R24

Recorder:Interface:Controller:Sampler

AUDIO INTERFACE MANUAL

ZOOM

Contents

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 R24 with a DAW and other software.

Functions of the audio interface and control surface

[INPUT 1-8] jacks
Guitars and other musical instruments, built-in stereo mic

[PHONES] jack
Playback device like headphones or an audio system

[OUTPUT] jacks
Stereo system, speakers with built-in amplifiers, etc.

R24

Windows/Mac

DAW software

Cubase LE etc.

USB Cable

Audio driver
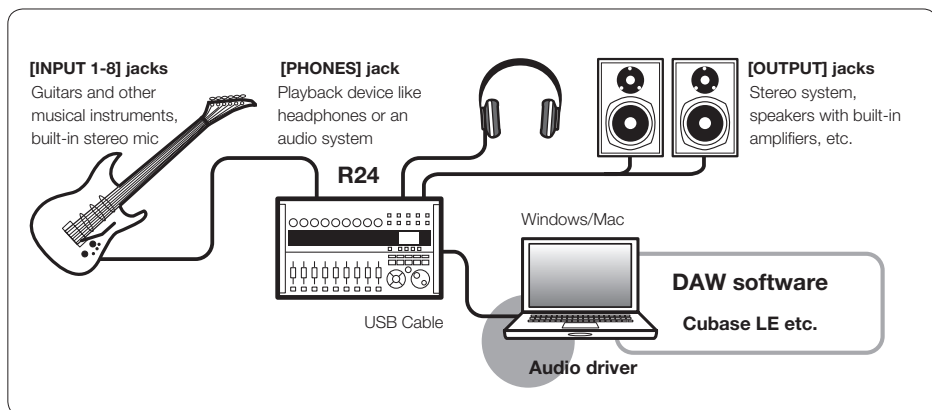
■ Audio interface

The R24 has numerous inputs and outputs and it can be used as a Hi-Speed USB (USB 2.0) audio interface with 8 inputs and 2 outputs at quality up to 24-bit/96 kHz. Effects can be used when the sampling rate is 44.1 kHz, and the unit can be powered by a computer's USB bus.
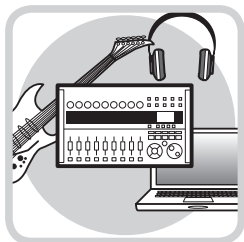
■ Control surface functions

On-board control surface functions can be used to control DAW software on a computer via USB. Transport operations, including playback, recording and stopping, and physical control of the DAW faders are possible. Furthermore, various other DAW software functions can be mapped to the F1~F5 keys (assignable functions depend on the DAW used).
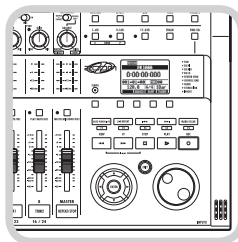
■ Supports input from a variety of sources, including guitars, mics and line level instruments

The 8 onboard jacks accept XLR and standard phone plugs and include one high-impedance input and two inputs with phantom power (24V 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, 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 R24's 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.
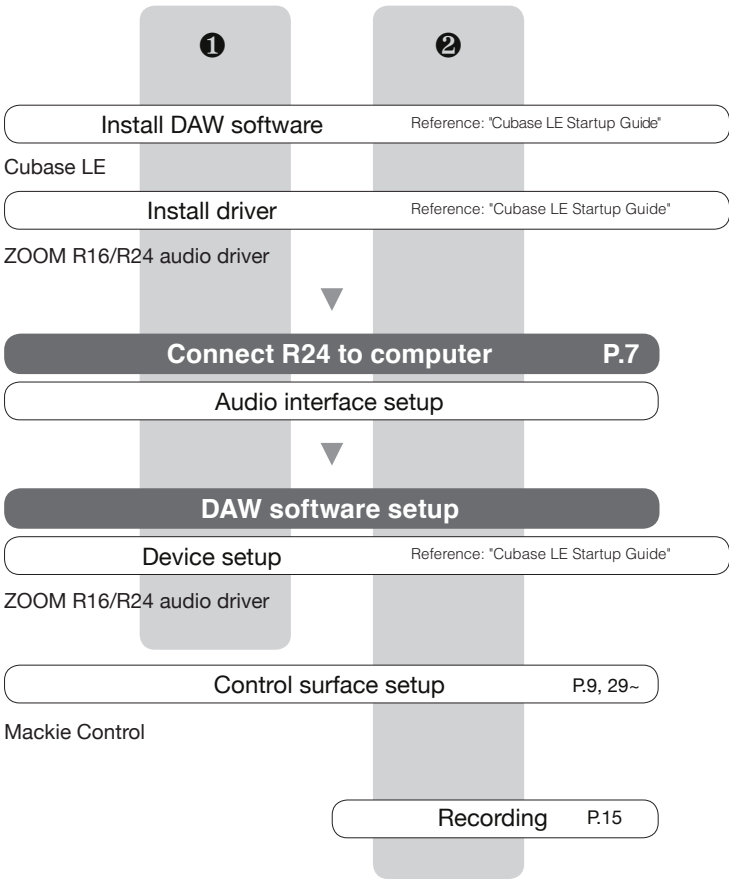
Cubase LE installation overview

To use the R24 with DAW software, after installing that software, a driver must be installed and set to recognize it. We explain how to do this with Cubase LE.

❶ **Audio interface**

By using the R24 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 Hi-Z or phantom power can also be connected.

❷ **Control surface**

Using the faders and keys on the R24, you can control transport operation and mixing in digital audio workstation (DAW) software on your computer.

❶ ❷

Install DAW software — Reference: "Cubase LE Startup Guide"

Cubase LE

Install driver — Reference: "Cubase LE Startup Guide"

ZOOM R16/R24 audio driver

▼

Connect R24 to computer   **P.7**

Audio interface setup

▼

DAW software setup

Device setup — Reference: "Cubase LE Startup Guide"

ZOOM R16/R24 audio driver

Control surface setup   P.9, 29~

Mackie Control

Recording   P.15

R24 Audio Interface system requirements

R24 Audio Interface system requirements

Windows
Windows® XP SP2 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 10.4.11 or later/10.5 or later/10.6
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.

Cubase LE installation guide

Please refer to the Cubase LE Startup Guide for detailed instructions for installing the R16/R24 audio driver and Cubase LE.
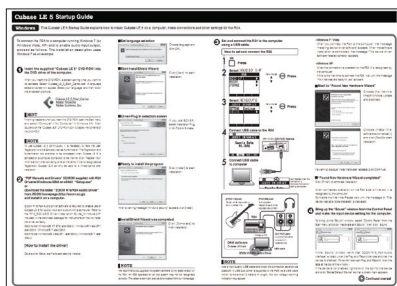
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- Ableton Live is a trademark of Ableton AG.
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In order to improve the product, specifications might be changed without advance notice.

Connecting and disconnecting in audio interface mode

This is an overview of connecting and disconnecting the R24 to a computer with a USB cable. For details, see the included Cubase LE Startup Guide guide.

Connecting the R24 to a computer for the first time

1 Install the Cubase LE DAW software on the computer.

2 Install the audio driver on the computer from the included CD-ROM.

Installation and setup details

☞ Reference: "Cubase LE Startup Guide"

4 Connect the R24 to a computer.

R24 setup and connection ●

5 Setup the DAW software.

Device setup

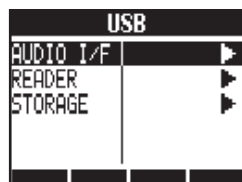☞ Reference: "Cubase LE Startup Guide"

Control surface setup   P.9

Mackie Control

R24 setup and connection
Follow these procedures when connecting again.

1 USB Press **USB**.

2 Select AUDIO I/F.

```
        USB
AUDIO I/F        ▶
READER           ▶
STORAGE          ▶
```
Change menu ▲ ▼

(ENTER) Press **ENTER**.

3 Select EXECUTE.

```
  AUDIO INTERFACE
SETTING  Continue
EXECUTE          ▶
```
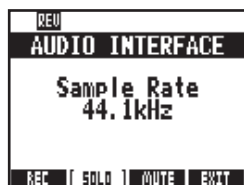Change menu ▲ ▼

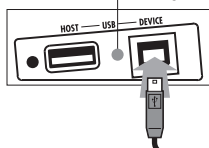(ENTER) Press **ENTER**.

▌ NOTE

• The ZOOM R16/R24 audio driver is essential for using the R24 as an audio interface with DAW software such as Cubase LE.
  When downloading it, follow the included installation guide to install it correctly.
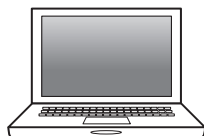• Download the latest R24 audio driver from the Zoom Corporation website.
  http://www.zoom.co.jp/

4 Connect the USB cable to the R24.

REV
AUDIO INTERFACE

Sample Rate
44.1kHz

REC [SOLO] MUTE | EXIT

USB DEVICE indicator lights

HOST —— USB —— DEVICE

5 Connect the USB cable to the computer.

USB icon appears when connection completes.

AUDIO INTERFACE

Sample Rate
96.0kHz

REC [SOLO] MUTE | EXIT

Disconnecting

1 Press the [ ] below **EXIT**

USB
or [ ] .

2 Select YES.

Terminate

Are You Sure?

YES
NO

Change
menu
▲
▼

(ENTER) Press **ENTER**.

3 Disconnect the USB cable

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 R24 can be used by drawing power through a USB cable from the USB bus.
- We recommend always using the latest R24 system software.
- When using phantom power, we recommend using batteries or an AC adapter even when the unit is used as an audio interface.

8

Using control surface functions

When using the R24 connected by USB as an audio interface, the R24 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 R24 can be assigned to particular Cubase LE functions.

| Transport section | P.10 |

| About banks | P.11 |

| Fader section | P.11 |

Control surface setup

See R24 setup and connection steps 1–5 on P7~8

6 Then, launch Cubase LE.

7 From the Cubase LE "Devices" menu, select "Device setup…"

Open the "Device Setup…" window.

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

9 Set the MIDI input and output

MIDI input: ZOOM R16_R24
MIDI output: ZOOM R16_R24

▌ HINT

Assigning keys
For a list of functions that can be assigned to the knobs and keys of the R24, 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.

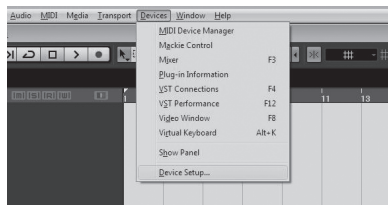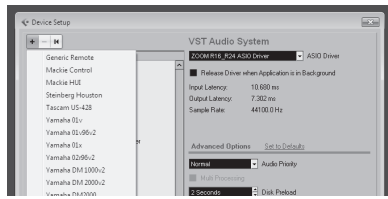| Reference: Control surface functions quick reference guide | P.14 |

Transport section

By setting up the control surface, the R24's transport section keys can be assigned to individual functions in Cubase LE.
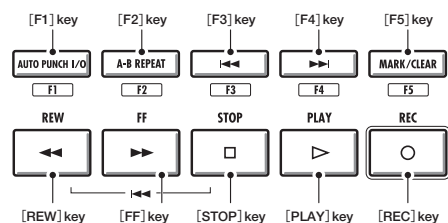
Fader section operation

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 R24's fader and status keys.

A group of tracks operated by the faders and status keys is called a "bank." With the R24, 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.

Control	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 the [9~16tr (Bank>)] key once switches the assignments as shown below.

Control	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

1~8Tr

1~8Tr (< BANK) key
Tracks (channels) assigned to the fader section are moved backward by eight tracks.

9~16Tr

9~16Tr (BANK >) key
Tracks (channels) assigned to the fader section are moved forward by eight tracks.

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.
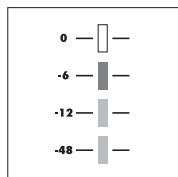
The faders control the volumes of their respective tracks. Change the master volume by moving the [Master] Fader.
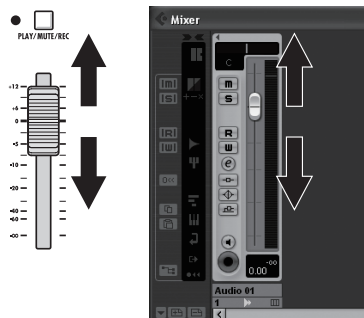
3 To change the function of the status keys for all the tracks, press the soft key for the desired function.
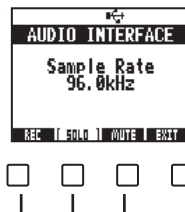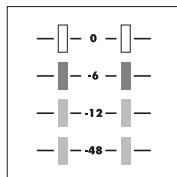
**R24 level meters
(Audio interface use)**

1 / 9 / 17
|
8 / 16 / 24

Each level meter other
than the MASTER displays
the signal immediately
before sending it to the
computer.

MASTER

The master level
meter displays the
returning signal from
the computer.

Checking DAW recording levels
Set "REC SIGNAL" (in the INSERT
EFFECT menu) to "WET" (signal with
effect) or "DRY" (no effect) to send
signals to the computer with or without
being processed by the insert effects.
The recording levels of the sent signals are dis-
played on the level meters. The signal shown
on the master level meter differs from that
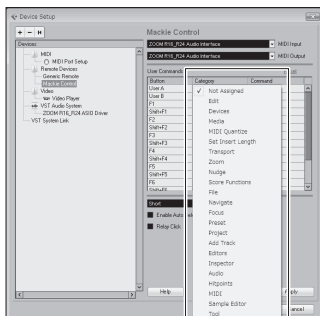shown on each level meter.
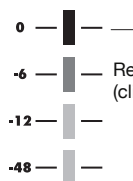
Red light
(clipping)

Adjust the levels so that the
red (0 dB) clipping indicators
on the meters do not light.

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.

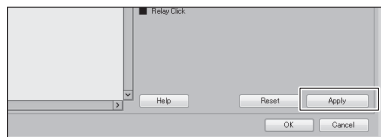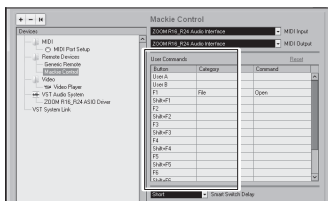**5** Choose the type of Cubase LE function from the Category pop-up menu.

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.
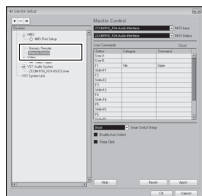
7 Press the "Apply" button.

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 the track
	Faders	Controls the volume of the corresponding tracks
	MASTER Fader	Master volume operation
Display section	Soft keys	Change functions of status keys/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
Control section	**1-8Tr** key	Moves one bank forward
	9-16Tr key	Moves one bank backward

[1]Scrolls window in Digital Performer
[2]No function in Digital Performer

Recording with Cubase LE

In this chapter, we explain how to record into Cubase LE using the R24.

Create a new project

Copy the ZOOM R24 project templates to the computer.

From the CubaseLE_template folder on the CD included with R24, copy the templates to the location where Cubase LE is installed.
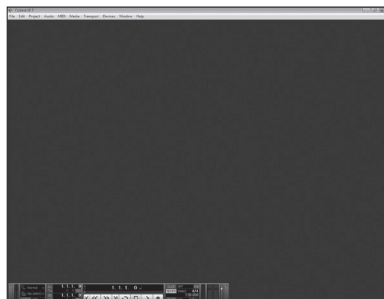
Windows
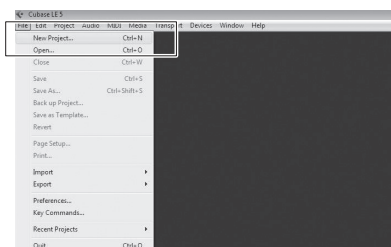C:\Program Files\Steinberg\Cubase LE ■\templates
Macintosh
/Applications/CubaseLE ■.app/Contents/templates/

1 Launch Cubase LE.

2 Choose "New Project" from the File menu.

Choose a new project template from the New Project Window.

3 Create a new project

After copying the R24 project templates to the designated folder, the R24 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 arranged for the R24.

New Project

Templates:

```
Empty
CLE - 16 MIDI Tracks
CLE - 4 Stereo 8 Mono Audio Track Recorder
CLE - Cubase Synths On Instrument Tracks
CLE - Mastering Setup
CLE - Podcasting
default
ZOOM R16_R24 4Mono 2Stereo Recording
ZOOM R16_R24 4Stereo Recording
ZOOM R16_R24 8Mono Recording
```

OK   Cancel

Template names and details

ZOOM R16_R24 8Mono Recording

Project with Cubase LE mono tracks 1~8 assigned to R24 **INPUTS 1~8**

ZOOM R16_R24 4Stereo Recording

Project with Cubase LE stereo tracks 1~4 assigned to R24 **INPUTS 1/2 ~ 7/8**

ZOOM R16_R24 4Mono 2Stereo Recording

Project with Cubase LE mono tracks 1~4 assigned to R24 **INPUTS 1~4** and Cubase LE stereo tracks 5~6 assigned to R24 **INPUTS 5/6** and **INPUTS 7/8**

4 Set the save location and click the "OK" button ("Choose" button on Mac OS X).

The project file save location window is displayed.
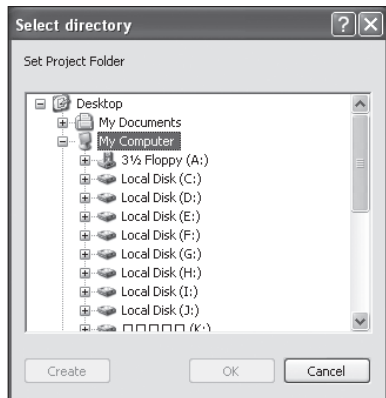
This will create a new project and the project window where most Cubase LE operations are conducted will open.
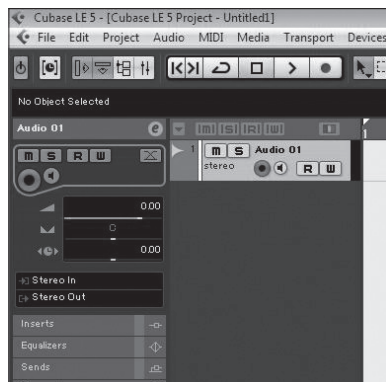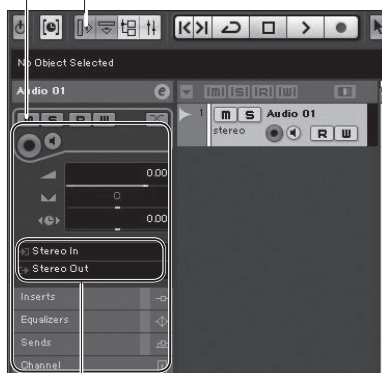

Create a new audio track

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 setting of detailed track information

If the inspector is not shown, click here to show/hide the inspector

Select the track input/output bus.
The names of the R24 busses assigned in the VST Connections (Devices menu) will be displayed.
Click here to choose a different bus from the menu.

▌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

6

Connect an instrument such as a guitar to an R24 **INPUT** jack and choose an effect patch.

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

See the following for information about how to choose the R24 input signal.

☞ Reference: R24 Operation Manual
Selecting an input signal
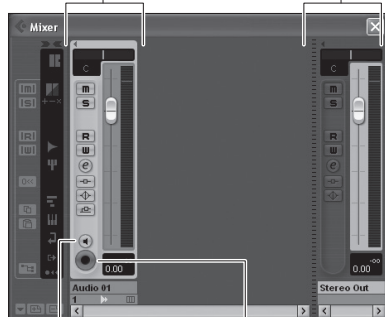Selecting an effect patch

7

Select "Mixer" from the Cubase LE "Devices" menu.
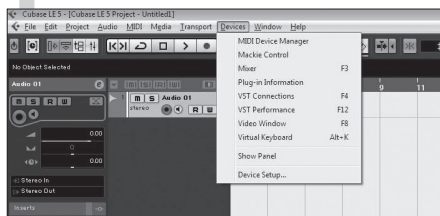
The mixer window opens, showing the channels corresponding to the created tracks and the master channel.

8

Enable the track for recording.

Channel corresponding
to an audio track

Master Channel

Click the Monitor button until it lights orange.

Click the record enable button. It will light red and recording will be enabled.

▌HINT

When the Monitor button is lit, the audio track input level will be displayed in the level meter next to the fader. When the light is off, the audio track output level will be displayed.

Adjust the recording level

9 While playing the instrument, adjust the R24 input level and set the Cubase LE recording level.
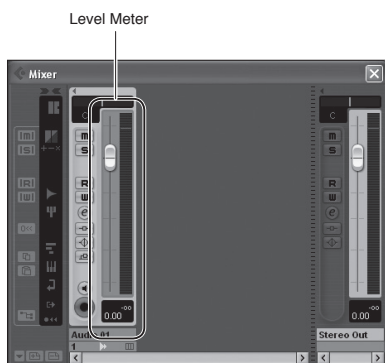
Level Meter

The recording level for Cubase LE can be checked by viewing the level meter of the corresponding channel of the recording-enabled track. Please set it as high as possible without making the meter peak.
When adjusting the level, do not move the Cubase LE fader, but instead use the fader and adjust the gain on the R16.

▌ NOTE

- If the Monitor button is on, the R24 input signal and the signal returning to the R24 via the computer will both be output from the R24 at the same time. This can create a flanger-like sound. To monitor accurately while adjusting the recording level, turn the **BALANCE** knob toward **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 to turn off the light.


Monitor button

This turns off display of the input level, and mutes the signal from the computer to the R24.

When the Monitor button is off, the signal just before it is sent to the computer can be monitored from the R24 **PHONES** and **OUTPUT** jacks.

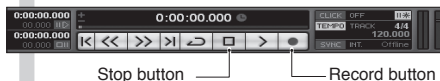**11** Confirm that the Transport Panel is displayed

If the Transport Panel is not displayed, select "Transport Panel" from the "Transport" menu.
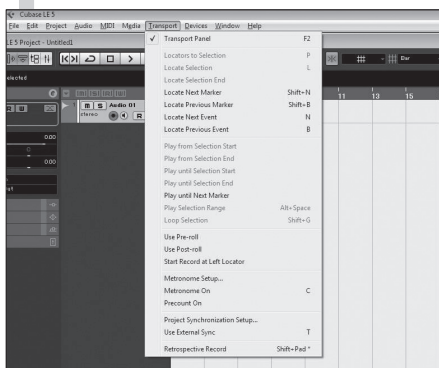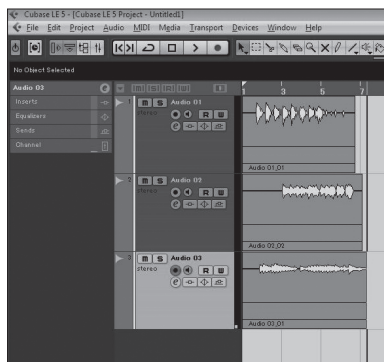
Recording with Cubase LE

Recording

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

Stop button ——— Record button

As you play the instrument, a recorded waveform is drawn in real time in the project window.
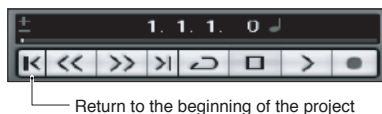To stop recording, click the Stop button in the transport panel.

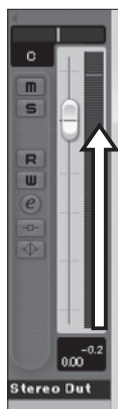## Check the recording (playback)

1 Lower the master channel fader.

2 Click the |< button in the Transport Panel to return to the beginning of the project.

Return to the beginning of the project

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

Play button

19

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

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 occurrences become frequent, the following measures might improve the situation.

❶ Terminate programs other than Cubase LE that are running.

In particular, confirm that many background applications are not running.

❷ Reduce the use of plug-ins (effects, virtual instruments)

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.

❸ Use the R24 AC adapter

When devices draw power from the USB bus, on rare occasions computer performance can suffer. Try using the AC adapter.

If the sound breaks up, please increase the Audio Buffer Size in the Device Setup… menu > VST Audio System window.
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 R24 USB port from the computer once, and then reconnecting the USB port and relaunching Cubase LE.

▌ 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 **BALANCE** control is at the center.
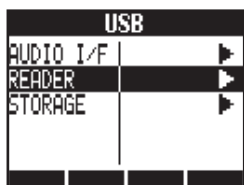
Importing audio data into Cubase LE

By connecting a computer and the R24 with a USB cable and setting the R24 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 R24 **DEVICE** port with a USB cable.

2 Press **USB.**

3 Select READER.

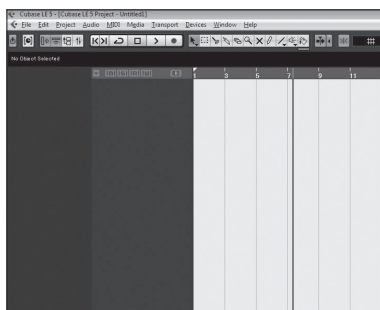| USB	
AUDIO I/F	▶
READER	▶
STORAGE	▶

Change menu ▲ ▼

Press **Enter**.

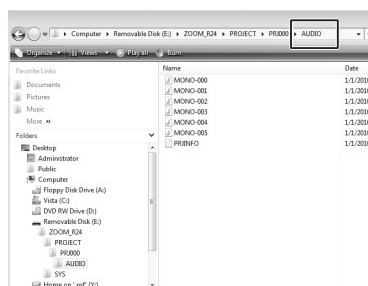Access the R24 from the computer.

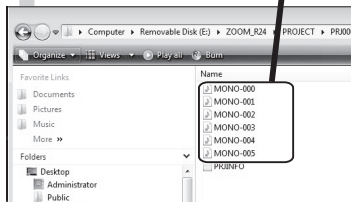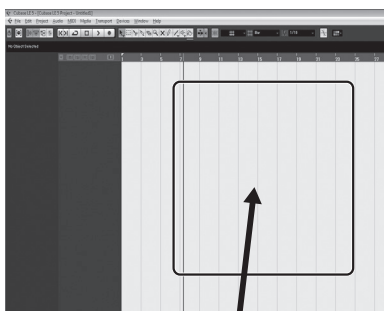**4** Launch Cubase LE.

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

6 Open the R24 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.
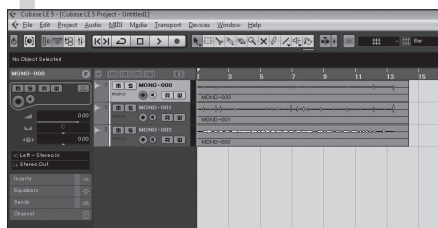Select "One track" to create one track with the audio files arranged horizontally.
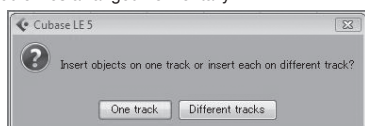
This window where you can select the import method appears.

9

In the "Import Options" window click the "Copy Files to Working Directory" check box, and click the OK button.
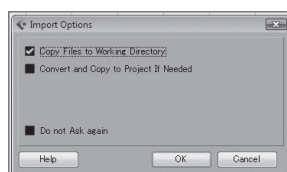
The audio files are loaded into Cubase LE tracks.

HINT

- The USB cable can be connected even when the computer or the R24 is on.
- If the R24 is connected when off, it can be run on USB bus power.
- Project data is stored in folders for each project in the PROJECT folder in the ZOOM_R24 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 R24 to assign the files to tracks.
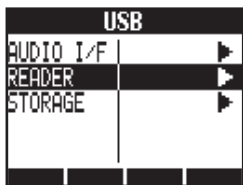
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Importing audio data into Cubase LE

Using the "Import" command

1 Connect the computer and the R24 **DEVICE** port with a USB cable.

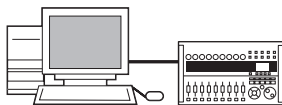**2** Press **USB**.

3 Select READER.
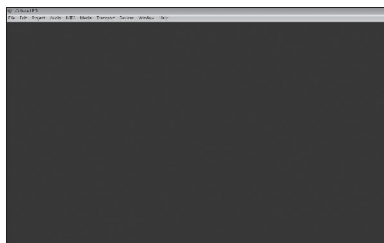

Change menu ▲ ▼

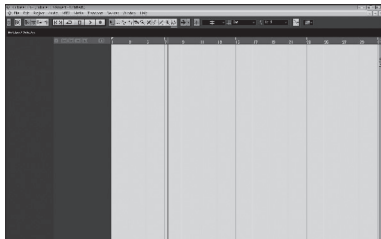(ENTER) Press **ENTER**.

Access the R24 from the computer.

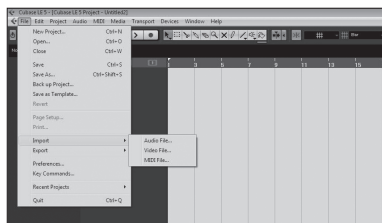

4 Launch Cubase LE.

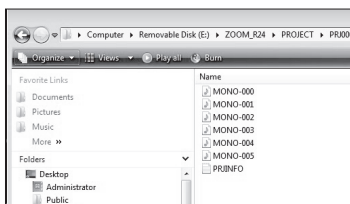**5** Open the Cubase LE project into which you want to import audio data.

6 From the Cubase LE "File" menu select "Import" and "Audio File…"
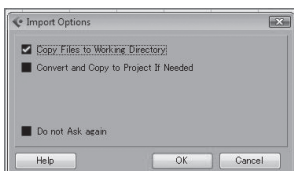
The "Import Audio" window opens.

23

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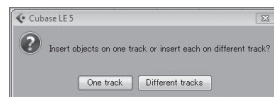
Generally, select "Different Tracks" to automatically create one track for each file. The files will be arranged vertically in the project window.
Select "One track" to create one track with the audio files arranged horizontally.

HINT

- The USB cable can be connected even when the computer or the R24 is on.
- If the R24 is connected when off, it can be run on USB bus power.
- Project data is stored in folders for each project in the PROJECT folder in the ZOOM_R24 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 R24 to assign the files to tracks.

The mixer in audio interface mode

In audio interface mode you can make a mix for monitoring using the R24's internal mixer. In addition, you can adjust the balance of the internal mixer and the sound from the computer.
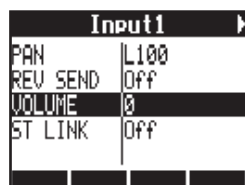
Volume, reverb send, pan

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

Operation is the same as in recorder mode.
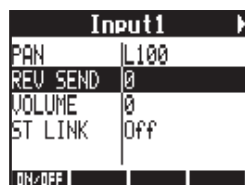(Reference: OPERATION MANUAL)

PAN/EQ menu

VOLUME

Adjust the volumes of **INPUTS 1~8**.

Input1	▶
PAN	L100
REV SEND	Off
VOLUME	0
ST LINK	Off

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

REV SEND

Adjust the reverb send levels of **INPUTS 1~8**.

Input1	▶
PAN	L100
REV SEND	0
VOLUME	0
ST LINK	Off
ON/OFF	

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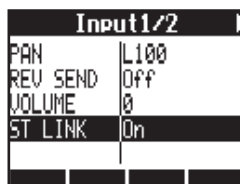Reverb only affects the monitored signal (as in recording mode).

PAN (BALANCE)

Adjust the pan for **INPUTS 1~8**.

Input1	▶
PAN	L100
REV SEND	Off
VOLUME	0
ST LINK	Off
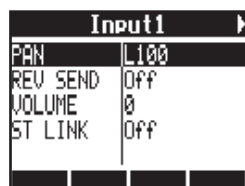
L100~R100
(increments of 2)
Default value: Center
(as in recording mode)

Stereo link

Link even and odd numbered **INPUTS** to handle them as stereo pairs.

Input1/2	▶
PAN	L100
REV SEND	Off
VOLUME	0
ST LINK	On

On/Off
Default setting: Off
By setting up a stereo link, volume, reverb send and pan track parameters can be shared by pairs of even and odd inputs simultaneously (as in recording mode).
(Reference: Operation Manual)

Balance knob

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.

Left — Only the INPUT 1~8 signals — MASTER DIRECT

BALANCE

Right — Only the DAW stereo signal — CLICK DAW
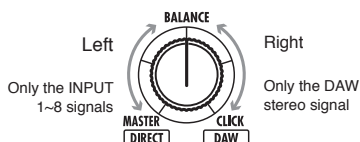
█ NOTE

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

Tuner

The R24 tuner can be used as when recording. For details, see the Operation Manual.

Chromatic tuner
TOOL > TUNER

1 Press **TOOL**.
TOOL

2 Select TUNER.

TOOL	
TUNER	▶
SYSTEM	▶

Change menu
▲
▼

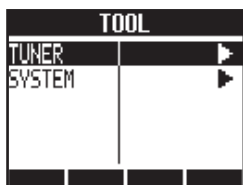Press **ENTER**.

3 Tune the instrument.

CHROMATIC TUNER

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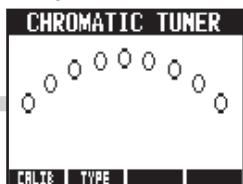
4 To change the standard pitch, press the ☐ beneath **CALIB**.

CHROMATIC TUNER

CALIB | TYPE
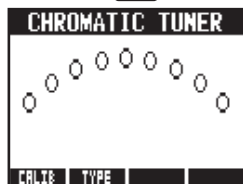
5 Select the standard pitch.

TUNER CALIBRATION
440Hz
441Hz
442Hz
443Hz
444Hz

Change the standard pitch
▲
▼

Press **ENTER**.

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

CHROMATIC TUNER

CALIB | TYPE

5 Change the tuner type.

TUNER TYPE
CHROMATIC
GUITAR
BASS
OPEN-A
OPEN-D
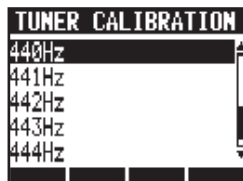
Change the tuner type
▲
▼

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)

NOTE

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

☞ Reference: Operation Manual
                    Tuner

Effects in audio interface mode

The R24's 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.

Send return effect

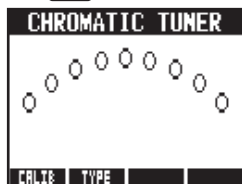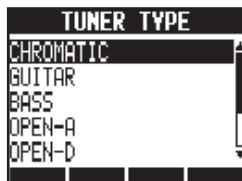As in recorder mode, use the SEND REVERB menu to change the patch and use the PAN/EQ menu to set the REV SEND level that adjusts the reverb depth.

INSERT EFFECT menu

Select the insert location

Insert on any **INPUT 1~8**.

```
INSERT EFFECT
ON/OFF    |On
ALGORITHM |Clean
PATCH     |No.00 Z CL
INPUT SRC |Input1
EDIT      |
 INSERT  REVERB
```

(Reference: Operation Manual)

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.

```
INSERT EFFECT
EDIT   |
SAVE   |
RENAME |
IMPORT |
REC SIG |Wet
 INSERT  REVERB
```
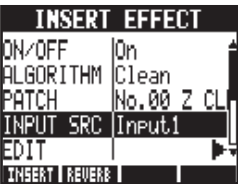
(Reference: Operation Manual)

Setting the reverb send level

REVERB SEND

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

```
   Input1     ▶
PAN      |L100
REV SEND |0
VOLUME   |0
ST LINK  |Off

 ON/OFF
```
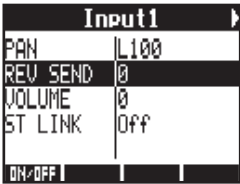
(Reference: Operation Manual)
(Reference: Audio interface manual – Mixer)
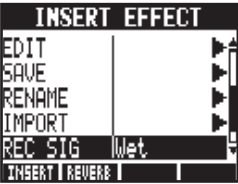
▍NOTE

- Effects can only be used when the sampling rate is 44.1 kHz. At all other times it is turned OFF.
- Insert and send return effect settings are saved when you terminate (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

Patch operation menu

Selecting insert effect/reverb patches

To use an insert effect, select an algorithm and a patch.
To use a send reverb effect, select a patch.
(Reference: Operation Manual)

Editing patches (EDIT)

By adjusting effect module parameters and levels, you can create the desired result. (Reference: Operation Manual)

Importing patches (IMPORT)

All effect algorithms (and reverb patches) or a single one can be imported from a selected project on the R24.
(Reference: Operation Manual)

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)

Initializing patches (INITIAL)

Restores patches to their original factory settings (only available in audio interface mode).

Changing patch names (RENAME)

The name of the currently selected patch can be changed.

Patch initialization (factory reset)
EFFECT > INITIAL

1 Press **EFFECT**.

Turning effects on/off

Insert effect
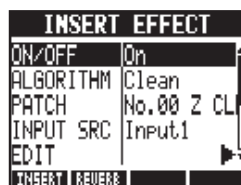Press the [ ] beneath **INSERT**.

Send return effect
Press the [ ] beneath **REVERB**.
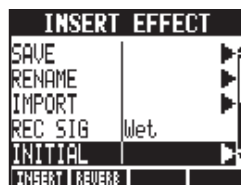
The following example is of an insert effect.

2 Turn the effect On.

Change

3 Select INITIAL.

Change menu

▲
▼

(ENTER) Press **ENTER**.

4 Select YES.

Change menu

▲
▼

(ENTER) Press **ENTER**.

Control surface setup for other DAWs

You can set up the R24 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 R16_R24" 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 R24.

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" dialog.

If a controller/surface has already been selected, click on the "Delete" button to delete it.

2 Click the "Add" button and open the "Controller/Surface Setup" dialog.

3 Choose "ZOOM R16_R24" from the drop-down menu of the "Controller/ surface" column.

Select "ZOOM R16_R24" 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 Choose "Option key bind" to open the "Key bind" dialog.

2 Press "Search for the key" in "Setup".

3 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 7.

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.

| HINT

The F1~F5 keys on the R24 are labeled as follows.

F1: **AUTO PUNCH I/O** key
F2: **A-B REPEAT** key
F3: ◄◄ (marker) key
F4: ►►| (marker) key
F5: **MARK/CLEAR** key

Control surface setup for other DAWs

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 R16_R24" from the pull-down menus of the Input and Output columns.

5 In the MIDI Ports section below, turn "On" the Remote column button for the "Input: Mackie Control Input (Zoom R16_R24)" item.

Function key setup

1 Press the MIDI button at the top right of the main LIVE window to open 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 R24 that you want to use to control the selected parameter in Live.

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.

▌ HINT

The F1~F5 keys on the R24 are labeled as follows.

F1: **AUTO PUNCH I/O** key
F2: **A-B REPEAT** key
F3: ◄◄ (marker) key
F4: ►►| (marker) key
F5: **MARK/CLEAR** key

Digital Performer

Control surface setup

1 Launch the Audio MIDI Setup application (/Applications/Utilities).

2 Open the MIDI Studio window (Window > Show MIDI Window) and confirm that "ZOOM R24" 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 "R24" in the "Device Name" field.

6 Click and drag the downward arrow of the original "ZOOM R24" icon and connect it to the downward arrow of the "R24" 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 "R24" from the "MIDI" pull-down menu of the Control Surface window and select "R24-1" from the menu list.

12 Click the "OK" button.

The above procedures are for Mac OS X 10.6 and Digital Performer 5.

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 setup

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.

ZOOM

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