2. Select a Time Line track onto which to create a blank Audio Entry, by clicking the arrow buttonn.

3. Turn the Cue List ON.

4. Start the video, and use the Timecode Add command's *A-T* shortcut to mark where sound effects should go while you watch the picture. Each time you type *A-T*, you will insert a blank Audio Entry onto the track.

NOTE Blank Audio Entries are represented on the Time Line as a different colored rectangle than normal Audio Entries. If you are using the Default color scheme, blank entries are blue.

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5. After you've added blank Audio Entries, add samples to them by double clicking the blank entry to bring up Audio Event Parameters.

6. Drag a sample from the Sample List, and drop it into the Sample field at the top of the requester.

7. Close the requester.

Now the sample you dragged from the Sample List has replaced the blank Audio Entry. The Audio Entry still starts where you added it using the Timecode Add command above, so your sound effect starts right where you wanted it to. Of course if your reaction time was off you can just move the sound effect by dragging it along the Time Line.

Recording a New Audio Entry

Here are the typical steps you can use to record a sample from the Time Line. The setups depend on the source of your audio signal.

■ For a video tape deck, audio tape deck, CD player, or synthesizer - connect their outputs directly to the AD516 or AD1012's inputs.

■ For microphones, or electric guitars - connect them to an external mixer, and then connect the output of the mixer to the AD516 or AD1012.

■ For the output of the Time Line itself (mix downs), don't connect anything to your AD516's inputs.

Record a Sample From the Time Line

1. Select the record path in the Sample List (the ☒ box). The record path is where the new samples you record are stored. If you don't have the correct path showing in Sample List, add the path and then select it as the record path.

2. Select New from the Cue List Menu to open an empty Cue List.

3. Select a Time Line track onto which to record. If you want to record a monophonic source, click the track select button on one track. To record a stereo source, shift-click the track select buttons on two audio tracks.

4. Select the input source you want for each track. To do so, click the track name button and select the input source using the Record drop list in Audio Track

Parameters. For each track, you can choose an input on either the AD516 or AD1012 installed in your system.

You can also choose to record the left or right output of the Time Line itself. This is a very handy way to bounce multiple tracks together into either a single monophonic sample or a stereo mix, using several tracks. It's also an easy way to combine the samples that overlap during a real time cross fade into a single sample.

5. While you're in Audio Track Parameters change the name of the track to reflect the recording you're about to make. You can do this by typing a new name in the Name field at the top of the requester, and hitting the return key on your keyboard.

6. Name the new sample you're about to record, by typing a new name in the Record field below the Record drop list. The default sample name is "Untitled".

7. If you are going to record the output of the Time Line, mute (no speaker) the playback of any tracks you don't want to record. And, turn on the Sound button (speaker showing) to enable the playback of a tracks you do want to mix down.

8. Drag the Punch-In flag to where you want the recording to start.

9. Drag the Position flag five seconds or so before the punch-in flag.

10. Drag the Punch-Out flag to where you want the recording to stop.

11. Click the Record button to enable recording.

12. When you're ready to record, click the Play button.

13. The time line will play from the Position flag. It will automatically begin recording at the Punch-In flag, and it will stop recording at the Punch-Out flag or when you click the Stop button.

By leaving the punch-in flag at the same location, you can easily record a series of samples that start at the same time. Record each sample on a different track and the time line becomes a very flexible digital multitrack recorder.

Grouping/Ungrouping Entries

The Time Line has a powerful grouping feature that works much like the object grouping in a drawing program.

To group entries together:

1. Shift-click each entry

2. Select the Group command from the Entry menu.

When entries are grouped, if you select one entry you will select all entries in the group. If you move one entry you will move all the entries in the group, which is great for keeping entries in sync with each other. If you remove one entry you will remove all entries in the group.

If you did something to a whole group that you meant to do to one entry, simply:

1. Use the Undo Edit (*A-Z*) to restore where you were.

2. Select Ungroup to separate all the entries in the group.

3. Select and change individual entries again.

To remove all entries from all groups in the Cue List, use the Ungroup All command in the entry menu.

Cropping an Entry

The Time Line makes it very easy to non-destructively crop the beginning or end of any sample.

1. Click an Audio entry to select it. You'll see the entry change color, and you'll see four small boxes appear. The two boxes on each end of the entry (not the ones on the top corners) are called the Crop Gadgets.

2. Drag the Crop gadget on the left edge of the entry to crop the beginning of the sample.

3. Drag the Crop gadget on the right edge of the entry to crop the end of a sample.

You can not use Crop to extend a sample beyond the length of the original entry. You can only shorten the sample by cropping off the beginning or end, or restoring what you've cropped. Cropping can be very useful for removing unwanted noise at the beginning or end of a sample.

Cropping in the Time Line is non-destructive. It does nothing to the original sample data on your hard drive, so you can experiment and make changes as often as you want. If you change your mind, simply move the Crop gadgets again until you're satisfied with the result.

Fading an Entry

The Time Line makes it very easy to non-destructively fade the beginning or end of any sample.

1. Click an Audio entry to select it. You'll see the entry change color, and you'll see four small boxes appear. The two boxes on the top corners are called the Fade Gadgets.

2. Fade in the beginning of the sample by dragging the fade gadget on the left edge of the entry.

3. Fade out the end of a sample by dragging the Fade gadget on the right edge of the entry.

You can only drag a Fade gadget inward, toward the entry. When you do so you will be adjusting the fade in time for the beginning or the fade out time for the end.

Fading done in the Time Line is non-destructive. It does nothing to the original sample data on your hard drive, so you can experiment and make changes as often as you want. If you change your mind, simply move the Fade gadgets again until you're satisfied with the result.

Cross Fading Entries

Cross fading entries is very simple on the Time Line. All you have to do is slide one sample over into another on the same Audio track. The cross fading is automatic and non-destructive. If you don't like the cross fade, simply move either sample again until you're satisfied with the result.

Looping Entries

Loops are processed by duplicating a sample and repeating it many times. By using the limited cross fade edit mode, you can get a seamless looping action out of any sample.

Loop an Entry

1. Click the entry to be looped.

2. Select the limited crossfade edit mode. If required, edit the crossfade overlap in Cross Fade Preferences.

3. Control drag a copy of the entry to the right of the original sample. Leaving them crossfaded.

4. Control drag another copy to the right. Continue the control drag technique until you have duplicated the sample as many times as required.

Editing an Entry

Load an Audio Entry Into an Editor

1. Click the entry to select it.

2. Choose the Edit Selected command in the Entry menu (*A*-E). An Editor will open for the sample.

   This will not work if the entry is part of a group.

Ungroup an Audio Entry and Load It Into an Editor

1. Select the entry.

2. Choose the Ungroup command from the Entry menu.

3. Click anywhere on a track outside the entries to deselect all entries.

4. Select the entry again and choose the Edit Selected command in the Entry menu (*A*-E). An Editor will open for the sample.

Load a Grouped Audio Entry Into an Editor

1. Double click the entry to bring up Audio Event Parameters.

2. Click the Edit button in the requester and an Editor will open for the sample.

WARNING Edits made in the Editor will change the actual sample. If the same sample is used in other Audio Entries, in the same Cue List or other Cue Lists, the edits you make will affect those other Audio Entries.

You should consider making a copy of a sample under another name in the Sample List. Then you can import the copy into the Audio Entry, by dragging it from the Sample List onto the Sample field at the top of the Audio Event Parameters requester. This will insure that you have a unique sample for that entry and you can edit it without worrying about affecting other Audio Entries.

Playing an Entry

Play a Single Audio Entry

1. Click the entry to select it.

2. Choose the Play Selected command in the Entry menu (*A*-P).

    This will not work if the entry is part of a group.

Ungroup an Audio Entry and Play It

1. Select the entry.

2. Choose the Ungroup command from the Entry menu.

3. Click anywhere on a track outside the entries to deselect all entries.

4. Select the entry again and choose Play Selected in the Entry menu (*A*-P).

Play a Grouped Audio Without Ungrouping

1. Double click the entry to bring up Audio Event Parameters.

2. Click the Play button in the requester.

Changing Volumes and Pans

To change volume and pan settings for an Audio Entry, double click the entry to bring up Audio Event Parameters. In that requester you can move the Pan slider left or right to pan the sample between the left and right outputs (this is only available if you have an AD516) and move the Volume slider up and down to raise and lower the sample's volume.

You will not be able to hear the results of these settings if the Use Mixer Levels command is activated in the Options menu. Use Mixer Levels should not be activated when you want to use the Audio Event Parameters settings to control volumes and pans from within the Time Line. Activate Use Mixer Levels when you want to do an automated mix with the Mixer module.

Removing an Entry

To remove an entry, click it once to select it, then use the Remove Selected command in the Entry menu, or just hit the Delete key.

Remove more than one entry by shift-clicking the entries you want to remove then using the Remove Selected command.

Removing entries from the Cue List in the Time Line will not delete the actual sample data from your hard drive. If you change your mind you can drag the samples back from the Sample List into the Time Line, or simply use the Undo command in the Time Line.

Replacing an Entry

A simple way to replace an entry or to try different sound effects at the same position is to use the Drag & Drop capabilities of Audio Event Parameters. This can replace the sample in an Audio Entry with another sample from the Sample List.

Replace One Sample With Another

1. Double click the Audio Entry to bring up Audio Event Parameters.

2. Drag a sample from the Sample List and drop it in the Sample field at the top of the requester.

3. The sample you dragged from the Sample List has replaced the sample that was in the Audio Entry.

Using AREXX

You can send messages to other programs directly from the Time Line. Use AREXX commands to:

■ Show pictures
■ Play animations
■ Start video decks
■ Run video disk players
■ Control a light show
■ Trigger the NewTek Video Toaster (Toaster Handler required)
■ Dial a phone number

Before you can use AREXX, you must run the RexxMast program that came with your Amiga (WorkBench 2.04 and higher). This program listens to AREXX messages sent by all programs and routes them to the specific program for which they're intended. To run it, double click the RexxMast icon (check your Amiga's documentation for the location of the RexxMast icon). It's a good idea to put the RexxMast icon into your WorkBench Startup Drawer. Then it will run automatically whenever you boot your Amiga, and you won't have to start it up manually every time you use AREXX.

To send AREXX messages from the Time Line you need an AREXX track.

Create an AREXX Track

1. Choose the Add Track command from the Track menu.

2. Click the word "AREXX" in the requester to add an AREXX track. An AREXX track will appear on the Time Line. The Track Name button on the left edge of the track will say "AREXX".
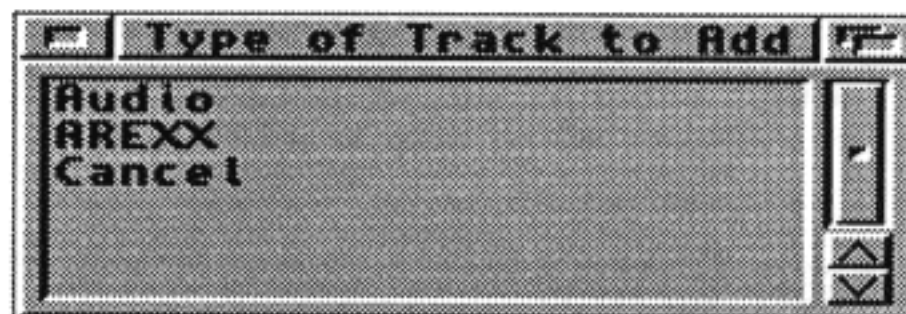

Figure 8-4.   Track Types

Next you specify the AREXX port to be addressed. An AREXX port is the name that tells the RexxMast program to which other program you're sending messages.

Specify an AREXX Port

1. Find out the name of the AREXX port for the program to addressed by looking in that program's manual.

2. Run the program to be addressed. This step is optional, but it makes it possible to test if the AREXX communication is working.

3. Click the Name button on the AREXX track to open AREXX Track Parameters.

4. Type the AREXX port name in the Port field and hit the return key on your keyboard.

5. The bottom of the AREXX Track Parameters requester should now say "Port Found". If it doesn't, you either don't have your AREXX program or RexxMast running, or you typed the Port name incorrectly.

6. It's important that you type it precisely the way it's shown in the manual of the AREXX program. AREXX is case sensitive, so match upper and lower case letters exactly.

While you're in AREXX Track Parameters, you can change the name of the track from "AREXX" to something else, like the name of the program you're addressing. There's room for up to nine characters in the track name button.

Change the Name of a Track

1. Click the Name field and erase the name "AREXX" by typing A-X.

NOTE   This is the standard Amiga keyboard shortcut for erasing the contents of fields. You can also use the delete key or the backspace key. When a field is not activated, the Time Line uses A-X to cut selected tracks into the Paste buffer.

2. Type the new name for the track and hit return.

    The new name will appear in the Track Name button for the track. You can change the name at any time.

3. When you're done with the name change, close AREXX Track Parameters by clicking the close gadget in the upper left corner.

Now that you've set up the track to address another program's AREXX port, the next thing to do is add an AREXX Entry to the track. AREXX Entries let you send a list of commands to the program the track is addressing. The commands will be sent at an exact time on the Time Line.

Add an AREXX Entry to an AREXX track

1. Select the AREXX track or tracks on which to add an entry.

2. Drag the Position flag to the point in time where the entry will be added.

3. Choose the Timecode Add command in the Entry menu.

    This will add an AREXX Entry at the time of the Position flag on any selected AREXX tracks. An AREXX entry looks like a vertical line with a small box in the center of the line.

NOTE Time Code Add command is the only way to add AREXX entries.

If the Time Line is playing, the Position flag will be moving and you can add entries on-the-fly with the *A*-T shortcut for the Timecode Add command.

If you feed SMPTE time code from a video deck to the SMPTE input of your SunRize card, you can use *A*-T to add AREXX Entries where you want them in relation to the video, while you watch the video.

4. Double click the entry to open the AREXX Event Parameters.

5. Specify the commands you want the AREXX Entry to send by typing them in the Cmd1 through Cmd9 fields. The commands will be sent in order starting with Cmd1.

Figure 8-5.   AREXX Event Parameters

To learn the AREXX commands available for the program you are addressing, refer to the program's manual.

Test the AREXX Commands

1. Make sure the program to be addressed is running.

2. Click the Test CMD button. The commands will be sent to the program.

Type a name in the Name field. This name will appear next to the AREXX Entry in the Time Line. You can give it a name appropriate to its function, like "Picture", "Animation", or whatever.

You can also type in an exact time in the Time field, if you need it to sync to a specific time. If there is a delay between the time set in the Time field and the time the program you are addressing actually responds, you can move the AREXX Entry back in time to compensate. To move it, either enter a new time in the Time field, or drag the entry with the mouse.

Moving an Entry

To move an entry, just drag it with the mouse. You can drag an entry:

- left   - to move it earlier in time
- right   - to move it later in time
- up/down   - to move it from one track to another

If you drag an Audio entry into another Audio entry on the same track, they will automatically cross fade.

If you hold down the Control key and drag an Entry, the original entry will remain and you will drag a duplicate entry.

You can only drag Audio entries onto Audio tracks and AREXX entries onto AREXX tracks.

How you can move an entry depends on the Drag Mode you've selected. You can set the Drag Mode using the Drag Mode buttons at the top of the Time Line window.
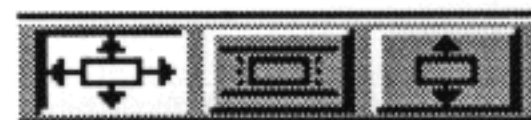

Figure 8-6.   Drag Mode Buttons

From left to right, the Drag Mode buttons select:

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

Any Direction

To drag entries with no restrictions, click the Any Direction button.

To move more than one entry at the same time:

1. Shift-click the entries to move.

2. Then when you drag any one of the grouped entries, you'll drag them all.

Lock-To-Grid

To drag entries so that they lock to the nearest grid lines, click the Lock-To-Grid button. You can use this to align entries to the same start time or match sound effects to musical beats.

Vertical Only

To drag entries so that they only move between tracks, click the Vertical Only button. Use this when you already have entries synchronized and don't want to lose their positions in time.

Auto-Locating Flags

The Time Line has 10 locate flags. You can put them wherever you want along the Time Line to mark a location and you can then jump to that location with a single keystroke. You can add a comment that will be displayed next to a Locate flag.

Add a Locate Flag

1. Drag the Position flag to where you want the Locate flag to be.

2. Hold down the shift key and type a function key.

3. A Location flag corresponding to the number you typed will appear at the Position flag. For example, if you typed F1, the "banner" of the flag says "F1".

    If you've already created a particular Locate flag and you do the above steps, the Locate flag will relocate to the new position. You can also move Locate flags by dragging them left or right. If the Lock-To-Grid editing mode is on when you move a Locate flag, it will move in grid increments.

4. Once you've added a Locate flag, move the Time Line to that flag by typing the function key or the number on the numeric keypad that corresponds to that flag.

    The Time Line will scroll to show the flag, and the Position flag will move to the Locate flag. If you click the Play button, the Time Line will begin to play from the Locate flag.

It can be useful to put a comment next to a Locate flag to remind yourself what it's marking. For example, you could put "Verse", "Chorus", or "Chase Scene".

Comment a Locate Flag

1. Double click the flag's banner to open Flag Parameters .