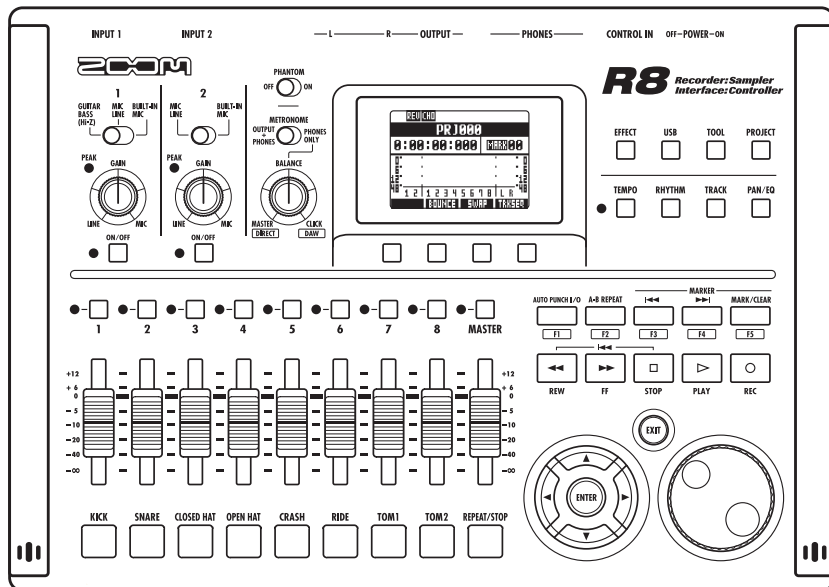


R8 Recorder: Sampler Interface: Controller



AUDIO INTERFACE MANUAL

ZOOM

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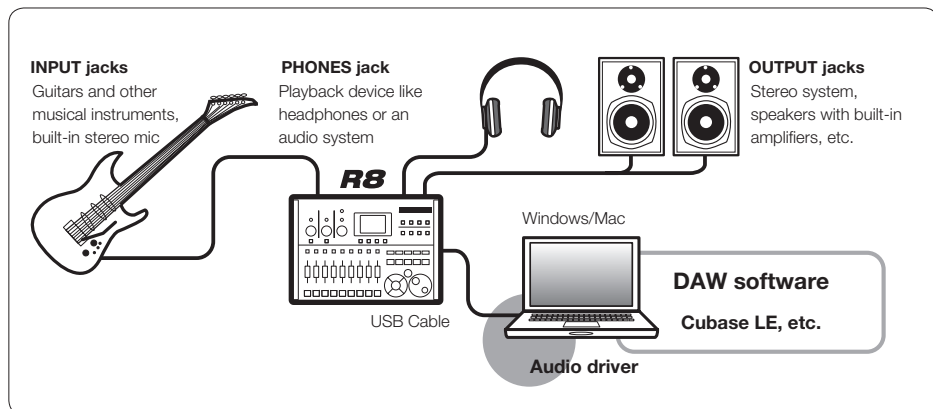
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Audio interface and control surface

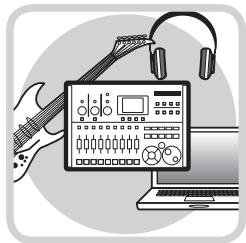
This section explains how to connect the unit with a computer and how to set up and use the audio interface and control surface functions of the **RB** with a DAW and other software.

Functions of the audio interface and control surface



■ Audio interface

The **RB** inputs and outputs can be used as a Hi-Speed USB 2.0 audio interface with 2 inputs and 2 outputs at quality up to 24-bit/96kHz. Effects can be used when the sampling rate is 44.1 kHz, and the unit can be powered by a computer's USB bus.



■ Control surface functions

Control surface functions can be used to control DAW software on a computer via USB. Transport operations, including playback, recording and stopping, are possible. Furthermore, various other DAW software functions can be mapped to the F1~F5 keys (assignable functions depend on the DAW used).



■ Supports input from a variety of sources, including guitars, mics and line level instruments

The two onboard jacks include one high-impedance input. Both accept XLR and standard phone plugs and can provide phantom power (24 or 48V).

Many sources are supported from high-impedance guitars and basses to dynamic and condenser microphones and line-level devices like synthesizers. In addition, the built-in high-performance condenser microphones are convenient for recording acoustic guitars and vocals.

■ Versatile effect functions

Built-in insert effects can be applied to specific channel paths, and two-types of send/return effects work via the mixer send/return. These effects can be applied when recording, of course, but they can also be applied to only the monitor output. For example, when recording vocals, you can apply reverb only to the monitor signal to make singing easier.

■ Comprehensive built-in mixer

Using the **RB** mixer, you can make a mix for monitoring. When simultaneously recording guitar and vocals, for example, you can adjust volume balance, panning and reverb levels.

Moreover, you can also adjust the balance between the built-in mixer and the sound sent from a computer.

■ Multifunction tuner

In addition to standard chromatic tuning, the on-board multifunction tuner also supports 7-string guitar, 5-string bass and various drop tunings.

Cubase LE installation overview

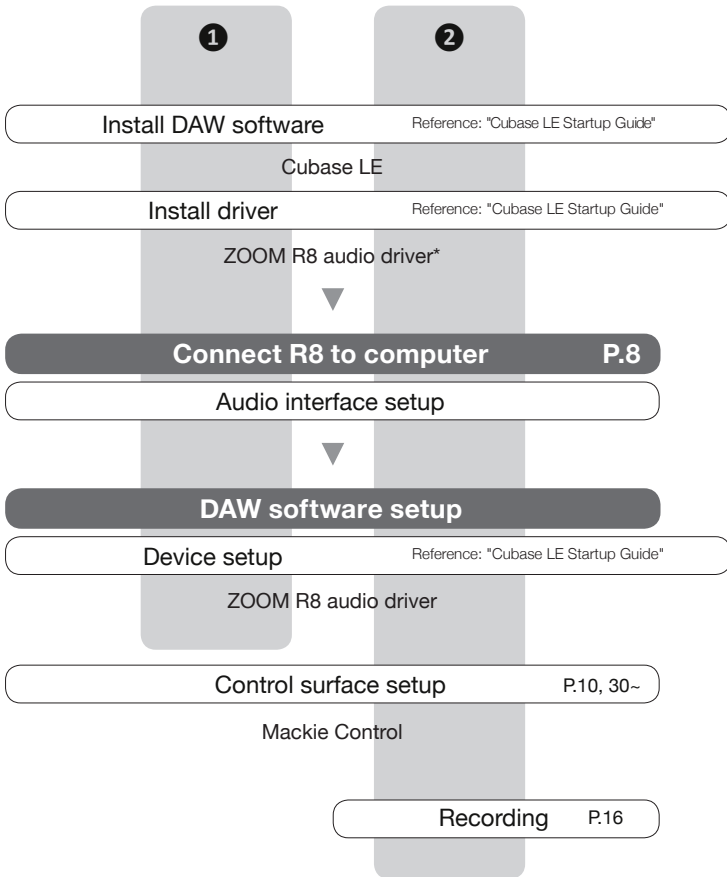
To use the **R8** with DAW software, after installing that software, an audio driver must be installed and set to recognize it.* We explain how to do this with Cubase LE.

1 Audio interface

By using the **R8** between a computer and external audio devices and instruments, their signals can be recorded using a DAW or other software. Instruments and mics that require high impedance or phantom power can also be connected.

2 Control surface

Using the faders and keys on the **R8**, you can control transport operation and mixing in digital audio workstation (DAW) software on your computer.



*No driver is necessary for use with Macintosh computers.

RB audio interface system requirements

RB audio interface system requirements

Windows

Windows® XP SP3 or later (32-bit)
Windows® Vista SP1 or later (32-bit, 64-bit)
Windows® 7 (32-bit, 64-bit)
32-bit: Intel® Pentium® 4 1.8 GHz or faster
64-bit: Intel® Pentium® Dual Core 2.7 GHz or faster
32-bit: RAM 1 GB or faster
64-bit: RAM 2 GB or faster

Intel Mac

OS X 10.5.8 or later/10.6.5 or later
Intel® Core Duo 1.83 GHz or faster
RAM 1 GB or faster

Both

USB 2.0 compatible port

- USB hubs are not supported.
- Intel® chipsets recommended.

Note about descriptions and images



This manual was prepared based on use with Windows systems. Special functions related to Mac OS X are indicated separately.

The screen images are of the Windows version of Cubase LE.

Cubase LE Startup guide

Please refer to the Cubase LE Startup Guide for detailed instructions on installing the ZOOM **RB** audio driver and Cubase LE.

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- Ableton Live is a trademark of Ableton AG.
- Digital Performer is a registered trademark of Mark of the Unicorn.
- All other product names, registered trademarks, and company names mentioned in this documentation are the property of their respective owners.

In order to improve the product, specifications might be changed without advance notice.

Connecting and disconnecting in audio interface mode

This is an overview of connecting and disconnecting the **RB** to a computer with a USB cable. For details, see the included Cubase LE Startup Guide page.

Connecting the **RB** to a computer for the first time

- 1 Install the Cubase LE DAW software on the computer.
- 2 Install the ZOOM **RB** audio driver on the computer from the included SD card. (No driver is necessary for use with Macintosh computers.)


 Reference: "Cubase LE Startup Guide"

- 3 Connect the **RB** to the computer.

RB setup and connection

- 4 Setup the DAW software.

Device setup

 Reference: "Cubase LE Startup Guide"

Control surface setup P.10

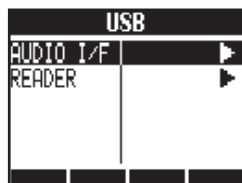
Mackie Control

RB setup and connection

- 1 Connect the **RB** to the computer using a USB cable.

- 2  Press **USB**.

- 3 Select **AUDIO I/F**.



-  Press **ENTER**.

- 4 Select **EXECUTE**.





-  Press **ENTER**.

NOTE

- The ZOOM **RB** audio driver is essential for using the **RB** as an audio interface with DAW software such as Cubase LE. (No driver is necessary for use with Macintosh computers.)
- Download the latest **RB** audio driver from the Zoom Corporation website.
<http://www.zoom.co.jp/>

Disconnecting

1 Press the  below **EXIT**
 USB
 or press .

2 Select **YES**.



Change
menu



Press **ENTER**.

NOTE

Select **CONTINUE** to use the same settings as last time.

- INSERT EFFECT settings
- SEND RETURN EFFECT settings
- Mixer settings
- TUNER settings

Select **RESET** to restore default settings for each item.

- The audio interface and control surface functions of the **RB** can be used by drawing power through a USB cable from the USB bus.
- We recommend always using the latest **RB** system software.

Using control surface functions

When using the **R8** connected by USB as an audio interface, the **R8** keys and faders can be used to control Cubase LE's transport and mixer.

About the control surface

In control surface mode, the keys and knobs on the **R8** can be assigned to particular Cubase LE functions.

Transport section P.11


About banks P.12

Fader section P.12

HINT

Assigning keys

For a list of functions that can be assigned to the knobs and keys of the **R8**, as well as other transport/function keys that are supported by Cubase LE, please consult the "Control surface functions quick reference guide" in this manual.

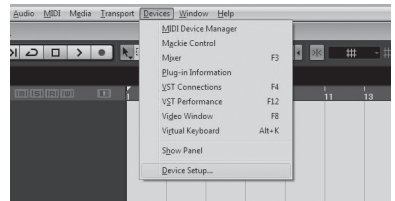
 Reference: Control surface functions quick reference guide **P.15**

Control surface setup

See **R8** setup and connection on P.8-9

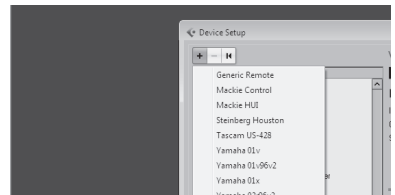
5 Then, launch Cubase LE.

6 From the Cubase LE "Devices" menu, select "Device setup..."



Open the "Device Setup..." window.

7 At the top left of the Device setup window [+], [-] and [<] buttons appear. Click the [+] and select "Mackie Control"

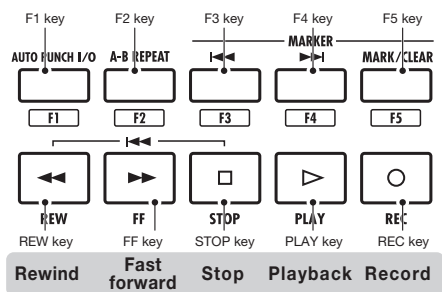


8 Set the MIDI input and output

MIDI input: ZOOM R8
MIDI output: ZOOM R8

Transport section

By setting up the control surface, the **RB** transport section keys can be assigned to individual functions in Cubase LE.



HINT

You can connect a footswitch to the **CONTROL IN** jack to start and stop playback, and change effect patches, for example, with your foot when using the **RB** as an audio interface.



Reference: Operation Manual
Using a footswitch

P.113

Fader section operation

Using the faders and status keys of the fader section, you can adjust the volume of corresponding Cubase LE tracks, mute and solo them, and arm them for recording.

About banks

After setting up control surface operation, the main parameters of Cubase LE can be operated using the **RS** fader and status keys.

A group of tracks operated by the faders and status keys is called a “bank.” With the **RS**, one bank of 8 adjacent tracks can be controlled.

For example, if fader 1 is assigned to Cubase LE track 1, tracks 1-8 can be controlled as shown in the following diagram.

Status keys & Faders	1	2	3	4	5	6	7	8
Track	Tr.1	Tr.2	Tr.3	Tr.4	Tr.5	Tr.6	Tr.7	Tr.8

As the diagram shows, when tracks 1~8 are selected, pressing beneath **BANK** once switches the assignments as shown below.

Status keys & Faders	1	2	3	4	5	6	7	8
Track	Tr.9	Tr.10	Tr.11	Tr.12	Tr.13	Tr.14	Tr.15	Tr.16

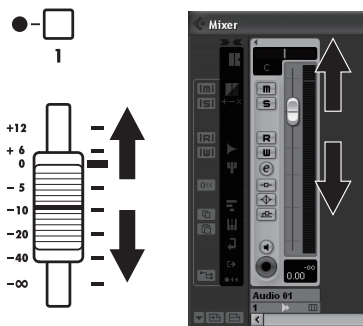
Push beneath **BANK**.
The next lower bank of eight tracks (channels) is assigned to the fader section.

Push beneath **BANK**.
The next higher bank of eight tracks (channels) is assigned to the fader section.

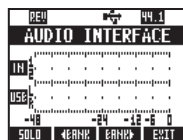
Operating the fader section

- 1 Assign the Cubase LE tracks (channels) that you want to control to the fader section.
- 2 Use the faders to control the volumes of the corresponding tracks.

The faders control the volumes of their respective tracks. Change the master volume by moving the Master Fader.

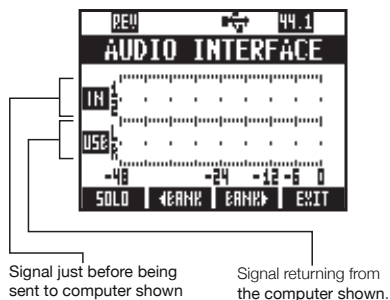


- 3 To change the function of the status keys for all the tracks, press the soft key for the desired function.



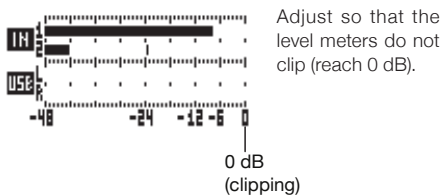
Use these keys to set the functions of the status keys

RS level meters
(Audio interface use)



Checking DAW recording levels

Set "REC SIGNAL" (in the INSERT EFFECT menu) to set whether signals are sent to the computer "WET" (with effect) or "DRY" (without effect).

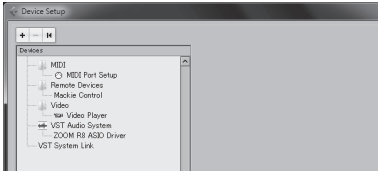


Setting the function keys

The five keys above the transport keys can be used as function keys (F1~F5) and assigned as desired.

Function key setup

- 1 Open the “Device setup...” dialog in Cubase LE.

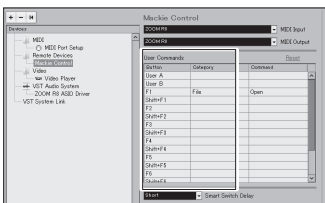


- 2 Select “Mackie Control”.

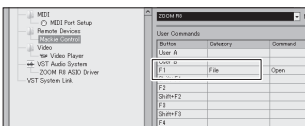
Commands can be assigned using the three columns displayed on the right side of the window.



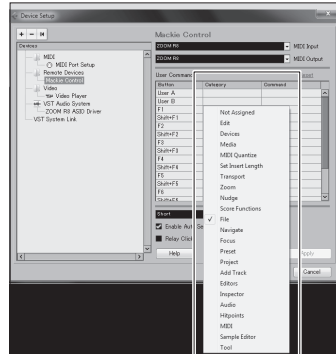
- 3 From the “Button” column choose the function key (F1~F5) to be assigned a Cubase LE function.



- 4 Click on the “Category” column for that control.

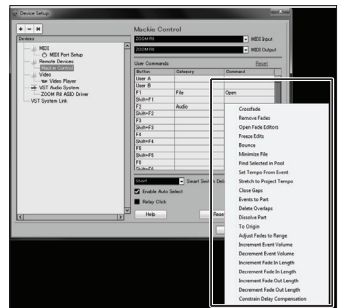


- 5 Choose the type of Cubase LE function from the Category pop-up menu.

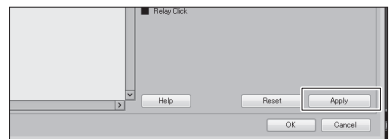


- 6 Click on the “Command” column and select the desired Cubase LE function from the pop-up menu.

The items in this pop-up menu will differ depending on the category chosen.



- 7 Press the “Apply” button.



Control surface functions quick reference guide

These functions work with Cubase LE, Cubase, Logic Pro, SONAR, Ableton Live and Digital Performer.

	Control	Explanation
Fader section	Status keys	Turns mute, solo or record arming on/off for tracks
	1–8 faders	Controls the volume of the corresponding tracks
	MASTER fader	Master volume operation
Display section	Soft keys	Change functions of status keys, change banks and end connection (EXIT)
Transport section	Cursor keys	Performs the same functions as the computer arrow keys ¹
	DIAL	Moves the project cursor position ²
	REW key	Rewind
	FF key	Fast forward
	STOP key	Stop
	PLAY key	Play
	REC key	Record
	AUTO PUNCH I/O key	Depends on the F1 key setting
	A-B REPEAT key	Depends on the F2 key setting
	⏮ (marker) key	Depends on the F3 key setting
	⏭ (marker) key	Depends on the F4 key setting
MARK/CLEAR key	Depends on the F5 key setting	

¹Scrolls window in Digital Performer

²No function in Digital Performer

Recording with Cubase LE

In this chapter, we explain how to record into Cubase LE using the **RB**.

Create a new project

Copy the ZOOM **RB** project templates to the computer.

From the CubaseLE_template folder on the SD card included with the **RB**, copy the templates to the location where Cubase LE is installed.

For Cubase LE 5, copy them as follows

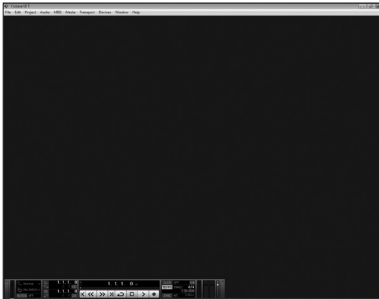
Windows

C:\Program Files\Steinberg\Cubase LE5\templates

Macintosh

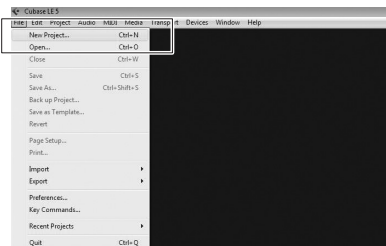
/Applications/CubaseLE5.app/Contents/templates/

1 Launch Cubase LE.



2 Choose “New Project” from the File menu.

The New Project Window where you can choose a new project template opens.



3 Create a new project

If you have copied the **RB** project templates to the designated folder, these project templates will be displayed when creating a new project. By choosing these templates you will be able to easily create projects with audio track input and output settings already made for the **RB**.



Template names and details

ZOOM R8 Mono Recording

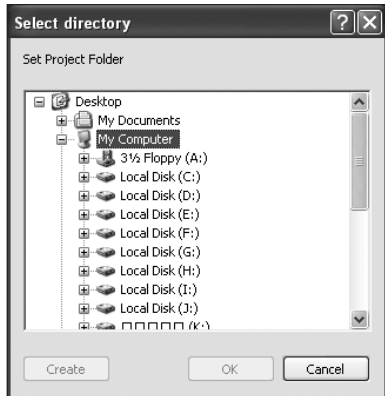
Project with Cubase LE mono tracks 1–2 assigned to **RB** INPUTS 1–2

ZOOM R8 Stereo Recording

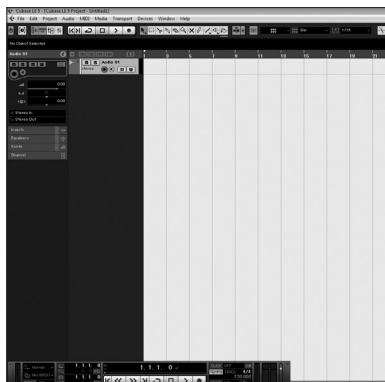
Project with a Cubase LE stereo track assigned to **RB** INPUTS 1–2

- 4** Set the save location and click the “OK” button (“Choose” button on Mac OS X).

The project file save location window is displayed.



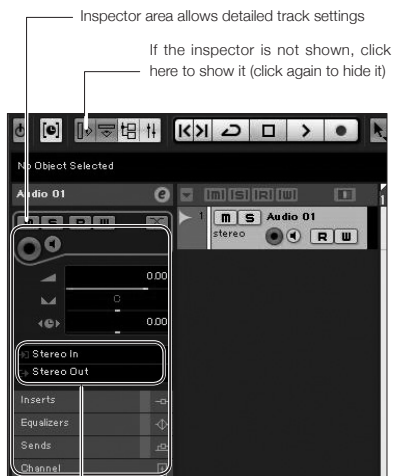
This will create a new project and the project window where most Cubase LE operations are conducted will open.



Create a new audio track

- 5** Set-up the audio tracks that were made as follows.

To add a new audio track, select “Add Track” from the “Project” menu and then choose “Audio” from the sub-menu that appears.



Inspector area allows detailed track settings

If the inspector is not shown, click here to show it (click again to hide it)

Select the track input/output bus.

The names of the **RB** busses assigned in the VST Connections (Devices menu) will be displayed.

Click here to choose a different bus from a menu that will appear.

NOTE

The inspector displays information about the track currently selected. If it does not display anything click on a track to see that track's status.

Recording With Cubase LE

Connect an instrument



Connect an instrument such as a guitar to an **RS INPUT** jack and choose an effect patch.

The chosen effect patch will be applied to the signal and can be recorded on the computer via the **USB** port.

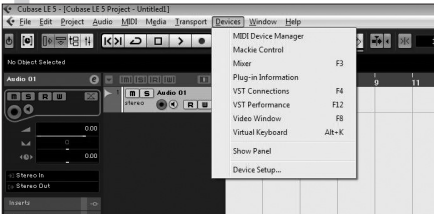
See the following for information about how to set the **RS** input signal.

Reference:
Operation Manual
Connections
Selecting effect patches

P.12

P.83

7 Select "Mixer" from the Cubase LE "Devices" menu.

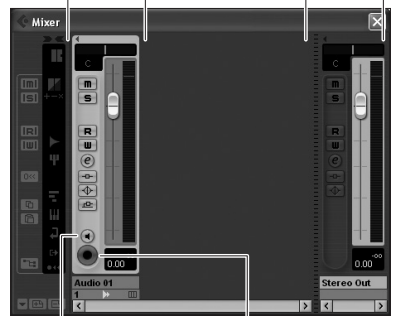


The mixer window opens, showing the channels corresponding to the created tracks and the master channel.

8 Enable track monitoring and recording.

Channel corresponding to an audio track

Master Channel



Click the Monitor button until it appears orange.

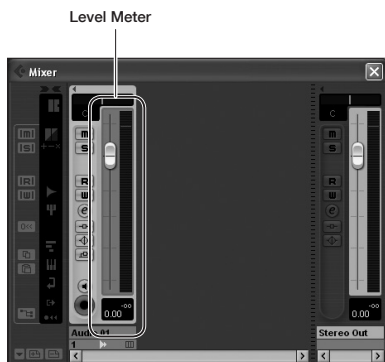
Click the record enable button. It will appear red when recording is enabled.

HINT

When the Monitor button is orange, the audio track input level is displayed in the level meter next to the fader. When the Monitor button is off, the audio track output level is displayed.

Adjust the recording level

- 9 While playing the instrument, adjust the **RS** input level and set the Cubase LE recording level.

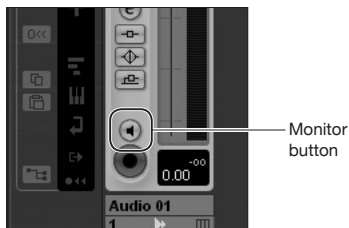


Check the recording level for Cubase LE by viewing the level meter of the channel that corresponds to the recording-enabled track. Set it as high as possible without making the meter peak. When adjusting the level, do not move the Cubase LE fader, but instead adjust the **RS** gain.

NOTE

- If the Monitor button is on, the **RS** input signal and the signal returning to the **RS** via the computer will both be output from the **RS** at the same time, creating a flanger-like sound. To monitor accurately while adjusting the recording level, turn the **BALANCE** knob to **DIRECT**.
- The meter above shows the signal level after it has been processed internally by Cubase LE. For this reason, a slight delay might occur from the time a string is plucked until the level meter moves. This is not a defect.

- 10 After adjusting the recording level, click the Monitor button so that it becomes grey.



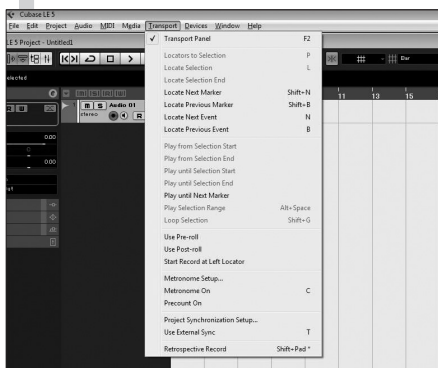
This turns off display of the input level, and mutes the signal from the computer to the **RS**.

When the Monitor button is off, the signal just before it is sent to the computer can be monitored from the **RS PHONES** and **OUTPUT** jacks.

- 11 Confirm that the Transport Panel is displayed.



If the Transport Panel is not displayed, select "Transport Panel" from the "Transport" menu.



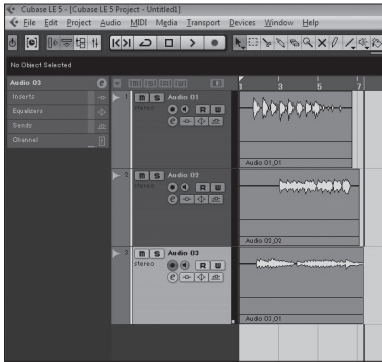
Recording with Cubase LE

Recording

12 Click the Record button on the Transport Panel to start recording.



As you play the instrument, a recorded waveform is drawn in real time in the Project window. To stop recording, click the Stop button in the Transport Panel.

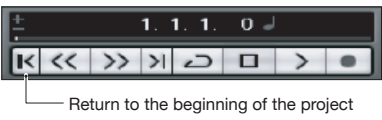


Check the recording (playback)

1 Lower the master channel fader.



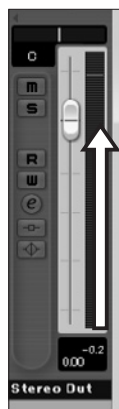
2 Click the Go to Zero (|<) button in the Transport Panel to return to the beginning of the project.



3 Click the Play button in the Transport Panel to begin playback.



- 4** Raise the master channel fader to a suitable playback level.



HINT

If no sound comes out after clicking the Play button following recording, recheck the VST Connections (step 6 in the Cubase LE Startup Guide).

In addition, confirm that the **R8 BALANCE** control is set to the center.

Tips to improve performance

When using Cubase LE, application performance could become extremely delayed or error messages such as “cannot synchronize with USB audio interface” might be displayed. Should such things happen often, the following measures might improve the situation.

1 Quit other running programs.
In particular, confirm that many background applications are not running.

2 Reduce the use of plug-ins (effects, virtual instruments) in Cubase LE

If a large number of plug-ins are running, the computer processing capacity might not be able to keep up. In addition, reducing the number of simultaneous playback tracks might be effective.

If the sound breaks up, please increase the audio Buffer Size (Devices > Device Setup... > R8 driver > Control panel). For details, see Step 5 of the Cubase LE Startup Guide.

Moreover, if the application performance is extremely slow and regular computer operation is affected, we recommend quitting Cubase LE and disconnecting the **R8** USB port from the computer once, and then reconnecting the USB port and relaunching Cubase LE.

Importing audio into Cubase LE

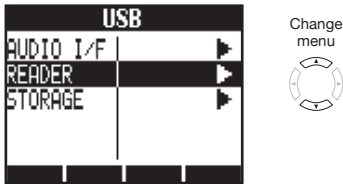
By connecting a computer and the **RS** with a USB cable and setting the **RS** to function as a card reader, you can import audio data as WAV files into Cubase LE audio tracks.

Importing by drag & drop

1 Connect the computer and the **RS** with a USB cable.

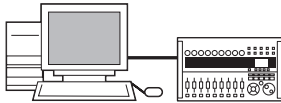
2  Press **USB**.

3 Select **READER**.



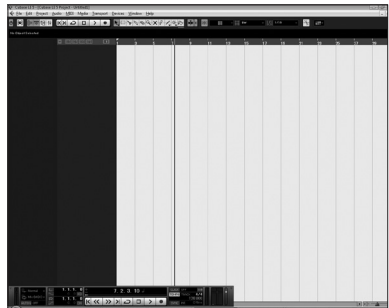
 Press **Enter**.

Access the **RS** from the computer.

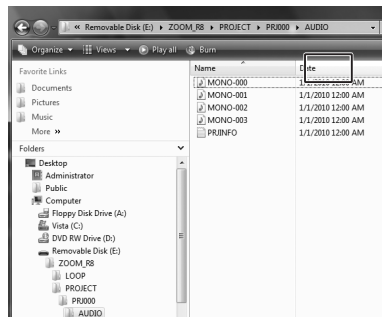


4 Launch Cubase LE.

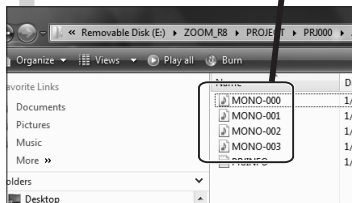
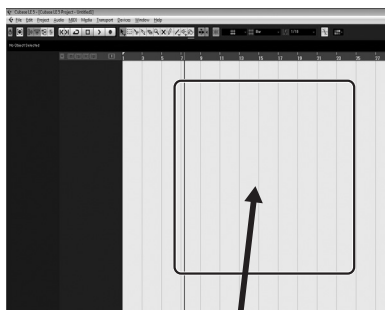
5 Open the Cubase LE project into which you want to import audio data.



6 Open the **RS** SD card from the computer and open the “AUDIO” folder of the project from which you want to import audio data.



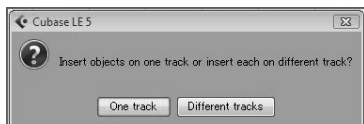
- 7** Select the file (or files) that you wish to import from the “AUDIO” folder and drag and drop them into the Cubase LE project window.



When a file is dragged and dropped, a window will open asking how Cubase LE should place the file.

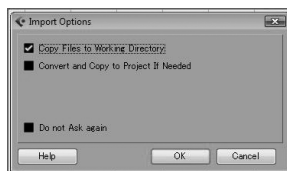
- 8** When dragging multiple files at one time, select either “Different Tracks” or “One Track” as the import method.

Generally, select “Different Tracks” to automatically create one track for each file. The files will be arranged vertically in the project window. Select “One track” to create one track with the audio files arranged horizontally.

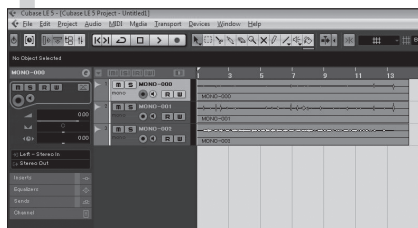


This window where you can select the import method appears.

- 9** In the “Import Options” window click the “Copy Files to Working Directory” check box, and click the OK button.



The audio files are loaded into Cubase LE tracks.



HINT

- Project data is stored in folders for each project in the PROJECT folder in the ZOOM_R8 folder. Audio recordings are stored as WAV files in the “AUDIO” subfolders of each project folder. Each AUDIO folder also contains a file called “PRJINFO.TXT” that lists the names of files assigned to tracks.
- Master tracks and stereo tracks are stereo WAV files.
- To copy a WAV file from a computer, copy it to the AUDIO subfolder of the desired project folder. Use the **RS** to assign the files to tracks.

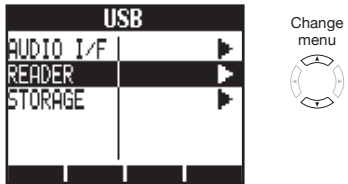
Importing audio into Cubase LE

Using the "Import" command

1 Connect the computer and the **RS** with a USB cable.

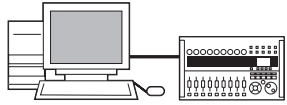
2  Press **USB**.

3 Select **READER**.

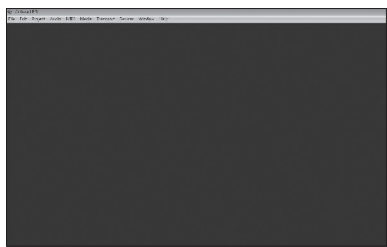


 Press **ENTER**.

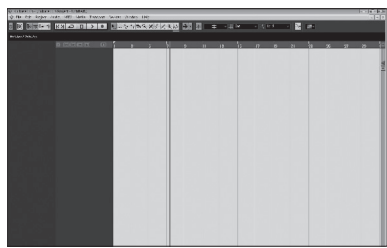
Access the **RS** from the computer.



4 Launch Cubase LE.

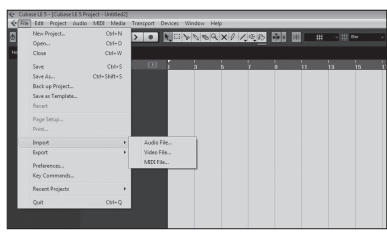


5 Open the Cubase LE project into which you want to import audio data.

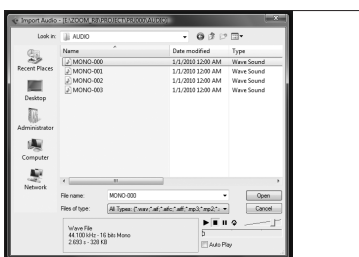


6 From the Cubase LE "File" menu select "Import" and "Audio File..."

The "Import Audio" window opens.

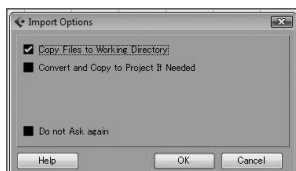


- 7 Select the desired audio file (or files) from the “AUDIO” folder of the project from which you wish to import. Click “Open.”



Importing files will cause the “Import Options” window to appear.

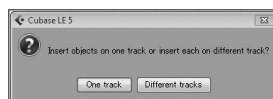
- 8 In the “Import Options” window click the “Copy File(s) to Working Directory” check box, and click the OK button.



When a file is imported, a window will open asking how Cubase LE should place the file.

- 9 When importing multiple files at one time, select either “Different Tracks” or “One Track” as the import method.

The audio data is assigned to one or more Cubase LE tracks.



Generally, select “Different Tracks” to automatically create one track for each file. The files will be arranged vertically in the project window. Select “One track” to create one track with the audio files arranged horizontally.

HINT

- Project data is stored in folders for each project in the PROJECT folder in the ZOOM_R8 folder. Audio recordings are stored as WAV files in the “AUDIO” subfolders of each project folder. Each AUDIO folder also contains a file called “PRJINFO.TXT” that lists the names of files assigned to tracks.
- Master tracks and stereo tracks are stereo WAV files.
- To copy a WAV file from a computer, copy it to the AUDIO subfolder of the desired project folder. Use the **RB** to assign the files to tracks.

Mixer in audio interface mode

In audio interface mode you can make a mix for monitoring using the **RB** internal mixer. In addition, you can adjust the balance of the sound from the internal mixer and from the computer.

Volume, reverb send, pan

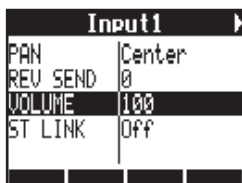
You can be adjust the reverb send, pan, volume and stereo link settings in the same way as in recorder mode.

Operation is the same as in recorder mode.
(Reference: Operation Manual P.42)

PAN/EQ menu

VOLUME

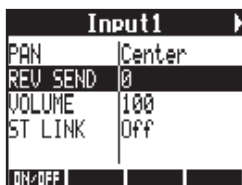
Adjust the volumes of **INPUTS 1-2**.



0-127 (increments of 1)
Default value: 100

REV SEND

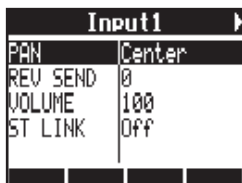
Adjust the reverb send levels of **INPUTS 1-2**.



0-100 (increments of 1)
Default value: 0
Reverb only affects the monitored signal (as in recording mode).

PAN (BALANCE)

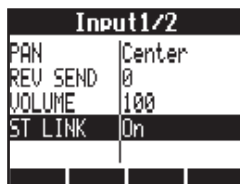
Adjust the pan for **INPUTS 1-2**.



L100-R100
(increments of 2)
Default value: Center
(as in recording mode)

Stereo link

Link **INPUT 1 and 2** to handle them as stereo pairs.



On/Off

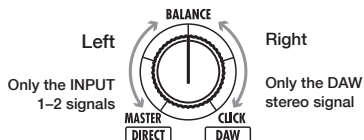
Default setting: Off

By setting up a stereo link, volume, reverb send and pan track parameters can be shared by **INPUT 1 and 2**.

(Reference: Operation Manual P.29)

Balance

In audio interface mode, the balance of the input monitoring signal and the signal from DAW software (the computer) can be adjusted with the **BALANCE** knob.



NOTE

The reverb send, pan, volume and stereo link settings are all saved when you end (EXIT) audio interface mode and can be used again the next time.

Tuner

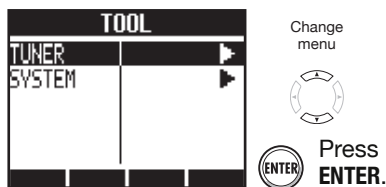
The **RS** tuner can be used as when in audio interface mode. For details, see the Operation Manual (P.108).

Chromatic tuner

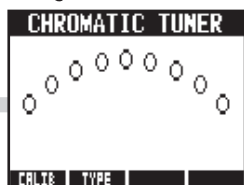
TOOL > TUNER

1 **TOOL**
 Press **TOOL**.

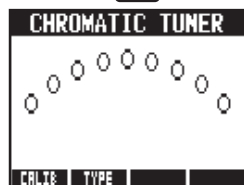
2 Select **TUNER**.



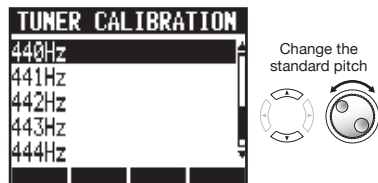
3 Tune the instrument.



4 To change the standard pitch, press the beneath **CALIB**.



5 Select the standard pitch.



Press **ENTER**.

HINT

- The default value of the standard pitch is 440 Hz.
- Tuners other than the chromatic tuner can also be used.

Reference: Operation Manual
 Tuner

P.108

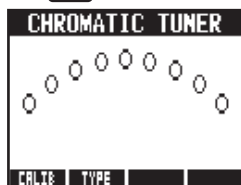
NOTE

Tuner settings are saved when you end (**EXIT**) audio interface mode and can be used again the next time.

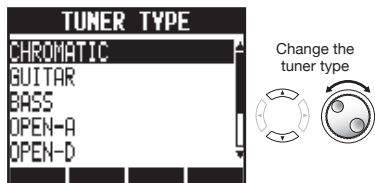
Reference: Operation Manual
 Tuner

P.108

4 To change the tuner type, press the beneath **TYPE**.



5 Change the tuner type.



Press **ENTER**.

Effects in audio interface mode

The **RS** insert and send-return effects can both be used when the sampling frequency is set to 44.1 kHz. Basic operation is the same but there are a few differences in the menus.

Insert effect

As in recording mode, you can select the insert location and the insert effect algorithm, as well as the effect patches to be applied to the signal being recorded.

INSERT EFFECT menu options

Select the insert location

Insert on any **INPUT 1-2**.



(Reference: Operation Manual P.45)

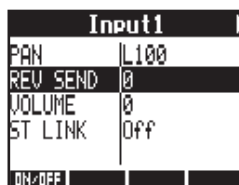
Send return effect

When used as an audio interface, the send reverb can only be used for monitoring. As in recorder mode, use the **SEND REVERB EFFECT** menu to change the patch and use the **PAN/EQ** menu to set the **REV SEND** level that adjusts the reverb depth.

Setting the reverb send level

REVERB SEND

Adjust the amount of reverb using the **REV SEND** level of the **PAN/EQ** menu.

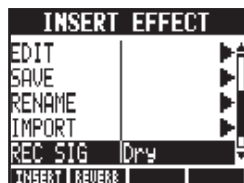


(Reference: Operation Manual P.44)

(Reference: Audio interface manual – Mixer P.26)

Apply the effect only to monitoring

The effect can be set to only be applied to the monitoring signal and to not affect signals recorded in DAW software.



(Reference: Operation Manual P.89)

NOTE

- Effects can only be used when the sampling rate is 44.1 kHz. At all other times they are turned OFF.
- Insert and send return effect settings are saved when you end (EXIT) audio interface mode and can be used again the next time.

Working with patches

After making many changes, you can restore a patch to its pre-edited settings by initializing it. This will return it to its factory preset condition.

Patch operations

For both insert and send return effects

Menus used for patch operations

Selecting patches

INSERT EFFECT/SEND REVERB

Select a patch from an algorithm to use an insert or send reverb effect.

(Reference: Operation Manual P.83)

Editing patches (EDIT)

By adjusting effect module parameters and levels, you can create the desired result.

(Reference: Operation Manual P.84)

Importing patches (IMPORT)

All effect algorithms (and reverb patches) or a single one can be imported from a selected project on the **RS**.

(Reference: Operation Manual P.87)

In audio interface mode, one complete set of effect data is saved for the mode. There are no project based settings.

Saving patches (SAVE)

Edited patches can be saved.

(Reference: Operation Manual P.86)

Initializing patches (INITIAL)

Patches can be restored to their original factory settings. (This option is only available in audio interface mode.)

Changing patch names (RENAME)

The name of the currently selected patch can be changed.

(Reference: Operation Manual P.88)

Patch initialization (factory reset)

EFFECT > INITIAL

1 EFFECT
Press **EFFECT**.

Selecting effect type

Insert effect

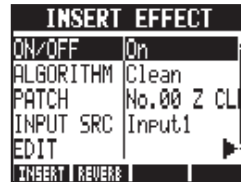
Press the beneath **INSERT**.

Send return effect

Press the beneath **REVERB**.

The following example is of an insert effect.

2 Turn the effect **On**.



3 Select **INITIAL**.



Press **ENTER**.

4 Select **YES**.



Press **ENTER**.

Control surface setup for other DAWs

You can set up the **RS** as a controller for use with a variety of DAW software besides Cubase LE. Please refer to the manual for the software that you are using.

Logic

Control surface setup

- 1 Select “Preferences” > “Control surfaces” > “Setup...” from the “Logic Pro” menu.

This opens the “Setup” window.
- 2 Click on the top left “New” and select “Install” from the pull-down menu.
- 3 Select “Mackie Designs/Mackie Control/Logic Control” from the list in the “Install” window and click the “Add” button.

“Mackie Control” will be added to the setup window.
- 4 Click the “Mackie Control” icon. Then, from the top of the list at the left set “Out Port” and “Input” to “ZOOM R8” using their pull-down menus.

Function key setup

- 1 Select “Preferences” > “Control surface” > “Controller Assignments...” from the “Logic Pro” menu.

This opens the “Controller Assignments” window.
- 2 From the “Zone” column select “Control Surface: Mackie Control.”
- 3 Change the functions as you like. Controls F1–F5 correspond to the F1–F5 keys on the **RS**.

The above procedures are for Logic Pro 9.

The names of the menus, for example, might be different in a different version of Logic.

Please refer to the manual for the version of Logic that you are using for details.

SONAR**Control surface setup**

- 1 Select “Controller/Surface” from the “Options” menu to open the “Controller/Surface” window.
- 2 Click the “Add” button and open the “Controller/Surface Settings” window.
- 3 Choose “ZOOM R Series” from the drop-down menu of the “Controller/surface” column.

Select “ZOOM R8” in the input/output port column.

For Cakewalk SONAR, installation of a control surface plug-in is necessary. Please install it when installing the driver.

Function key setup

- 1 Open the “Edit” > “Preferences” menu.
- 2 Click “Customization”.
- 3 Click “Key bindings”.
- 4 Click “Locate Key...”
- 5 Press the F1-F5 key that you want to setup to see the currently assigned function. Change that function as necessary.

The above procedures are for Sonar X1.

The names of the menus, for example, might be different in a different version of Sonar.

Please refer to the manual for the version of Sonar that you are using for details.

Control surface setup for other DAWs

Ableton Live

Control surface setup

- 1 Select “Preferences” from the “Option” (Windows) or “Live” (Mac) menu.

The Preferences window will open.
- 2 Click the “MIDI” setting tab on the left side of Preferences window to select it.

The setup window related to MIDI will open.
- 3 Select “Mackie Control” in the pull-down menu of the Control Surface column.
- 4 Select “ZOOM R8” from the pull-down menus of the Input and Output columns for both left and right.
- 5 In the MIDI Ports section below, turn “On” the Remote column button for the “Input: Mackie Control Input (Zoom R8)” item.

Function key setup

- 1 Press the MIDI button at the top right of the main LIVE window to start MIDI map mode.
- 2 Interface elements that can be assigned will be highlighted in blue. Click on a parameter that you want to control.
- 3 Press the F1–F5 key of the **RS** that you want to assign to control the selected parameter.

The above procedures are for Ableton Live 8.

The names of the menus, for example, might be different in a different version of Live.

Please refer to the manual for the version of Live that you are using for details.

Digital Performer

Control surface setup

- 1 Launch the Audio MIDI Setup application (/Applications/Utilities).
- 2 Open the MIDI Studio window (Window > MIDI Studio) and confirm that “R8” is displayed.
- 3 Click “Add Device.”
A “new external device” will be added.
- 4 Click the “new external device” to select it, and then click the “Show Info” button.
- 5 Enter the name “R8” in the “Device Name” field.
- 6 Click and drag the downward arrow of the original “R8” icon and connect it to the downward arrow of the “R8” icon that you added.
Use same method to connect the upward arrows.
- 7 Launch Digital Performer
- 8 Select “Control Surface Setup” from the “Setup” menu to open the Control Surface window.

9 Click the “+” icon in the Control Surface window and select “Mackie Control” from the “Driver” pull-down menu.

10 Select “Mackie Control” from the “Unit” pull-down menu that will be displayed at bottom.

11 Select “R8” from the “MIDI” pull-down menu of the Control Surface window and select “R8-1” from the menu list.

12 Click the “OK” button.

The above procedures are for Mac OS X 10.6 and Digital Performer 7.

The names of the menus, for example, might be different in a different version of Digital Performer.

Please refer to the manual for the version of Digital Performer that you are using for details.

Function key settings

The functions are already assigned in Digital Performer and cannot be changed.

AUTO PUNCH I/O key:	Selects YES in dialog boxes
A-B REPEAT key:	Selects NO in dialog boxes
◀◀ (marker) key:	Creates groups/track groups
▶▶ (marker) key:	No assignment
MARK/CLEAR key:	No assignment

Refer to sections about Mackie Control dialog boxes and track groups in the manual for the version of Digital Performer that you are using.



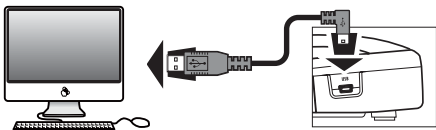
4-4-3 Kanda-Surugadai, Chiyoda-ku, Tokyo 101-0062 Japan
Web Site: <http://www.zoom.co.jp>

Using the R8 with Mac OS X 10.5.8

If noise should occur when using the **R8** as an audio interface with Mac OS X 10.5.8, follow the procedures below to change the audio class setting.

Setting the audio class

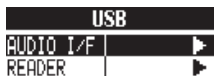
- 1 Connect the **R8** and the computer by USB cable. Then, turn the power ON.



- 2 **USB**
Press



- 3 Select **AUDIO I/F.**

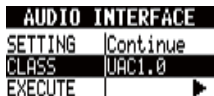


Change menu



Press

- 4 Select **CLASS** and set it to **UAC1.0.**



Change menu



Change setting

- 5 Select **EXECUTE.**

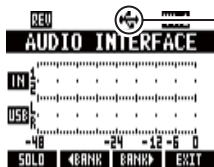


Change menu



Press

- 6 Audio interface mode is enabled.



Icon appears when connection is made.

HINT

- The USB Audio Class is a specification for audio devices connected by USB and includes UAC1.0 and 2.0. UAC2.0 allows transfer at Hi-Speed (480 Mbps) mode, which reduces latency.

NOTE

- When using Windows or Mac OS X 10.6.5, use the default setting of UAC2.0.

Cubase LE Startup Guide

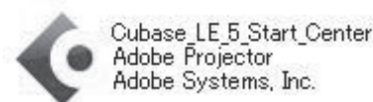
Windows

This Cubase LE Startup Guide explains how to install Cubase LE on a computer and make connections and other settings for the **R8**

To connect the **R8** to a computer running Windows 7 (or Windows Vista or XP) and to enable audio input/output, proceed as follows. This installation description uses Windows 7 as an example.

1 Insert the supplied Cubase LE installation DVD-ROM into the DVD drive of the computer.

When you insert the DVD-ROM, a screen asking what you want to do appears. Select "Cubase_LE_5_Start_Center.exe". A language selection screen will appear. Select your language, and then follow the on-screen prompts.



HINT

If nothing happens when you insert the DVD-ROM, open the Start menu and select "Computer" ("My Computer" in Windows XP). Then double-click the "Cubase LE 5" DVD-ROM icon to display the contents of the DVD-ROM.

NOTE

To continue using Cubase LE, it is necessary to have a User Registration and a Software License Authentication. The Registration and Authentication can be processed when Cubase LE is activated on a computer connected to the Internet. Click "Register now" which is shown when activating, and enter all the items. If registration is not recognized, Cubase LE can only be used for a limited period after installation.

2 From the SD card supplied with the **R8** open Drivers > Windows > 32bit (or 64bit) and launch "Setup.exe"

OR

Download the latest "ZOOM R8 Audio Driver" from the ZOOM website (<http://www.zoom.co.jp>) and install it on a computer.

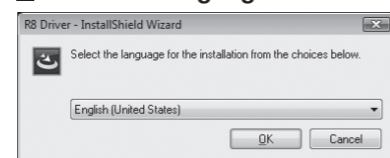
The ZOOM R8 Audio Driver software is required to enable audio input and output with a computer when using Cubase LE. Refer to the "R8 Driver Installation Guide_Windows.pdf" included in the download package for instructions on how to install the driver correctly.

32bit folder: Windows® XP SP3 or later (32bit), Windows® Vista SP1 or later (32bit), Windows® 7 or later (32bit)
64bit folder: Windows® Vista SP1 or later (64bit), Windows® 7 or later (64bit)

How to install the driver

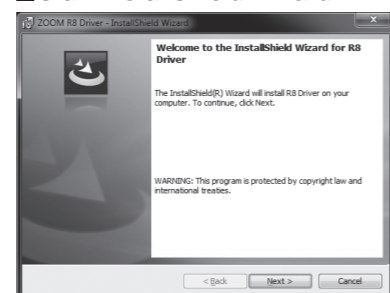
Double-click the Setup.exe file to activate the installer.

Select the language



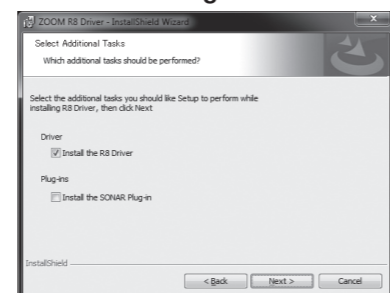
Choose the language and click [OK].

Start InstallShield Wizard



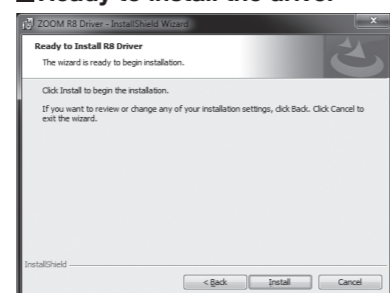
Click "Next" to start installation.

Driver and Plug-in selection



Select "Install the SONAR Plug-in" to enable use of control surface functions with SONAR.

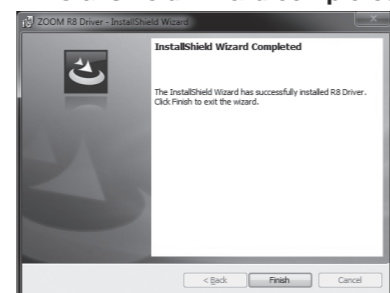
Ready to install the driver



Click "Install" to start installation.

When a "Windows security" warning message appears, click "Install".

InstallShield Wizard completes



Click "Finish" to finish installation.

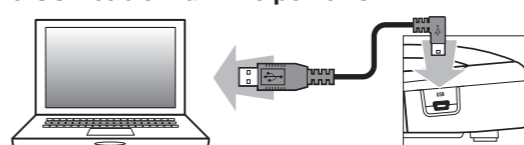
NOTE

We recommend you upgrade the **R8** system software to the latest version. An **R8** operated with an old system might not be recognized correctly. The latest system version can be downloaded from our website (<http://www.zoom.co.jp>).

3 Connect the **R8** to the computer using a USB cable and enable use as an audio interface.

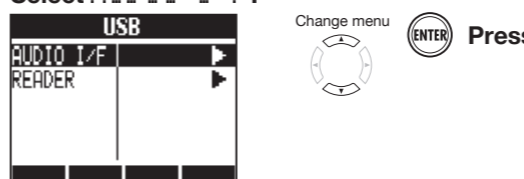
How to connect the **R8** as an audio interface

1 Connect the **R8** to the computer using a USB cable. Turn the power ON.

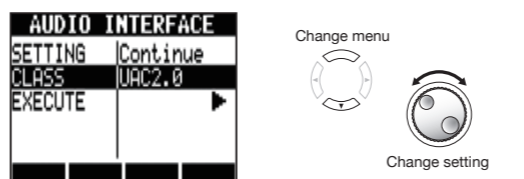


2 Press

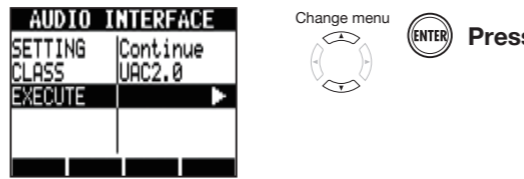
3 Select AUDIO I/F.



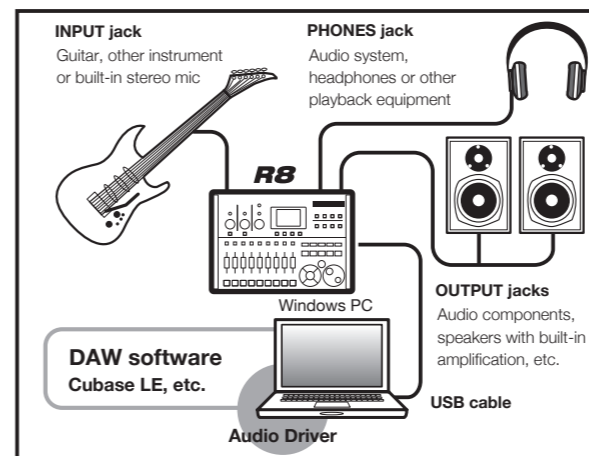
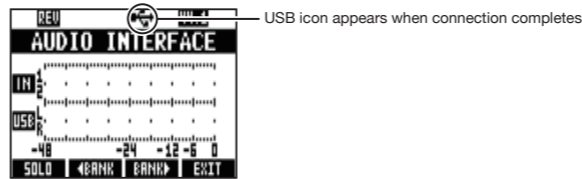
4 Select CLASS and set it to UAC2.0.



5 Select EXECUTE.



6 Audio interface is enabled.



NOTE

Use a high-quality USB cable and keep the connection as short as possible. If USB bus power is supplied to the **R8** via a USB cable that is more than 3 meters in length, a low voltage warning might appear.

Windows 7/Vista

When you connect the **R8** to a computer, an "Installing device driver software" message appears. When the software installation completes, "The device driver software installed correctly" message appears.

Windows XP

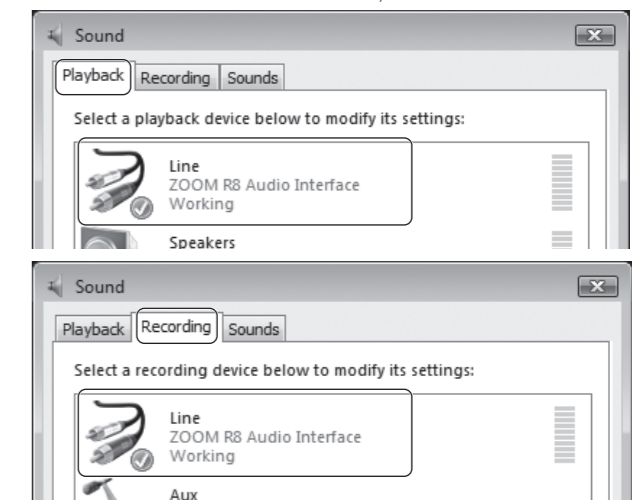
When you connect the **R8** to a computer, a "Found New Hardware ZOOM R8 Audio Interface" message appears.

If an "Install hardware" warning dialogue appears, click "Continue".

Wait until "The device was able to be prepared" message is displayed.

4 Open the "Sound" window from the Control Panel and make the input device setting for the computer.

To open the "Sound" window, select "Control Panel" from the Start menu and click "Hardware and Sound", then click "Sound".



In the "Sound" window, verify that "ZOOM R8 Audio Interface" is listed under Playback and Recording devices and is checked. (To switch between Playback and Recording, click the tabs at the top of the window.)

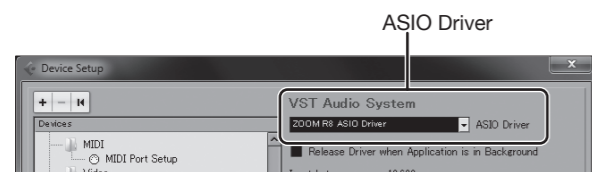
If "ZOOM R8 Audio Interface" is not checked, right-click on the icon for the device and click "Set as Default Device" so that a check mark appears.

Continued overleaf

5 Start Cubase LE. Then, open the “Devices” menu, select “Device Setup...” and click “VST Audio System”.

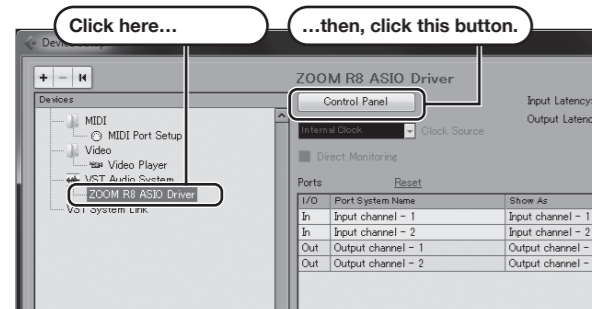
To start Cubase LE, double-click the Cubase LE shortcut icon that was created on the desktop.

After startup, select “ZOOM R8 ASIO Driver” as the ASIO driver in the right section of the Device Setup window. When you change the ASIO driver selection, a confirmation message appears. Click the “Switch” button.



The device indication in the left section of the window now shows “ZOOM R8 ASIO Driver” as the ASIO driver.

Click on this indication to select it, and then click the “Control Panel” button in the right section of the Device Setup window.

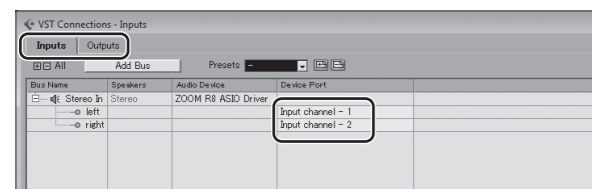


The window that appears lets you set the buffer size for the ASIO driver. The buffer size should be set to a value that is as low as possible without causing sound dropouts during recording and playback.

The sampling frequency can be changed in the Cubase LE Project Settings.

When these settings are complete, click the OK buttons in the respective windows to close them and restore the Cubase LE window to its appearance at startup.

6 From the “Devices” menu of Cubase LE, select “VST Connections”. In the window displayed, set “Input channel-1” and “Input channel-2” as the input ports and “Output channel-1” and “Output channel-2” as the output ports .



Use the tabs at the top left to switch between input and output, and verify that “Input channel - 1”, “Input channel - 2”, “Output channel - 1” and “Output channel - 2” are selected as the device ports.

If another device is selected, click the device port field and change the selection.

To connect the **R8** to a computer running Mac OS X and to enable audio input/output, proceed as follows.

This installation description uses Mac OS X v10.6.5 as an example.

1 Insert the supplied Cubase LE installation DVD-ROM into the DVD drive of the Mac and start installation.

The contents of the DVD-ROM should be shown automatically. If they are not shown, double-click the “Cubase LE 5” icon displayed on the desktop (or in a Finder window).

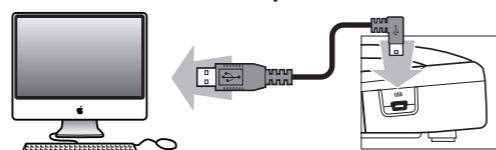
When it appears, use the Cubase LE 5 Start Center



2 Connect the **R8** to the Macintosh using a USB cable and enable use as an audio interface.

How to connect the **R8** as an audio interface

1 Connect the **R8** to the Macintosh using a USB cable. Turn the power ON.

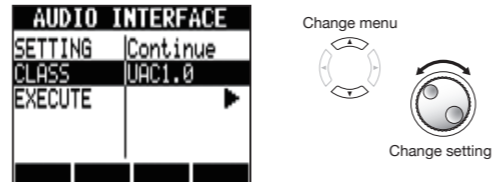


2 Press

3 Select AUDIO I/F.



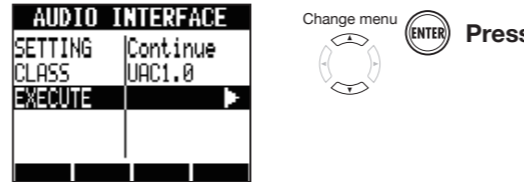
4 Select CLASS.



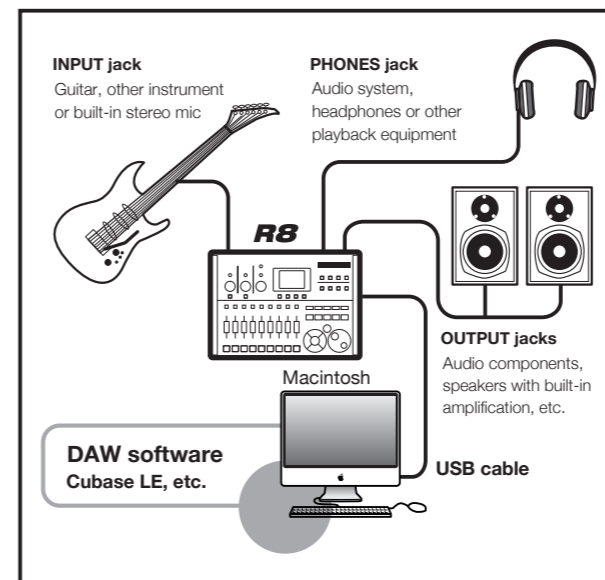
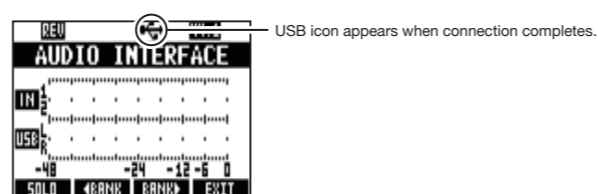
Mac OS X 10.5.8: Set to UAC1.0

Mac OS X 10.6.5 or later: Set to UAC2.0

5 Select EXECUTE.



6 Audio interface is enabled.



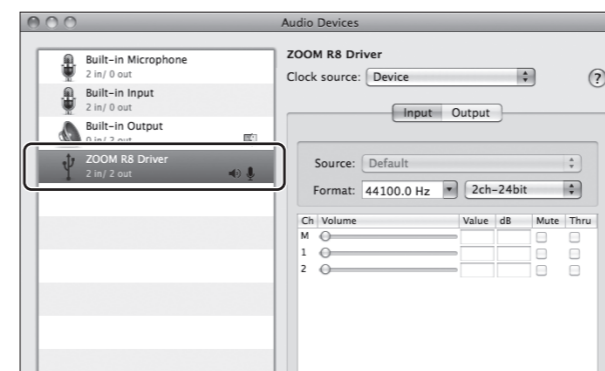
When the connection is enabled on the **R8**, it should be recognized by the computer.

NOTE

Use a high-quality USB cable and keep the connection as short as possible. If USB bus power is supplied to the **R8** via a USB cable which is more than 3 meters in length, a low voltage warning might appear.

3 Open the “Applications” folder and then the “Utilities” subfolder, and double-click “Audio MIDI Setup”.

The Audio MIDI Setup screen appears. Open “Audio Devices” (Window > Show Audio Window) and check that “ZOOM R8 Driver” is selected as the default input and default output.



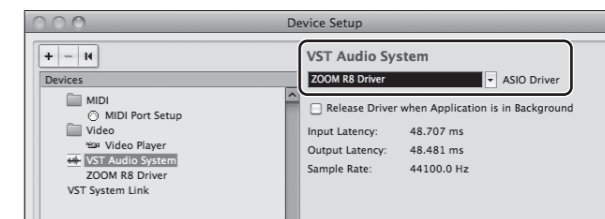
If another device is selected, use the gear icon (or right-click) to change the selection to “ZOOM R8 Driver”.

After the settings are made, close Audio MIDI Setup.

4 Start Cubase LE. Then, access the “Devices” menu, select “Device Setup...” and click “VST Audio System”.

To start Cubase LE, double-click the Cubase LE icon in the “Applications” folder.

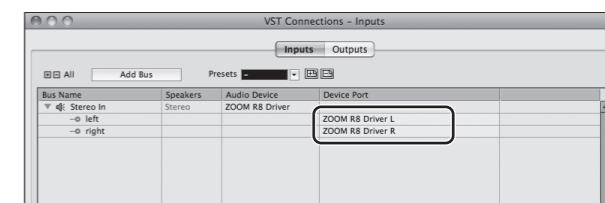
After startup, confirm that “ZOOM R8 Driver” is selected in the right section of the Device Setup window.



If another device is selected, use the pull-down menu to change the selection to “ZOOM R8 Driver”.

After the setting is made, click “OK” and close the window.

5 From the “Devices” menu of Cubase LE, select “VST Connections” and select “ZOOM R8 Driver” as the Audio Device for both the input and output ports.



Use the tabs at top center to switch between inputs and outputs, and verify that in the as Device Port column “ZOOM R8 Driver L/R” is selected for the Inputs and “ZOOM R8 Driver 1/2” is selected for the Outputs.

If another device is selected, click the Device Port field and change the selection.

Optimizing performance

While using Cubase LE, other applications might slow down drastically or a message such as “Cannot synchronize with USB audio interface” could appear. If this happens frequently, consider taking the following steps to optimize the operation conditions for Cubase LE.

1) Shut down other applications besides Cubase LE.

In particular, check for software and utilities running in the background.

2) Reduce the number of plug-ins (effects, instruments) used by Cubase LE.

When a large number of plug-ins is used, the computer's processing power may not be able to keep up. Reducing the number of simultaneous playback tracks can also be helpful.

Adjust the latency (Devices menu) if the sound cuts out. See step 5 (for Windows) in this Startup Guide for details.

If applications still run very slowly or the computer itself does not function properly, disconnect the **R8** from the computer and shut down Cubase LE. Then, reconnect the USB cable and start Cubase LE again.