2. Type a comment in the Comment field and hit the return key on your keyboard.

   The comment will appear to the right of the flag's banner, above the Time Line.

Figure 8-7. Flag Parameters

Remove a Locate Flag

1. Double click the flag's banner to open the Flag Parameters.
2. Click the Remove button.

The flag will be removed from the Time Line.

Opening and Saving Cue Lists

You can Open Cue Lists into the Time Line by using the Open command in the Cue List menu. A file requester will let you select a Cue List file to open. You can save the Time Line to a Cue List file by using the Save As or Save command. See Chapter 6 - Cue List Tutorial for step by step instructions.

NOTE A Cue List does not contain samples. It is a file that contains the descriptions of events to be triggered and when every entry should be triggered.

Triggering Entries From the Time Line

The Time Line can trigger Audio and AREXX entries when its Activation button is turned ON and the Time line has been triggered. There are three ways to trigger the Time Line:

- Click the Play button
- Click the Play from Start Button
- Start the SMPTE generator, either internal or external

Internal sources include the SMPTE Generator or SMPTE Output in the Studio 16 software. External sources include the SMPTE output of a video tape deck or multitrack audio recorder connected to the SMPTE input of your AD516.

It may take the Time Line several seconds to find the correct position to start playback, especially if the computer is busy, or if you are triggering near the end of a long sample.

Selecting SMPTE Frame Rate and Source

Studio 16 supports SMPTE frame rates of 24, 25, and 29.97 frames per second, and 30 frame per second drop frame (DF). The Time Line will expect whatever frame rate set in Studio 16 Preferences.

Select a Frame Rate

1. Use the Preferences command in the Project menu to open the Preferences.
2. Choose the frame rate clicking the appropriate button in the SMPTE section in the upper right corner.
3. You can use the SaveSetup command in the Project menu to save your choice as the default frame rate.

NOTE The SaveSetup command also saves other information about your initial setup, including the windows you have open, their locations, default file requester paths, screen colors, and more.

Setting Cue List Defaults

When you first open the Time Line, it will open a Cue List called "Untitled.cue". The same file is opened when you select the New command in the Cue List menu.

You can customize the layout and design of this default file by creating Cue List format of your choice and then choosing the Save Default command in the Cue List menu. Your customized Time Line will then be saved as Default.cue.

Cue List Reference

Transport Buttons

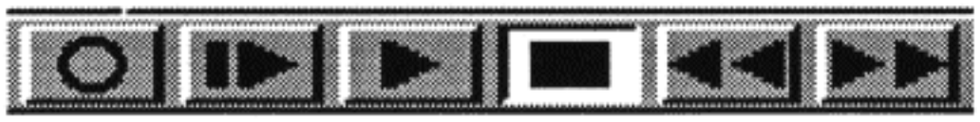

Figure 8-8. Transport Buttons

You'll find the transport buttons in the upper left corner of the Time Line window. You can click them with the left mouse button or use their keyboard shortcuts. They function much like the buttons on a standard multitrack tape recorder.

There are six transport buttons:

- Record
- Play From Start
- Play
- Stop
- Rewind
- Fast Forward

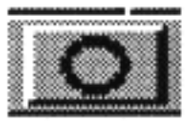

Figure 8-9. Record Button

Record Button The Record Button lets you put the time line into record mode. In record mode, you can record a sample onto one or more tracks. However, clicking the Record Button will not immediately cause the time line to begin recording.

Keyboard Shortcut: + -

On the numeric keypad, you can use the + key to turn the record button on, and the - key to turn the record button off.

Record From the Cue List

1. Click the Record Button. This puts the Time Line into record mode.
2. Select one or more tracks by clicking the Track Select button for each track you intend to record onto. The Track Select button is to the right of the Track Name button. It displays an arrow when selected. Typically you'll select one track for a monophonic recording, or two tracks for a stereo recording.
3. Open the Audio Track Parameters by clicking the Track Name button. There you'll see the Record drop list in the Track Parameters . Choose from the inputs on any SunRize boards installed in your system.

   You can also choose to record the output of the Time Line. This lets you combine multiple tracks into a single sample.
4. Move the Punch-In and Punch-Out flags to define the start and end times of the recording.
5. Move the Position flag to the left of the Punch-In flag so that playback begins before the start time of the recording.
6. Click the Play button.

   Or, you can also use the Play-From-Start Button, if the Start Flag is to the left of the Punch-In Flag. Recording always begins at the Punch-In Flag. Recording stops at the Punch-Out Flag or when you click the stop button.

NOTE The + and - keyboard shortcut for the Record button means you can go in and out of record mode without looking at the monitor to see what mode you're in. This can be helpful if you're recording an instrument that picks up hum from the monitor, like an electric guitar. Using keyboard shortcuts, you can do your recording with the monitor off, if necessary.

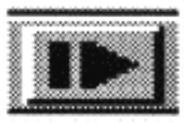

Figure 8-10. Play From Start Button

Play-From-Start Button

Click the Play-From-Start Button when you want the Time Line to begin playing from the Start Flag, rather than from the Position Flag location.

Keyboard Shortcut:

You can use the 0 key on numeric keypad to activate the Play From Start Button.

If the Record Button is enabled, the Time Line will automatically start recording onto selected tracks when the Location Flag passes the Punch-In Flag.

NOTE You can move the Start Flag to any location by dragging it, but typically you'll put it about five seconds before the beginning of your soundtrack or song. You can use the ten Locate Flags to set other locate points within your soundtrack or song.

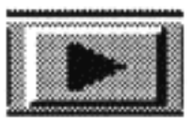

Figure 8-11. Play Button

Play Button

Click the play button when you want the Time Line to start playing from the Position Flag.

Keyboard Shortcut:

Enter (keypad)

You can use the Enter key on the numeric keypad to toggle playback on and off. The Enter key will also stop rewind and fast forward operations.

The Position Flag marks your current playback location on the time line. When you're not playing, rewinding or fast forwarding, the Position Flag will be wherever you last stopped playback, unless you drag it somewhere else or move it to a Locate flag position using one of the function keys.

If the Record Button is enabled, the Time Line will automatically start recording onto selected tracks when the Position Flag passes the punch-in flag.

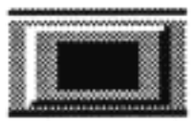

Figure 8-12. Stop Button

Stop Button Click the Stop button to stop any playback, recording, fast-forward or rewind operation.

Keyboard Shortcut: . Enter (keypad)

You can use the Decimal Point key or the Enter key on the numeric keypad to stop playback, rewind and fast forward operations. The Decimal Point key will always stop the current transport operation. The Enter key toggles between the Play and Stop buttons.

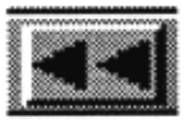

Figure 8-13. Rewind Button

Rewind Button Click the rewind button to move the Position Flag rapidly backward in time. Click the stop button when you want the Position Flag to stop.

Keyboard Shortcut: Left arrow key

You can use the left arrow key to scroll the Time Line to the left while keeping the Position flag at about a third of the way from the left edge of the Time Line. This is not exactly what the Rewind button does, but it's similar enough that you can often just use the left arrow key to rewind.

If the Grid Snap button is turned on, the Position Flag will move in grid increments. Otherwise it will move in seconds.

NOTE You'll see the changing SMPTE location of the Position Flag if you open the SMPTE Monitor.

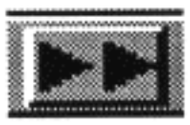

Figure 8-14. Fast Forward Button

Fast Forward Button Click the fast-forward button to move the Position Flag rapidly forward in time. Click the stop button when you want the Position Flag to stop.

Keyboard Shortcut: Right arrow key

You can use the right arrow key to scroll the Time Line to the right while keeping the Position flag at about a third of the way from the left edge of the Time Line. This is not exactly what the Fast Forward button does, but it's similar enough that you can often just use the right arrow key to fast forward.

If the Grid Snap button is turned on, the Position Flag will move in grid increments. Otherwise it will move in seconds.

NOTE You'll see the changing SMPTE location of the Position Flag if you open the SMPTE Monitor.

Drag Mode Buttons

The Drag Mode buttons are at the top of the Time Line window to the right of the Transport Control buttons. You can click them with the left mouse button or use their keyboard shortcuts. They let you determine how freely you can drag entries and flags with the mouse.

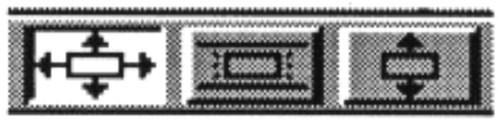

Figure 8-15. Drag Mode Buttons

There are three Drag Mode buttons. Only one button can be active at a time.

- Any Direction
- Lock-To-Grid
- Vertical Only

Dragging Entries You can drag an entry in the time line by clicking it with the left mouse button, and while still holding the left mouse button down, moving the mouse. The entry will follow the mouse. It can be dropped on any audio track.

Dragging Grouped Entries You can drag grouped entries together by dragging any member of the group. Select and group multiple entries by clicking each entry while holding down the shift key, and then select the Group command in the Entry menu.

Dragging Flags You can drag a flag by clicking it with the left mouse button, and while still holding the left mouse button down, moving the mouse left or right. The flag will follow the mouse.

If you drag a flag or entry beyond the right or left edge of the Time Line window, the Time Line will scroll.

You can move entries and flags freely in time, but there's another issue to be aware of. There are only so many pixels on the computer screen to represent all the resolution available in the Time Line. If you are zoomed out and you move a flag, you may notice that in order to represent the amount of time you're viewing, each time you move the flag by a single pixel it may jump several frames, or even several seconds depending on the time the Time Line needs to display.

The larger the amount of time you show in the Time Line by zooming out to see more of the Time Line, the more time each pixel has to represent. Zoom in for more resolution.

NOTE Pixel is short for Picture Element. A Pixel is a single tiny rectangle on the screen that combines with other pixels to create what you see on your computer screen. On a normal, (non-overscan) Amiga high-res interlaced screen there are 640 pixels from the left side of the monitor to the right side of the monitor.

For example, in Any Direction Mode, with SMPTE selected in the Time Options area of Cue List Preferences. If dragging an entry or flag by single pixel moves it more than a thirtieth of a second, and you need finer control, zoom in to display a smaller portion of the Time Line using the Zoom Arrow Buttons to the left of the Horizontal Scroll Bar. You can also make your Time Line window wider using the sizing gadget in the lower right corner.

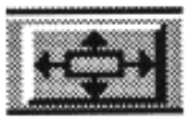

Figure 8-16. Any Direction Button

Any Direction Button Use the Any Direction button to select the Any Direction mode. This mode lets you drag entries forward or backward in time, at the current resolution of the Time Line. It also lets you drag entries up or down, from one track to another.

Keyboard Shortcut: Tab or ~

Let go of either the tab or tilde key to turn on the Any Direction Button.

If you are in Any Direction mode when you drag a sample from Sample List in the Time Line, the Audio Entry will start where your mouse pointer was when you dropped the entry. However, if Keep Original Time activated, the sample will be added at the correct SMPTE frame.

The Any Direction Mode also lets you move flags forward or backward at the current display resolution of the Time Line.

NOTE For speedy keyboard access to all modes, select the Any Direction button. Then hold down the tilde key ~ (above the Tab key) on your keyboard when to temporarily select Vertical Only, or the Tab key to select the Lock-To-Grid button. Releasing the tilde key or Tab key will reselect the Any Direction button.

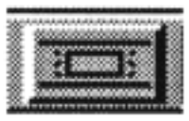

Figure 8-17. Lock-To-Grid Button

Lock-To-Grid Button In Lock-To-Grid mode, when you drag entries in time they snap to the nearest grid increment. You can drag entries between tracks.

Keyboard Shortcut: Tab key

Press and hold the tab key to turn on Lock-To-Grid. Release the tab key to turn it off.

Use this mode when you want entries to start exactly at a predefined interval. Also, snapping left and right stereo samples to the same grid increment is a quick way to synchronize them exactly. If you then group them, you can then drag them anywhere, in Any Direction Mode, without losing stereo sync.

You can also set a custom grid increment to match the tempo of a musical sample, and then drag sound effect samples to lock to the grid so they follow the beat.

If you are in Lock-To-Grid mode when you drag a sample from Sample List onto an Audio track in the Time Line, the audio entry will start at the nearest grid line.

Flags will also snap to the nearest grid increment when you move them. Use the "Set Grid Spacing" command in the Options menu to change the increment.

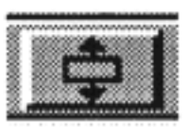

Figure 8-18. Vertical Only Button

Vertical Only Button In Vertical Only mode, you can prevent any time changes when moving entries between tracks. In this mode you will not be able to move entries forward or backward in time.

Keyboard Shortcut: ~

Press and hold the ~ tilde key (above the Tab key) to turn the Vertical Only button on. Release it to turn it off.

This is handy when you have a sound effect placed exactly at the time you want, but you need move it to another track. Another use is to record a second take on a separate track, then "punch in" to the original track.

Since flags can only be moved horizontally, they are not restricted by this mode. Just like the Any Direction mode, Vertical Only mode lets you move flags forward or backward in time at the current display resolution of the Time Line.

NOTE For speedy keyboard access to all modes, select the Any Direction button. Then hold down the tilde key ~ (above the Tab key) on your keyboard when to temporarily select Vertical Only, or the Tab key to select the Lock-To-Grid button. Releasing the tilde key or Tab key will reselect the Any Direction button.

Edit Mode Buttons

You'll find the Edit Mode buttons at the top of the Time Line window to the right of the Drag Mode buttons. You can click them with the left mouse button or use their keyboard shortcuts. They let you determine how freely you can overlap entries that are on the same track.

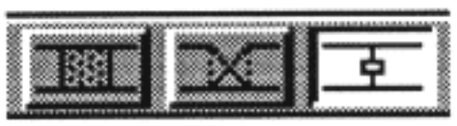

Figure 8-19. Edit Mode Buttons

There are three Edit Mode buttons. Only one of these buttons can be active at a time.

- Unlimited Cross fade
- Limited Cross fade
- Butt Edit

What Is Cross Fading?

If you have two sounds that overlap in time on the same track, the Time Line will automatically cross fade them. Cross fading is the process of turning down the first sound while simultaneously turning up the second sound. This gives you a smooth transition from one sound to the next.

Cross fading is amazingly easy in the Time Line. Just drag one Audio Entry over another on the same track, and you're done. Change the cross fade time by either dragging the Entry to the left or right. Or, change the crossfade times without actually moving the Entries by dragging either Entry's crop gadgets. Note that Crossfades are CPU intensive, too many crossfades may decrease your number of playback tracks.

You can also select from a variety of cross fade curves that determine how the volume fades on each of the overlapping samples. Just change the cross fade types by clicking the cross fade area and bring up the Cross Fade Type Requester.

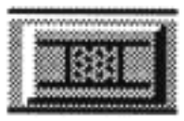

Figure 8-20. Unlimited Crossfade Button

Unlimited Cross Fade Button

Select the Unlimited Cross Fade button to turn on Unlimited Cross Fade mode. In this mode you can automatically create any length cross fade by dragging part of one sample over part of another sample on the same track. You can see the cross fade area as you are dragging one sample over another.

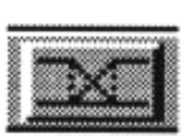

Figure 8-21. Limited Cross Fade Button

Limited Cross Fade Button

In Limited Cross Fade mode, if you drag any sample over any other sample, the overlap area is restricted to be no greater than the default cross fade time set in Cross Fade Preferences. In other words, you can create a cross fade that is less than or equal to the default cross fade time. Create a cross fade of exactly the default time by dragging until the cross fade area stops growing.

Change the default or maximum cross fade time by moving the slider at the bottom of the Cross Fade Preferences requester. You can bring up Cross Fade Preferences from the Options menu. Save your new cross fade time as the default cross fade time with the SaveSetup command in the Project menu.

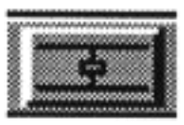

Figure 8-22. Butt Edit Button

What Is A Butt Edit?

A butt edit is when one sample starts exactly when another stops. The two samples will not overlap, nor will there be a gap between them. Precise butt edits are easy to do. Just drag one sample against another while in Butt Edit mode.