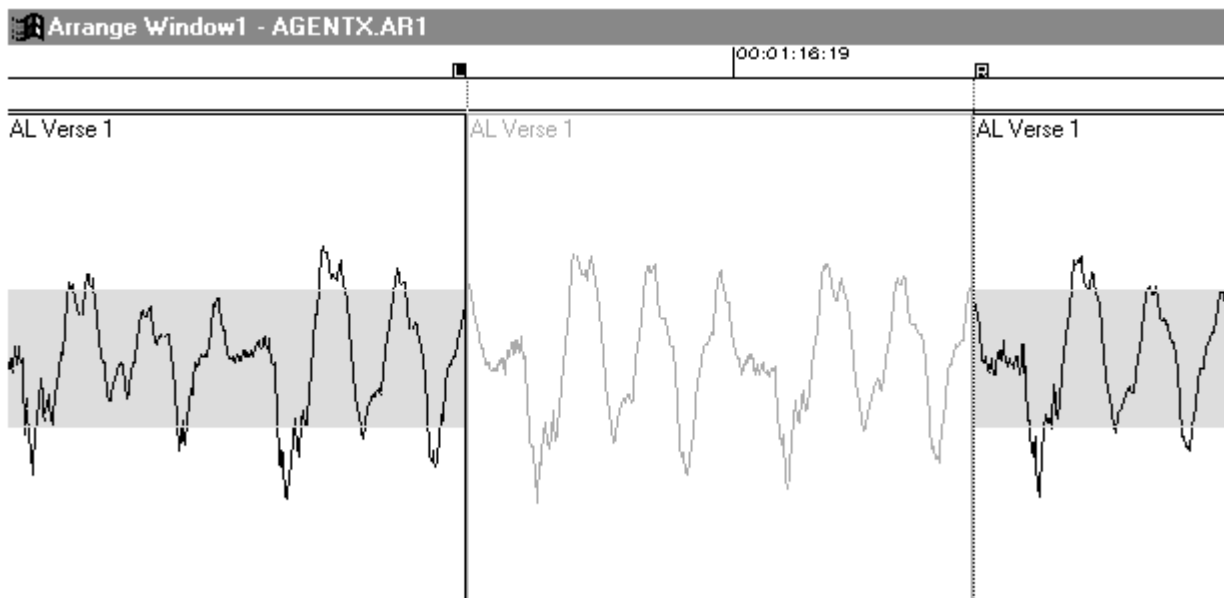


Cut Tool “Ctrl+X”

The **Cut tool** allows non-destructive editing of any part in the arrange window. To edit a part, select the **cut tool**, point at the part where the edit is required and click. The position of the cut will correspond to the current snap value setting, and part will be cut into two parts which have identical volume, fade and track assignments.

Any edited parts can be treated in exactly the same way as other parts and can be copied or moved etc. For example, the **cut tool** is useful for defining a region which requires a different volume or fade setting. You can make cuts across several virtual tracks at once, by selecting a group, and then clicking on one part in the group. Any other selected parts at the same timing position will be cut at the same point.

For precise editing it is often necessary to turn the **snap off** and **zoom in** to waveform level. For instance to remove a click from a part, the waveform can be cut at the start and end of the click, and the part with the click can then be deleted, have its volume reduced, or just muted as shown below:-





Move, Copy & Cut at Locator Tools

Locator Based Editing “Ctrl+Alt+M (or C, or X)”

The three tools **Move**, **Copy** and **Cut** at nearest locator, allow locator based editing to be used. The play pointer, or the left and right locators can determine the position of a move, copy or cut operation. With move or copy, the start or end of the selected part(s) will snap to the nearest locator. This allows, for instance, sound effects to start or end at a timecode reference which is set “on the fly” (while playing), or set by entering the value at the Tape Transport.



Solo Tool “Ctrl+H”

The **Solo tool** can be used to play any individual part (or stereo linked parts) in the arrange window even if the part is muted. To solo a part, select the **solo tool** on the left or right mouse button, point at or in front of a part and hold the mouse button down. The part will be played from the mouse position and will continue for as long as the button is held. When the part ends, the next part assigned to the same physical track will be played. If the mouse button is released and then pressed again without moving the mouse pointer, the same section of the part will be repeated, making it easy to listen to a vocal phrase or identify a note or click in the take.

Muted parts can also be played using the **solo tool**, but as they are not assigned to a physical track, the track used to play them can be assigned with the **Muted Parts Solo Output** parameter under the **Settings** menu.

Auditioning audio directly from a take is also possible by pointing and holding the **solo tool** on a take displayed in the **SDisk window**, or by clicking and holding the right mouse button on a take in the **SFile** directory (it doesn’t matter which tool you have selected).



Solo Part Tool “Ctrl+Shift+H”

The **Solo Part tool** allows soloing of a single part from beginning to end. If the mouse is in the left half of the part, soloing will start at the beginning of the part and will continue until the end of the part or until the mouse button is released. If the mouse is in the right half of the part, then soloing will start at the current mouse position and will stop at the end of the part.

In addition, if the left or right locators are placed within a part, you can solo up to a locator or away from a locator, or from one locator to another. This allows edits to be rehearsed, before cutting or deleting any of the part. Once rehearsed, the edits can be made at locator positions using the move, copy and cut to locator tools described earlier.

Soundscape



Part Volume and Fades

Each Part in the arrangement has a beginning volume, an end volume and 1 of 8 fade curve settings and there are four tools which are used to edit these parameters. This provides an extremely powerful and flexible method for mix automation. All volume changes are processed in real-time and are calculated to 18 bit accuracy, to use the full 108dB dynamic range of the SSHDR1's 18 bit D/A converters.

Part volumes are indicated on-screen by the amplitude of the Part colours, when the 'Show Part Volumes' setting is enabled (from Various Switches under the Settings menu). However, due to screen resolutions, volumes are only displayed from the 3rd vertical zoom setting (*i.e.* click on the vertical zoom-in (+) button 3 times).

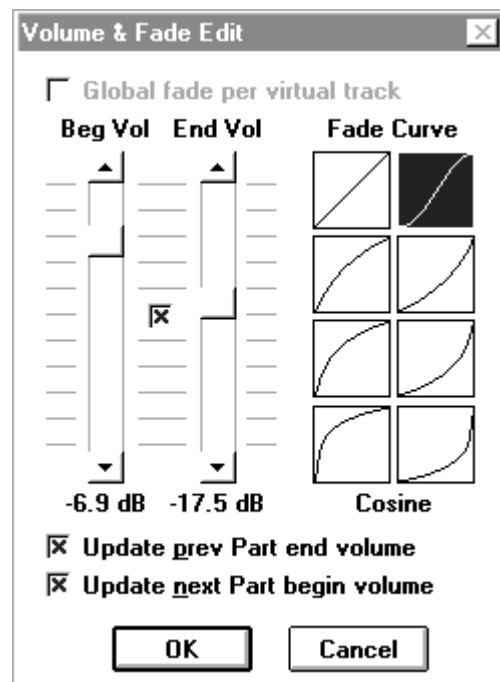


Volume & Fade Edit Tool "Ctrl+V"

Select the tool and click on a Part in the arrangement.

The faders for **Beginning Volume** and **End Volume** can be linked by selecting the check box between the two faders. In this way the overall level can be changed without affecting the volume contour. When linked, the difference of dB between the volume settings is maintained, but as the faders follow an audio taper law for dB versus on-screen movement, the distance between the faders on-screen will not be constant as the faders are moved.

To edit the **Beginning** or **End Volumes** individually, make sure that the check box is not selected.



The selected fader will flash and can be moved either with the mouse or using the arrow or page up/down keys.

There are two check boxes, **Update prev Part end volume** and **Update next part begin volume**, which select whether the volume of previous or next parts will be adjusted to make a smooth contour, to match any changes you make to the selected part. The **Update Prev/Next Part volume** check boxes are enabled automatically when there are parts before or after the selected ones. Note that the settings are not saved for each part, but are just selected and used when using the volume tool.

Fade Curves

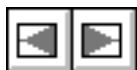
There are 8 different fade curves providing linear, cosine (sometimes called equal or constant power), three exponential and three logarithmic shapes. Each curve can be used for fading in or for fading out.

Note: *A linear fade curve has the effect that it reduces volume by a fixed amount (-10%) per second. This means that after half of the fade time, the level is half of the original (-6dB). After 3/4 of the fade time, the level is 1/4 of the original (-12dB) etc. This means that the rest of the fading (to -96dB) comes in the last 1/4 of the time. This is a linear fade and has the characteristic that the level decreases very fast towards the end of the fade. An exponential fade, where the fade rate is faster at the start and more gentle towards the end of the fade will produce a more natural sounding fade out.*

The currently selected curve setting is shown in black and clicking on another curve will select it in blue, showing that a change has been made. The curves apply to a fade from one level to another, as well as to a fade in from zero (-96dB) or a fade out to zero. There are several rules which apply to single parts or multiple parts in the same way.



The maximum fade time for one part is 3 min 10.21sec (at 44100Hz). For fades longer than this, cut the part into smaller lengths, select all the parts and use the fade in/out tools, or use the global feature within the volume tool to define a fade across all parts



Fade In/Out Tools “Ctrl+E / Ctrl+F”

The **Fade In/Out tools** just change the beginning volume to -96dB (fade in) or the end volume to -96dB (fade out) without affecting the other volume setting, but the **curve setting** is unchanged.

If you click with a **fade tool** on a part which already has a fade selected, the fade will be removed, and the beginning and end volumes will both be set to the highest volume that was previously selected for the fade. This is also the case when multiple parts are selected, so that turning off the fade for multiple parts will set all part volumes to the highest volume found for all selected parts. *i.e. you will lose any volume contours that may have been defined !*

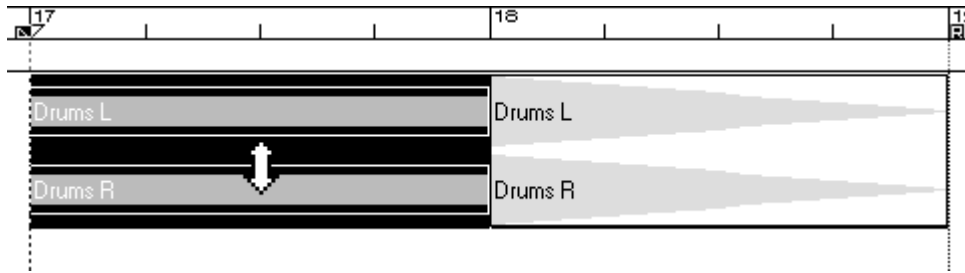


Volume Trim Tool “Ctrl+Shift+V”

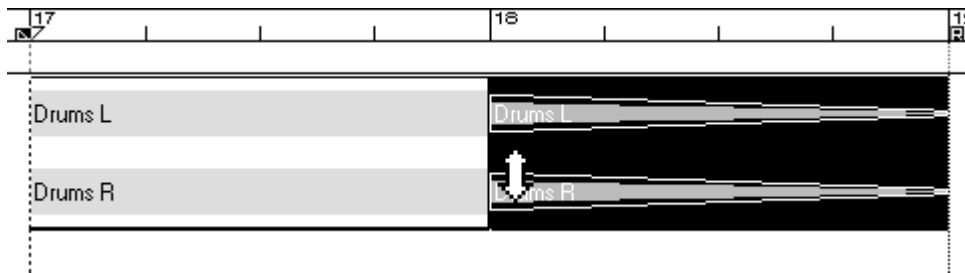
The **Volume Trim tool** allows the part volumes to be edited on screen using the mouse.

Click and drag vertically with the mouse in the centre of the part to change

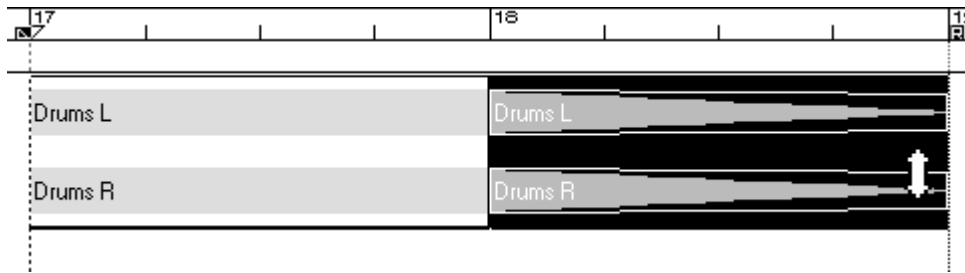
both the beginning and end volumes of the part, so that the slope is unchanged.



Click and drag at the left side of the part to change only the beginning volume of the part.



Click and drag at the right side of the part to change only the end volume of the part.



Using the **volume trim tool** for multiple parts will modify the part clicked on and its previous/next parts. If you click on the centre of the part, as both the beginning and end volumes are modified to maintain the fade shape both the end volume of the previous part and the beginning volume of the next part are updated automatically. Clicking on the cut between two selected parts will modify the end volume of the first part and the beginning volume of the second.

For selected parts on other virtual tracks, the volume will be changed only if the particular cut points are in the same timing positions as those on the virtual track being changed.



An easy way to define the volume contour for an entire virtual track is first to select 'Keep Part Selection' (from **Various Switches** under the **Settings** menu), then select the virtual track required and use the **Volume Trim** and **Cut/Trim** tools to modify the volume contour as desired. If two adjacent parts have different end and beginning volumes, causing a discontinuity which you would

like to smooth out, drag the volume of both to the maximum level, release the mouse and then drag them to the required volume.

Volume & Fades for Multiple Parts

With multiple parts selected, the beginning/end volumes shown when using the volume edit tool are the beginning volume of the first part selected and the end volume of the last part selected - for the virtual track that you click on. This to allow a group of parts to be treated as one if required, with a curve and two volume settings.

If the global check box is not selected, then changes made to any parameter will be made for all selected parts. For example, if the end volume is increased by 5dB, all parts will have their end volume setting increased by 5dB. If the curve is changed, then all parts will have the same curve selected.

If the global setting is selected, then a smooth fade, starting at the beginning volume level and finishing at the end volume level, which approximates to the curve (shown in black), will be made for each selected virtual track. Each individual part will then have this same curve selected, so for a closer overall approximation to the curve, select all the parts again, use the volume & fade tool, turn off the global check box and select the linear curve.

If you use the **volume tool** for a group of parts which have different curves, then the curve will not be shown in black, and you will not be able to alter beginning and end volumes separately. Also the fader check box linking the faders is automatically selected.

If you select a new curve, you will then be allowed to change the volume link and global check boxes if desired. Note that all parts will then have their curve set the same.

Changing the Overall Level for Multiple Parts

If you want to change the overall level of a track which has contours already defined, then use the **Volume & Fade tool**. Make sure that the global check box is cleared and the volume fader link is selected, so that the same changes are made to both beginning and end volumes of all selected parts.

Note that some selected parts may have levels that are already too close to minimum or maximum for the same amount of change to be made, these will saturate at minimum or maximum volume.

Sometimes the faders cannot be moved enough in the required direction. This could be because the beginning volume of the first part is at minimum (e.g. a fade in) and the end volume of the last part is also at minimum (e.g. a fade out). Then both faders would be at -96dB and so the level of the track could not be reduced by say 6dB.

The easy way to accomplish this change is to select all required parts except the fade in/out ones at either end. Make sure that the **Update prev/next** part volume check boxes are selected, and change the level. Use this technique also for increasing the level when there is a fade at either end, as then the fade in and fade out will still be from -96dB.



Alternatively, you can use the **Part Info** tool and click on one of the selected parts which does allow the necessary level change to be made. Link the faders and change the level as required. All parts will have their beginning and end volumes changed by the same amount.

Fading Multiple Parts

When you use the **fade tool** to fade across multiple parts, all parts will take the curve setting of the part that you click on. Also, the shape for the entire fade will approximate to that curve so that the beginning/end volumes of each part are selected automatically according to points on the curve.

However, as all individual parts have the same curve set, the approximation to the overall shape required may not be as good as if each part had a linear curve selected. To change the curve of each part to linear, first select all relevant parts, use the volume tool and select the linear curve, but make sure that the global fade per virtual track box is unchecked.



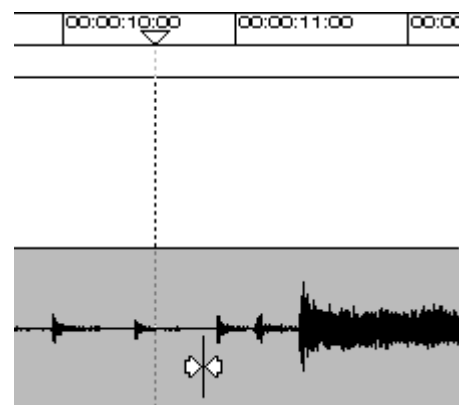
Scrub Tools “Ctrl+B” & “Ctrl+Shift+B”

The **Solo** (white) and **Multi-track** (grey) **Scrub tools** allow the audio to be played forwards or backwards, using the mouse to determine the speed of playback. This is similar to moving the tape across the tape heads by rocking the reels of a tape machine, in order to find a precise edit point.

Select the Solo scrub tool, point at a single or stereo linked part and hold the mouse button while moving the mouse left or right. There may be a brief delay while the internal buffers are loaded from the SDisk, and then the mouse pointer will change to a scrub icon, as shown below:-

Moving the mouse away from the play pointer in either direction will cause the playing to occur in the selected direction. The distance between the mouse and the play pointer determines the speed of audio playback, from zero up to normal speed. Zooming in can give a smoother, more precise scrubbing action.

The **Multi-track tool** scrubs tracks 1-8 and so it is not necessary to point at a particular part for playback to occur.



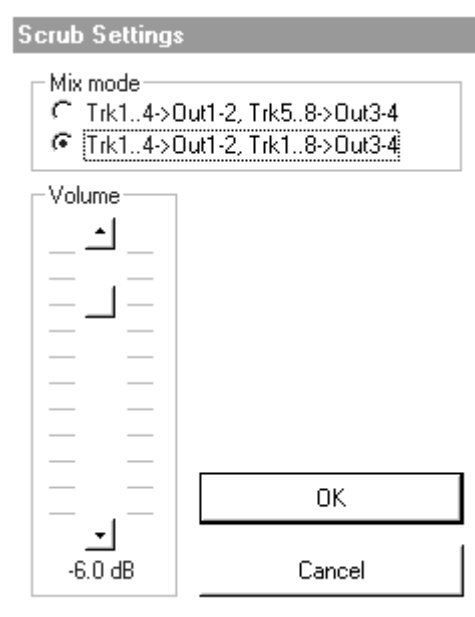


You can drop the Left and Right locators whilst scrubbing, using the **L** and **R** keys. Also, the **cut at locator** tool can be used in conjunction with scrubbing to make edits quickly and precisely, based upon what you hear rather than on what you see.

Note: Only the first 8 tracks are available for scrubbing when using 10 or 12 tracks per unit.

Setting Scrub Volume

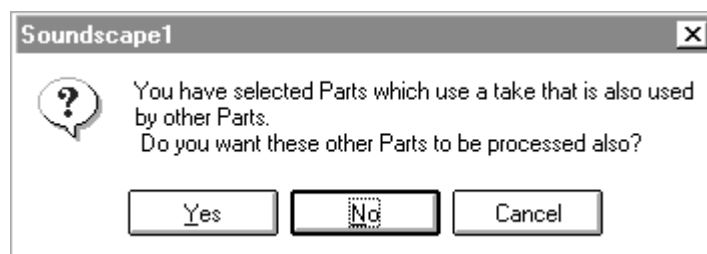
Scrubbing does not use the V2 mixer, but has a direct stereo mix to outputs 3/4. Double click on either of the scrub tools to set the mixing mode and scrub volume.



Normalise Process Tool “Ctrl+N”

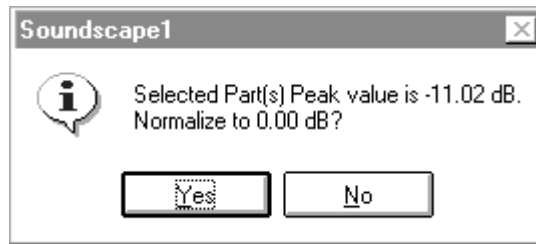
Normalising can be used to increase level of a part or a take which was not recorded at the maximum possible signal level. A new take is generated to disk and is renamed automatically (e.g. #1 or #2 etc.). First select a part or group of parts, and click with the **normalise** tool.

If you have selected any part which is not the entire length of the take on disk, or is used by other parts which you didn't select, then the following message will be displayed.

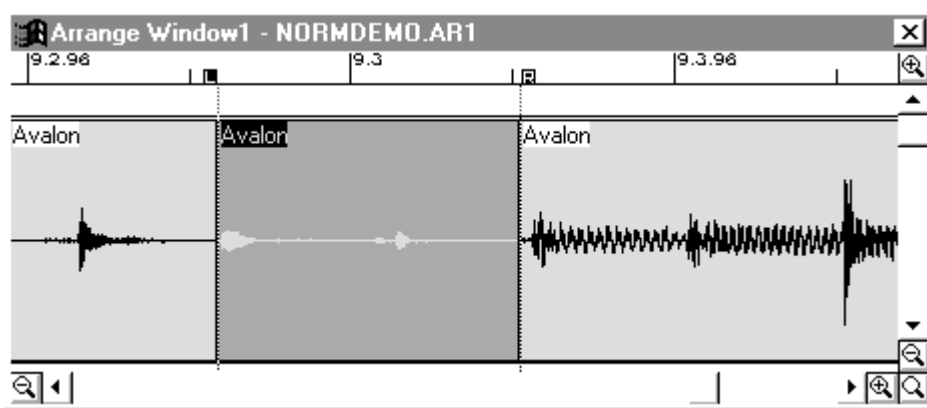


Click on **No** to generate new normalised takes just for the parts selected *i.e.*, the same length as the part(s). Click on **Yes** to normalise the entire take and generate a new take which is the same length as the original. The part(s) will

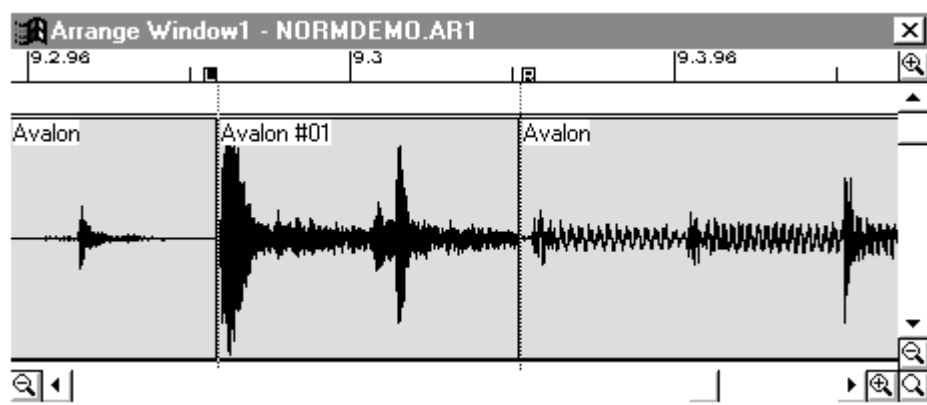
then be scanned, and the highest peak value found for all selected parts will be reported as shown below:-



If you wish to continue with the normalise, click on **Yes**, otherwise select **No** and nothing will have been altered.



Each part selected will be increased in level by an amount which increases the reported peak level to 0dB.



You can use the normalise function to determine noisegate "on level" settings. Make a cut at each end of an area that you wish to "gate" out and then click on that part with the normalise tool. It will show you how much it will have to increase the level of the selected part to reach 0dB. Click on **No** to avoid normalising the part and then glue the cut section back into the main part. If you use the 'normalise value' as your "on level" value in the noisegate, it will mute all sections of the part below that level.



Time Stretch/Compress Process Tool “Ctrl+Shift+T”

Changes the time of a (stereo) part without altering the pitch, within a range from 67% up to 150%. The time of the generated take(s) can be specified in percentage, SMPTE, B/C/T or tempo. See **Time Module chapter**.



Pitch Shift Process Tool “Ctrl+Shift+P”

Changes the pitch of a (stereo) part without altering the length, within a range from 67% up to 150%. The pitch of the generated take(s) can be specified in percentage, or semitones and cents change. See **Time Module chapter**.



Sample Rate Convert Process Tool “Ctrl+Shift+S”

Resamples a (stereo) part, thereby changing the length and pitch, within a range from 50% up to 200%. The time of the generated take(s) can be specified in percentage, SMPTE, B/C/T or sample rate. See **Time Module chapter**.



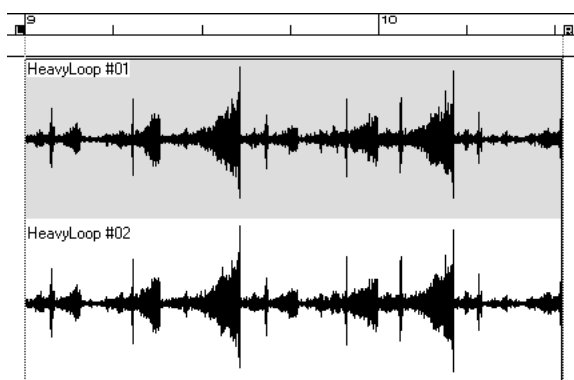
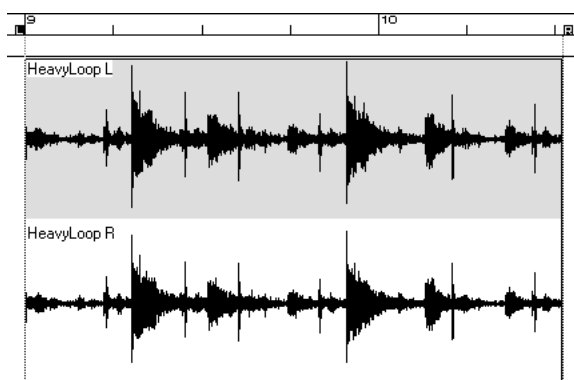
Stereo Reverb Process Tool “Ctrl+Alt+R”

Clicking the Stereo Reverb tool on a part will call up the reverb settings window. It is then possible to create a new reverb effect or call up a “preset” effect which has been previously stored. See **Stereo Reverb Module chapter**.



Reverse Tool “Ctrl+Shift+R”

The **Reverse** tool is a process function which generates a new ‘reversed’ take of the part that has been selected. If you process a part which uses a take that will be unused in the current arrangement after the reverse process, you will be given the option to “Delete unreferenced takes?”. Only click on **Yes** if you are sure that the take is not used in any other arrangement.





DC Removal Tool “Ctrl+Shift+N”

The **DC Removal tool** processes a part or selected parts with a 10Hz high pass filter. New takes are generated which have all DC offsets removed (these may have been present when takes were originally recorded due to DC at mixer or preamp outputs).



Mute Tool “Ctrl+U”

The **Mute tool** allows any part or group of parts to be muted by selecting the tool and clicking on a part or group. Muted parts retain the track assign data. Un-muting using the **mute tool** again, returns the previous track assignments.



Glue Tool “Ctrl+G”

The **Glue tool** allows you to remove cuts that have been made to a part in the arrange window. To glue a part, select the tool on the left or right mouse button, point at the part which is immediately before the cut, and click. The cut will be removed and the glued part will take the parameters (*i.e.* volume, fade settings and track assignments) of the part you selected.

It is only possible to glue together parts which were originally edited using the **cut tool**, thus are from the same take and are in the same order as the original part (*i.e.* continuous audio).



If you want to create one part from several parts in order to use just one set of parameters for all the parts, but the parts use different takes, then the only way to achieve this is to use the **mixdown tool** to create a single new take.



Mixdown Tool “Ctrl+Y”

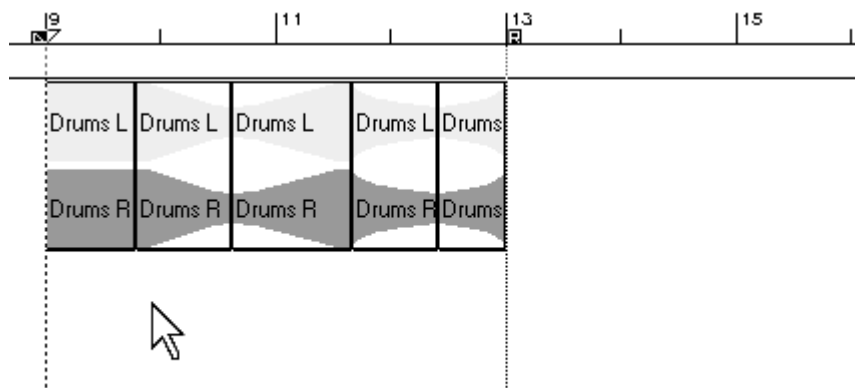
The **Mixdown tool** allows up to ten active tracks to be digitally mixed together to form a new take, so that sub-mixes or a complete stereo mix can be performed without leaving the digital domain. The mixdown process does not add any extra background noise or degradation of the audio quality, and contains all the fade settings and mixer settings of the original parts. Mixdowns are performed in real-time, so that it is possible to retain all the EQ, real-time FX (*i.e.* plug-ins), volume and pan settings for the active parts. When the mixer automation feature becomes available, all real-time fades etc. will be included in a mixdown process.

Performing the Mixdown

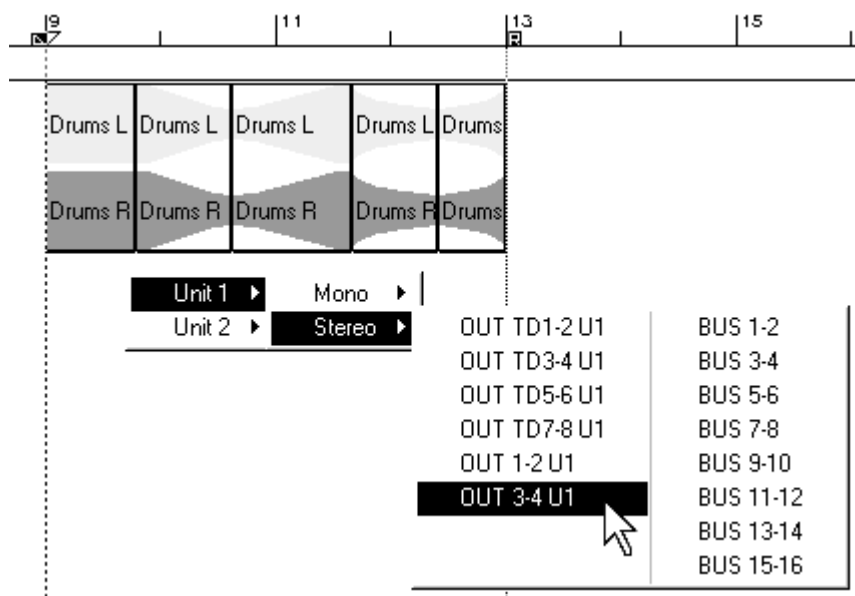
To perform the mixdown, first position the left and right locators around the region you wish to mix. The length of the new take is determined by the left and right locators, so place them accurately to avoid using more hard disk

Soundscape

space than is actually required. Once you are happy with the volume, pan, fade settings and any plug-in settings, select the **Mixdown** tool and click on a free space in the arrange window between the locators.



A 'pop out' menu will appear requiring you to select which unit the mixdown will be performed to, mono or stereo and finally which output the mix shall be recorded from. The output selection is critical as all audio is now routed through Soundscape's mixer, so only tracks routed to the selected outputs will be mixed down.



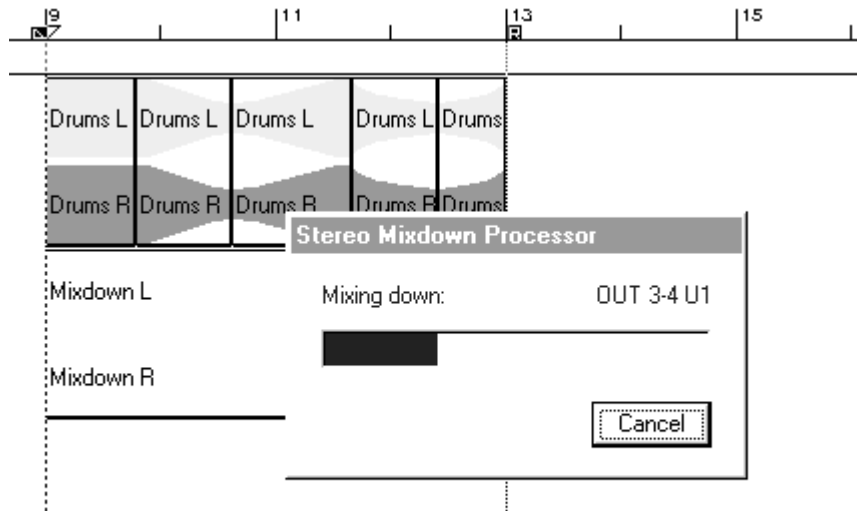
For example, you may have tracks 1 to 4 routed to outputs 1 + 2 and tracks 5 to 8 routed to outputs 3 + 4 on your Soundscape mixer... therefore, releasing the mixdown tool on tracks 1 + 2 will only mixdown tracks 1 to 4. It is a good idea to bus all of your tracks to a master mix channel so that all channels are available from one output selection. This would allow you to control which tracks will be mixed by selecting or muting them in the arrange window. See *the Mixer chapter for more information*



Remember, you will get no sound at all without a mixer active!

Letting go of the mouse button will initiate a mixdown. The next available tracks will automatically be selected for mixing down to. The following

dialogue box appears to show the progress and you will also hear the audio that has been selected between the locators.



The new take(s) and part(s) are named Mixdown L and R, and will be allocated a number if there are previous mixdowns in the current SFolder. The SFile Manager will also show that the takes originated as a mixdown.

The Mixdown creates a new waveform and saves it on disk as a take, so it is not possible to extract the original tracks from the mix, as can be performed by MIDI sequencers. However, the merged part can be assigned to a physical track and the original parts can be left muted in the arrange window, with the takes still present on the hard disk. This means that you can always return to the original arrangement and redo the Mixdown at any time.



To check a stereo arrangement for mono compatibility, first produce a pair of stereo tracks by performing a stereo mixdown, or by mixing in real-time to DAT and recording this back into Soundscape. You can then either pan left and right parts at the centre and listen in real-time, or perform a mono mixdown of left and right tracks.

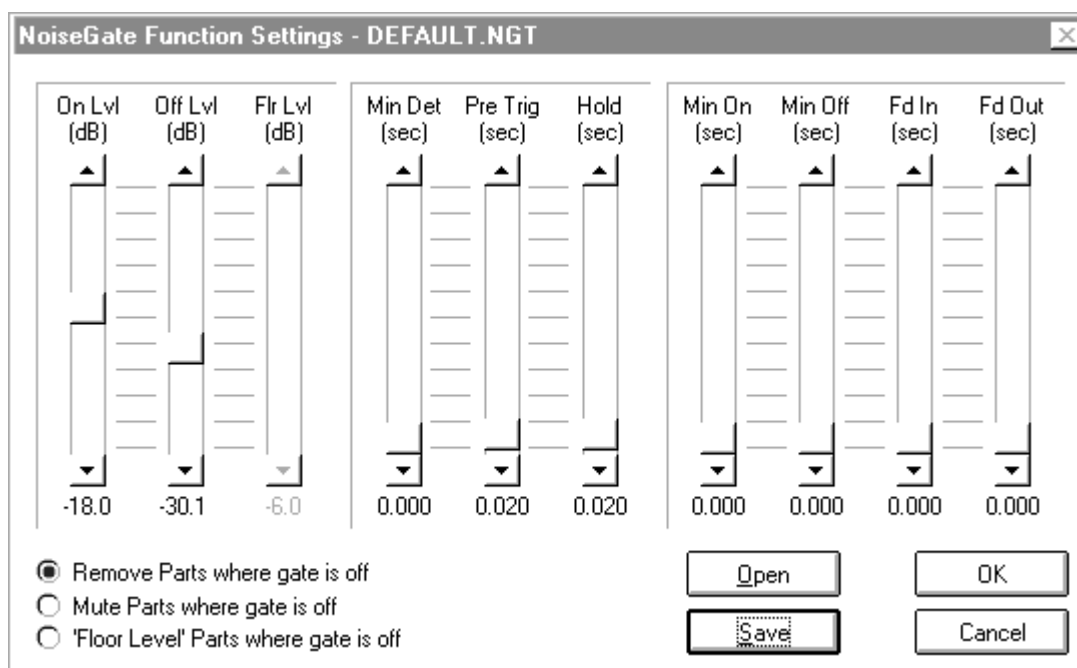
Note that this will give a different result to performing a mono mix or Mixdown of all tracks, as in a stereo mix signals which are panned in the centre (*i.e.* same level in left and right tracks) will always increase by 6dB when left and right tracks are added together *i.e.* they are effectively added twice into the mono mix.



Noise Gate Tool “Ctrl+K”

The post-processing Noise Gate function is accessed when you click on a part

or a group of parts with the **Noise Gate** tool. The Noise Gate parameter settings are then displayed as shown below:-



The noise gate processes a part or group of parts and automatically makes non-destructive edits to the arrangement corresponding to the audio in the part(s) and determined by the settings of the 10 noise gate parameters. This generates multiple smaller parts, but leaves the takes on disk untouched. Standard gating techniques can be applied to the audio, but with some powerful additions like programmable fade ins/outs, pre-trigger time and floor attenuation.

The Noise Gate can also be used to cut out silent or unwanted sections of the recorded material for eventual removal from the disk (see **Shrink takes** later), saving valuable disk space.

Saving Noise Gate Settings

It is possible to store your gate settings for easy recall. Just click on the **Save** button in the gate settings window and the usual save dialogue appears. The settings will be saved with a ".ngt" extension. You can recall any gate setting by clicking on **Open** in the gate settings window.

Noise Gate Parameters

On Lvl (-96..0dB): **Threshold On Level**
Threshold level for opening the gate.

Off Lvl (-96..0dB): **Threshold Off Level**
Threshold level for closing the gate.
(i.e. gate closes when the audio drops below this setting).

Flr Lvl (-96..0dB): Floor Level

Level that is used for scaling part volumes of parts that are in the 'gate off' region. This setting is only used if 'Floor Level' Parts where gate is off option is selected.

Min Det (0.000..10sec): Minimum Detection Time

'Gate on' regions less than this setting are ignored, so that fast glitches and clicks do not open the gate.

Pre Trig (0.000..10sec): Pre Triggering Time

Time that gate already opens before 'On Lvl' is reached (*i.e. this allows audio that starts just before the on threshold is reached, to be included*).

Hold (0.010..10sec): Hold Time

Time that gate remains open after the audio drops below 'Off Lvl'. This is re-triggerable, so if the audio rises above the 'On Lvl' within the hold time, the gate will remain open.

Min On (0.000..10sec): Minimum 'gate on' time

'Gate on' region minimum length.
(*i.e. this sets the smallest part length that will be generated*).

Min Off (0.000..10sec): Minimum 'gate off' time

'Gate off' region minimum length.
(*i.e. this sets the smallest gap or muted part that will be generated*).

Fd In (0.000..10sec): Fade in time

'Fade in' part length (can be shortened automatically if not enough space between parts is available).

Fd Out (0.000..10sec): Fade out time

'Fade out' part length. (can be shortened automatically if not enough space between parts is available).

Remove Parts where gate is off:

All parts that are in the 'gate off' region will be deleted.

Mute Parts where gate is off:

All parts that are in the 'gate off' region will be muted.

'Floor Level' Parts where gate is off:

All parts that are in the 'gate off' region will be scaled down in volume by the amount specified in 'Flr Lvl'.

Adjust the parameters as required for the type of audio material you wish to process. To get an idea of threshold levels, maximize the track fader and look at the peak meters while scrubbing or soloing the audio.



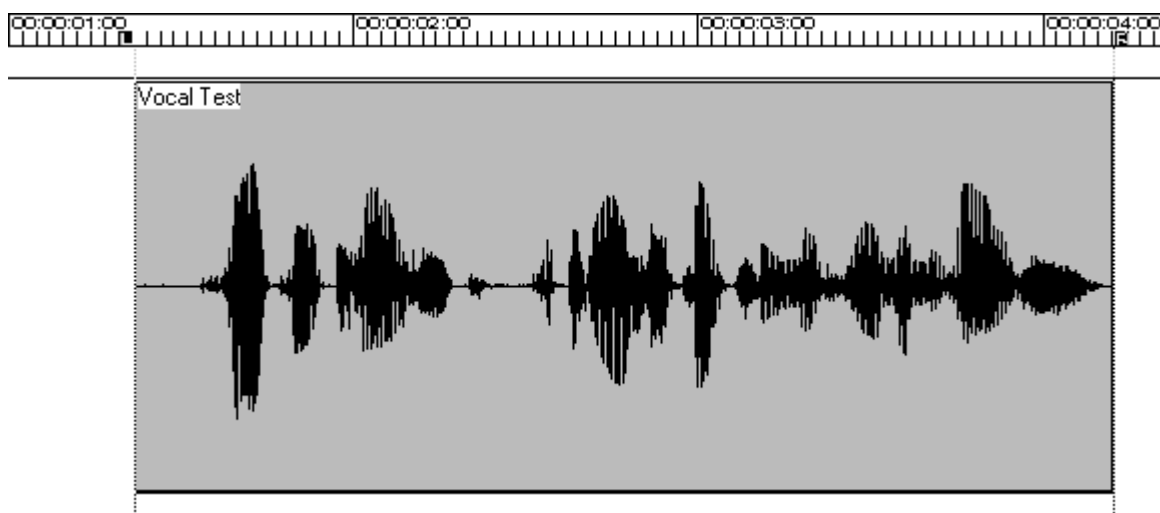
Use the normalise function to report the peak value of a selected part, and then abort normalising by clicking on Cancel. Remember, however, that normalising does not include part volumes or fades.

A good starting point for setting the thresholds, is to set the **On Lvl** to 15dB below peak level and the **Off Lvl** to 15dB above the noise.

The noise gate scans the audio in the parts, taking into account the beginning volumes of parts that exist before processing has taken place *i.e.* you can pre-adjust the volume, to vary the levels of any troublesome sections which do not gate effectively. With inappropriate parameter settings, the parts generated may not be what you intended. Remember that noise gate processing is non-destructive, so simply undo the edits, adjust the parameters and reprocess.

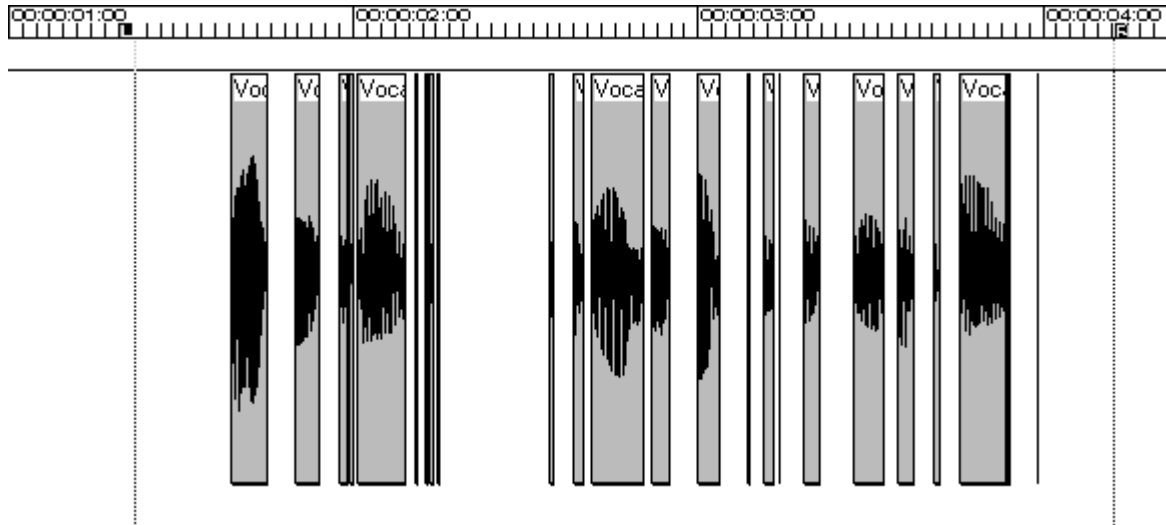
It's always a good idea to make a copy of the original part on another virtual track using the **Copy Vertical tool** before noise gate processing, just in case you perform a different operation afterwards and so **Undo** is not possible (of the Noise Gate).

In the following example a short section of speech was recorded.

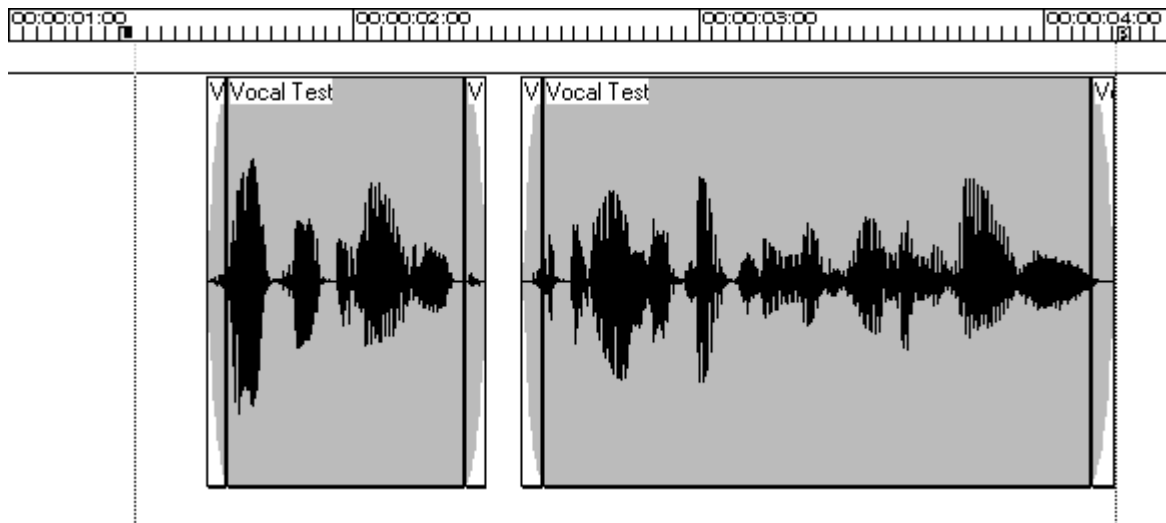


The noise gate processing was then performed, but the chosen parameters

produced too many short parts, and removed some of the wanted sections of the audio.



Undo was then used, and the noise gate parameters were modified to add a short fade in and fade out, the Hold time, Min On and Min Off times were increased and the thresholds lowered slightly. Reprocessing then achieved the desired result, so that gaps in the speech were removed.

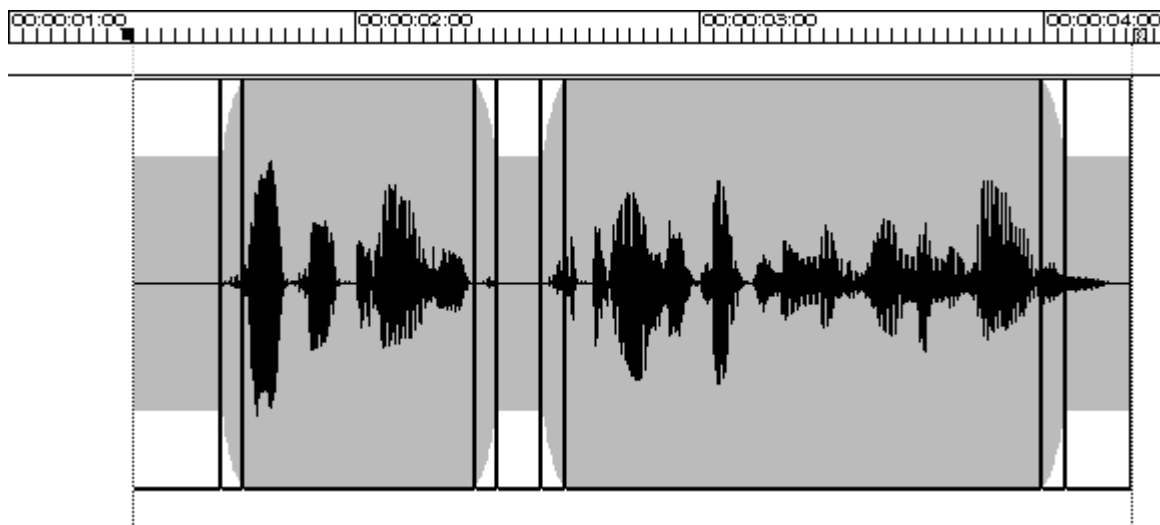


Following this, Shrink takes and Defragment SDisk could be performed to free up hard disk space.

If 'Mute Parts' where gate is off is selected, then muted parts are generated in the 'gate off' regions. This makes it easy to check the audio that is being removed, by selecting muted and active parts and then using the **Mute tool** to toggle the active/muted status.

If 'Floor Level' parts where gate is off is selected and the Floor Level parameter is set to -10dB, then instead of removing the audio in the 'gate off' regions, it just becomes attenuated as shown below. For situations where completely

removing the background ambience sounds unnatural, this can provide a controlled reduction in background levels.



Waveform Tool “Ctrl+W”

The **Waveform tool** is used to turn on and off waveform display for selected part(s) in the arrangement and to generate waveform display files (.wvf). These are stored in the `c:\Soundscape\Wvf` folder on the PC's hard disk.

The waveform files are compressed for display by 1024:1 compared to the sizes of takes on the sound disk and so occupy a small amount of disk space on the PC. Once you have generated waveforms for a part, it will always have the waveform displayed and the SDisk window also displays the waveform for entire takes.

As you zoom in, the waveform display is automatically switched from reading the low resolution PC files, to displaying high resolution waveforms directly from the sound disk (down to sample resolution). Fades and volume changes do not scale the waveform display, making it easy to view waveforms for parts that have a low volume setting, or at the ends of a fade out.

You can select whether waveform files are saved or discarded when you exit the program under **Preferences** from the **Settings** menu - ‘**Keep all generated waveform files?**’



Info Tool “Ctrl+I”

The **Info tool** is used to view or edit information about a part or a take. It allows parts and takes to be named and precise editing of all part parameters.

To view part information, select the tool, and click on an individual part. The **Part Info** dialogue box will be displayed as shown:-

Part Info

Part Information

Name:

-> Selected Parts Name | -> Take(s) Name

Start in Arr.: SMPTE B/C/T

Length: SMPTE B/C/T

Start in Take: SMPTE B/C/T

Output:

Fade: Invert Phase

Beg Vol:

End Vol:

Take Information

Name:

Length: SMPTE B/C/T

Here you can enter a name for the part and take, move to a new start time, edit the part length, change output assignments, assign fade curves, adjust beginning and end volumes, invert the phase, and select which audio take the part will use.

'-> **Selected Parts Name**' button updates part name of all selected parts with current part name.

'-> **Take(s) Name**' button updates take name of all selected parts with their corresponding part name.

The takes are listed according to the **Take Sort** option in the **Settings** menu to assist in locating the one required. The start position in the arrangement, the length and the start position in the take can also be entered in bars, beats and ticks, or in SMPTE time with the sample extension described earlier in this section. Here you are able to move the part by as little as one sample if required, allowing sample accurate positioning.

If multiple parts are selected, the same amount of change that is made to any parameter is made to all other selected parts where possible. e.g. If the part length is reduced 1 frame, all other selected parts also have their lengths reduced 1 frame.

Soundscape

The only exceptions to this are when the same amount of change to timing values for start position in arrangement, length, or start position in the take, cannot be made to other selected parts (because of overlaps, part/take lengths etc.). The maximum amount of change that can successfully be made to all selected parts is substituted. A way of checking that values entered are OK, is to click on another parameter after entering changes. If the changed value remains as you have entered it, then the change is legal for all selected parts. If not, then the parameter shows the maximum allowable change.

The only parameters that cannot be changed for multiple parts are part names, output assignments and changes to take assignment. These changes can still be entered for the part that was selected from the group.

Changes to the take assignment are not allowed when multiple parts are selected.

To view take information, click on any take from the **SDisk window**. The dialogue box shown below will be displayed and you can name the take, add a comment, view the SDisk location, status, date and time recorded, sample rate, frame rate, start time, length, size of file, , and origin of the take.

Take Information			
Name:	Mixdown L		
Comment:	New Version of Drum Take 7		
SDisk:	1A		
Status:	Active		
Recorded:	Jun 16, 1997	20:23:32	
Sample Rate:	44100	Hz	
Frame Rate:	25	Fps	
Start:	00:00:21:08.1426	SMPTE	
Length:	00:00:10:16.1595	SMPTE	4.0.0 B/C/T
	0.941	Mbyte	
Origin:	Mixdown Processed		

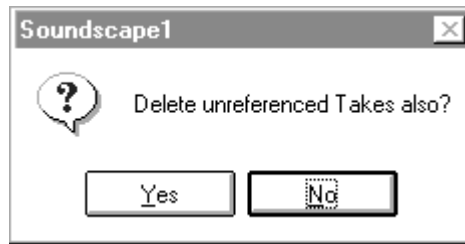


Delete Tool “Ctrl+D”

The **Delete** tool allows parts or groups of parts to be deleted from the arrange window and takes to be deleted from the SDisk directory.

To delete parts, select the **delete** tool and click on a part or group. If, when the parts you have selected are deleted, there are takes left on the disk which

would then be unused in the arrangement, a dialogue box will be displayed as shown:-



If you no longer require these takes, and you are sure that they are not used by any other arrange file, then click on **Yes**. The takes will then be deleted from the hard disk. Click on **No** if you want to save the takes, or if you are not sure whether other arrangements use these takes.

If you are recording and deleting parts regularly, then under the **Settings** menu it is possible to set auto deleting of the takes when deleting parts.



Be extremely careful if you do set 'auto delete mode', as it is then very easy to remove valuable digital audio from the disk.

To delete a take, select the tool and then click on any take from the SDisk directory. If there are parts in the arrange window which use the take you have selected, then a dialogue box will be displayed as shown:-

Click on **OK** only if you want to proceed with deleting the take.

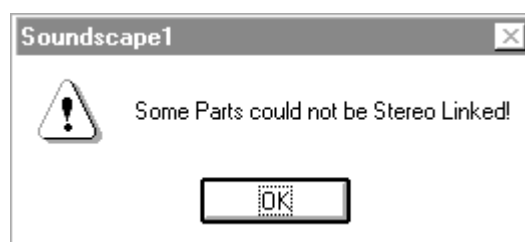


It is also possible to delete takes from the **SFile Manager** window by highlighting the relevant take and then using the **Delete** key on your keyboard.



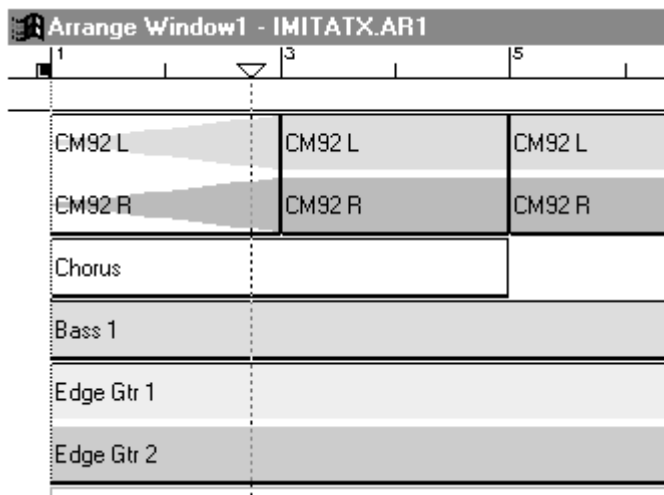
Stereo Link Tool “Ctrl+L”

The **Stereo Link tool** allows two parts to be linked for all editing operations, including soloing. To stereo link the parts, first select them and then click with the mouse on the uppermost part. Stereo linking can only take place if the two parts are on adjacent virtual tracks and have identical lengths and start positions in the arrangement. If this is not the case, a dialogue box appears as shown:-



Soundscape

Multiple parts may be selected, but only those fulfilling the above criteria will be stereo linked. Any linked parts appear as shown below, still with the original track assignments and colours. Using the **Track Assign** tools on stereo linked parts will assign tracks in pairs (*i.e.* 1 & 2, 3 & 4 etc...).

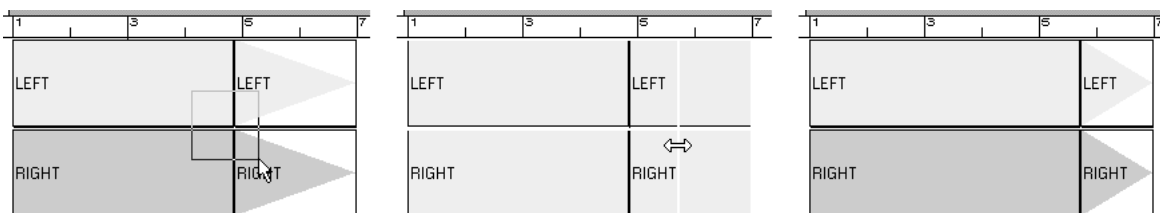


Trim Tool “Ctrl+T”

The **Trim tool** allows the start or end of a part or group of parts to be dragged to the left or right using the mouse, to shorten or lengthen the part(s). The audio remains in the same timing position, and this allows you to ‘reveal’ more or less of the audio from the take as desired.

To trim a part, point at the start or end, click and hold and then drag with the mouse. You can only extend the length of a part when it is shorter than the take *i.e.* where there is still available audio on disk.

You can also move the position of a cut between two parts, for instance, when you have cut a part into two with a fade out at the end. The **trim tool** always allows you to draw a select box across a cut, to select the parts on both sides.



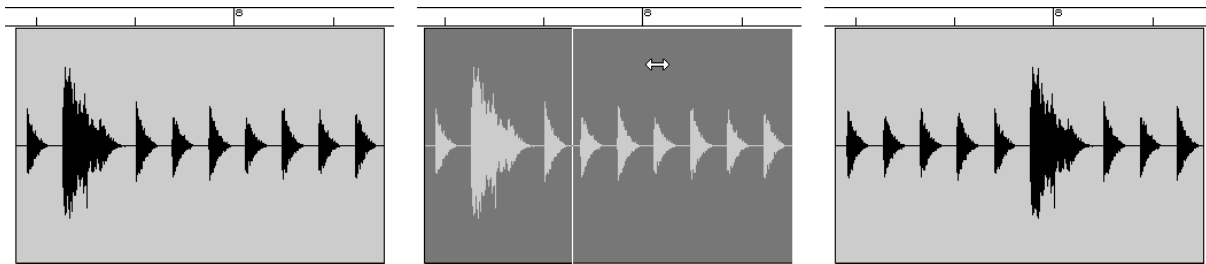
Dragging the cut will lengthen one part and shorten the other. You can trim parts from multiple tracks at the same time, as long as the starts/ends/cuts are at identical timings.



Slip Tool “Ctrl+J”

The **Slip tool** allows the audio within a part to be moved without changing the length of the part or its start position. It is only possible to slip the audio to the

left or right, if the take on disk is longer than the part in the arrangement, and so there is excess audio at least one end.

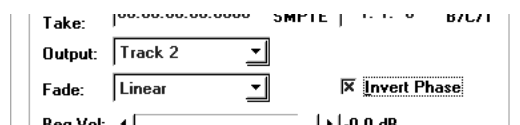


It is easier to see the effect of slipping the audio at waveform level, as shown above. Select the slip tool, point at the part of the waveform that you wish to move and drag left or right. A white line which shows how much movement is being made will be drawn, as shown in the second diagram above. The current snap setting is used, but applies from the *start or end of the part* (depending upon the slip direction), rather than being relative to the time axis.



Phase Invert Tool “Ctrl+P”

The **Phase Invert** tool allows individual parts to be 180° inverted in real-time (*i.e.* this is a playback parameter and does not have to be generated to a new take on disk). The **Phase Invert** status of a part is reported in the **Part Info** box:-



Phase inversion may be necessary if equipment in the record or playback audio path is also inverting. This can now be corrected easily using the phase invert function for individual parts or entire tracks.



Phase inversion can also add some interesting effects if a part is copied, assigned to a new track, phase inverted and then is delayed slightly. This has the effect of implementing a simple comb filter, which will cancel some frequencies and enhance others, depending upon the delay.

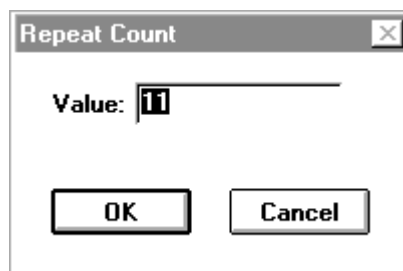


Repeat Tool “Ctrl+R”

The **Repeat** tool allows a part or group of parts to be repeated any number of times in the arrangement. The snap setting allows the repeated section to

Soundscape

start on the nearest bar, beat or second boundary after the end of the part(s), or if snap is set to off, to repeat immediately with no gap.



If the number of repeats entered causes an overlap with other parts in the arrangement, a warning message will be displayed. In this case, the maximum number of repeats possible without overlapping will be made.

Edit Menu

Edit	Global	Settings	Backup	SD
U <u>ndo</u> Record			Ctrl+Z	
C <u>reate</u>			Alt+1	
T <u>rack</u> Assign			Ctrl+1	
M <u>ove</u>				▶
C <u>opy</u>				▶
C <u>ut</u>				▶
S <u>olo</u>				▶
V <u>olume</u>				▶
S <u>crub</u>				▶
P <u>rocess</u>				▶
M <u>ute</u>			Ctrl+U	
G <u>lue</u>			Ctrl+G	
N <u>oiseGate</u> Function			Ctrl+K	
W <u>aveForm</u>			Ctrl+W	
I <u>nf</u> o			Ctrl+I	
D <u>elete</u>			Ctrl+D	
S <u>tereo</u> L <u>ink</u>			Ctrl+L	
T <u>rim</u>			Ctrl+T	
S <u>lip</u>			Ctrl+J	
I <u>nv</u> ert P <u>h</u> ase			Ctrl+P	
R <u>epeat</u>			Ctrl+R	
Z <u>oom</u>				▶
M <u>ix</u> Control/Edit toggle		E		

Under the **Edit** menu you will find one of the most useful functions within Soundscape, the **Undo** function. The menu also lists the function key assignments which you can use to select each tool on the mouse.

Undo “Ctrl+Z”

You can undo any edit that you make to parts or takes by selecting **Undo** from the **Edit** menu. The undo function will only restore the last 10 edits. However, in certain circumstances an undo may be impossible. For example, if you have deleted a Take from the SDisk, and then recorded or imported a new Take that uses the same area of the disk, then an undo of the delete will not be possible as the original will have been overwritten.

View Menu

View	Help
✓ Tool Bar	
Next Tool Page	PgUp
Prev Tool Page	PgDn
✓ Status Bar	
✓ Tape Transport Bar	
✓ Arrange Window	A
✓ Marker Bar	
✓ SFile Manager	D
Marker Directory	W
SDisks Window	K
Buffer Activity	B
Big Current Time	T
AVI Player	V
Mix Window	▶

The **View** menu allows you to configure the Soundscape display to your own liking. The Main, Arrange, SFile Manager, Marker Directory, SDisk, Big Current Time, AVI Player and the Mix windows can be resized and positioned in the normal way. The buffer activity window cannot be resized, but can be positioned. Using the menu, you can turn each window on as required.

Windows can also be turned off by using the standard Windows facility of clicking on the 'X' in the top right corner.

All screen settings can be saved to the initialisation file (which is loaded each time you start the Soundscape software), using **Save Settings** from the **Settings** menu.



If you want to position a window but have it disabled on start-up, first perform a **Save Settings** with the window displayed, but at the required position, then turn it off and perform the **Save Settings** again.

Tape Menu

Tape	Edit	Global	Setting
Goto <u>B</u> egin		Home	
Goto <u>E</u> nd		End	
<u>R</u> ewind		Left	
<u>F</u> orward		Right	
<u>S</u> top		Down	
<u>P</u> lay		Up	
<u>R</u> ecord		Add	
<hr/>			
Song Position			
Smpte Time			
<u>L</u> eft Locator		Alt+L	
<u>R</u> ight Locator		Alt+R	
Sign			
Tempo			

Under the **Tape** menu is a list of the keys used to control the tape transport window.

You can also use this menu to select the tape transport dialogue boxes for time entries. All tape transport dialogue boxes can also be opened by double clicking on the relevant display on the tape transport.

Options Menu

Under the **Options** menu is a list of 'optional software upgrades' which are password protected. It is necessary to enter your password in order for you to run the Ver 2 mixer. Double clicking on the 000000000000 will enable you to enter the appropriate password for the mixer or any other option.

Passwords are only available from your local dealer/distributor or directly from Soundscape Digital Technology.

Future 'optional' upgrades such as the "Audio Toolbox" and 3rd party plug-ins will also be "unlocked" from this menu.

See the **Options Menu** chapter for more details.