

# CUBASE

*Score*

for Windows

## Audio Recording Tutorial

DEMO version

**Steinberg**

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# Introduction

Welcome to the Cubase Demo Audio on-line documentation! Please use one of the methods described below to quickly find the desired information:

- **Use the Table of Contents provided by the Adobe Acrobat Reader program.**
- **Use the Adobe Acrobat Reader Search function.**
- **Click on a cross-reference (green text) to jump to the respective topic.**

It is of course possible to print out this document or parts of it. Additional Information on how to use the Adobe Acrobat Reader can be found in its on-line Help.

## What this document contains

This chapter is an excerpt from the Cubase “Audio Recording” book . It contains a tutorial introducing you to Cubase’s audio capabilities. You will learn:

- How to make an audio recording.
- How to play back audio.
- How to check your audio recordings in the Pool
- How to open an Audio Track in the Audio Editor.

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- Since this is an excerpt from a bigger book, some references to other texts and chapters will not be accurate.
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# Preparations

This text assumes you are reasonably familiar with Cubase as a MIDI recorder. If not, check out the “Basic MIDI Recording” chapter in the beginning of the main Cubase manual. The text also assumes you have the Startup Song provided with the program loaded. Here goes:

**1. If you like, record a couple of MIDI Tracks to which you could overdub some “real” instrument or vocals.**

Make sure you have all your audio equipment connected and set up correctly, as described in the installation chapter. If you plan to record in mono, you can connect to the left input only, on the audio card. If you plan to record in stereo, you must connect to both inputs.

**2. Open the Hardware Setup dialog (on the audio menu) and select a Sample Rate for the song.**

The higher the sample rate, the better the audio quality, but the more hard disk space are used for your recordings. Furthermore, all cards might not support all rates. 22050 and 44100Hz are pretty safe bets for any card. See [page 184](#) in the appendix “Optimizing Audio Performance” for details.

- 3. To record audio, you first have to create an Audio Track or select an existing one (Audio Tracks have a small sine wave symbol in the “C” column).**

If you want to create an Audio Track, double click below the existing Tracks in the list, press the mouse button in the “C” column for the new Track that appears, and select “Audio Track” from the Track Class pop-up menu that appears.



- 4. Set the Track to Channel 1 by changing the value in the Track’s “Chn” column to “1”.**

It will now record and play back on audio channel 1.

**5. Open the Inspector (if not already open).**

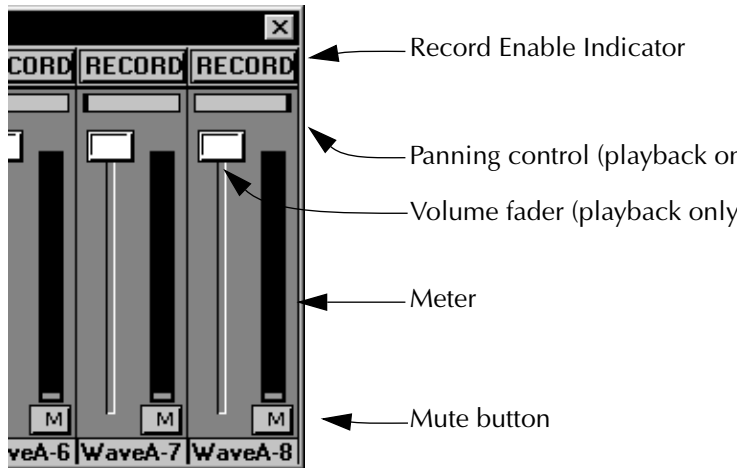


**6. Decide if you want the recording to be stereo or mono by clicking the Mono/Stereo switch in the Inspector.**

**7. Click on the File name button. In the file dialog that appears, specify a name and location for the audio file and click OK.**

The Filename button turns darker to indicate that the audio channel is ready for recording.

**8. Bring up the Monitors window, by selecting Monitors from the Audio menu.**



**9. Adjust the level of the audio source, if needed.**

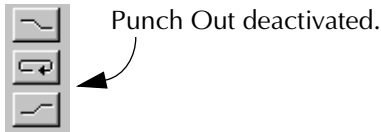
If you are using Cubase Audio XT, you may be able to use the monitor meters to check the level.

**10. Play back the MIDI Tracks to rehearse the audio part, if you like.**

**11. When you are ready, set the Left Locator to the position where you want to commence recording.**

## 12. As usual, Cubase will punch out at the Right Locator if Punch Out is activated on the Transport Bar.

You may want to turn this function off, by clicking on the button.



## Record!

1. **Activate recording, by clicking on the Record button or by pressing [\*] on the computer keyboard.**

2. **Record as much as you like, and then press Stop.**

An image of the audio file gets calculated. When this is done you should have a Part with a waveform in it. If not, select "Show Events" from the Part Appearance menu on the Options menu.



A recorded Part.

3. **Play back the Arrangement to listen to what you did.**

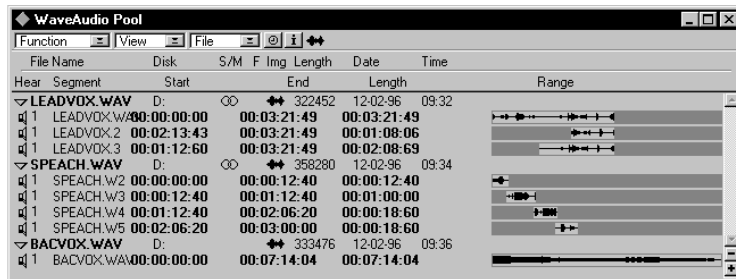
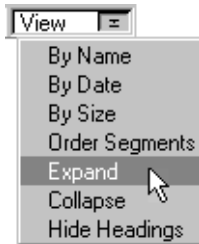


- 4. If you want to redo the recording completely, simply select Undo, or delete the Part (select it and press [Backspace]).**  
If you hold down [Control] while pressing [Backspace], the audio file you recorded will also be permanently deleted from the hard disk.
- 5. If you want to punch in on this recording, do so, just as with MIDI Tracks. However, you can not “punch in on the fly” on audio Tracks.**
- 6. When you are happy with the first Track, create a new Audio Track and set it to channel number 2.**
- 7. Set up a recording file in the Inspector, and record on this Track as with the first.**  
You will hear the first Track playing back while recording. If you want to pan it or adjust its playback level, use the controls in the Monitor Window.
- 8. If you have more audio channels, feel free to record more Tracks.**  
In fact, you can have many Tracks set to the same audio channel, for playback. But if two sounds “collide”, only one of them will play back. Each audio channel can only play back one sound file at a time.
- 9. If you wish, you can use all of the regular Tools in the Toolbox on your audio Parts, just as with MIDI Parts.**  
Move them, duplicate, split them up, join them etc.

# The Pool

Now it is time to examine what you actually did when you recorded.

1. Select **Pool** from the **Audio** menu.
2. Use the **View** pop-up menu in the **Pool** window to select “**Expand**”.



What you see is a list of *files* and their *segments*. The audio files are in bold text and the segments are in plain.

A *file* is an actual recording on disk. A *segment* is a “cutout” from a file, a specification for a section of it. As you will note, if you have duplicated Parts or otherwise performed some editing in the Arrange window, one file can have a number of segments, all playing back different sections of the file.

For each file there is at least one segment, maybe more, depending on how much editing you have done.

### **3. You can display or hide headings for the file/segment columns.**

This is done by selecting Hide/Show Headings from the View pop-up menu at the top of the window. You can also turn waveform display on and off by clicking the Waveform icon at the top of the window.

### **4. If you press the mouse over the speaker icon for a segment it will be played back.**

There are a lot of other interesting things you can do with the Pool, like import audio files from other applications and perform editing on them, but we'll save that for later. Let's go into the editor.

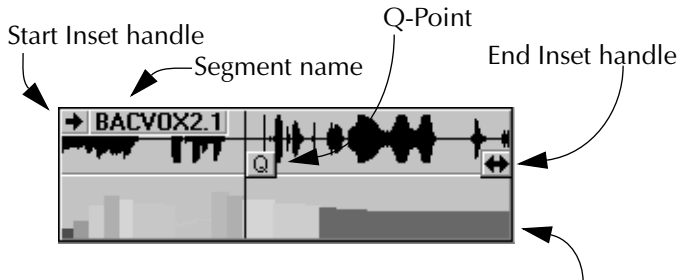
# The Audio Editor

This is where you edit the individual Audio Events.

1. Click somewhere in the Arrange window so that it gets activated.
2. Find an Audio Part you'd like to examine closer, and double click on it. The Audio editor opens.



In this window you can see a number of *Events*. Each Event plays back one segment, and you can see the name of that segment in the Event. This editor has a Toolbox as all others. You can pretty much do with an audio Event what you can do with a MIDI note, and more. You can also customize the display by using the View pop-up menu on the Status bar. This is what can be shown in an Event:



The lower part of the waveform display is used to display a Volume curve. This is created and edited individually for *each Audio segment*.

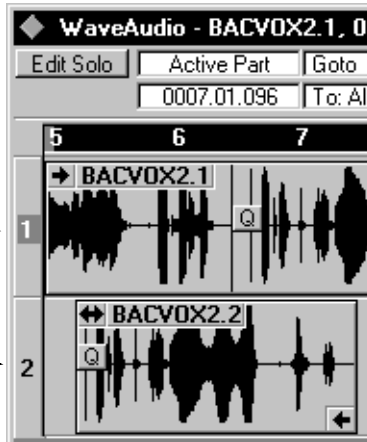
- **The Start and End Inset handles can be dragged to mask out portions of the file.**
- **The Q-point can be dragged, and when you move or Quantize, it is to this point that the Event snaps.**  
If you have the speaker symbol on the Functions bar activated when you drag any of the handles, you will hear where you put it when you release the mouse.

- 3. When you move Events you may find that you can drag them vertically as well as horizontally (make the window bigger first).**  
We call the horizontal strips separated by lines, *lanes*. When you edit *one* Part, as now, it doesn't matter which lane you put an Event on.
- 4. If you have the item “Volume” activated on the View pop-up, the bottom half of the Event will show a volume curve for the Event.**  
You can create and edit volume curves using the Pencil tool. To add new points, hold down [Alternate] when clicking with the Pencil.
- 5. When you have tried the functions above, and maybe even gone on your own excursions on the menus and using the Toolbox, you can Keep or Discard any changes (Press [Return] or [Esc]), as in all editors.**
- 6. Next, in the Arrange window, select several Parts that play back on *different* audio channels.**
- 7. Open the editor by double clicking on any of the selected Parts.**

## 8. Check that Lane Info is activated on the View pop-up menu.

You will now see that each lane plays back on one audio channel.

The number in the Lane Info field to the left of the waveform display, shows which audio channel the Events on the lane play back on.



## 9. By moving an Event to another lane, you move it to another audio channel, and in this case also to another Part.

## 10. When you are finished, close the editor.

Save the Song if you wish to keep it. Make it a habit to put the Song in the same folder as your Audio or in its vicinity. And when you back up, don't forget to include the audio files...

This completes the guided tour of the audio part of Cubase. Hopefully you will have gained some understanding about the structure of the program, and realised that with this program, recording audio doesn't differ much from recording MIDI. Please refer to the rest of the text for details on each function.