

CUBASE

Basic Home Recording for Beginners

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Introduction

Cubase is a powerful, professional-grade recording software that has the tools you need to create quality recordings—if you know how to use them.

To the beginner, Cubase's complex user interface can be intimidating and even discouraging. But by focusing on the most basic features needed to record, this manual will simplify the user interface and allow you to start recording sooner.

Although you don't need any recording experience, this manual assumes that you are reasonably comfortable and competent with computers and that you have access to the equipment required to record. A list of required equipment can found in <u>Lesson 1.1</u>.

To keep things simple while you're learning, this manual uses a single microphone and teaches you how to record on a single audio track. Remember that once you're more comfortable with this simple setup, you can adapt the manual's instructions to help you set up multiple microphones and record on multiple tracks.

By the end of this manual, you will be able to:

- Connect your equipment and ensure that it is recognized by Cubase
- Create a project file, save it, and record audio within it
- Perform basic editing functions to improve your recording
- Export your recording as a shareable file

Get ready...you're just a few pages away from recording your first track in Cubase!

Acknowledgements

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Note: Original image modified for title page was retrieved online from Softube.com. Click here to visit the image URL.

Module 1 - Before You Start

Lesson 1.1 – What You'll Need

To use this manual, you will need the following items:

Cubase

You don't need a specific version of Cubase to use this guide as the features covered are similar across all versions. If you have not yet purchased Cubase, you can find online products and pricing from the manufacturer by clicking here.

Interface device

Also known as an "I/O" or "In & Out," an interface device has ports to connect cables used for microphones. It receives an analog signal from a microphone and converts it to a digital signal that the computer can understand. Interface devices normally connect to computers through either a Firewire or USB port.

Computer

Your computer should meet the minimum system requirements of your version of Cubase and your interface device. It should also have the appropriate port type to connect to your interface device.

Headphones

Headphones are used during recording so that musicians can hear what they are singing or playing while it is being recorded. Using speakers for this purpose is not recommended, as the microphone is likely to pick up and record the sound coming from the speakers and muddle the recording. Headphones are also used to listen to the recorded material.

Note: Most interface devices have a ¼ inch headphone output port. If your headphones have a 3.5mm connection, you may need an adaptor that converts the connection to the required size.

Microphone

This guide will use a type of microphone called a dynamic microphone, since it is suited to recording a wide variety of volume.

Note: Microphones usually connect to interface devices via an XLR cable. Make sure you know what kind of cable your microphone needs and that it is capable of connecting to your interface device.

Speakers (optional)

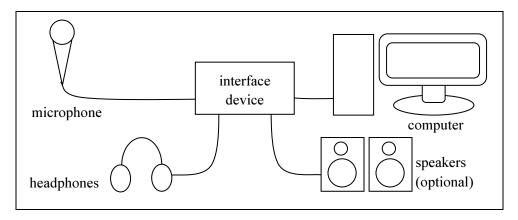
If desired, speakers can be used to listen to recorded material instead of headphones. Ensure that you have the correct cables and any necessary adaptors to connect your speakers to your interface device.

Lesson 1.2 – Connecting the Equipment

In this lesson, you will learn how to properly connect your recording equipment.

Note: Before you continue, make sure that you have installed Cubase and your interface device software (if any) as per manufacturer instructions, as software installation is not covered in this manual.

The diagram below shows a basic recording equipment configuration. The lines between components represent cables. Cable types have not been specified as they will vary depending on the equipment being used.



Ensure that your computer, interface device, and speakers (if using) are plugged in and powered on, then finish setting up by checking your volume settings.

Adjusting Microphone Volume

Adjust the volume that the interface device sends from your microphone to your computer using the controls on your interface device. Most interface devices have a volume control for each individual port as well as a set of LED lights to indicate the volume of incoming sound. Position yourself about as far from the microphone as you will be while recording and speak, sing, or play into it at the loudness you will use to record. The LED lights on your interface device should respond to your input. These lights normally range from green (lowest volume) to red (highest volume). Adjust the volume so that it is the highest it can be without the red light turning on to ensure a quality recording.

Adjusting Volume of Headphones & Speakers

Listen to a professionally recorded song (most computers have sample music available) to adjust your headphones and speakers to a comfortable volume.

For Headphones: Use the knob on your interface device that corresponds

to the headphones port.

For Speakers: Speaker volume is usually adjusted via the main volume

knob on the interface device.

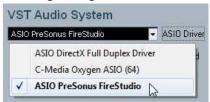
Lesson 1.3 – Setting Up the Cubase Workspace

Before you can begin recording, you will need to follow some steps to ensure that Cubase can recognize the signal coming in from your interface. These steps do not include installation of your interface device's software. If you have not installed the software that came with your interface device, please do so before attempting the steps below.

1. Open Cubase

2. Connect Your Interface

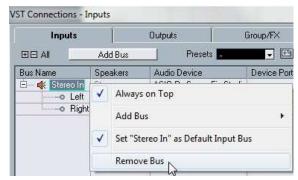
- Open the Devices menu and choose Device Setup.
- In the **Device Setup** window, select the dropdown menu below **VST Audio System** and select your interface from the list. This list will also contain your computer's sound card(s), so be sure that you are choosing the right item. Click **OK** when done.



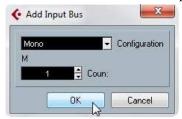
Note: This step only needs to be done once. Cubase will remember the settings you choose here for future recording projects.

3. Configure Your Interface

- Cubase needs to know which interface device ports (also known as busses) you will use to record.
- Open the **Devices** menu and choose
 VST Connections to view the settings.
- Cubase has a default bus configuration, but it is a "Stereo" connection, which uses two microphones. Right click the "Stereo In" line and select Remove Bus.



Since we will use a single microphone, we need to add what is known as a "Mono" input. To do this, click the
 Add Bus button. In the window that appears, verify that selections are "Mono" and "1" and then press OK.



■ A new "Mono In" will be added. Close the **VST Connections** window with "X."

4. Create a New Project

- Open the File menu and select New Project.
- When prompted to choose a template, select Empty and click OK.
- When prompted to choose a save location, choose your desired location and click OK.
- A new project window will now open. The project will be named "Untitled1" until it is saved.

Note: Cubase allows for multiple project windows to be open at a time. These inner windows can be minimized and maximized just like regular program windows.

5. Create a New Audio Track

- Open the Project menu, mouse over the Add Track option, and select Audio.
- When the Add Audio Track window appears, verify that the count is "1" and the configuration is "Mono," then click OK. This is a configuration to use when recording with a single microphone.



• An empty track called "Audio 01" will be created.



Note: The pane to the left of the audio track shows additional settings and controls for your new track. Notice that the "Mono In" input shown corresponds to the bus you created in Step 3.

Module 2 – Recording Your First Song

Lesson 2.1 - Saving Your Project

You should save your new project before you begin recording and then at regular intervals as it progresses. Saving multiple versions is helpful, as an earlier version can be useful if a track is accidentally deleted or modified. Below are two methods you can use to save your project.

Method 1: Save As

Use when saving your project for the first time or saving a new version.

- Open the **File** menu and choose the **Save As** option.
- Give your project file a name (or add a version number if this is not your first save) and click OK.

Method 2: Save

Use when saving changes in the same file name (overwrites existing file).

Open the File menu and choose the Save option.

Lesson 2.2 – Starting (and Stopping) a Recording

1. Enable Recording on Your Audio Track

 Before you can record on your audio track, the Record Enable button on your audio track must be selected (it should turn red).



2. Enable the Monitor Button

• Turn the **Monitor** button on (it should turn yellow) so that the sound going into the microphone can be heard through your headphones.



If you are using speakers, turn their volume to zero or mute them before you begin recording. You should only be able to hear what goes into the microphone through the headphones while you record. If sound comes from the speakers during recording, it will negatively affect your recording.

Note: If the monitor button is selected but you can't hear anything in your headphones, refer to Lesson 1.2 to check the volume levels of your microphone, headphones, and speakers (if used).

3. Turn off the Precount and Metronome

- Cubase offers a count-in click called the "Precount" and a metronome that can play while you record. For simplicity, we will turn these features off.
- Open the Transport menu. If there is a checkmark next to either "Metronome On" or "Precount On," click to remove it. Doing so will turn the feature off.



4. Start Recording

• Use the **Transport Record** button to begin recording.



Your audio track should turn red to indicate that you are recording.



5. Stop Recording

• Use the **Transport Stop** button to end recording when you're done.



 You should now have something that looks roughly like what is pictured below in your project window. The white areas represent sound waves, so they will vary based on what you recorded.



Lesson 2.3 - Playing Back Your Recording

Now that you've recorded something, it's time to play it back to hear how it turned out. Follow the steps below to listen to your recording.

1. Disable the Monitor Button

When the Monitor button is on, you'll only hear sound going into the microphone. If you want to hear what you recorded, click the Monitor button again to turn it off (it should turn blue).



 If you are using speakers, turn up your volume to hear playback through them. Remember to mute your speakers again before switching back to recording.

2. Move Cursor to Zero

Note: The vertical black line that moves across the screen during recording is called the **Cursor**. It indicates how many bars (a musical unit of measurement) have passed.

• To hear your recording from the beginning, move the cursor back to zero by clicking the **Goto Previous Marker/Zero** button.



3. Playback Recording

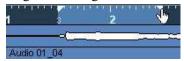
• Click the **Transport Play** button to begin recording playback.



Note: Even after your entire recorded track has been played, the cursor will continue moving forward until you click the **Transport Stop** button.

4. Listen in Loop Mode (Optional)

• To select all or part of your song to play on loop mode, click and hold the white triangle on the ruler (found in the top left corner), then drag it to the right to make a selection. Both sides can be moved.



 Once you have a selection that is highlighted in blue, click the Transport Cycle On/Off button.



• Click the **Transport Play** button.



The selection will now play on loop until stopped with the **Transport Stop** button.



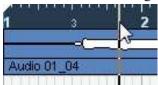
Module 3 - Modifying Your Recording

Lesson 3.1 - Navigating Your Recording

Before you can modify your recording, you'll need to know how to move around with the **Cursor**. This is a quick but essential lesson.

1. Position the Cursor

• To move the **Cursor** to a certain time in your recording, click on the timeline wherever the regular mouse pointer appears.



Note: If you begin playback after moving the cursor, Cubase will play from wherever the cursor was positioned. (Refer to <u>Lesson 2.3</u>, Step 3 for instructions on how to start playback.)

Lesson 3.2 – Deleting a Segment of Your Recording

Sometimes you'll need to delete a part of your audio track. For example, a vocalist might cough between sections of a song. You may remember selecting a particular portion of your track in <u>Lesson 2.3</u> when you learned about looping playback. However, when you need to select part of your recording to delete, a different method is used.

1. Activate the Range Selection Tool

 Click the Range Selection button from the cluster of editing tools in the project window.



 Mouse over your audio track. Your pointer should change into an 'I' that looks similar to a text editor pointer.



2. Select a Segment for Deletion

 Click, hold, and drag your pointer over the audio track to highlight the section you want to delete. The selection should turn light blue when you let go of the mouse button.



3. Delete the Selection

Press the **Delete** key on your keyboard.

Note: If you make a mistake, you can undo your action. Open the **Edit** menu and click **Undo**.

Lesson 3.3 – Recording Over a Segment of your Audio Track

If you are happy with most of your recording but would like to retry a section, you can record over part of the existing track using steps similar to those in Lesson 2.2. Doing this does not delete the section of the existing track where you record, but instead creates a new layer that sits on top of the old one.

1. Position the Cursor

 Move the cursor to the beginning of the section you want to record over. (Refer to <u>Lesson 3.1</u> for instructions on moving the cursor.)

2. Record New Audio Layer

 Record in the same way you would if you were starting a new audio track. (Refer to <u>Lesson 2.2</u> for the five steps to record.)

3. Review New Audio Layer

 Playback your recording to hear how the new layer sounds in the track. (Refer to <u>Lesson 2.3</u> for instructions on recording playback.)

4. Make Adjustments

- If your new audio track layer needs correction, click on it once to select it (it should become outlined in red), then choose one of these options:
 - Crop To remove sound from the beginning or end of the new audio layer, click, hold, and drag the white boxes on either bottom corner of the track to crop it.



■ Move — To move the whole layer so that it begins earlier or later in the overall recording, click and hold anywhere on it where your pointer is a regular arrow. Drag the track right or left along the timeline as desired.

Module 4 – Exporting Your Recording

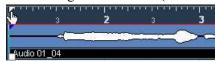
Lesson 4.1 – Selecting a Segment of Your Recording to Export

Before you can export your recording, you need to tell Cubase how much of your project file you want to export. Here are a few examples of when this is useful:

- You have recorded several songs side-by-side in a single project file, but you only want to export one of them.
- You have extra layers saved at the end of your song that you want to keep for later use, but you don't want to export them with your song.

1. Find the Triangle Selector

• To select a portion of your recording to export, start by finding the white triangle on the ruler (it is in the top left corner).



2. Make a Selection for Export

 Click and hold the white triangle, then drag it to the right to make a selection. Your selection will be highlighted in blue. Both sides can now be moved.



Lesson 4.2 – Exporting the Selected Segment

Once you've selected a portion of your recording (<u>Lesson 4.1</u>), you can export that selection as an easily sharable file type.

1. Open the Export Audio Mixdown Window

 Open the File menu, mouse over Export, then choose Audio Mixdown.

2. Choose a Save Name and Location

• In the Export Audio Mixdown window, use the Choose button to select a save location and to name the file that will be exported.



3. Choose a File Format

- In the same window, use the drop down menu under File Format to choose the type of file you would like to export your recording as. The two most common types are:
 - Wave File (.wav)
 High quality, but large file size.
 - MPEG 1 Layer 3 File (.mp3)
 Medium quality, smaller file size.



4. Export your Selection

• When you have chosen your save location, file name, and file type, finish by clicking **Export.**

Quick Reference: Basic Cubase Controls

This reference sheet provides a list of the Cubase controls that are most commonly referenced in this manual. You may find it helpful to keep a copy of this list somewhere easily accessible for future recording projects.

Audio Track Controls

A pair of buttons that appear on each track and control that track's recording settings.

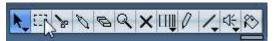


- 1. **Record Enable:** Controls whether audio records to the corresponding track when the Transport Record button is clicked. When on (red), audio will record to the track. When off (blue), audio will not record to the track.
- **2. Monitor:** Controls whether sound going into the microphone is output into headphones/speakers. When on (yellow), headphones/speaker output will be any sound that goes into the microphone.

Selection Tools

Tools that allow a portion of the audio track to be selected in different ways.

 Range Selection: Used in this manual to select a portion of an audio track to be deleted.

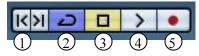


• **Triangle Selection:** Used in this manual to select a portion of an audio track to play on loop or to be exported.



Transport Buttons

A group of buttons that help the user navigate their recorded tracks.



- 1. Goto Previous Marker / Zero: Moves cursor to zero on the timeline.
- 2. Transport Cycle On/Off: Turns the looping feature on or off.
- 3. Transport Stop: Stops playback.
- 4. Transport Play: Begins playback from the current cursor location.
- **5. Transport Record:** Begins recording from the current cursor location.