

Quick Start Guide



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Introduction

Welcome!

Congratulations and thank you for purchasing a high-quality Steinberg product!

Building on the core technologies used in the Cubase 6 advanced music production system, Cubase Elements 6 and the hardware-bundled versions, Cubase AI 6 and Cubase LE 6, offer all the basic tools for composing, recording, editing, and mixing your latest idea into a true masterpiece. Combining the very best sound quality, intuitive handling, and a vast range of highly advanced audio and MIDI tools, the sixth version of the Cubase family condenses over 25 years of Steinberg development into the cutting-edge line of digital audio workstations used by countless musicians, producers, and composers all over the globe.

Cubase provides the latest computer and audio technologies inviting you to venture into new artistic territory and give your creativity free reign. Whether you are a professional, a hobby musician, a student, or a teacher, Cubase has it all covered and supports you through every stage of music production, from the inception of the first fleeting idea and its development, right down to the final mix. And because it has been built to support individual creativity, Cubase owners are among the most successful artists in just about any musical genre or activity conceivable — from engineers recording and mixing rock albums to dance DJs, hip-hop producers, songwriters creating pop hits, and film composers scoring for Hollywood blockbusters. If you are entirely new to Cubase, you have just become a member of this large community of professionals and music enthusiasts! Check out the official Cubase community for tips and tons of other useful information at www.steinberg.net/forum.

Please don't forget to register your Cubase version on MySteinberg in order to gain access to online support offers and additional exclusive services.

We wish you musical inspiration when working with your brand-new Cubase DAW.

See you around! Your Steinberg Cubase Team

About the documentation and the help

The Cubase documentation is divided into several sections, as listed below. The documents are available in Adobe Acrobat format (extension .pdf) and can be accessed as follows:

- You can open the PDF documents from the Documentation submenu on the Help menu in the program.
- Under Windows you can also open these documents from the Cubase Documentation subfolder on the Windows Start menu.
- Under Mac OS X the PDF documents are located in the folder “/Library/Documentation/Steinberg/Cubase 6”.

⇒ To read the PDF documents, you need to have a suitable PDF reader application installed on your computer.

The Quick Start Guide

This is the document you are reading. It covers the following areas without going into details:

- Computer requirements, installation procedure, and license activation.
- Setting up your system for audio and MIDI work.
- Creating a project, recording, and mixing.

The Operation Manual

The Operation Manual is the main Cubase reference documentation, with detailed descriptions of operations, parameters, functions, and techniques.

Plug-in Reference

This document describes the features and parameters of the included VST plug-ins and VST instruments.

HALion Sonic SE

This document describes the features and parameters of the included VST instrument HALion Sonic SE.

Remote Control Devices

This document lists the supported MIDI remote control devices.

Menu Reference

This document provides a list of all menus and their options with a brief description, for quick reference.

The dialog help

To get information about the active dialog, click its Help button.

About the program versions

The documentation covers three program versions, Cubase Elements, Cubase AI, and Cubase LE, for two different operating systems or “platforms”, Windows and Mac OS X. Whenever the program is only called “Cubase” in this document, this refers to all three program versions.

Some features described in the documentation are not applicable to all three Cubase versions. Whenever this is the case, it is clearly indicated in the heading of the related subject. For example, if a heading is followed by “(Cubase Elements only)”, the corresponding feature is not available in Cubase AI and Cubase LE. Likewise, if you see “(not in LE)”, the corresponding feature is only available in Cubase Elements and Cubase AI.

In some cases the difference between the five available versions of Cubase is not the presence or absence of a feature, but rather how often an element (e.g. a certain track type) can be used in a project:

Maximum number of	Cubase	Cubase Artist	Cubase Elements	Cubase AI	Cubase LE
Audio tracks	unlimited	64	48	32	16
MIDI tracks	unlimited	128	64	48	24
Instrument tracks	unlimited	32	24	16	8
VST instrument slots	64	32	16	8	0
Group channels	256	32	16	8	8
FX channels	64	64	8	4	4
Audio channel insert slots	8	8	8	4	4
Audio channel send slots	8	8	8	4	4
MIDI inserts/sends	4	4	0	0	0
Physical I/Os*	256	32	24	16	8
Max. audio resolution	192kHz	96kHz	96kHz	96kHz	96kHz

* This determines the number of input and output busses that can be defined in the VST Connections window (256 I/Os equal 128 stereo or 256 mono busses, for example).

Some features and settings are also specific to one of the platforms. This is clearly stated in the applicable cases. If nothing else is said, all descriptions and procedures in the documentation are valid for both Windows and Mac OS X.

The screenshots are taken from the Windows version of Cubase Elements.

Key command conventions

Many of the default key commands in Cubase use modifier keys, some of which are different depending on the operating system. For example, the default key command for Undo is [Ctrl]-[Z] under Windows and [Command]-[Z] under Mac OS X.

When key commands with modifier keys are described in this manual, they are shown with the Windows modifier key first, in the following way:

[Win modifier key]/[Mac modifier key]-[key]

For example, [Ctrl]/[Command]-[Z] means “press [Ctrl] under Windows or [Command] under Mac OS X, then press [Z]”.

Similarly, [Alt]/[Option]-[X] means “press [Alt] under Windows or [Option] under Mac OS X, then press [X]”.

⇒ This manual often refers to right-clicking, for example, to open context menus. If you are using a Mac with a single-button mouse, hold down [Ctrl] and click.

How you can reach us

On the Help menu in Cubase you will find items for getting additional information and help.

The menu contains links to various Steinberg web pages. Selecting a menu item automatically launches your browser and opens the page. On these pages you can find support and compatibility information, answers to frequently asked questions, information about updates and other Steinberg products, etc. This requires that you have a web browser installed on your computer, and a working Internet connection.

2

System requirements and installation

About this chapter

In this chapter the requirements and installation procedures for the Windows version and the Mac version of Cubase are described.

Minimum requirements

To use Cubase (32-bit or 64-bit version), your computer must meet the following minimum requirements:

Windows

- Windows 7 (32-bit or 64-bit)
- Intel or AMD dual-core processor
- 2 GB RAM
- 4 GB of free hard-disk space
- Windows-compatible audio hardware (ASIO-compatible audio hardware recommended for low-latency performance)
- Display resolution of 1280 x 800 pixels recommended
- DVD ROM dual-layer drive required for installation
- QuickTime 7.1 and video card supporting OpenGL 1.2 (OpenGL 2.0 recommended)
- Internet connection required for license activation and registration

Mac OS X


- Mac OS X 10.6 (32-bit or 64-bit)
- Intel dual-core processor
- 2 GB RAM
- 4 GB of free hard-disk space
- CoreAudio compatible audio hardware
- Display resolution of 1280 x 800 pixels recommended
- DVD ROM dual-layer drive required for installation
- Video card supporting OpenGL 1.2 (OpenGL 2.0 recommended)
- Internet connection required for license activation and registration

Starting Cubase 64-bit on a 64-bit Mac OS X system

When you install Cubase on a 64-bit Mac OS X system, the program is set to start in 32-bit mode.

- To start Cubase in 64-bit mode, right-click the application symbol in the Mac OS X Finder, select “Get Info” and deactivate the “Open in 32-bit mode” option in the dialog that appears.

General notes on how to set up your system

 On the Steinberg web site, under “Support–DAW Components”, you can find detailed information on what to consider when setting up a computer system dedicated to audio work.

- **RAM** – There is a direct relation between the amount of available RAM and the number of audio channels that you can have running.

The amount of RAM specified above is the minimum requirement, but as a general rule “the more the better” applies.

- **Hard-disk size** – The size of the hard disk determines how many minutes of audio you will be able to record.

Recording one minute of stereo CD quality audio requires 10MB of hard-disk space. That is, eight stereo tracks in Cubase use up at least 80MB of disk space per recording minute.

- **Hard-disk speed** – The speed of the hard drive also determines the number of audio tracks you can run.

That is the quantity of information that the hard disk can read, usually expressed as “sustained transfer rate”. Again, “the more the better” applies.

- **Wheel mouse** – Although a mouse without a wheel will work fine with Cubase, we recommend that you use a wheel mouse.

This will speed up value editing and scrolling considerably.

MIDI requirements

If you intend to use the MIDI features of Cubase, you need the following:

- A USB MIDI keyboard or a MIDI instrument and a MIDI interface to connect external MIDI equipment to your computer
- Any audio equipment required to listen to the sound from your MIDI devices

Audio requirements

In music production it is very important to work with low latencies. Therefore we recommend you to use a dedicated ASIO audio interface. Although Cubase can run with many audio cards that are installed in a computer, they might not offer you low enough latencies. For an overview of the audio hardware offered by Steinberg, see <http://www.steinberg.net/products/hardware.html>.

Cubase will run with audio hardware that meets the following specifications:

- Stereo.
- 16 bit.
- Support of at least the 44.1 kHz sampling rate.
- Windows – If there is no dedicated ASIO driver available, you can also use the Generic Low Latency ASIO Driver.
- Mac – The audio hardware must be supplied with Mac OS X-compatible drivers (CoreAudio or ASIO).

Using the built-in audio hardware of Macintosh computers

Depending on your preferences and requirements, using the built-in audio hardware may be sufficient for use with Cubase. It is always available for selection in Cubase – you do not have to install any additional drivers.

Installing Cubase

Starting the installation

The installation procedure puts all files in the right places, automatically.

Depending on your system, the Start Center program on the DVD may start automatically. If no interactive start center appears, open the DVD and double-click the file "Start_Center.exe" (Win) or "Start_Center.app" (Mac). From the Start Center you can initiate the installation of Cubase and browse through the additional options and information presented there.

In case you do not want to install Cubase via the interactive Start Center, follow the procedure below.


Windows

1. Double-click the file "Setup.exe".
2. Follow the instructions on screen.

Macintosh

1. Double-click the file "Cubase LE AI Elements 6.mpkg".
2. Follow the instructions on screen.

License activation and registration

 The process for license activation is described in detail on the Steinberg web site. To open the corresponding page, follow the Activation & Registration link in the Start Center.

Cubase Elements, Cubase AI, and Cubase LE use a software-based copy protection scheme. The so-called Soft-eLicenser is installed automatically with your version of Cubase. It can be accessed via the eLicenser Control Center application that is installed automatically with the product.

Cubase Elements

After installation, you need to activate your product. If you purchased Cubase Elements in a shop, the product package contains the “Essential Product License Information” sheet which contains an activation code and describes the process in detail.

If you purchased the download version of Cubase Elements, you receive an e-mail with the activation code and a description of the activation process.

Register Cubase Elements

We encourage you to register your software! By doing so you are entitled to technical support and kept aware of updates and other news regarding Cubase.

- To register your software, open the Help menu in Cubase and select the Registration option.

The Registration page of the Steinberg web site opens in your web browser. Continue by following the instructions on screen.

⇒ You can also directly go to www.steinberg.net/mysteinberg, log in to the exclusive MySteinberg online customer portal and register your product by following the instructions on screen.

Cubase AI and Cubase LE

The Soft-eLicenser that came with your product allows you to use the program out-of-the-box for 30 days. After this period, you have to register your program and activate your license permanently.

When you start Cubase AI or Cubase LE, a dialog opens that informs you for how much longer you can use the program without registration and activation.

When you click the Register Now button in this dialog, the standard web browser of your computer opens the MySteinberg section on the Steinberg web site.

- Follow the instructions on screen. Once you have registered, you receive all information required for activation of your product.

When you have successfully registered and activated your product, you are entitled to technical support and kept aware of updates and other news regarding Cubase.

Hardware installation

Installing the audio hardware and its driver


1. Install the audio hardware and related equipment in the computer, as described in the hardware documentation.
2. Install the driver for the audio hardware.

A driver is a piece of software that allows a program to communicate with a certain piece of hardware. In this case, the driver allows Cubase to use the audio hardware. Depending on the operating system of your computer, there are different types of drivers that can be used.

Dedicated ASIO drivers

Professional audio hardware often comes with an ASIO driver written especially for the device. This allows for direct communication between Cubase and the audio hardware. As a result, the devices with specific ASIO drivers can provide lower latency (input-output delay), which is crucial when monitoring audio via Cubase or using VST instruments. The ASIO driver may also provide special support for routing, synchronization, etc.

ASIO drivers are provided by the audio hardware manufacturers. Make sure to check the manufacturer's web site for the latest driver versions.

 If your audio hardware comes with a specific ASIO driver, we strongly recommend that you use this.

Generic Low Latency ASIO driver (Windows only)

On Windows systems, you can use the Generic Low Latency ASIO driver. This is a generic ASIO driver that provides ASIO support for any audio hardware supported by Windows 7, thus allowing for low latency. The Generic Low Latency ASIO driver provides the Windows Core Audio technology in Cubase. No additional driver is needed. This driver is included with Cubase and does not require any special installation.

⇒ This driver should be used if no specific ASIO driver is available. Although the Generic Low Latency ASIO driver supports all audio devices, you might get better results with on-board audio cards than with external USB audio interfaces.

DirectX drivers (Windows only)

DirectX is a Microsoft “package” for handling various types of multimedia data under Windows. Cubase supports DirectX, or to be more precise, DirectSound, which is a part of DirectX used for playing back and recording audio. This requires one of the following types of drivers:

- A DirectX driver for the audio device, allowing it to communicate with DirectX. If the audio hardware supports DirectX, this driver should be supplied by the manufacturer. If it is not installed with the audio hardware, please check the manufacturer’s web site for more information.
- The ASIO DirectX Full Duplex driver, allowing Cubase to communicate with DirectX. This driver is included with Cubase, and does not require any special installation.

Mac OS X drivers (Mac only)

If you are using a Macintosh computer, make sure that you are using the latest Mac OS X drivers for your audio hardware. Follow the manufacturer’s instructions to install the driver.

Testing the audio hardware

To make sure that the audio device works as expected, perform the following tests:

- Use any software included with the hardware to make sure that you can record and play back audio without problems.
- If the hardware is accessed via a standard operating system driver, try playing back audio using the computer’s standard audio application (e.g. Windows Media Player or Apple iTunes).

Installing a MIDI interface or USB MIDI keyboard

Although many USB MIDI keyboards and MIDI interfaces are plug&play devices, you may have to install a dedicated device driver. Please follow the installation procedure described in the documentation that came with the device.

⇒ You should also make sure to check the manufacturer’s web site for the latest driver updates.

3

Creating your first project

About this chapter

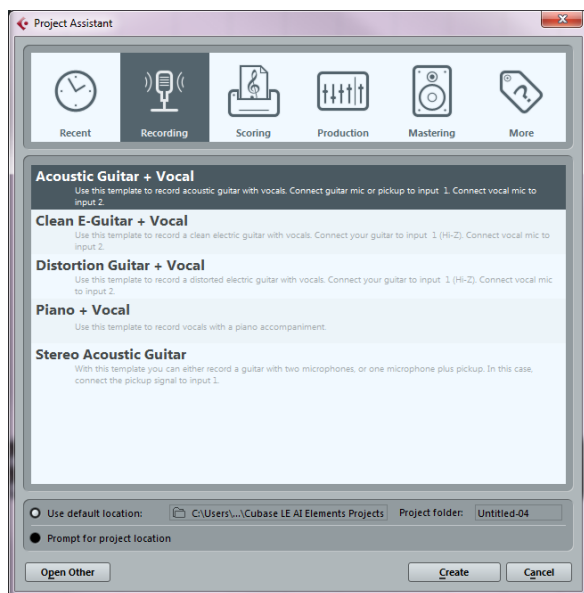
In this chapter you will learn how to create a new project, save a project, and open a saved project. You will also learn how to set up your audio device in Cubase.

The Project Assistant dialog

To create a new project, proceed as follows:

1. Start Cubase.

The Project Assistant dialog opens. It allows you to open existing projects and create new projects, which can either be empty or based on a project template.



⇒ If Cubase is already running, you can open the Project Assistant by selecting the “New Project...” command from the File menu.

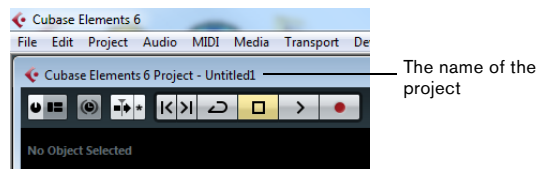
2. In the “Project folder” field, enter a name for the project folder (e.g. “My first project”).

3. If you want to start with a preconfigured project for a specific purpose instead, select a template from one of the categories (Recording, Scoring, Production, or Mastering).

If you do not select a template, a blank new project is created.

4. Click Create.

You are looking at your very first project in Cubase. Congratulations! If you look at the top of the window (called the Project window), you will see that the name of this project is “Untitled1”.



⚠ You are not done yet! So far you have created a new Cubase project. There is a new folder on the hard drive, but the actual Cubase project has not been saved yet.

Saving, closing, and opening projects

Saving a project

1. On the File menu, select the Save command.

If your project has not been saved before, this opens the Save As dialog. You will notice that the folder you created earlier (“My First Project”) is already selected. This is where you want to save your project.

2. Type in a name for your project (e.g. “My First Cubase Project”).

3. Click “Save” – and that’s it!

⇒ If a project has been saved before, the shortest way to save is pressing [Ctrl]/[Command]-[S].

Closing a project

1. Make sure that the Project window is selected.

The Project window is the main window that you work in.

2. On the File menu, select the Close command.

If you have made any changes to the project since you last saved it, you will be prompted to “Save”, “Don’t Save”, or “Cancel”. Click Save if you want your changes saved.

Opening a project

After you have saved and closed your project, you have several possibilities to open it again.

Opening a project using the Open command

1. On the File menu, select the “Open...” command.
2. Navigate to the folder containing the project that you want to open.
3. Select the project and click Open.

The project is loaded in the Project window.

Opening a project using the Project Assistant dialog

In the Recent category in the Project Assistant dialog, you will find a list of recently opened projects. When you select a project in this category, the Create button changes to an Open button and is used to load the corresponding project.

Opening a project using the “Recent Projects” submenu

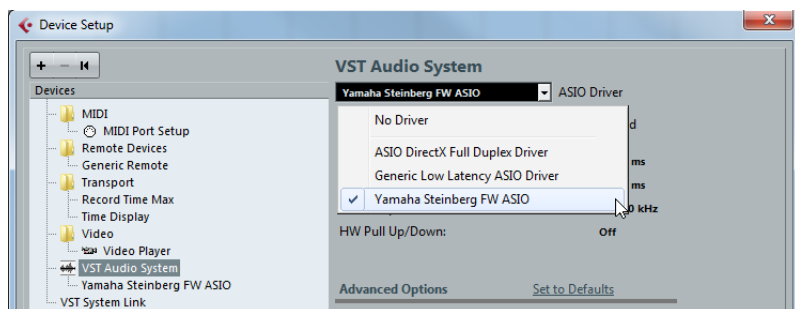
Cubase remembers recently opened projects and lists them in the “Recent Projects” submenu of the File menu. On this menu, you can select a project name to load that project.

Selecting the driver for your audio device

Before you can set up the routing for your audio signals and start recording, you need to make sure that the correct ASIO driver is selected:

1. Open the Devices menu and select the “Device Setup...” option.
2. In the Device Setup dialog, click on the “VST Audio System” entry in the list on the left.

The VST Audio System page is shown on the right.



3. On the ASIO Driver pop-up menu, select the driver that you want to use. The different types of drivers are described in the section “Hardware installation” on page 19.

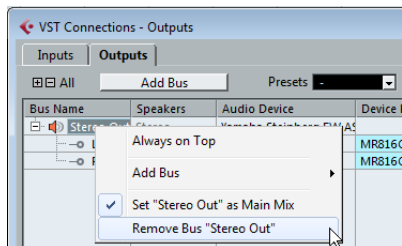
Setting up the VST connections

The VST Connections window allows you to set up the routing of input and output signals between Cubase and your audio hardware. These connections are called “busses”. In this section you will learn how to set up the busses so that you can get playback and recording working.

Adding outputs

In this section you will learn how to set up the outputs for playing back audio in Cubase. Let’s start from scratch and remove any outputs that were automatically added by Cubase:

1. Open the Devices menu, and select “VST Connections”.
The VST Connections window opens. The default key command for this is [F4].
2. Select the Outputs tab.
3. In the “Bus Name” column, right-click the top entry and select “Remove Bus” from the context menu.
If necessary, repeat this step for any further busses.



Now that the “Bus Name” column is empty, you are ready to set up the output that you need:

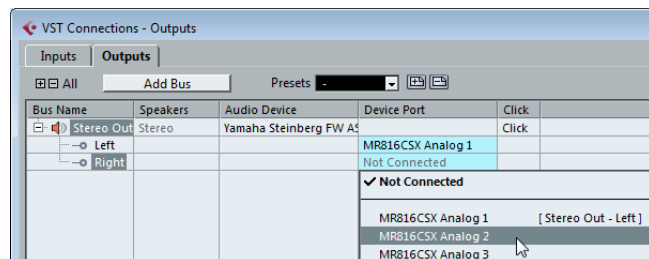
1. Click the “Add Bus” button.
The Add Output Bus dialog opens.
2. Choose “Stereo” for Configuration and “1” for Count.

3. Click OK.

A new stereo bus (Left and Right) is added, allowing you to have audio in Cubase routed to your audio hardware.

4. If you want to change the output ports that were selected automatically, open the “Device Port” pop-up menu and select different ports.

Depending on your audio hardware, more than two output ports might be available. For most cases we recommend to use the main stereo outputs.



Adding inputs

In this section you will learn how to set up the inputs for recording into Cubase from scratch:

1. In the VST Connections window, select the Inputs tab.
2. In the “Bus Name” column, right-click the top entry and select “Remove Bus” from the context menu.

If necessary, repeat this step for any further busses.

3. Click the “Add Bus” button.

The Add Input Bus dialog opens.

4. Choose “Stereo” for Configuration and “1” for Count.

5. Click OK.

A new stereo bus (Left and Right) is added, allowing you to have audio from your audio device's input routed to Cubase for recording.

Having a stereo input is useful for recording audio with two channels, for example, to record a keyboard with a left and a right audio channel. If you want to record with two mono channels instead, you can set up separate mono busses:

6. Click the “Add Bus” button.

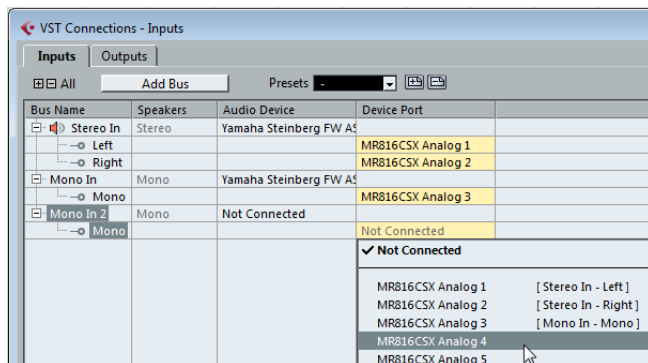
The Add Input Bus dialog opens.

7. Choose “Mono” for Configuration and “2” for Count.

8. Click OK.

Two new mono busses are added.

9. Click in the “Device Port” column to select the audio inputs of your audio device for the stereo and mono inputs.



That's it! You are now ready to record audio in Cubase and play it back.

4

Recording audio

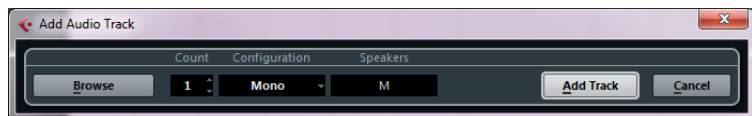
About this chapter

In this chapter you will learn how to record a bass guitar in mono from the “Mono In” input. Make sure that you have your audio hardware set up and you have read through the section “Setting up the VST connections” on page 26. You also need an empty project, see “Creating your first project” on page 21.

Creating a mono track

Let’s create an audio track for recording:

1. On the Project menu, open the “Add Track” submenu, and select the “Audio” option.
2. Choose “Mono” for Configuration and “1” for Count. Click “Add Track”. This adds a mono audio track to the Project window.

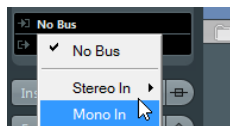


3. Click on the new track you have created and take a look at the Inspector. The Inspector allows you to see and manipulate a lot of information for the selected track.



4. Open the “Input Routing” pop-up menu and select “Mono In” for the audio track’s input.

By selecting “Mono In”, you will be able to record the audio from the left input of the audio device.



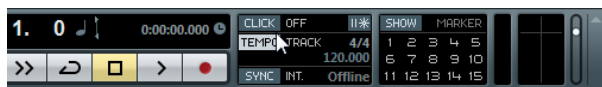
5. Open the “Output Routing” pop-up menu and select “Stereo Out” for the audio track’s output.

Setting the output to “Stereo Out” allows you to hear what you are recording. See the chapter “VST Connections” in the Operation Manual for more detailed information.

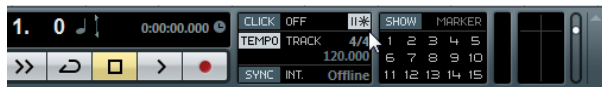
Turning on the metronome click

To have a click or metronome play in the background so that your recording aligns with the bars and beats in Cubase, proceed as follows:

1. On the Transport panel, activate the “Metronome/Click” button.



2. If you would like to hear a two bar count in before you record, also activate the “Precount/Click” button.



Next you have to set the speed or the tempo for your project. This will directly affect how fast the click plays.

- Click the Tempo button so that the text field to the right reads “Fixed” (instead of “Track”), then click in the value field and enter a new tempo value. The tempo is set in bpm (beats per minute).



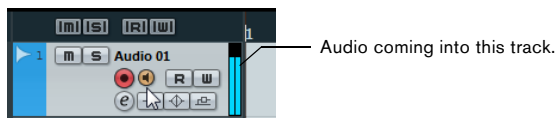
Setting levels

For this example, we assume that you have an instrument playing through an amplifier with a microphone in front of the amplifier's speaker. This microphone is plugged directly into the audio device's input. The level has to be set so that there is enough volume without clipping. Proceed as follows:

- Make sure that the “Record Enable” button on the track is enabled. This way Cubase knows that you want to record on this track.

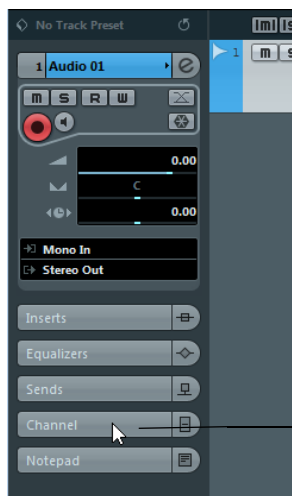


- Click the Monitor button so that you can hear the instrument playing. You should now see and hear the incoming audio signal.



3. In the Inspector, open the Channel tab.

This will display the channel fader for the selected track.



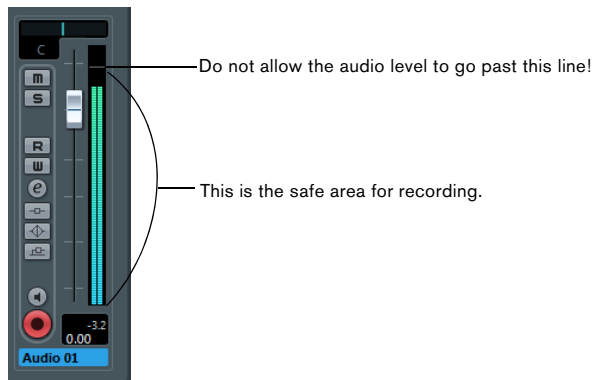
Click here to display the channel fader.

4. Do the best you can to send the maximum amount of volume to the audio inputs of your audio device, but avoid distortion.

Most audio devices show some kind of level or volume indication. If yours does not, don't worry, you can change the amount using the channel fader.

5. Move the fader up or down so that the volume is loud enough without going into the red on the channel meter.

If the meter goes into the red, clipping or distortion can occur. You will see a line near the top of the channel meter – make sure that the level does not go over this line!



Once the level is set, you are ready to record!

Recording

To record the instrument you are playing (in our example a bass guitar), proceed as follows:

1. Position the cursor at the beginning of the project.

This will make sure you start recording on bar 1.

2. Click the Record button to start recording.

Since the “Precount/Click” button is activated, you will hear two bars of click before recording begins.

3. Click Stop when you are finished.

4. Turn off the Monitor and “Record Enable” buttons on the track.

By turning off the “Record Enable” button you make sure that you do not accidentally record on the track again.



Congratulations! You have just recorded your first piece of audio in Cubase. Move ahead to the next section to learn how to play back audio.

Playback

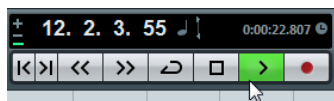
In this section, you will learn how to play back in Cubase. You might think this is very simple – just hit Play. It is actually this simple, but there are a few tricks to learn so that you will be playing back what you want with precision.

Starting playback

There are a few ways you can start playback in Cubase:

- Click the Play button on the Transport panel.

Playback starts at the project cursor position.



- Press the [Enter] key on the numeric keypad.

Playback starts at the project cursor position.

- Press [Space] on your computer keyboard.

This toggles between start and stop.

- Double-click in the lower half of the ruler.

Playback starts from the position where you clicked.

Double-click in this area.



Stopping playback

There are also several ways to stop playback in Cubase:

- Click the Stop button on the Transport panel.

Clicking the Stop button twice moves the cursor to the position in the project where you started playback.

- Press [Space] on your computer keyboard.

This toggles between stop and start.

- Press the [0] key on the numeric keypad.

Cycle playback

In Cubase, you can play back a section of your project in a continuous cycle or loop. Proceed as follows:

1. On the Transport panel, set the left locator to “1” and the right locator to “5”. This tells Cubase that you want to cycle between the beginnings of bars 1 and 5. That way you will get a 4-bar cycle.

The left locator is set to “1”.



The right locator is set to “5”.

2. Make sure that the Cycle button is activated.

3. Click the Play button.

Cubase will repeat the cycle over and over until you stop playback.

- To playback the selected audio event or MIDI part in a cycle, you can also select the event or part and choose “Loop Selection” from the Transport menu. This is the quickest way to set up a cycle and start playback; the default key command for this is [Shift]-[G].

5

Recording MIDI

About this chapter

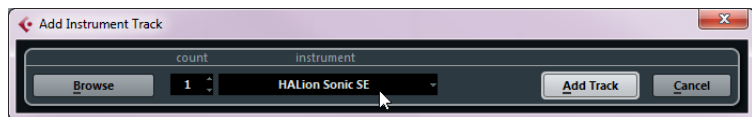
In this chapter you will learn how to record MIDI. You can record MIDI with virtual instruments, i.e. a synthesizer inside your computer, or using a hardware keyboard. This chapter describes how to use virtual instruments.

Creating an instrument track

Before you start, you need to create a new project, see “Creating your first project” on page 21. You can then add an instrument track and select a virtual instrument. Proceed as follows:

1. On the Project menu, open the “Add Track” submenu, and select the Instrument option.

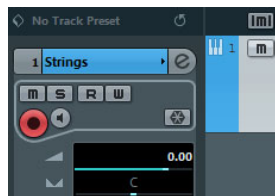
The Add Instrument Track dialog opens.



2. On the Instrument pop-up menu, select “HALion Sonic SE”, and click the “Add Track” button.

An instrument track is created.

3. In the track list, click on the new track to select it.
4. In the Inspector, double-click in the name field of the instrument track (HALion Sonic SE 01) and change it to “Strings”.



5. Click the “Edit Instrument” button.

The control panel for HALion Sonic SE opens.



Browsing sounds

In this section you will learn how to load sounds into the virtual instrument HALion Sonic SE:

1. At the top of the HALion Sonic SE plug-in panel, click in the Presets field. The Preset browser opens.



2. Click the “Set Up Window Layout” button in the bottom left corner of the Preset browser and activate the Filters option.

The Preset browser expands. It now has a Filter section.

3. In the Category column in the Filters section select “Strings”.

This filters the list on the right to only show string sounds.



4. In the preset list on the right, double-click on the string sound that you want to use.

The sound is applied and the Preset browser closes.

Recording

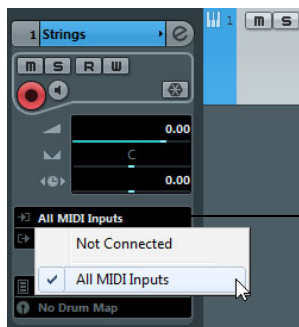
Now that you have selected a sound, you can record something. You will learn how to route a MIDI keyboard to your track so that HALion Sonic SE plays the sound you selected. Proceed as follows:

1. Connect a MIDI keyboard to your computer.

This can be done directly through USB or via a MIDI interface.

2. In the Inspector, on the Input Routing pop-up menu, choose the MIDI input that you want to use.

If you are not sure which input to choose, leave this set to “All MIDI Inputs”. That way, all available MIDI inputs are taken into account.

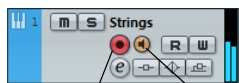


The MIDI Input Routing pop-up menu

Below the Input Routing pop-up menu, you can see the MIDI output. This is set to “HALion Sonic SE”.

3. Activate the “Record Enable” and Monitor buttons on the track and play some notes on your MIDI keyboard.

Record enabling the track lets Cubase know that you want to record on this track. You can have many tracks record enabled at a time. You should see and hear the MIDI signals coming in.

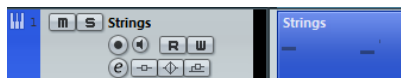


Incoming MIDI signal

Record Enable

Monitor

4. Press [1] on the numeric keypad of your computer keyboard.
The project cursor jumps to the left locator.
5. Click the Record button and record a few bars of music.
6. Click the Stop button when you are finished.
7. Turn off the Monitor and “Record Enable” buttons on the track.
By turning off the “Record Enable” button you make sure that you do not accidentally record on the track again.



Congratulations! You have just created your first MIDI recording in Cubase. Playing back MIDI is identical with playing back audio in Cubase. This is described in detail in the section “Playback” on page 36.

6

Mixing and effects

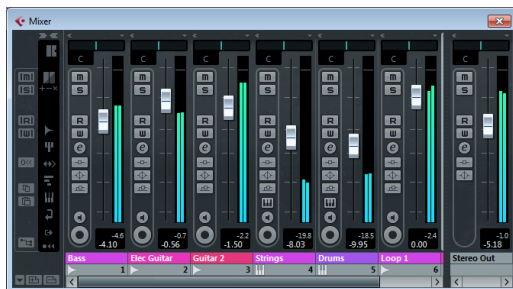
About this chapter

In this chapter you will learn how to get a mix ready with proper levels, EQs, and effects. Afterwards you will export the audio. To complete the steps described here, start with a project that contains recorded data (e.g. for a standard rock song) and is ready to be mixed.

Setting levels for the mix

The first thing you want to do is to set the levels for your project. This helps you get a preliminary balance of the mix so you can add EQ and effects later. Proceed as follows:

1. Open the Mixer.
2. Click the Play button on the Transport panel and listen to your recording.
3. Move the level faders for each channel until you are satisfied with the mix.



- You can also change a fader setting by double-clicking on the “Channel Level” value and entering the level manually.
- You can reset a fader back to 0dB (default setting) by [Ctrl]/[Command]-clicking in the fader area.

Do not raise the level faders too high! Be sure to keep levels at a good volume so that they are as loud as possible without clipping. If the CLIP indicator lights up for the output channel, lower your levels until CLIP is no longer displayed.

Setting panorama

The panorama (pan) settings allow you to move the position of each channel in the stereo mix. By positioning some of the instruments on the left or right, you can create a rich and spacious sound. Pan settings depend greatly on the actual position of the instruments on a stage and on personal preferences.

- To set the panorama for a channel, click on the pan control above the channel fader in the Mixer and move it to the right or left.

The pan position is also indicated as a numerical value below the pan control.



- To get a panner back to the center position (default), [Ctrl]/[Command]-click anywhere in the panner area.

In the following, you will find a few tips and guidelines about positioning different instruments:

- Bass drum (kick), bass guitar, rhythm guitar and lead vocals are normally kept in the center position.
- Lead guitar, keyboard, and drums (except for the bass drum) are often panned left or right.
- Instruments that are available in pairs (e.g. guitars) can be panned left and right.

Mute and solo

Each track has a Mute (M) and Solo (S) button. Activating Mute prevents you from hearing the track. When you solo a track, the other tracks become muted so that you hear only the soloed track(s). You can have several tracks muted or soloed at a time.



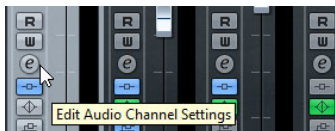
- If you want to deactivate all the mutes or solos, click the “Deactivate all Mute” or “Deactivate all Solo” buttons in the common panel on the left side of the Mixer.



Adding EQ

EQ or equalization amplifies or attenuates frequencies so that you can place each instrument correctly in the mix. EQ settings depend greatly on the style of music that you are mixing. In this section you will get to know the EQ features in Cubase. Proceed as follows:

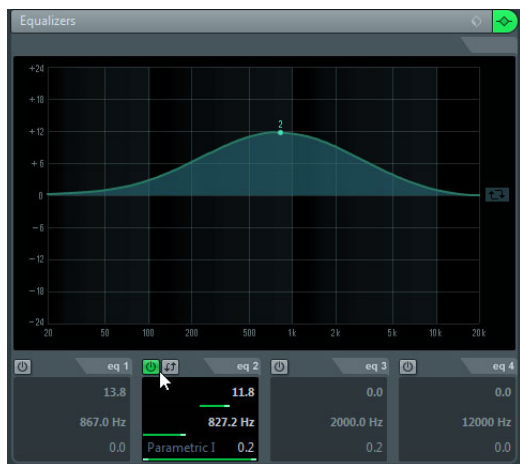
1. In your project, select an audio track with a drum recording.
2. Set up a cycle and play it back so that you can hear the EQ changes you are making.
3. Open the Mixer.
4. Solo the track and click the “Edit Audio Channel Settings” button.



The VST Audio Channel Settings window opens, where you can make your EQ settings. There are four EQ bands on each track.

5. In the Equalizers section, activate the EQs by clicking the corresponding “EQ Band Active” buttons.

You can also click in the EQ curve area to turn on an EQ.



6. Click and move the EQ point in the display.

- Set up the gain by moving the EQ point up or down.

The gain makes that particular EQ louder or softer.

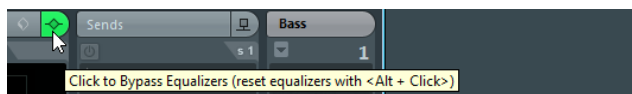
- Set up the frequency by moving the EQ point right or left.

⇒ If you hold down [Ctrl]/[Command], you can restrict the movement of the EQ to vertical adjustment. If you hold down [Alt]/[Option], you can restrict the movement of the EQ to horizontal adjustment.

- Change the quality (Q) of the EQ by holding down [Shift] and moving the EQ curve up or down.

- You can bypass the EQs by clicking on the “Bypass Equalizers” button.

- You can reset the EQ settings by [Alt]/[Option]-clicking the “Bypass Equalizers” button.

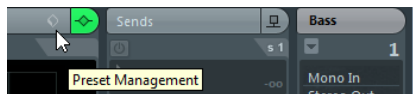


Experiment with the EQs on all your tracks. It is usually better to take away EQ (lower the gain) than to add it.

Using EQ presets

If you do not want to set up your EQs from scratch, you can load a preset instead:

1. Click the “Preset Management” button and choose a sound from the list.



2. Adjust the settings to your liking.
3. Store the EQ settings as a new preset by clicking the “Preset Management” button again and selecting the “Save Preset...” option. A dialog opens, allowing you to enter a name and save the new preset.

Audio effects

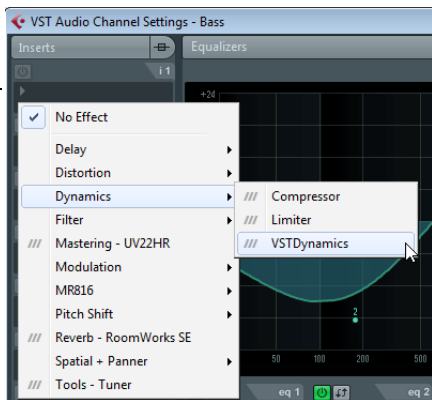
You will now learn to use some effects. You can add effects by inserting them directly on a track or by creating an FX channel and using the auxiliary sends of each track to send the audio to that FX channel.

Insert effects

Insert effects let you apply an effect to a single channel. In this example, you will apply compression to a bass track to smooth it out. Proceed as follows:

1. Open the Mixer.
2. Set up a cycle using the left and right locators.
3. Make sure that the Cycle button is activated and start playback. That way you can hear the changes you make. Cycle playback is described in the section “Cycle playback” on page 37.
4. Select the bass track of your recording and click its “Edit Audio Channels Settings” button.
The VST Audio Channel Settings window opens.
5. In the Inserts section, click on the first insert slot.
The effects pop-up menu opens.

Click here to open the effects pop-up menu.



6. Select “VSTDynamics” from the Dynamics submenu.

The VSTDynamics plug-in is loaded into the insert slot and the plug-in panel opens.

7. Set up the parameters in the Compressor section to your liking.

The plug-in parameters are described in detail in the PDF document “Plug-In Reference”.



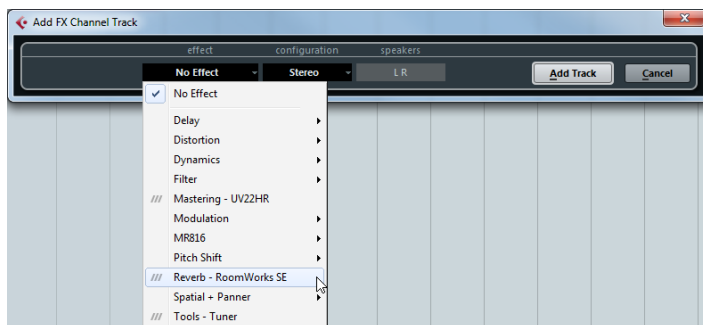
FX channels

In this section you will learn how to create and use FX channels. This is very useful if you want to apply an effect to several channels at once. In this example, you will add reverb to several tracks of a project:

1. Open the Project menu and select “FX Channel” from the Add Track submenu.

The Add FX Channel Track dialog opens.

2. Select the “RoomWorks SE” effect from the Reverb category, choose “Stereo” for Configuration, and click the “Add Track” button.



3. Experiment with the reverb settings until you get the room ambience that you want.

The effect parameters are described in detail in the PDF document “Plug-In Reference”.

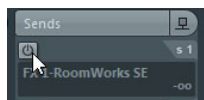
4. Open the Mixer and click the “Edit Audio Channels Settings” button of one of your audio tracks.

The VST Audio Channel Settings dialog opens.

5. In the Sends section, click on the first effect slot and choose “FX1-RoomWorks SE” from the pop-up menu.

The FX channel is loaded into the send effect slot.

6. Click the On/Off button above the effect slot to activate the send.



7. Move the slider to the right to raise the level of the send to the “RoomWorks SE” effect. You will notice the ambience created by the reverb effect.

⇒ By soloing the track you will be able to hear this effect more clearly.

8. Repeat the previous four steps for any channels to which you want to apply the reverb effect.

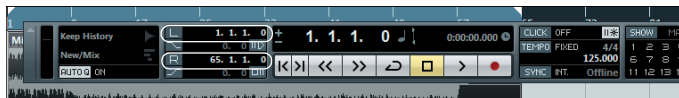
The great thing about FX channels is that they look and feel just like regular audio channels. If you set an EQ for an FX channel, only the effect will be changed by the EQ.

Exporting a mixdown

Now that the project is mixed, you can export it so that it can be imported into another program such as a CD burning application. Proceed as follows:

1. On the Transport panel, make sure that the left and right locators are set to the beginning and the end of your recording, respectively.

Cubase will export the section between the left and right locators.

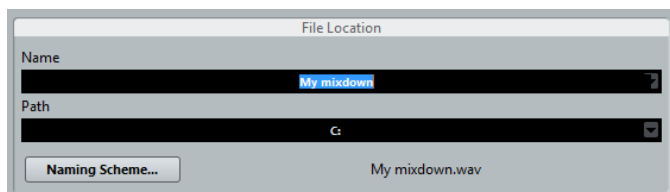


2. Open the File menu, and on the Export submenu select “Audio Mixdown...”. The Export Audio Mixdown dialog opens. This dialog is described in detail in the chapter “Export Audio Mixdown” in the Operation Manual.

3. In the Channel Selection section, choose the main output channel “Stereo Out” for export.

The exported file will be generated through the main stereo output.

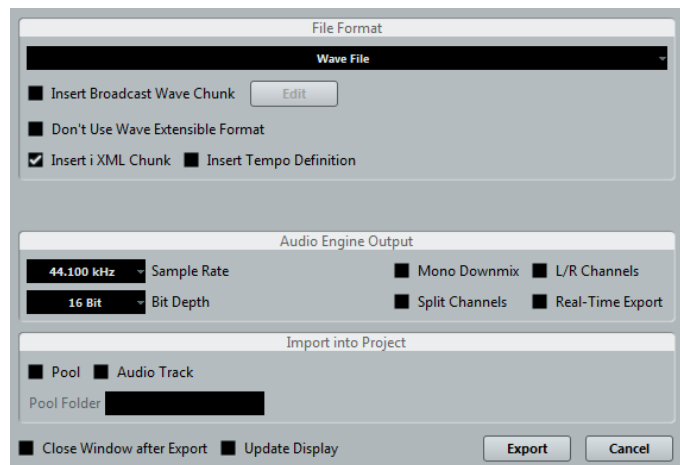
4. In the File Location section, enter a file name in the Name field.



5. Open the “Path Options” pop-up menu to the right of the Path field and select “Choose...” to specify the folder in which the mixdown will be saved. Use the option “Use Project Audio Folder” if you want to store the exported file in your project’s audio folder. This is one of the best places to keep it so it will not accidentally become erased or lost.

6. In the File Format section, select the file type.

Most common is the “Wave File” format. Which format to choose depends on the application that you want to use the exported file in.



7. In the “Audio Engine Output” section, choose the sample rate and bit depth for your export.

44.100 kHz and 16 bit are common for CD burning.

8. In the “Import into Project” section, activate the Pool and “Audio Track” options.

That way the audio is imported back into Cubase after the export and placed on a new audio track.

9. Activate the “Real-Time Export” option.

This ensures that the MIDI data is sent to the external MIDI instrument in realtime and recorded back in properly.

10. Click the Export button.

Your audio is exported to the specified location and imported on a new audio track in your project.

You can check if the audio mixdown sounds the way you want it by soloing the mixdown track.