UR-RT4
UR-RT2
USB AUDIO INTERFACE

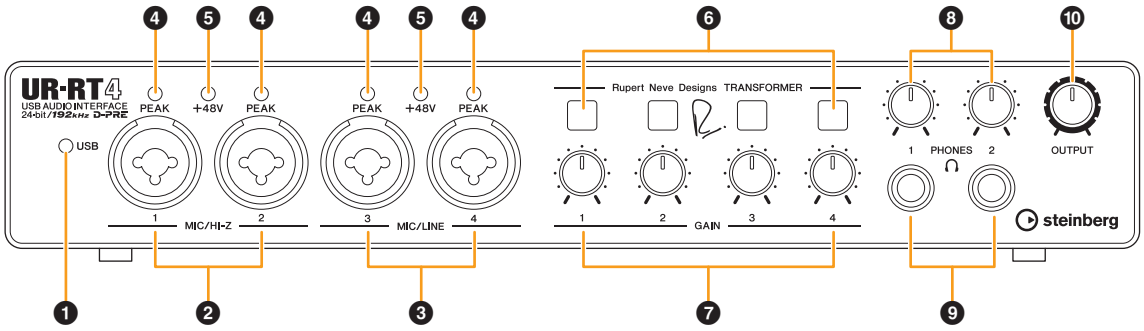
EN *Operation Manual*

steinberg

Contents

Panel Controls and Terminals

Front Panel UR-RT4



❶ [USB] indicator

Lights up when the power is turned on and the unit is communicating with the computer or iOS device.
The indicator flashes continuously when the computer or iOS device does not recognize the device.

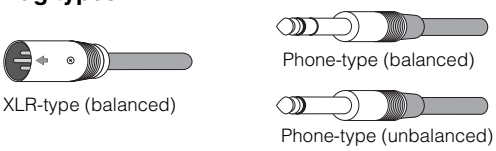
❷ [MIC/HI-Z 1/2] jack

For connection to a microphone, digital instrument, electric guitar, or electric bass.
This jack can be connected to both XLR-type and phone-type (unbalanced only) plugs. The XLR-type is MIC only and the phone type is HI-Z only.

❸ [MIC/LINE 3/4] jack

For connection to a microphone or digital instrument.
This jack can be connected to both XLR-type and phone-type (balanced/unbalanced) plugs. The XLR type is MIC only and the phone type is LINE only.

Plug types



Proper use of the HI-Z or LINE inputs

HI-Z

Guitar and bass with passive pickups (not battery powered)

LINE

- Effect device, preamp, direct box
- Guitar and bass with active pickups (battery powered)
- Digital instruments, such as synthesizer

❹ [PEAK] indicator

Lights up according to the input signal. Lights up when the input signal is 3 dB below the clipping level.

Setting optimum recording levels

Adjust the gain knobs so that the [PEAK] indicator flashes briefly at the loudest input volume.

❺ [+48V] indicator

Lights up when the [+48V] switch (phantom power) is turned on.

❻ [TRANSFORMER] switch

Switches the transformer circuit of the [MIC/HI-Z 1/2] jack and [MIC/LINE 3/4] jack on and off.

Use of the [TRANSFORMER] switch

ON (lit)

Passing the input signal through the transformer circuit results in sound with natural compression and saturation.

OFF (unlit)

This setting results in a well-balanced sound that is faithful to the original, which is the feature of D-PRE.

NOTE

The unit features one transformer of analog circuitry for each front input channel, created by Rupert Neve Designs® specifically for audio interface use.

❼ [GAIN 1 to 4] knob

Adjusts the input signal level of the [MIC/HI-Z 1/2] jack and [MIC/LINE 3/4] jack.

❽ [PHONES 1/2] knob

Adjusts the output signal level of the [PHONES1/2] jack.

❾ [PHONES 1/2 🎧] jack

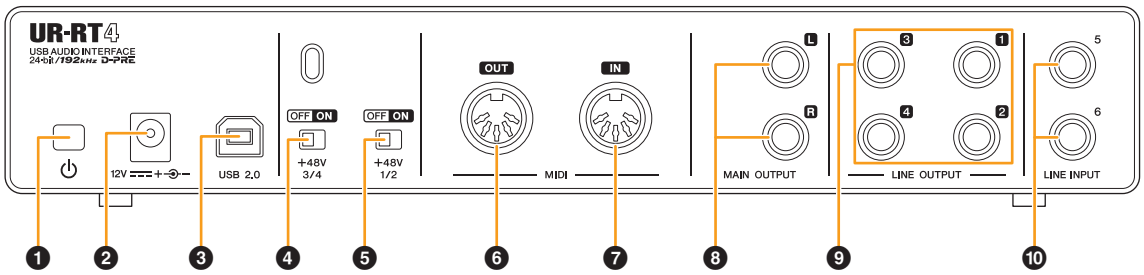
For connection to a set of stereo headphones.
[PHONES 1] outputs the MIX 1 signals.
[PHONES 2] outputs the MIX 1 or MIX 2 signals. To select the output signal of the [PHONES 2], refer to “Headphone Area” (page 14) in the section “dspMixFx UR-RT” or the “Headphones Window” (page 17) in the section “Dedicated Windows for Cubase Series.”

> **What is MIX?**
> MIX refers to the stereo output signals which flow in the device. The input signals to the device flow to each MIX. Refer to the section “Signal Flow” (page 37).

❿ [OUTPUT] knob

Adjusts the output signal level of the [MAIN OUTPUT] jacks.

Rear Panel UR-RT4



❶ [⏻](Standby/On) switch

Sets the power of the device to On (▂) or Standby (▇).

❷ DC IN [12V]

For connection to the AC power adaptor.

❸ [USB 2.0] port

For connection to a computer or iOS device.

NOTICE

When connecting to a computer with a [USB 2.0] port, observe the following to prevent the computer from freezing or shutting down, as well as corruption or even loss of data.

- **USB 3.0 cable requires a separate conversion plug.**
- **Before connecting/disconnecting the USB cable, be sure to observe the following points.**
  -Quit all open software applications on the computer.
  -Set all output level controls to the minimum.
- **Wait at least six seconds between connecting/disconnecting the USB cable.**

❹ [+48V 3/4] switch

Turns the phantom power on and off.
When you turn this switch on, phantom power will be supplied to the [MIC/LINE 3/4] jack. Turn this switch on when using a phantom powered condenser microphone.

❺ [+48V 1/2] switch

Turns the phantom power on and off.
When you turn this switch on, phantom power will be supplied to the [MIC/HI-Z 1/2] jack. Turn this switch on when using a phantom powered condenser microphone.

NOTICE

When using phantom power, observe the following to prevent noise and possible damage to UR-RT or connected equipment.

- **Do not connect or disconnect any devices while the phantom power switch is turned to ON.**
- **Set all output level controls to the minimum before turning the phantom power switch to ON or OFF.**
- **When connecting devices not requiring phantom power to the [MIC/HI-Z 1/2] and [MIC/LINE 3/4] jacks, make sure to set the phantom power switch to OFF.**

NOTE

When the phantom power switch is turned on and off, all inputs/outputs will be muted for a few seconds.

❻ [MIDI OUT] jack

For connection to the MIDI IN jack of the MIDI device.
Transmits MIDI signals from the computer.

❼ [MIDI IN] jack

For connection to the MIDI OUT jack of the MIDI device.
Receives and inputs MIDI signals to the computer.

NOTE

Select [Steinberg UR-RT4-port1] for the MIDI port when using a MIDI jack with an iOS app. Please note that [Steinberg UR-RT4-port2] is not available.

❽ [MAIN OUTPUT L/R] jacks

For connection to monitor speakers.
These jacks can be connected to phone-type (balanced/unbalanced) plugs. This outputs the MIX 1 signals. To adjust the output signal level, use the [OUTPUT] knob on the front panel.

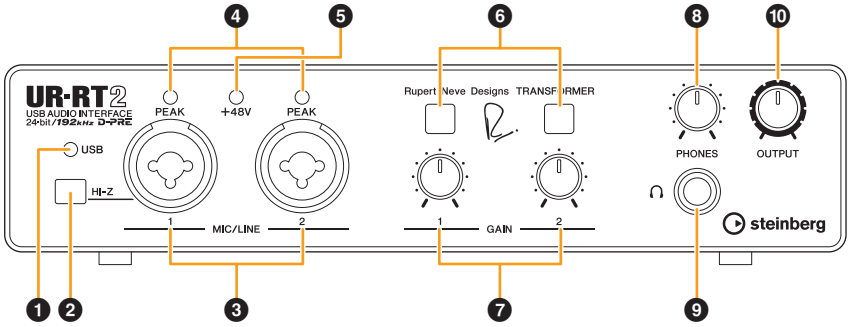
❾ [LINE OUTPUT 1 to 4] jacks

For connection to external devices with line level signals.
These jacks can be connected to phone-type (balanced/unbalanced) plugs. The [LINE OUTPUT1/2] jack outputs the MIX 1 signal and the [LINE OUTPUT 3/4] jack outputs the MIX 2 signal.

❿ [LINE INPUT 5/6] jacks

For connection to digital instrument or a mixer.
These jacks can be connected to phone-type (balanced/unbalanced) plugs. You can select the input signal level of the [LINE INPUT 5/6] jacks between “+4 dBu” and “-10 dBV.” Select “+4 dBu” when connecting a professional audio device, and select “-10 dBV” when connecting a consumer device. The default initial setting is “-10 dBV.”
To select the input signal level, use the “Setup Window” (page 14) in the section “dspMixFx UR-RT” or the “Settings Window” (page 18) in the “Dedicated Windows for Cubase Series.”

Front Panel UR-RT2



❶ [USB] indicator

Lights up when the power is turned on and the unit is communicating with the computer or iOS device.
The indicator flashes continuously when the computer or iOS device does not recognize the device.

❷ [HI-Z] switch

Switches the input impedance (on ▂/off ▉).
Turn this switch on when connecting high impedance instruments, such as an electric guitar or electric bass, directly to the [MIC/LINE 1] jack. When you turn this switch on, use an unbalanced phone plug for connection between the instruments and the [MIC/LINE 1] jack. If you use a balanced phone plug, this device will not work correctly.

CAUTION
To protect your speaker system, leave the monitor speakers turned off when turning the [HI-Z] switch on/off. It's also a good idea to turn all output level controls down to their minimum. Neglect of these precautions may result in loud noise bursts that may damage your equipment, your ears, or both.

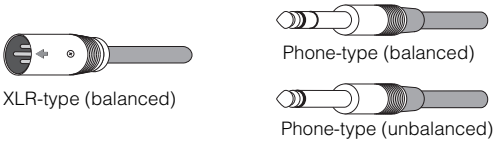
NOTICE

Do not connect or disconnect any cables while turning on the [HI-Z] switch. Doing so can damage the connected device and/or the unit itself.

❸ [MIC/LINE 1/2] jacks

For connection to a microphone or digital instrument.
This jack can be connected to both XLR-type and phone-type (balanced/unbalanced) plugs. The XLR type is set to the optimum level for microphone connection and phone type is for line connection.

Plug types



Proper use of the HI-Z or LINE inputs

HI-Z

Guitar and bass with passive pickups (not battery powered)

LINE

- Effect device, preamp, direct box
- Guitar and bass with active pickups (battery powered)
- Digital instruments, such as synthesizer

❹ [PEAK] indicator

Lights up according to the input signal. Lights up when the input signal is 3 dB below the clipping level.

Setting optimum recording levels

Adjust the gain knobs so that the [PEAK] indicator flashes briefly at the loudest input volume.

❺ [+48V] indicator

Lights up when the [+48V] switch (phantom power) is turned on.

❻ TRANSFORMER switch

Switches the transformer circuit of the [MIC/LINE 1/2] jack on and off.

Use of the TRANSFORMER switch

ON (lit)

Passing the input signal through the transformer circuit results in sound with natural compression and saturation.

OFF (unlit)

This setting results in a well-balanced sound that is faithful to the original, which is the feature of D-PRE.

NOTE

The unit features one transformer of analog circuitry for each front input channel, created by Rupert Neve Designs® specifically for audio interface use.

❼ [GAIN 1/2] knob

Adjusts the input signal level of the [MIC/LINE 1/2] jack.

❽ [PHONES] knob

Adjusts the output signal level of the [PHONES] jack.

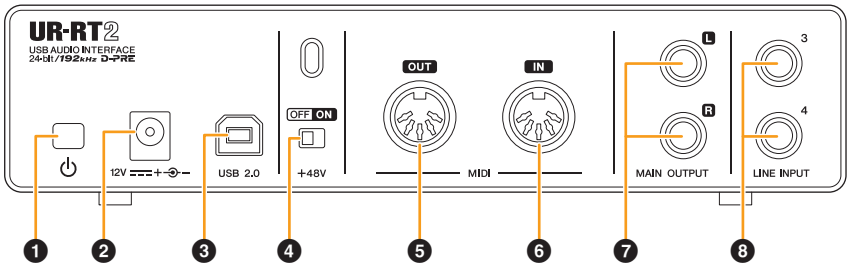
❾ [PHONES] jack

For connection to a set of stereo headphones.

❿ [OUTPUT] knob

Adjusts the output signal level of the [MAIN OUTPUT] jacks.

Rear Panel UR-RT2



❶ [⏻](Standby/On) switch

Sets the power of the device to On (▬) or Standby (▙).

❷ DC IN [12V]

For connection to the AC power adaptor.

❸ [USB 2.0] port

For connection to a computer or iOS device.

NOTICE

When connecting to a computer or iOS with a [USB 2.0] port, observe the following to prevent the computer from freezing or shutting down, as well as corruption or even loss of data.

- **USB 3.0 cable requires a separate conversion plug.**
- **Before connecting/disconnecting the USB cable, be sure to observe the following points.**
  -Quit all open software applications on the computer.
  -Set all output level controls to the minimum.
- **Wait at least six seconds between connecting/disconnecting the USB cable.**

❹ [+48V] switch

Turns the phantom power on and off.
When you turn this switch on, phantom power will be supplied to the [MIC/LINE 1/2] jack. Turn this switch on when using a phantom powered condenser microphone.

NOTICE

When using phantom power, observe the following to prevent noise and possible damage to UR-RT or connected equipment.

- **Do not connect or disconnect any devices while the phantom power switch is turned to ON.**
- **Set all output level controls to the minimum before turning the phantom power switch to ON or OFF.**
- **When connecting devices not requiring phantom power to the [MIC/HI-Z 1/2] jacks, make sure to set the phantom power switch to OFF.**

NOTE

When the phantom power switch is turned on and off, all inputs/outputs will be muted for a few seconds.

❺ [MIDI OUT] jack

For connection to the MIDI IN jack of the MIDI device.
Transmits MIDI signals from the computer.

❻ [MIDI IN] jack

For connection to the MIDI OUT jack of the MIDI device.
Receives and inputs MIDI signals to the computer.

NOTE

Select [Steinberg UR-RT2-port1] for the MIDI port when using a MIDI jack with an iOS app. Please note that [Steinberg UR-RT2-port2] is not available.

❼ [MAIN OUTPUT L/R] jacks

For connecting to monitor speakers or external devices with line level signals.
These jacks can be connected to phone-type (balanced/unbalanced).

❽ [LINE INPUT 3/4] jacks

For connection to digital instrument or a mixer.
These jacks can be connected to phone-type (balanced/unbalanced) plugs. You can select the input signal level of the [LINE INPUT 3/4] jacks between “+4 dBu” and “-10 dBV.” Select “+4 dBu” when connecting a professional audio device, and select “-10 dBV” when connecting a consumer device. The default initial setting is “-10 dBV.”
To select the input signal level, use the “Setup Window” (page 14) in the section “dspMixFx UR-RT” or the “Settings Window” (page 18) in the “Dedicated Windows for Cubase Series.”

Software

This section explains software operations for using the UR-RT with a computer.

Yamaha Steinberg USB Driver

Yamaha Steinberg USB Driver is a software program that allows communication between the UR-RT and a computer. In Control Panel, you can configure the basic settings for the audio driver (Windows) or confirm the audio driver information (Mac).

How to Open the Window

Windows

- Select [Control Panel] → [Hardware and Sound] or [Sounds, Speech, and Audio Devices] → [Yamaha Steinberg USB Driver]
- From the Cubase series menu, select [Studio] → [Studio Setup] → [Yamaha Steinberg USB ASIO] → [Control Panel].

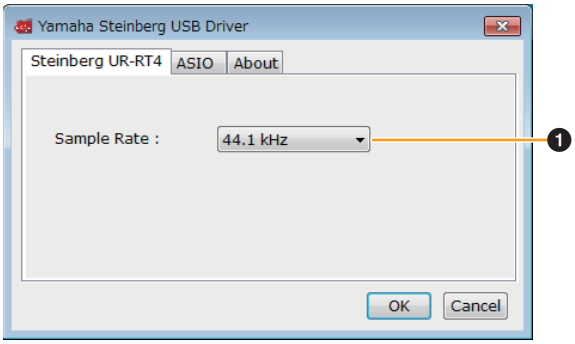
Click the upper tabs to select the desired window.

Mac

- Select [System Preferences] → [Yamaha Steinberg USB]
- From the Cubase series menu, select [Studio] → [Studio Setup] → [Steinberg UR-RT] → [Control Panel] → [Open Config App].

Steinberg UR-RT Window (Windows only)

This window is for selecting the sample rate.



❶ Sample Rate

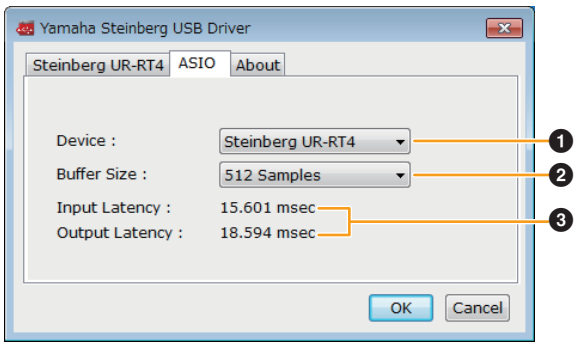
Lets you select the sample rate of the device.
Options: 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz

NOTE

The available sample rates may differ depending on the particular DAW you're using.

ASIO Window (Windows only)

For selecting the ASIO driver settings.



❶ Device

Lets you select the device for use with the ASIO driver. This function is available when connecting two or more devices that are compatible with the Yamaha Steinberg USB Driver to the computer.

❷ Buffer Size

Lets you select the buffer size for the ASIO driver. The range varies depending on the specified sample rate. The lower the value of the ASIO buffer size, the lower the value of audio latency.

Sample Rate	Range
44.1 kHz / 48 kHz	64 Samples – 2048 Samples
88.2 kHz / 96 kHz	128 Samples – 4096 Samples
176.4 kHz / 192 kHz	256 Samples – 8192 Samples

❸ Input Latency/Output Latency

Indicates the latency (delay time) for the audio input and output in millisecond units.

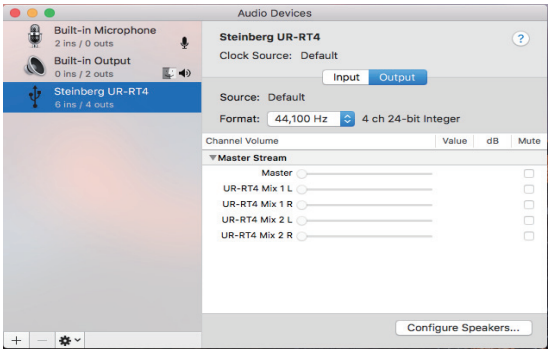
About Window

Indicates the version and copyright information of the audio driver.

How to Select the Sample Rate (Mac)

You can select the sample rate in [Audio MIDI Setup] window.

1. **Select [Applications] → [Utilities] → [Audio MIDI Setup].**
2. **Select the sample rate from the [Format] menu.**



How to Select the Buffer Size (Mac)

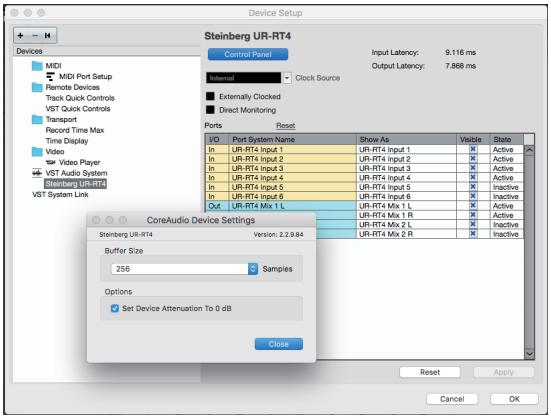
You can select the buffer size in the settings window for each application (DAW software, etc.).

1. **From the Cubase series menu, select [Studio] → [Studio Setup].**

NOTE

The method for opening the settings window is different for each application.

2. **Click [Control Panel] in [Steinberg UR-RT] in the menu on the left side of the window.**



dspMixFx UR-RT

This software is for operating the convenient built-in DSP mixer and DSP effects. The DSP mixer allows you to mix up to six input channels {four input channels} down to one stereo output. A number of DSP effects for processing the input signals are also provided, and since the processing/mixing is hardware-based, there is no monitoring latency.

NOTE

You cannot operate dspMixFx UR-RT while a Cubase series DAW is running. When Cubase is running, configure the DSP mixer and DSP effect from “Dedicated Windows for Cubase Series” (page 16).

Screenshot

How to Open the Window

Windows

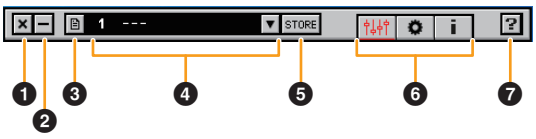
[All Programs] or [All apps] → [Steinberg UR-RT] → [dspMixFx UR-RT]

Mac

[Applications] → [dspMixFx UR-RT]

Tool Area

This is the area for configuring the overall common settings of dspMixFx UR-RT.



❶ Quit

Quits dspMixFx UR-RT.

❷ Minimize

Minimizes the dspMixFx UR-RT window.

❸ Menu

Provides four different menus for various settings.

Menu	Description
Open	Opens the settings file of dspMixFx UR-RT.
Save	Saves the settings file of dspMixFx UR-RT to a computer.
Import Scene	Imports a scene from the settings file of dspMixFx UR-RT. Select the desired settings file of dspMixFx UR-RT and import the desired scene on the left side of the [IMPORT SCENE] window. The window appears after the file is selected in the file selection dialog. Select the destination for importing on the right side of the window. Click [OK] to import it.
Initialize All Scenes	Initialize all the saved scenes.

❹ Scene

Indicates the scene name. You can change the scene name by clicking on it. Clicking the button on the right opens the window for calling up other scenes. Call up the desired scene by clicking it. To cancel calling up the scene, click outside of the window.

❺ STORE

Opens the Scene Store window. Enter the desired scene name into the STORE NAME field. Select the destination for storing the scene in the No. NAME field. Click [OK] to store the scene

❻ Selecting windows

Selects the desired dspMixFx UR-RT window. The selected window icon lights in red.

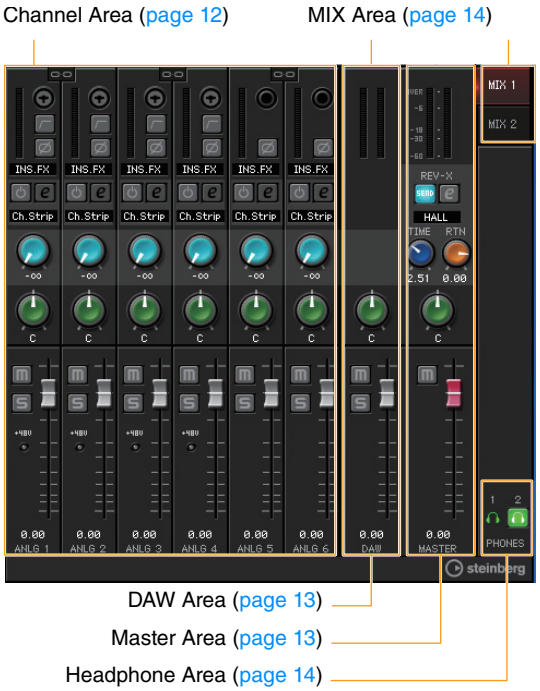
Menu	Description
	Main window (page 12)
	Setup window (page 14)
	Information window (page 15)

❼ Help

Opens the Operation Manual (this manual).

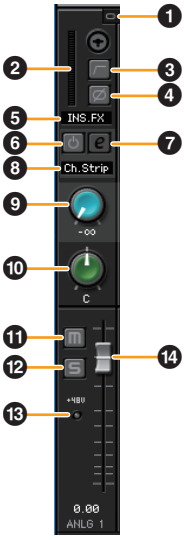
Main Window

This window is for configuring the entire signal flow.



Channel Area

This is the area for configuring the input channel settings.



❶ Channel Link

Turns on (lit) and off (unlit) the channel link function of two adjacent channels. When this is on, two mono channels will become one stereo channel.

❷ Level Meter

Indicates the signal level.

❸ High Pass Filter

Turns on (lit) and off (unlit) the high pass filter (not available on [LINE INPUT 5/6] {[LINE INPUT 3/4]}). To select the cutoff frequency of the high pass filter, use the “Setup Window” (page 14) in the section “dspMixFx UR-RT.”

❹ Phase

Turns on (lit) and off (unlit) the phase inversion of the signal.

❺ Effect Insertion location

Selects the insertion location of an effect.

Options	Description
MON.FX	Applies an effect to only the monitor signal (sent to the device).
INS.FX	Applies an effect to both the monitor signal (sent to the device) and the recording signal (sent to the DAW software).

❻ Effect On/Off

Turns the Effect on (lit) and off (unlit).

❼ Effect Edit

Opens (lit) and closes (unlit) the selected effect setup window.

❽ Effect Type

Select the effect type.
Options: ChStrp, Clean, Crnch, Lead, Drive

NOTE
The maximum number of Channel Strip and Guitar Amp Classics iterations which can be used simultaneously is limited. Refer to the “Limitations on the use of effects” (page 36).

❾ REV-X Send

Adjusts the signal level which is sent to REV-X.
Range: - ∞ dB – +6.00 dB

❿ Pan

Adjusts the pan.
Range: L16 – C – R16

⓫ Mute

Turns the mute function on (lit) and off (unlit).

⓬ Solo

Turns the solo function on (lit) and off (unlit).

⓭ +48V

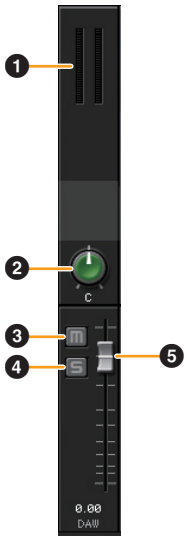
Indicates the on/off status of the phantom power function of the device.

⓮ Fader

Adjusts the signal level.
Range: - ∞ dB – +6.00 dB

DAW Area

This is the area for configuring the DAW channel settings.



❶ Level Meter

Indicates the signal level.

❷ Pan

Adjusts the pan.
Range: L16 – C – R16

❸ Mute

Turns the mute function on (lit) and off (unlit).

❹ Solo

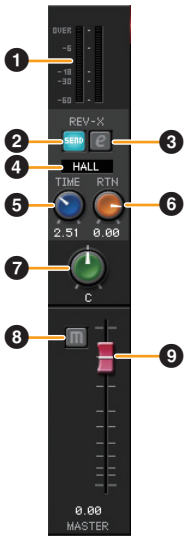
Turns the solo function on (lit) and off (unlit).

❺ Fader

Adjusts the signal level.
Range: - ∞ dB – +6.00 dB

Master Area

This is the area for configuring the master channel settings.



❶ Level Meter

Indicates the signal level.

❷ REV-X Send On

Indicates that REV-X Send is on. This is normally set to on.

❸ REV-X Edit

Opens (lit) and closes (unlit) the “REV-X” (page 21) setup window.

❹ REV-X Type

Selects the REV-X type.
Options: Hall, Room, Plate

❺ REV-X Time

Adjusts the reverb time of REV-X. This parameter links to Room Size. The adjustable range varies depending on REV-X type.

REV-X Type	Range
Hall	0.103 sec – 31.0 sec
Room	0.152 sec – 45.3 sec
Plate	0.176 sec – 52.0 sec

❻ REV-X Return Level

Adjusts the return level of REV-X.
Range: - ∞ dB – +6.00 dB

❼ Pan

Adjusts the pan position
Range: L16 – C – R16

❽ Mute

Turn the mute function on (lit)/ off (unlit).

❾ Fader

Adjusts the signal level.
Range: - ∞ dB – +6.00 dB

> **Fader operations**
> - You can reset certain parameters to 0 dB by double clicking the fader.
> - You can slide all fader channels at the same time by holding [Ctrl]/[command] and [Shift] while you drag on the faders.

MIX Area

This is the area for selecting the MIX you want to configure.

❶ MIX

Indicates the MIX object. The UR-RT2 can be set only to MIX1.
You can copy the Main window settings of the MIX by dragging and dropping.

Headphone Area

Indicates the monitor signal that is sent from the [PHONES] jack.

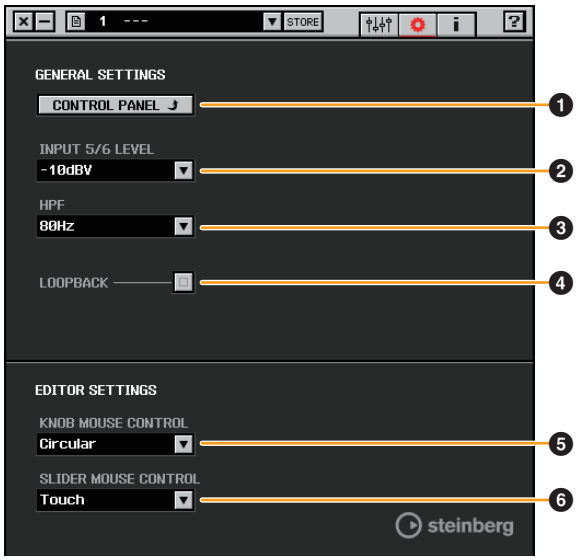
❶ PHONES On/Off

Turns on (lit) and off (unlit) the headphones output. The UR-RT2 [PHONES 1] is normally on.
You can output the MIX selected in the MIX area to the PHONES by turning this on.

NOTE
With [PHONES 2], either MIX 1 or MIX 2 can be selected. (UR-RT4 only); [PHONES 1] is fixed to MIX 1 and cannot be changed.

Setup Window

This window is for configuring the common settings of the device.



❶ CONTROL PANEL

For Windows, this opens the “Yamaha Steinberg USB Driver” (page 9). For Mac, this opens Audio MIDI Setup.

❷ INPUT 5/6 LEVEL {INPUT 3/4 LEVEL}

Select the input signal level of [LINE INPUT 5/6] {LINE INPUT 3/4}.
Options: +4 dBu, -10 dBV

❸ HPF

Selects the cutoff frequency of the high pass filter (not available on [LINE INPUT 5/6]{[LINE INPUT 3/4]}).
Options: 120 Hz, 100 Hz, 80 Hz, 60 Hz, 40 Hz

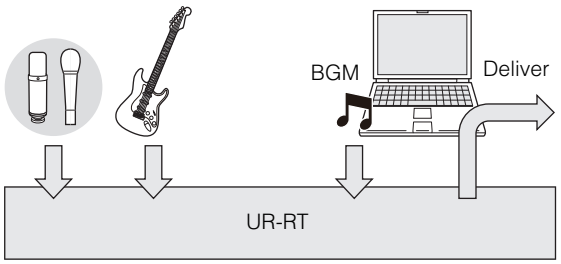
❹ LOOPBACK

Turns the Loopback function on (lit) and off (unlit).

What is Loopback?

Loopback is a convenient function for broadcasting over the Internet. It mixes the input audio signals (such as microphone and guitar) with the audio signals playing back in the software in the computer into two channels in the UR-RT, and sends them back to the computer. Refer to the section “Signal Flow” (page 37).

If the Loopback function is on while you are monitoring input signals from the UR-RT via DAW software, it will cause loud noise. This is because an infinite loop of the audio signal is generated between the UR-RT and the DAW software. When using the loopback function, turn off the monitor functions on your DAW software.



❺ KNOB MOUSE CONTROL

Selects the method of operating the knobs on dspMixFx UR-RT.

Options	Description
Circular	Drag in a circular motion to increase and decrease the parameter. Drag on a dial clockwise to increase, and counterclockwise to decrease. If you click any point on the knob, the parameter will jump there instantly.
Linear	Drag in a linear motion to increase and decrease the parameter. Drag upward or rightward to increase, and downward or leftward to decrease. Even if you click any point on the knob, the parameter will not jump there.

❻ SLIDER MOUSE CONTROL

Selects the method of operating the sliders and faders on dspMixFx UR-RT.

Options	Description
Jump	Click any point on the slider and fader to increase and decrease the parameter. If you click any point on the slider and fader, the parameter will jump there instantly.
Touch	Drag the handle of the slider and fader to increase and decrease the parameter. Even if you click any point on the slider and fader, the parameter will not jump there.

Information Window

This window indicates information about dspMixFx UR-RT and the device.

❶ Version Information

Indicates the version of the firmware and software.

dspMixFx (for iOS devices)

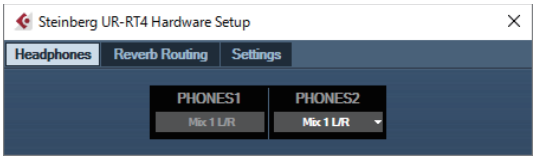
From your iOS devices, you can conveniently control built-in DSP mixer functions and DSP effects by using dspMixFx for iOS devices. For details on this app, see the Steinberg web site below.

http://www.steinberg.net/

Dedicated Windows for Cubase Series

These are the windows for configuring the device settings from Cubase series software. The dedicated windows for Cubase series allow you to configure the parameters which are configured by dspMixFx UR-RT. Two types of windows are available: Input Settings and Hardware Setup.

Screenshot



How to Open the Window

Input Settings Window

From the Cubase series menu, [Studio] → [MixConsole] → [HARDWARE]

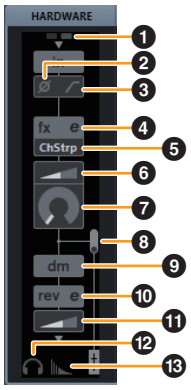
Hardware Setup Window

From the Cubase series menu, [Studio] → [Audio Hardware Setup]

Input Settings Window

This window is for configuring the input settings of the device. The signal flow is from top to bottom. The settings on this window (except for the +48V indicator) are saved to the Cubase project file.

Input setting window ([HARDWARE]) is shown according to the settings for Stereo bus and Mono bus at the UR-RT device port.



❶ +48V

Indicates the phantom power on/off status.

❷ Phase

Turns on (lit) and off (unlit) the phase inversion of the signal.

❸ High Pass Filter

Turns on (lit) and off (unlit) the high pass filter (not available on [LINE INPUT 5/6] {[LINE INPUT 3/4]}). To select the cutoff frequency of the high pass filter, use the “Settings Window” (page 18) in the section “Dedicated Windows for Cubase Series.

❹ Effect Edit

Opens the selected effect setup window.

❺ Effect Type

Selects the effect type.
Options: ChStrp, Clean, Crnch, Lead, Drive

NOTE

The maximum number of Channel Strip and Guitar Amp Classics iterations which can be used simultaneously has restrictions. Refer to the “Limitations on the use of effects” (page 36).

❻ DRIVE/Output Level

When Channel Strip is selected, this adjusts the degree to which the compressor is applied. The higher the value, the greater the effect.
Range: 0.00 – 10.00
When Guitar Amp Classics is selected, this adjusts the output level.
Range: 0.00 – 1.00

❼ MORPH

Adjusts the Channel Strip Sweet Spot Data. (Refer to the “MORPH” in the section “Channel Strip” on page 19).
When Guitar Amp Classics is selected, MORPH is not displayed.

❽ Effect Insertion Location

Selects the insertion location of an effect.

Insertion location	Description
Upper (OFF)	Turns the effect off.
Middle (MON.FX)	Applies an effect Strip to only the monitor signal (sent to the device).
Lower (INS.FX)	Applies an effect Strip to both the monitor signal (sent to the device) and the recording signal (sent to the DAW software).

❾ Output Position of the Direct Monitoring Signal

Indicates the position from which the audio signals for monitoring will be output when turning on Direct Monitoring in the device settings on Cubase.

❿ REV-X Edit

Opens the “REV-X” (page 21) setup window.

⓫ REV-X Send

Adjusts the signal level which is sent to the REV-X.
Range: - ∞ dB – +6.00 dB

⓬ Headphones Edit

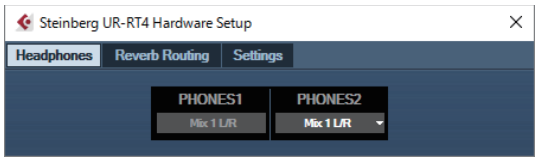
Opens the “Headphones Window” (page 17) in the section “Dedicated Windows for Cubase Series.”

⓭ Reverb Routing Edit

Opens the “Reverb Routing Window” (page 17) in the section “Dedicated Windows for Cubase Series.”

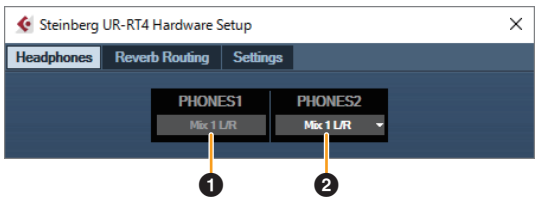
Hardware Setup Window

This window is for configuring the general settings of the device. Click the upper tabs to select the window. Only the settings on the Reverb Routing window are saved to the Cubase project file.



Headphones Window (UR-RT4 only)

This window is for configuring the output signal of the phones settings.



❶ PHONES 1

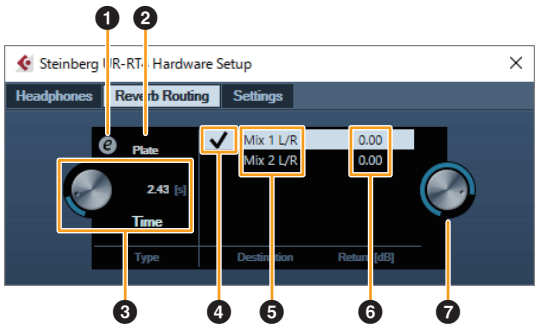
Indicates the output signal of [PHONES 1].

❷ PHONES 2

Selects the output signal of [PHONES 2].

Reverb Routing Window

This window is for configuring the “REV-X” (page 21) settings.



❶ REV-X Edit

Opens the “REV-X” (page 21) setup window.

❷ REV-X Type

Selects the REV-X type.
Options: Hall, Room, Plate

❸ REV-X Time

Adjusts the reverb time of REV-X. This parameter links to Room Size. The adjustable range varies depending on the REV-X type.

REV-X type	Range
Hall	0.103 sec – 31.0 sec
Room	0.152 sec – 45.3 sec
Plate	0.176 sec – 52.0 sec

❹ REV-X Send Source Select

Indicates the send source signal which is sent to REV-X. The UR-RT2 is Mix 1 L/R only.

❺ REV-X Send Source

Indicates the signal which is sent to REV-X.

❻ REV-X Return Level

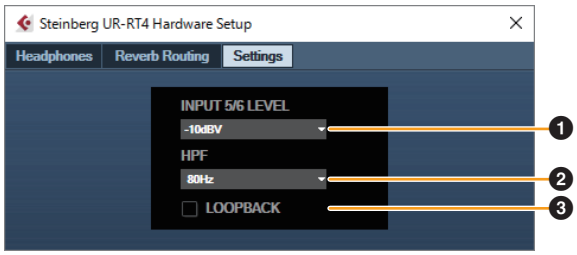
Indicates the return level of REV-X.

❼ REV-X Return Level Knob

Adjusts the return level of the selected (highlighted) signal.
Range: - ∞ dB – +6.00 dB

Settings Windows

This window is for configuring the device settings.



❶ INPUT 5/6 LEVEL {INPUT 3/4 LEVEL}

Selects the input signal of [LINE INPUT 5/6] {INPUT 3/4 LEVEL}.
Options: +4dBu, -10dBV

❷ HPF

Selects the cutoff frequency of the high pass filter (not available on [LINE INPUT 5/6] { [LINE INPUT 3/4] }).
Options: 120Hz, 100Hz, 80Hz, 60Hz, 40Hz

❸ LOOPBACK

Turns the Loopback function on (lit) and off (unlit).
Refer to the “LOOPBACK” in the section “dspMixFx UR-RT” (page 15).

Sweet Spot Morphing Channel Strip

The Sweet Spot Morphing Channel Strip (“Channel Strip” for short) is a multi-effect that combines compression and EQ. Advanced sound engineering know-how is condensed into a number of convenient presets that can be simply and instantly recalled, for professional results.

Four channel strips are provided, and each can be assigned to the monitor sound only, or to both the monitor and recorded sound.

The Channel Strip equipped with the device and the Channel Strip of the VST Plug-in version have the same parameters. When using the Channel Strip on Cubase series programs, you can share the settings between the built-in Channel Strip and the Channel Strip of the VST Plug-in version as a preset file. When using the built-in Channel Strip on Cubase series programs, turn on the [Direct Monitoring] setting in the program. Also, when assigning the Channel Strip of the VST Plug-in version to the effect slot on Cubase series programs, select it from the [Dynamics] category (in the case of the default settings). Note that you cannot use the built-in Channel Strip when the sample rate is set to 176.4 kHz or 192 kHz.

Screenshot

How to Open the Window

From Dedicated Windows for Cubase Series

Select the “Channel Strip” from the “Effect Type”, then click “Channel Strip Edit” in the section “Input Settings Window” (page 16).

From dspMixFx UR-RT

Select the “Channel Strip” from the “Effect Type”, then click “Channel Strip Edit” in the section “Channel Area” (page 12).

Common to Compressor and Equalizer

❶ MORPH

Adjusts the parameter of the Sweet Spot Data. You can simultaneously adjust the compressor and equalizer settings which are set to five points around this knob by turning this knob. When you set the knob between two adjacent points, the compressor and equalizer settings will be set to an intermediate value.

❷ Sweet Spot Data

Selects the Sweet Spot Data.

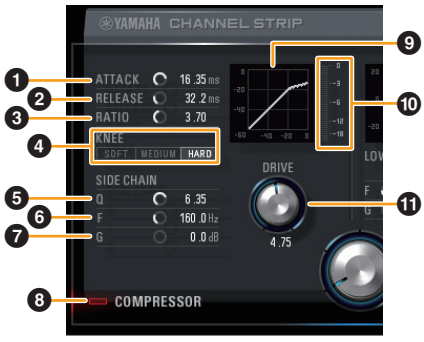
❸ TOTAL GAIN

Adjusts the total gain of the Channel Strip.
Range: -18.0 dB – +18.0 dB

❹ Level Meter

Indicates the output level of the Channel Strip.

Compressor



❶ ATTACK

Adjusts the attack time of the compressor.
Range: 0.092 msec – 80.00 msec

❷ RELEASE

Adjusts the release time of the compressor.
Range: 9.3 msec – 999.0 msec

❸ RATIO

Adjusts the release time of the compressor.
Range: 1.00 – ∞

❹ KNEE

Selects the knee type of the compressor.

Options	Description
SOFT	Produces the most gradual change.
MEDIUM	Results in a setting midway between SOFT and HARD.
HARD	Produces the sharpest change.

❺ SIDE CHAIN Q

Adjusts the band width of the side chain filter.
Range: 0.50 - 16.00

❻ SIDE CHAIN F

Adjusts the center frequency of the side chain filter.
Range: 20.0 Hz - 20.0 kHz

❼ SIDE CHAIN G

Adjusts the gain of the side chain filter.
Range: -18.0 dB – +18.0 dB

❽ COMPRESSOR On/Off

Turns the compressor on (lit) and off (unlit).

❾ Compressor Curve

This graph indicates the approximate compressor response.
The vertical axis indicates the output signal level, and the horizontal axis indicates the input signal level.

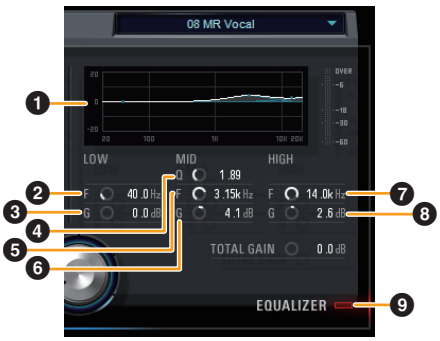
❿ Gain Reduction Meter

Indicates the gain reduction.

⓫ DRIVE

Adjusts the degree to which the compressor is applied. The higher the value, the greater the effect.
Range: 0.00 – 10.00

Equalizer



❶ Equalizer Curve

This graph indicates the characteristics of the 3-band equalizer. The vertical axis indicates the gain, and the horizontal axis indicates the frequency. You can adjust LOW, MID, and HIGH by dragging each handle in the graph.

❷ LOW F

Adjusts the center frequency of the low band.
Range: 20.0 Hz – 1.00 kHz

❸ LOW G

Adjusts the gain of the low band.
Range: -18.0 dB – +18.0 dB

❹ MID Q

Adjusts the band width of the middle band.
Range: 0.50 – 16.00

❺ MID F

Adjusts the center frequency of the middle band.
Range: 20.0 Hz – 20.0 kHz

❻ MID G

Adjusts the gain of the middle band.
Range: -18.0 dB – +18.0 dB

❼ HIGH F

Adjusts the center frequency of the high band.
Range: 500.0 Hz – 20.0 kHz

❽ HIGH G

Adjusts the gain of the high band.
Range: -18.0 dB – +18.0 dB

❾ EQUALIZER On/Off

Turns the equalizer on (lit) and off (unlit).

REV-X

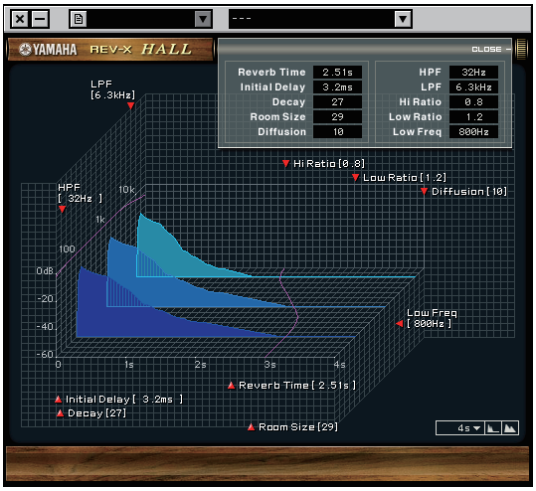
REV-X is a digital reverb platform developed by Yamaha for pro audio applications.

One REV-X effect is included in this unit. Input signals can be sent to the REV-X effect, and the REV-X effect is applied only to the monitor outputs. Three types of REV-X are available: Hall, Room, and Plate. The hardware REV-X equipped with the device and REV-X of the VST Plug-in version have essentially the same parameters. However, the [OUTPUT] and [MIX] parameters are only available in the VST Plug-in version.

When using REV-X on Cubase series programs, you can share the settings between the built-in REV-X and REV-X of the VST Plug-in version as a preset file. When using the built-in REV-X on Cubase series programs, turn on the [Direct Monitoring] setting in the program. Also, when assigning REV-X of the VST Plug-in version to the effect slot on Cubase series programs, select it from the [Reverb] category (in the case of the default settings).

The built-in REV-X is equipped with an “FX Bus” which is used for sending the signal from DAW software to REV-X. For example, to send the recorded audio data to REV-X, you can check the sound with REV-X, which is used for monitoring during the recording.

Screenshot



How to Open the Window

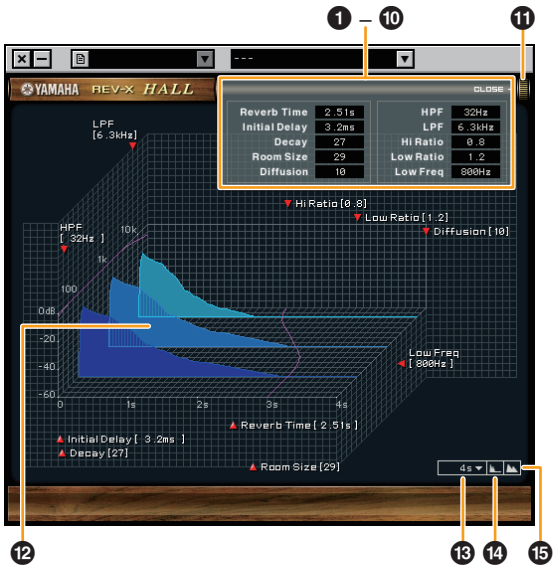
From Dedicated Windows for Cubase Series

- Click “REV-X Edit” (page 17) in the section “Input Settings Window.”
- Click “REV-X Edit” (page 17) in the section “Reverb Routing Window.”

From dspMixFx UR-RT

Click “REV-X Edit” (page 13) in the section “Master Area.”

REV-X



This section uses the Hall type of REV-X as an example.

❶ Reverb Time

Adjusts the reverb time.
This parameter links to Room Size. The adjustable range varies depending on the REV-X type.

REV-X type	Range
Hall	0.103 sec – 31.0 sec
Room	0.152 sec – 45.3 sec
Plate	0.176 sec – 52.0 sec

❷ Initial Delay

Adjusts the time that elapses between the direct, original sound and the initial reflections that follow it
Range: 0.1 msec – 200.0 msec

❸ Decay

Adjusts the characteristic of the envelope from the moment the reverberation starts to the moment it attenuates and stops.
Range: 0 – 63

❹ Room Size

Adjusts the size of the simulated room.
This parameter links to Reverb Time.
Range: 0 – 31

❺ Diffusion

Adjusts the spread of the reverberation.
Range: 0 – 10

❻ HPF

Adjusts the cutoff frequency of the high pass filter.
Range: 20 Hz – 8.0 kHz

❼ LPF

Adjusts the cutoff frequency of the low pass filter.
Range: 1.0 kHz – 20.0 kHz

❽ Hi Ratio

Adjusts the duration of reverberation in the high frequency range by using a ratio relative to the Reverb Time. When you set this parameter to 1, the actual specified Reverb Time is fully applied to the sound. The lower the value, the shorter the duration of reverberation in the high frequency range.
Range: 0.1 – 1.0

❾ Low Ratio

Adjusts the duration of reverberation in the low frequency range by using a ratio relative to the Reverb Time. When you set this parameter to 1, the actual specified Reverb Time is fully applied to the sound.
The lower the value, the shorter the duration of reverberation in the low frequency range.
Range: 0.1 – 1.4

❿ Low Freq

Adjusts the frequency of the Low Ratio.
Range: 22.0 Hz – 18.0 kHz

⓫ OPEN/CLOSE

Opens and closes the window for adjusting the reverb settings.

⓬ Graph

Indicates the characteristics of reverberation. The vertical axis indicates the signal level, the horizontal axis indicates the time, and the Z-axis indicates the frequency. You can adjust the characteristics of reverberation by dragging the handles in the graph.

⓭ Time Axis Setting

Select the display range of the time (horizontal axis) on the graph.
Display range: 500 msec – 50 sec

⓮ Zoom Out

Zooms out the display range of the time (horizontal axis) on the graph.

⓯ Zoom In

Zooms in the display range of the time (horizontal axis) on the graph.

Software operation

- You can reset certain parameters to their default values by holding the [Ctrl]/[command] key while you click on the appropriate knobs, sliders, and faders.
- You can adjust the parameters more finely by holding the [SHIFT] key while you drag on the appropriate knobs, sliders, and faders.

Guitar Amp Classics

Guitar Amp Classics are guitar amp simulations that make extensive use of advanced Yamaha modeling technology. Four amp types with different sonic characteristics are provided.

The Guitar Amp Classics equipped with the device and the Guitar Amp Classics of the VST Plug-in version have the same parameters. When using the Guitar Amp Classics on Cubase series programs, you can share the settings between the built-in Guitar Amp Classics and the Guitar Amp Classics of the VST Plug-in version as a preset file.

When using the built-in Guitar Amp Classics on Cubase series programs, turn on the [Direct Monitoring] setting in the program. Also, when assigning the Guitar Amp Classics of the VST Plug-in version to the effect slot on Cubase series programs, select it from the [Distortion] category (in the case of the default settings).

Note that Guitar Amp Classics cannot be used when the sample rate is set to 176.4 kHz or 192 kHz.

Screenshot

How to Open the Window

From Dedicated Windows for Cubase Series

Select the “Guitar Amp Classics” from the “Effect Type”, then click “Effect Edit” in the section “Input Settings Window” (page 16).

From dspMixFx UR-RT

Select the “Guitar Amp Classics” from the “Effect Type”, then click “Effect Edit” in the section “Channel Area” (page 12).

CLEAN

This amp type is optimized for clean tones, effectively simulating the tight brilliance of transistor amplifiers. The tonal character of this amp model provides an ideal platform for recording with multi-effects. It also features built-in chorus and vibrato effects.

❶ VOLUME

Adjusts the amplifier’s input level.

❷ DISTORTION

Adjusts the depth of distortion produced.

❸ TREBLE/MIDDLE/BASS

These three controls adjusts the amplifier’s tonal response in the high, middle, and low frequency ranges.

❹ PRESENCE

Can be adjusted to emphasize the high frequencies and overtones.

❺ Cho/OFF/Vib

Turns the Chorus or Vibrato effect on or off. Set to [Cho] to turn the Chorus effect on, or to [Vib] to turn the Vibrato effect on.

❻ SPEED/DEPTH

These controls adjust the speed and depth of the Vibrato effect when it is on. The SPEED and DEPTH controls only work with the Vibrato effect, and are disengaged when the Cho/OFF/Vib control, above, is set to “Cho” or “OFF.

❼ BLEND

Adjusts the balance between the direct and effect sound.

❽ OUTPUT

Adjusts the final output level.

CRUNCH

This is the amp type to use when you want lightly overdriven crunch tones. The CRUNCH model simulates the type of vintage tube amplifiers that are favored for blues, rock, soul, R&B, and similar styles.

❶ Normal/Bright

Selects a normal or bright tonal character.
The [Bright] setting emphasizes the high-frequency overtones.

❷ GAIN

Adjusts the input level applied to the preamp stage. Rotate clockwise to increase the amount of overdrive produced.

❸ TREBLE/MIDDLE/BASS

These three controls adjust the amplifier's tonal response in the high, middle, and low frequency ranges.

❹ PRESENCE

Can be adjusted to emphasize the high frequencies and overtones.

❺ OUTPUT

Adjusts the final output level.

DRIVE

The DRIVE amp type provides a selection of distortion sounds that simulate the tonal character of various highgain tube amplifiers. From mildly overdriven crunch to heavy distortion suitable for hard rock, heavy metal, or hardcore styles, this model offers a wide range of sonic capabilities.

❶ AMP TYPE

Six amplifier types are provided. Types 1 and 2 feature relatively mild distortion that allows picking nuances to come through naturally. Types 3 and 4 have more pronounced overtones, resulting in a fat, soft tone. Types 5 and 6 deliver wilder, aggressive distortion with a tight attack. The even-numbered amp types have greater presence and range than the odd-numbered types.

❷ GAIN

Adjusts the input level applied to the preamp stage. Rotate clockwise to increase the amount of distortion produced

❸ MASTER

Adjusts the output level from the preamp stage.

❹ TREBLE/MIDDLE/BASS

These three controls adjust the amplifier's tonal response in the high, middle, and low frequency ranges.

❺ PRESENCE

Can be adjusted to emphasize the high frequencies and overtones.

❻ OUTPUT

Adjusts the final output level

LEAD

The LEAD amp type simulates a high-gain tube amp that is rich in overtones. It is ideally suited to playing lead guitar lines that will project well in an ensemble, but it can also be set up for crisp accompaniment tones as well.

❶ High/Low

Selects the amp output type.
The [High] setting simulates a high-output amp, and allows the creation of more distorted tones.

❷ GAIN

Adjusts the input level applied to the preamp stage. Rotate clockwise to increase the amount of distortion produced.

❸ MASTER

Adjusts the output level from the preamp stage.

❹ TREBLE/MIDDLE/BASS

These three controls adjust the amplifier's tonal response in the high, middle, and low frequency ranges.

❺ PRESENCE

Used to emphasize the high frequencies and overtones.

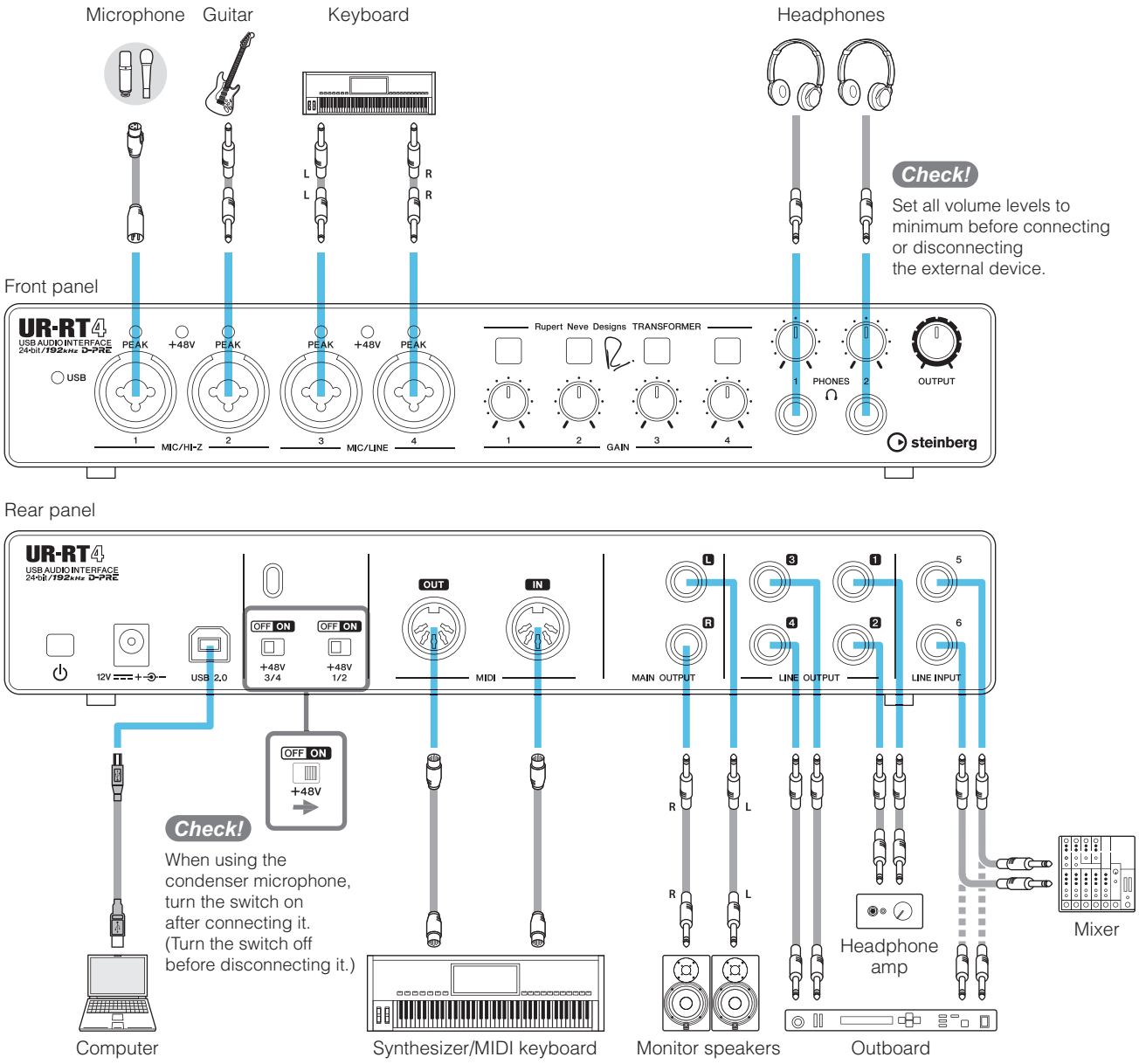
❻ OUTPUT

Adjusts the final output level.

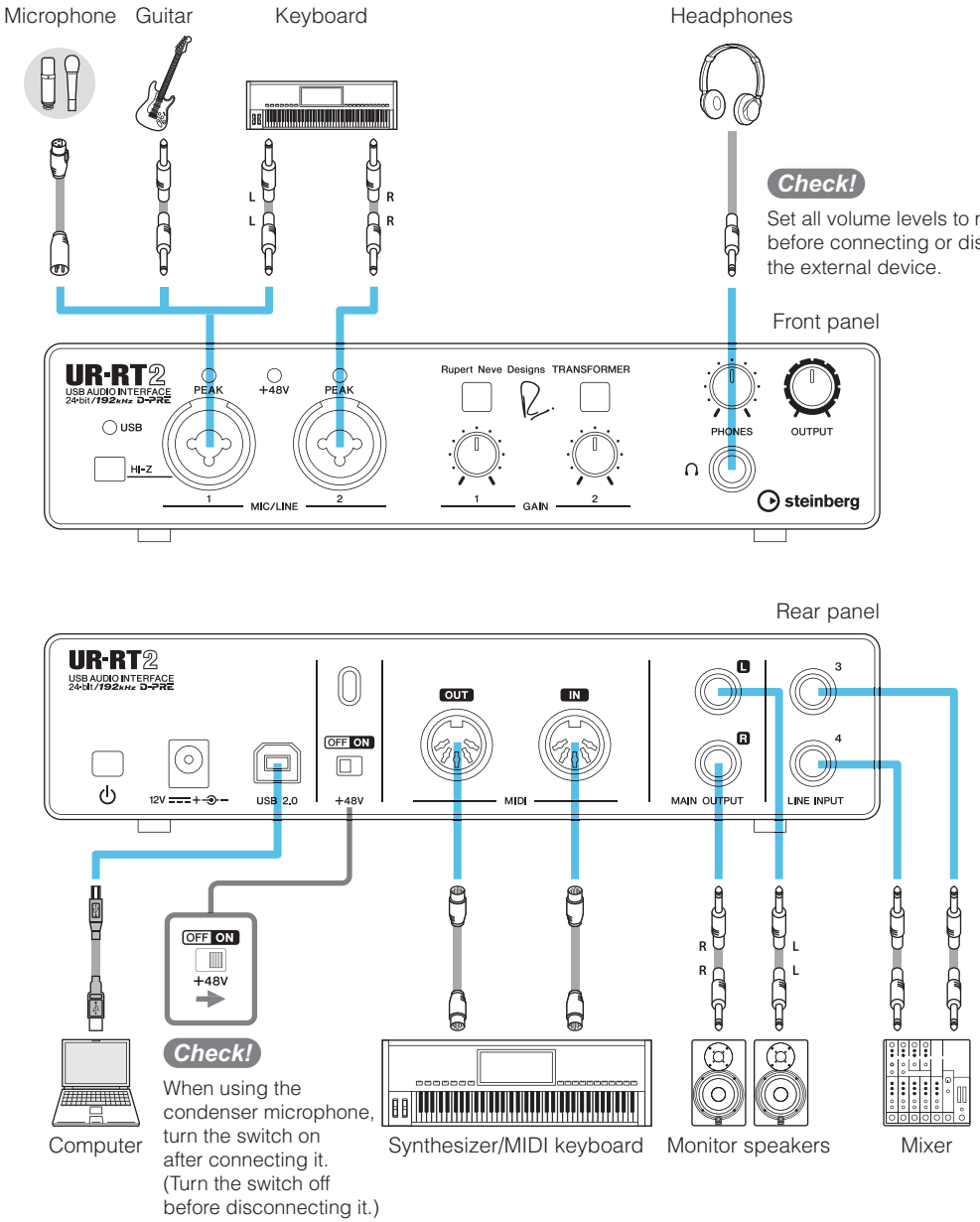
> **Using the GAIN, MASTER, and OUTPUT Controls**
> The tonal character of the DRIVE and LEAD amp types can be adjusted over a wide range via the GAIN, MASTER, and OUTPUT controls. GAIN adjusts the level of the signal applied to the preamp stage, affecting the amount of distortion produced. MASTER adjusts the output level from the preamp stage that is then fed to power amp stage. The GAIN and MASTER control settings have a large effect on the final sound, and the MASTER control may need to be turned up fairly high in order to drive the power stage sufficiently for optimum tone. The OUTPUT control adjusts the final output level from the amp model without affecting the distortion or tone, and is useful for adjusting the guitar's volume without changing any other aspects of the sound.

Using with a Computer

Connection Example UR-RT4



Connection Example UR-RT2



Configuring Audio Driver Settings on the DAW Software

Cubase Series Programs

1. **Make sure that all applications have been closed.**
2. **Make sure that the [⏻] switch has been turned on (▬).**
3. **Double-click the shortcut of Cubase series on the desktop to start Cubase.**
4. **When the [ASIO Driver Setup] window appears while the Cubase series program is launching, confirm that the device is selected, then click [OK].**

The audio driver settings are now complete.

Programs other than Cubase Series

1. **Make sure that all applications have been closed.**
2. **Make sure that the [⏻] switch has been turned on (▬).**
3. **Launch the DAW software.**
4. **Open the audio interface settings window.**
5. **(Windows only) Select the ASIO Driver for the audio driver settings.**
6. **Set the ASIO Driver for Windows and audio interface for Mac as follows**

Windows

Set the [Yamaha Steinberg USB ASIO] to the ASIO Driver settings.

Mac

Set the UR-RT to the audio interface settings.

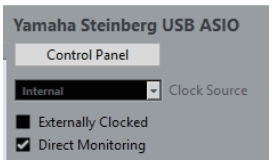
The audio driver settings are now complete.

Recording/Playback

This section explains simple recording operations for using a microphone. Connect a microphone as shown in the connection examples (pages 26, 27). Turn the [+48V] switch on when using a phantom powered condenser microphone.

Cubase Series Programs

1. **Launch the Cubase series DAW.**
   The [steinberg hub] window appears.
2. **Select the project template [Steinberg UR-RT Vocal-Inst Recording 1-C7] in [Recording] on the [steinberg hub] window, then click [Create].**
3. **Turn on Direct Monitoring as follows.**
   [Studio] → [Studio Setup] → [Yamaha Steinberg USB ASIO](Windows) or [Steinberg UR-RT](Mac) → enter checkmark to [Direct Monitoring] → [OK]



4. **Confirm that the [Record Enable] and [Monitor] indicators are turned on (lit) for the audio track.**

5. **While singing into the microphone, adjust the input signal level of the microphone with the [GAIN] knob on the device.**

> **Setting optimum recording levels**
> Adjust the gain knobs so that the [PEAK] indicator flashes briefly at the loudest input volume.

6. **While singing into the microphone, adjust the output signal level of the headphones with the [PHONES] knob on the device.**
7. **Set the Channel Strip settings and REV-X settings on the Input Settings window.**
   Select the Channel Strip Insertion location depending on the desired insert point. The default setting is “Lower” (applied to both the monitor signal and the recording signal). For details on the Insertion location, refer to the “Effect Insertion location” (page 17) in the section “Dedicated Windows for Cubase Series.”

8. **Click [●] to start the recording.**

9. **After finishing the recording, click [■] to stop it.**

10. **Turn [Monitor] off (unlit) for the just recorded audio track.**

11. **Click the Ruler to move the project cursor to the desired point for starting playback.**

12. **Click [►] to check the recorded sound.**

When listening to the sound over monitor speakers, adjust the output signal level by the [OUTPUT] knob on the device.

The recording and playback operations are now complete.

For more detailed instructions on using Cubase series programs, refer to the PDF manual, available from [Help] in the Cubase series menu.

Programs Other Than Cubase Series

1. **Launch your DAW software.**

2. **Open dspMixFx UR-RT.**

For instructions on how to open dspMixFx UR-RT, refer to the section “How to Open the Window” (page 11).

3. **Adjust the input signal level of the microphone with the [GAIN] knob on the device.**

> **Setting optimum recording levels**
> Adjust the gain knobs so that the [PEAK] indicator flashes briefly at the loudest input volume.

4. **While singing into the microphone, adjust the output signal level of the headphones with the [PHONES] knob on the device.**

5. **Set the Channel Strip settings and REV-X settings on dspMixFx UR-RT.**

6. **Start recording on your DAW software.**

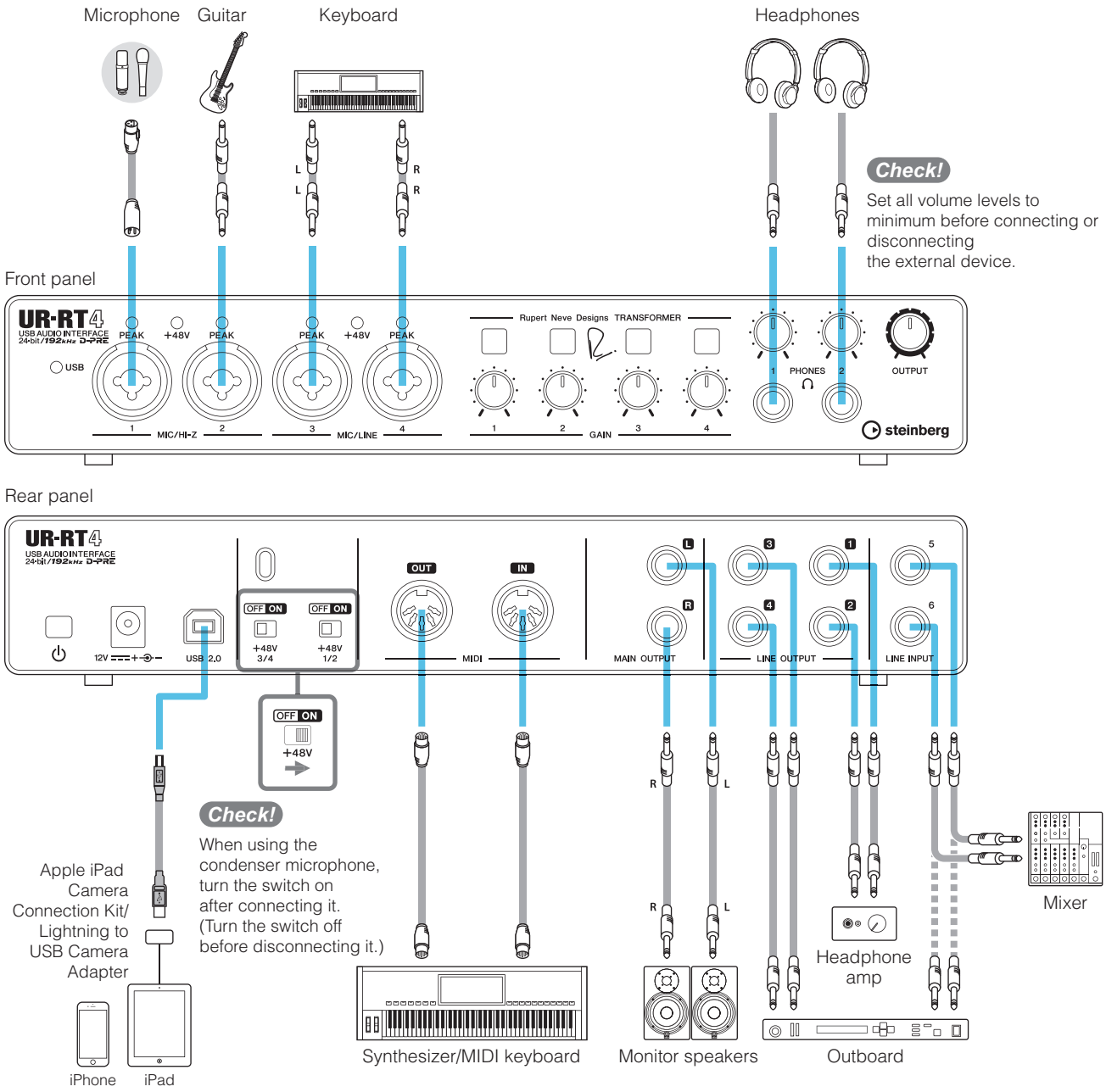
7. **After finishing recording, stop it.**

8. **Playback the newly recorded sound to check it.**

For more detailed instructions on using the DAW software, refer to your particular DAW’s software manual.

Using with an iOS device

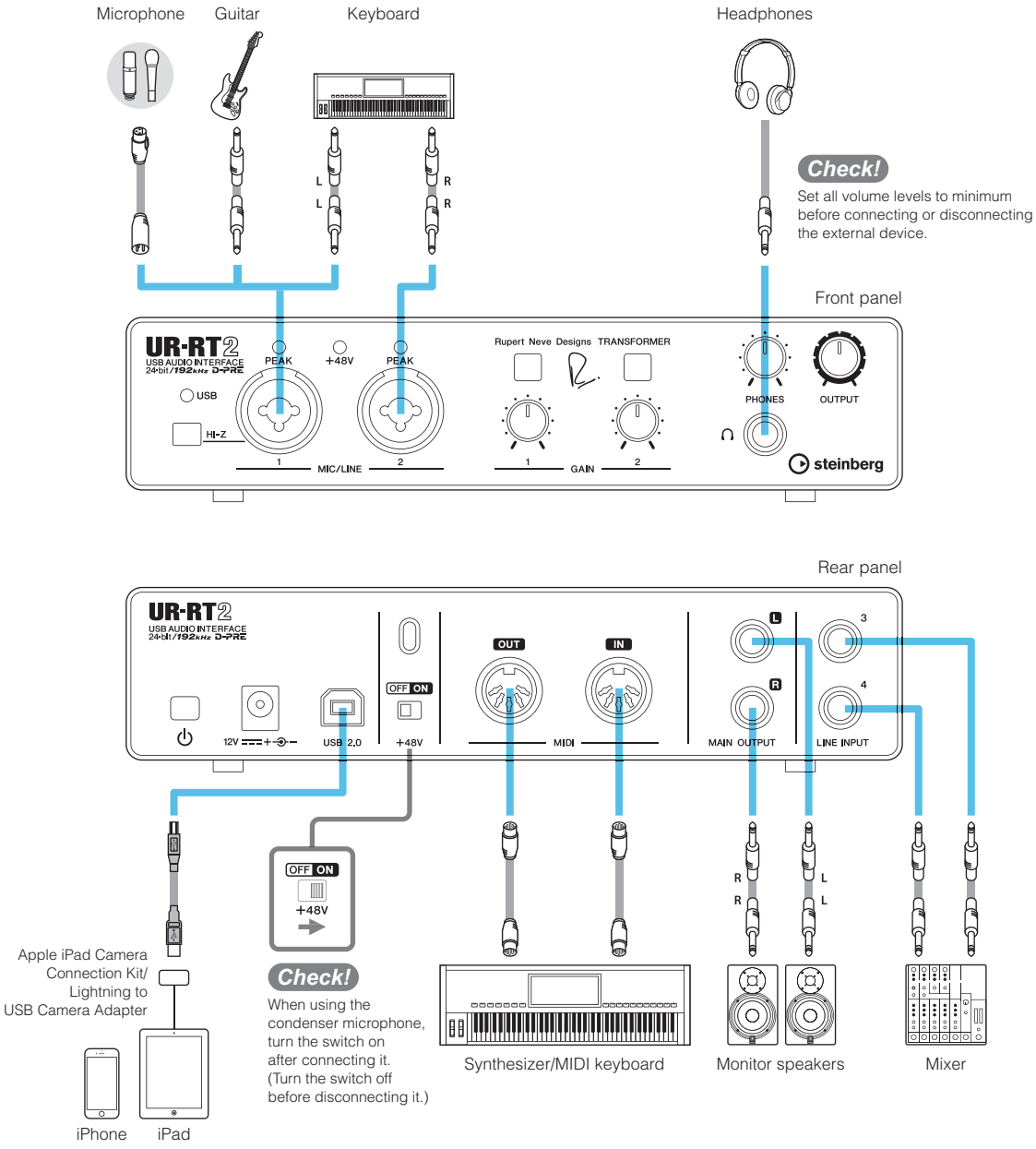
Connection Example UR-RT4



NOTE

- Apple iPad Camera Connection Kit or Lightning to USB Camera Adapter are required when connecting the UR-RT with an iOS device.
- For the latest information on compatible iOS devices, refer to the Steinberg Website below.
  http://www.steinberg.net/

Connection Example UR-RT2



NOTE

- Apple iPad Camera Connection Kit or Lightning to USB Camera Adapter are required when connecting the UR-RT with an iOS device.
- For the latest information on compatible iOS devices, refer to the Steinberg Website below.
  http://www.steinberg.net/

Recording/Playback

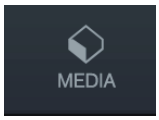
This section covers basic instructions for operating with Cubasis (an iPad app sold by Apple).

NOTE

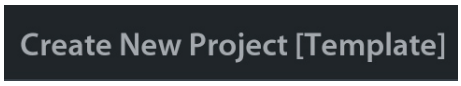
- iOS app may not be supported in your area. Please check with your Yamaha dealer.
- For the latest Cubasis information, see the Steinberg web site below.
  http://www.steinberg.net/

1. Open Cubasis.

2. Tap the [MEDIA] tab on the upper left of the screen.

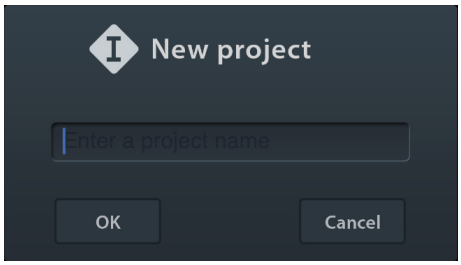


[Create New Project] is shown in the bottom of the screen.



3. Tap the [Create New Project].

4. Enter a project name and tap [OK] in the [New project] window.



5. Tap [+AUDIO] to add an AUDIO track.

6. Tap [▶] on the far left of your screen to show the track menu, with [Audio input] at the top.

7. Tap [⇥] to show the details window and set the input bus for the track by tapping a number.

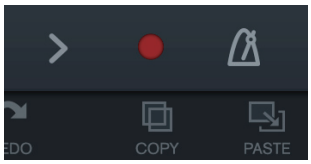
8. Tap [🔊] to turn monitoring on (lit).

9. Adjust the input signal level of the microphone with the [GAIN] knob on the device.

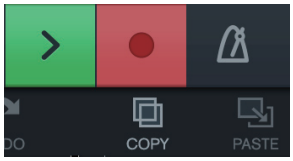
> **Setting optimum recording levels**
> Adjust the gain knobs so that the [PEAK] indicator flashes briefly at the loudest input volume.

10. While singing into the microphone, adjust the output signal level of the headphones with the [PHONES] knob on the device.

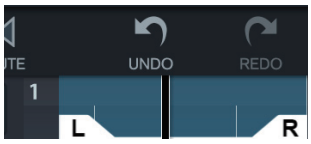
11. Tap [●] to start the recording.



12. Tap [>] to stop the recording.

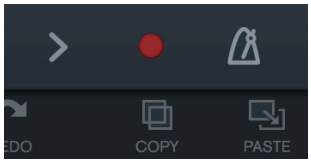


13. Tap and slide on the ruler to move the playback position.



You can also tap |< to return the beginning of the recording.

14. Tap [>] to playback the recorded sound.

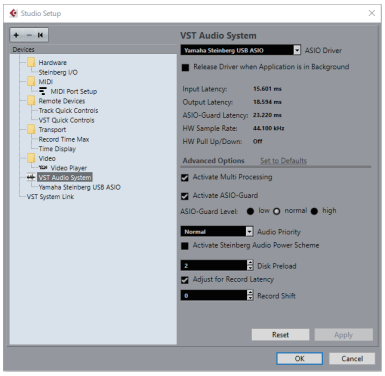
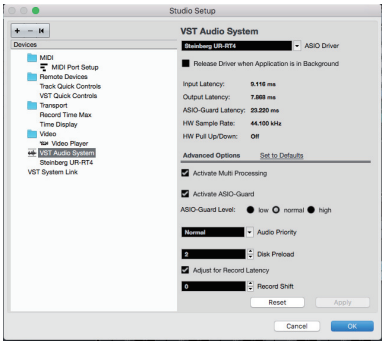


dspMixFx (for iOS devices)

From your iOS devices, you can conveniently control built-in DSP mixer functions and DSP effects by using dspMixFx for iOS devices. For details on this app, see the Steinberg web site below.

http://www.steinberg.net/

Troubleshooting

Power does not turn on. **(The USB indicator is off or flashing continuously, even though the UR-RT is connected to a computer or iOS device.)**	**Has the TOOLS for UR-RT been installed properly?** Refer to the Startup Guide instructions to complete the TOOLS for UR-RT installation.
	Is the AC adaptor connected correctly? The UR-RT is not a bus-powered type device. Refer to the Startup Guide instructions to turn on the [⏻] switch.
	Confirm whether or not a proper USB cable is used. If the USB cable is broken or damaged, replace the USB cable with a new one. Make sure to use a USB cable no longer than 3 meters.
No Sound	**Has TOOLS for UR-RT been installed properly?** Refer to the Startup Guide instructions to complete the TOOLS for UR-RT installation.
	Confirm whether or not a proper USB cable is used. If the USB cable is broken or damaged, replace the USB cable with a new one. Make sure to use a USB cable no longer than 3 meters.
	Are the volume controls of the device set to appropriate levels? Confirm the levels of the [OUTPUT] knob and [PHONES] knob.
	Are the microphones and monitor speakers connected to the device properly? Refer to the section “Connection Examples” (pages 26, 27, 30, 31) to confirm the connection.
	Are the audio driver settings on DAW software set properly? Refer to the section “Configuring the Audio Driver Settings on DAW Software” (page 28) to set it.
	Is the [ASIO Driver] setting on the Cubase series program set properly? From the Cubase series menu, open the [Studio] → [Studio Setup] → [VST Audio System], then confirm that the [Yamaha Steinberg USB ASIO] (Windows) or [Steinberg UR-RT] (Mac) is selected on the [ASIO Driver]. Windows  Mac 

No sound	**Was the power of the device turned on before starting the DAW software?** Before starting the DAW software, connect the device to a computer and turn on the power of the device.
	Is the monitor speaker switch turned on? Confirm that the monitor speaker switch is turned on.
	Is the buffer size set too low? Increase the buffer size compared to the current settings; refer to the section “Yamaha Steinberg USB Driver” (page 9) for instructions.
Unusual sound **(noise, interruption, or distortion)**	**Does your computer satisfy the system requirements?** Confirm the system requirements. For the latest information, see the Steinberg website below. http://www.steinberg.net/
	Are you recording or playing long continuous sections of audio? The audio data processing capabilities of your computer will depend on a number of factors including CPU speed and access to external devices. Reduce the audio tracks and check the sound again.
	Are the microphones properly connected to the device? Connect a microphone with an XLR plug to the device. If you use a phone plug, the volume may be insufficient.
	Is the loopback function set properly? Set Enable Loopback to off when not using the Loopback function. For instructions, refer to the section “Settings Window” (page 18) or “Setup Window” (page 14).

For the latest support information, refer to the Steinberg website below.
http://www.steinberg.net/

Appendix

Limitations on the use of effects

The maximum number of Channel Strip and Guitar Amp Classics iterations which can be used simultaneously are limited to the following. For example, Channel Strip can be used for two mono channels, while Guitar Amp Classics can be used for one mono channel simultaneously.

Channel Strip		Guitar Amp Classics	
Mono	**Stereo**	**Mono**	**Stereo**
4	0	0	-
2	1	0	-
2	0	1	-
0	2	0	-
0	1	1	-

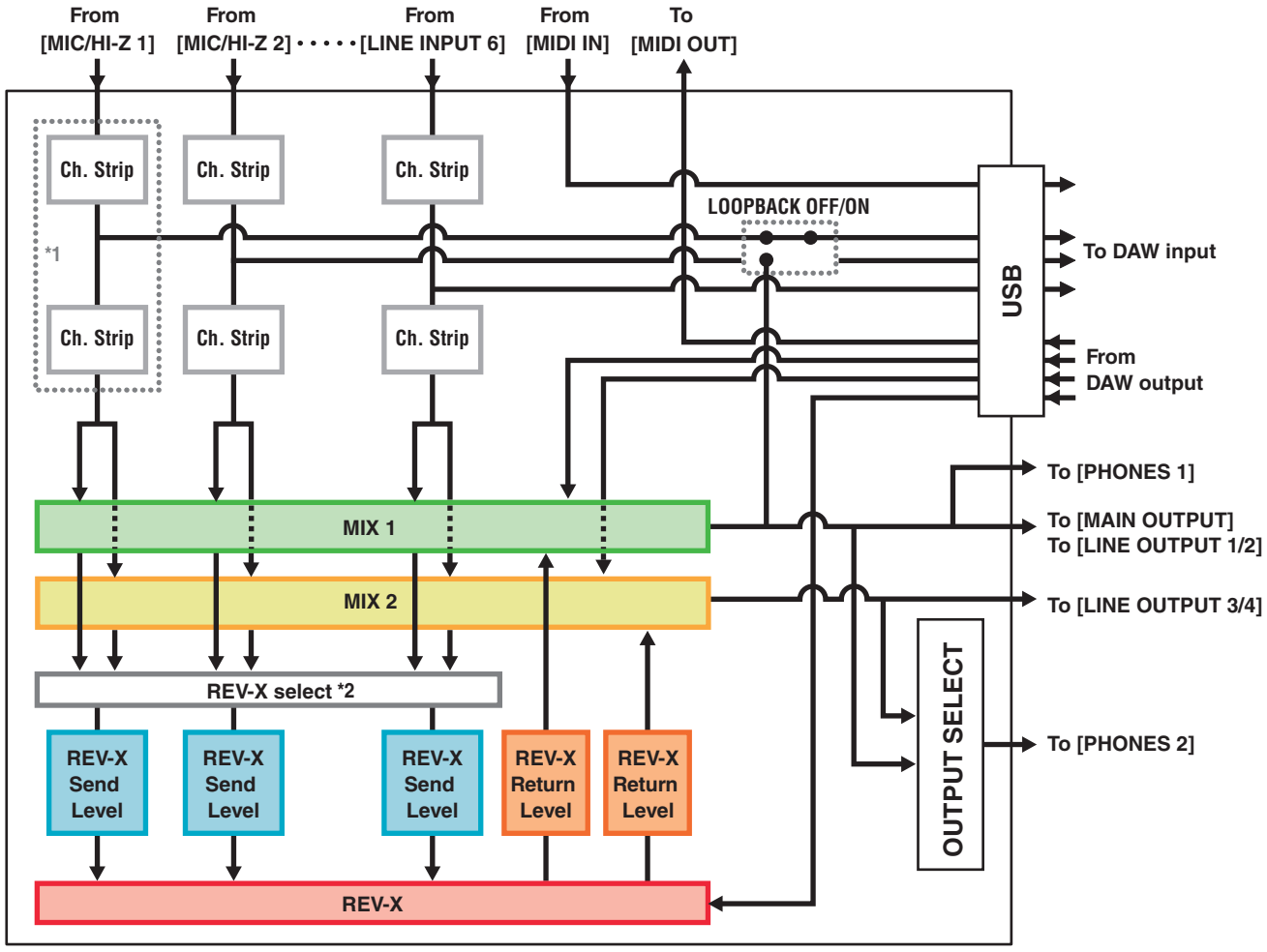
Signal Flows

The following chart indicates the signal flow in the device.

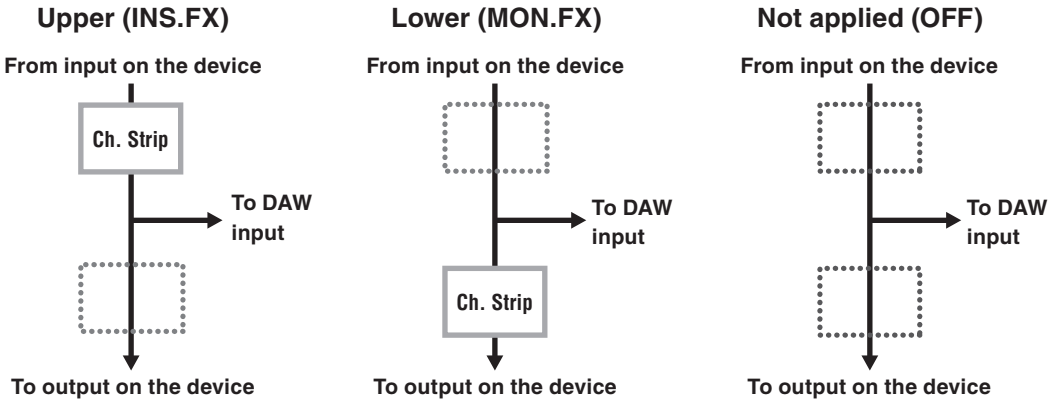
NOTE

- The controllers on the device, such as the [GAIN] knob, [OUTPUT] knob are not included in this chart.
- To configure each parameter, use the “dspMixFx UR-RT” (page 11) or “Dedicated Windows for Cubase Series” (page 16).
- Please note that you cannot use the built-in Channel Strip (Ch. Strip) and Guitar Amp Classics when the sample rate is set to 176.4 kHz or 192 kHz.

UR-RT4

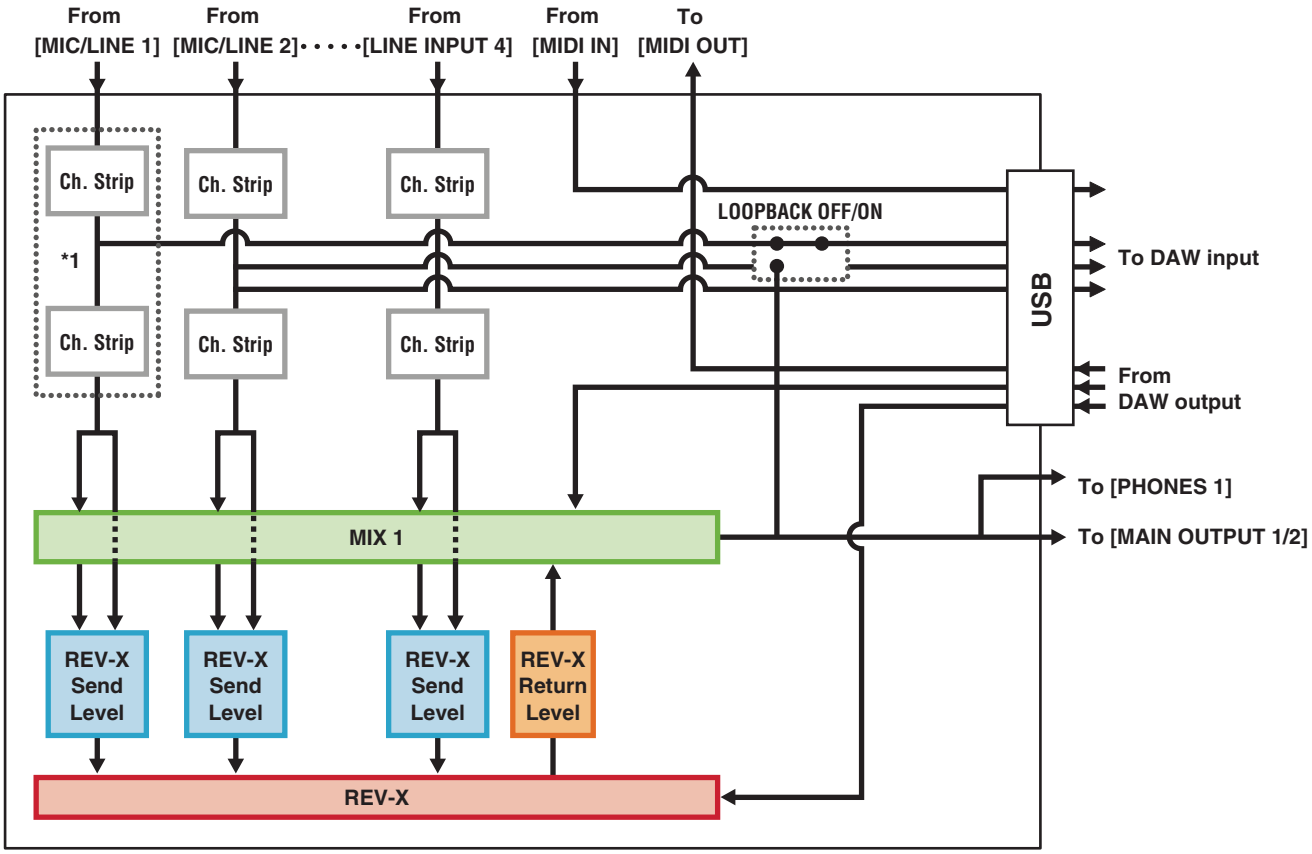


*1 The following chart indicates an effect insertion location.

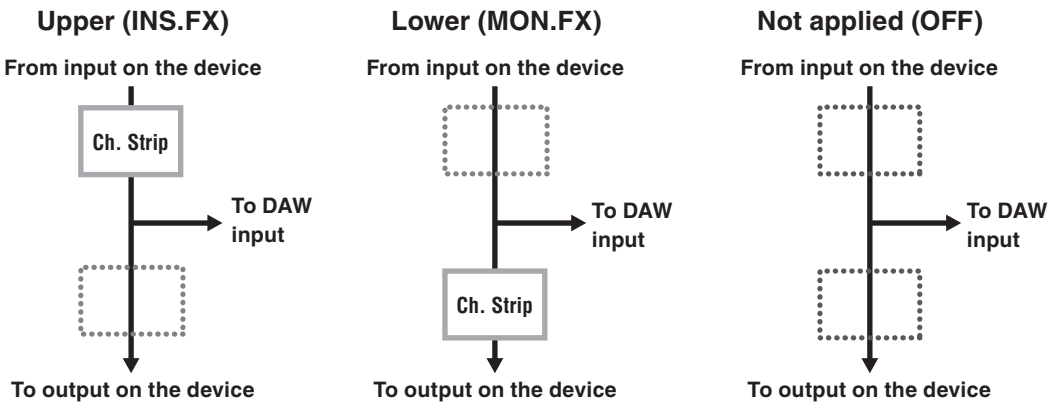


*2 You can turn this on for either MIX 1 or MIX 2.

UR-RT2

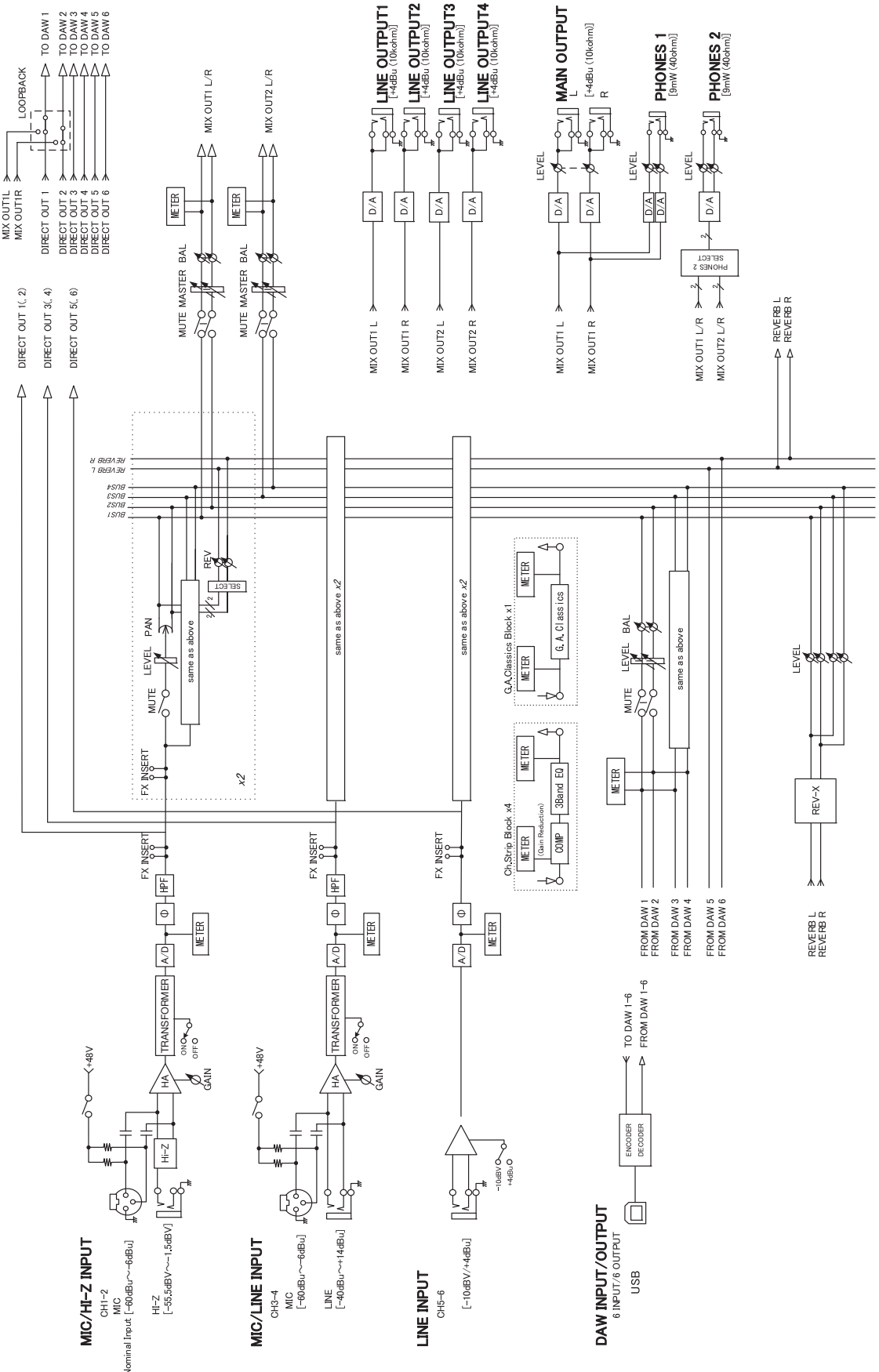


*1 The following chart indicates an effect insertion location.

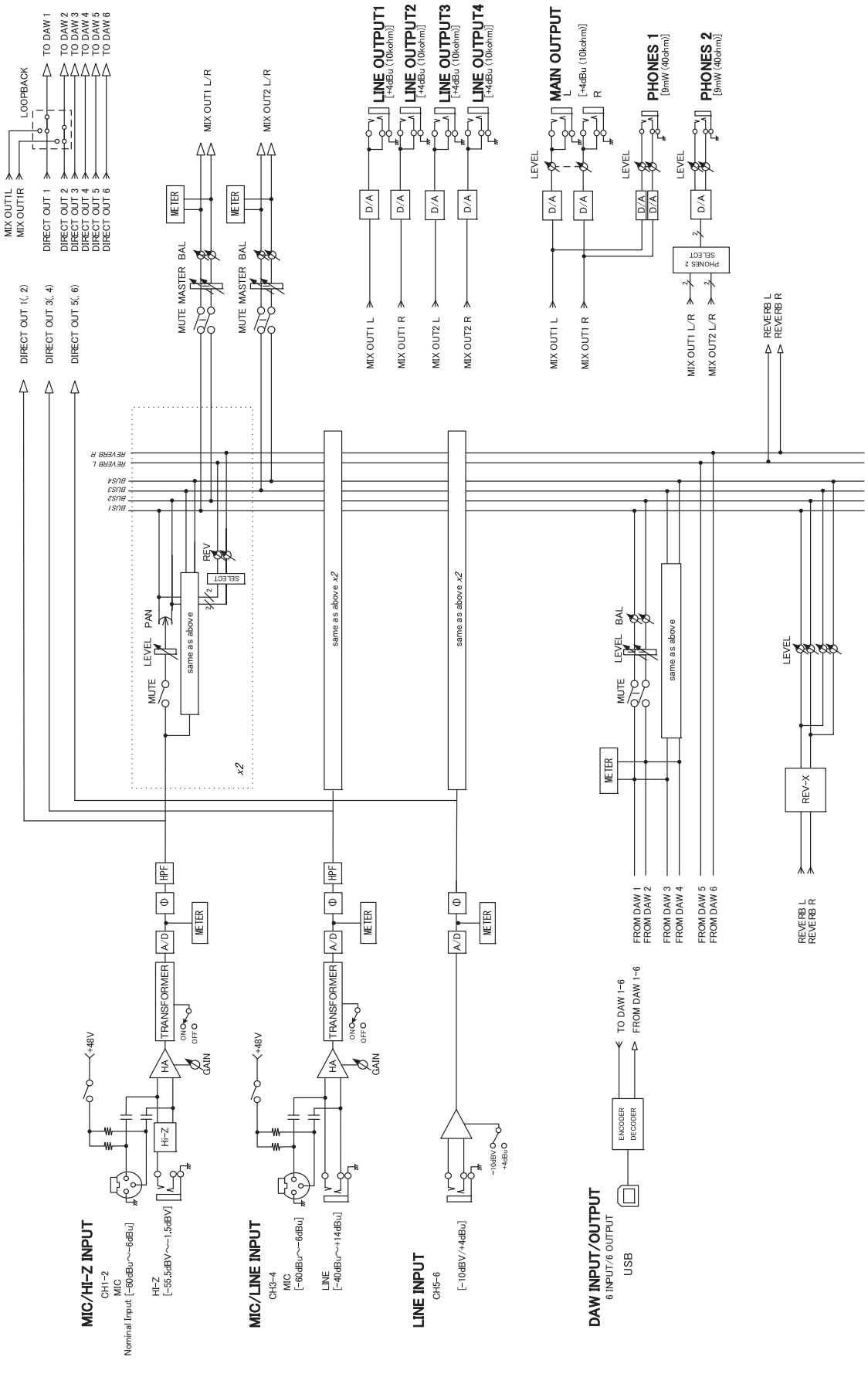


Block Diagrams

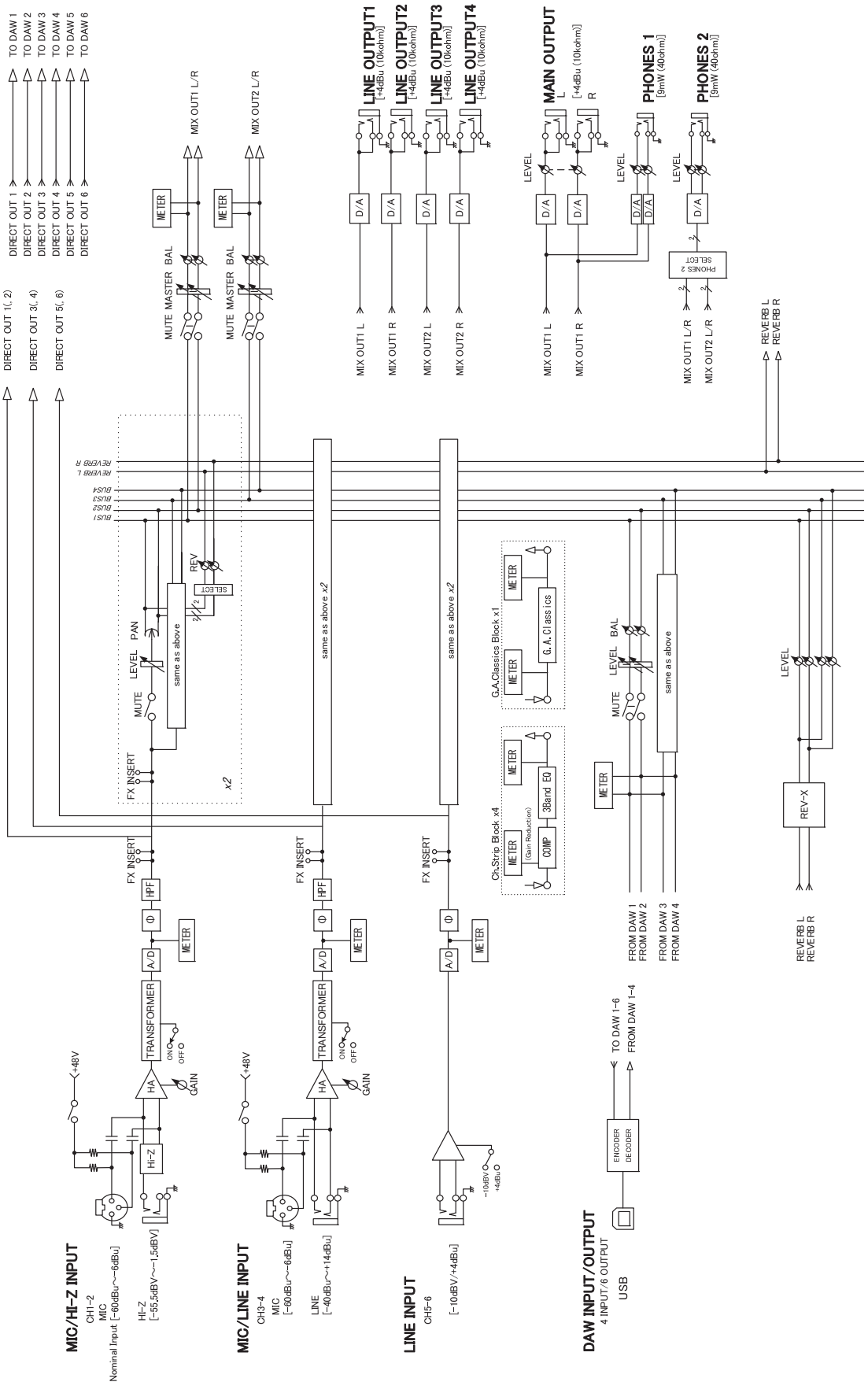
UR-RT4 – 44.1/48/88.2/96 kHz



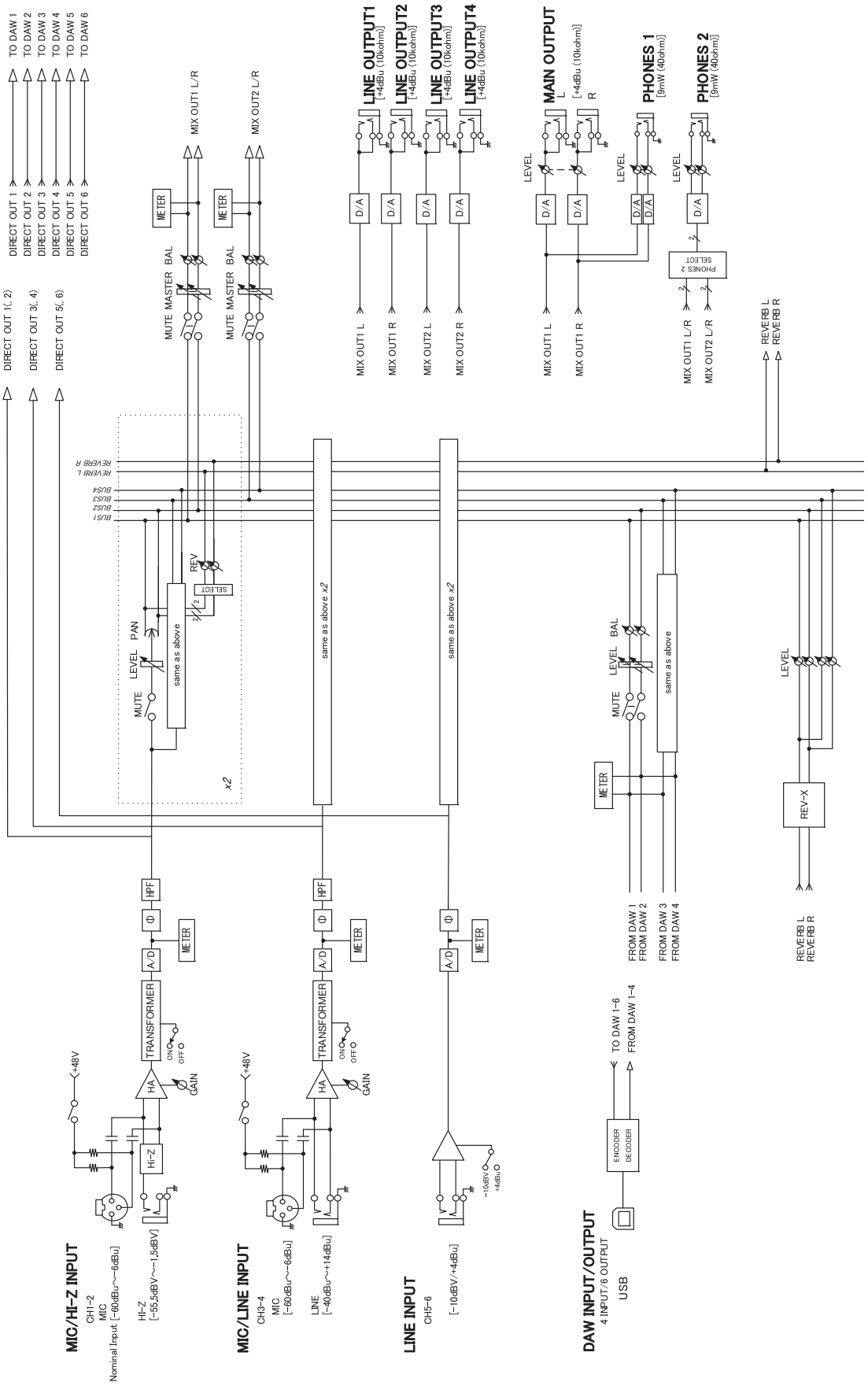
UR-RT4 – 176.4/192 kHz



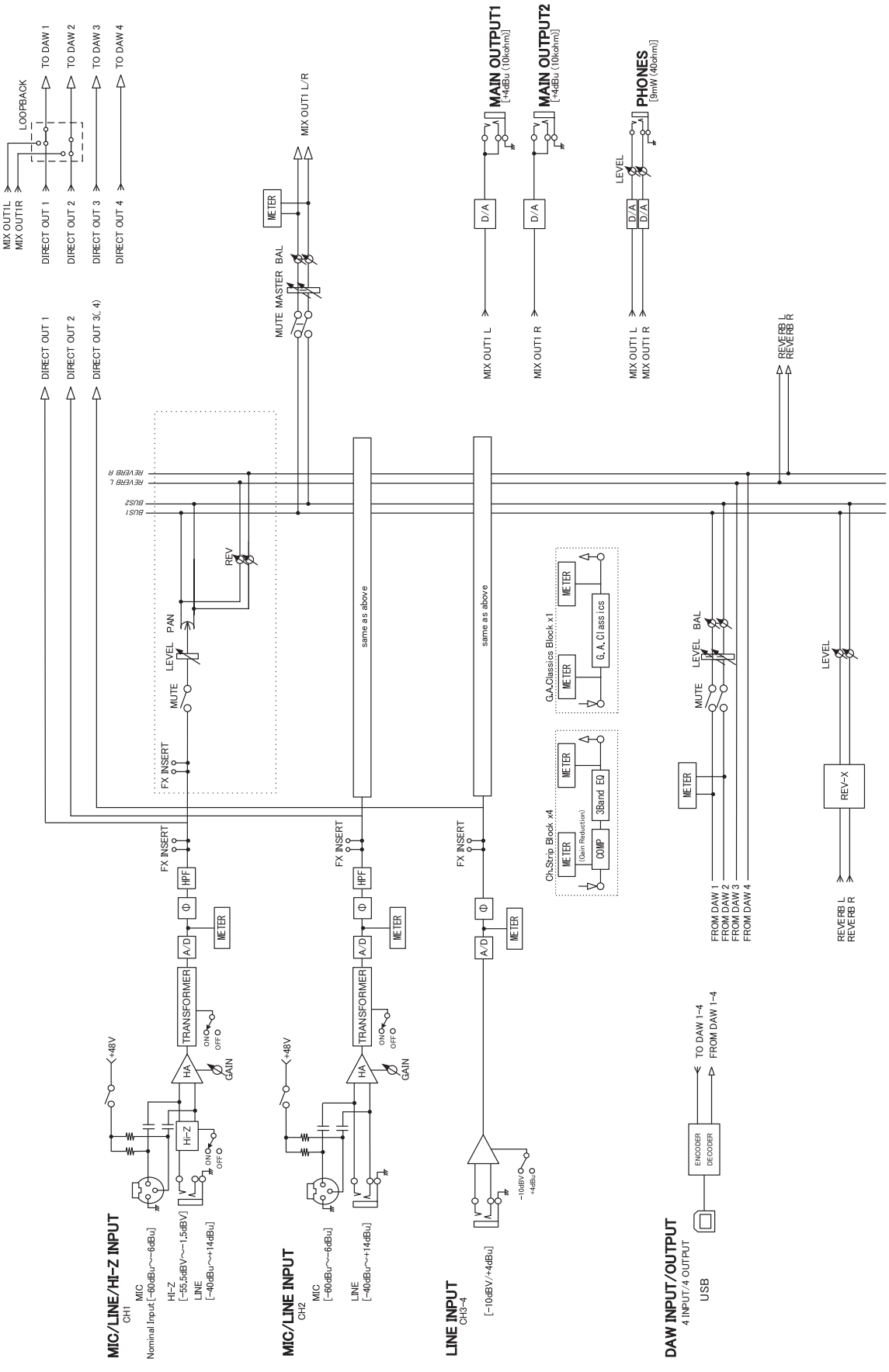
UR-RT4 – 44.1/48/88.2/96 kHz – iOS device



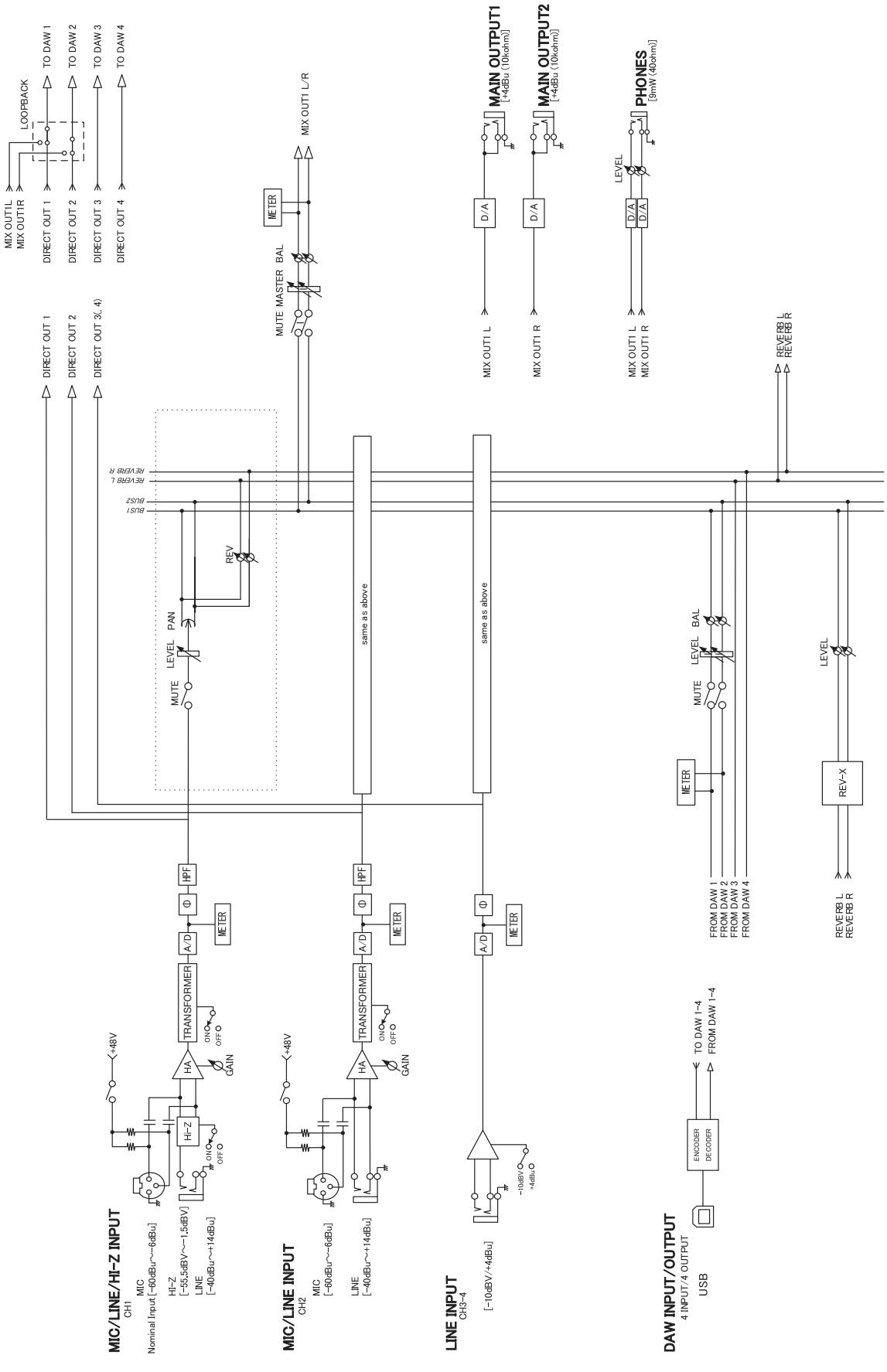
UR-RT4 – 176.4/192 kHz – iOS device



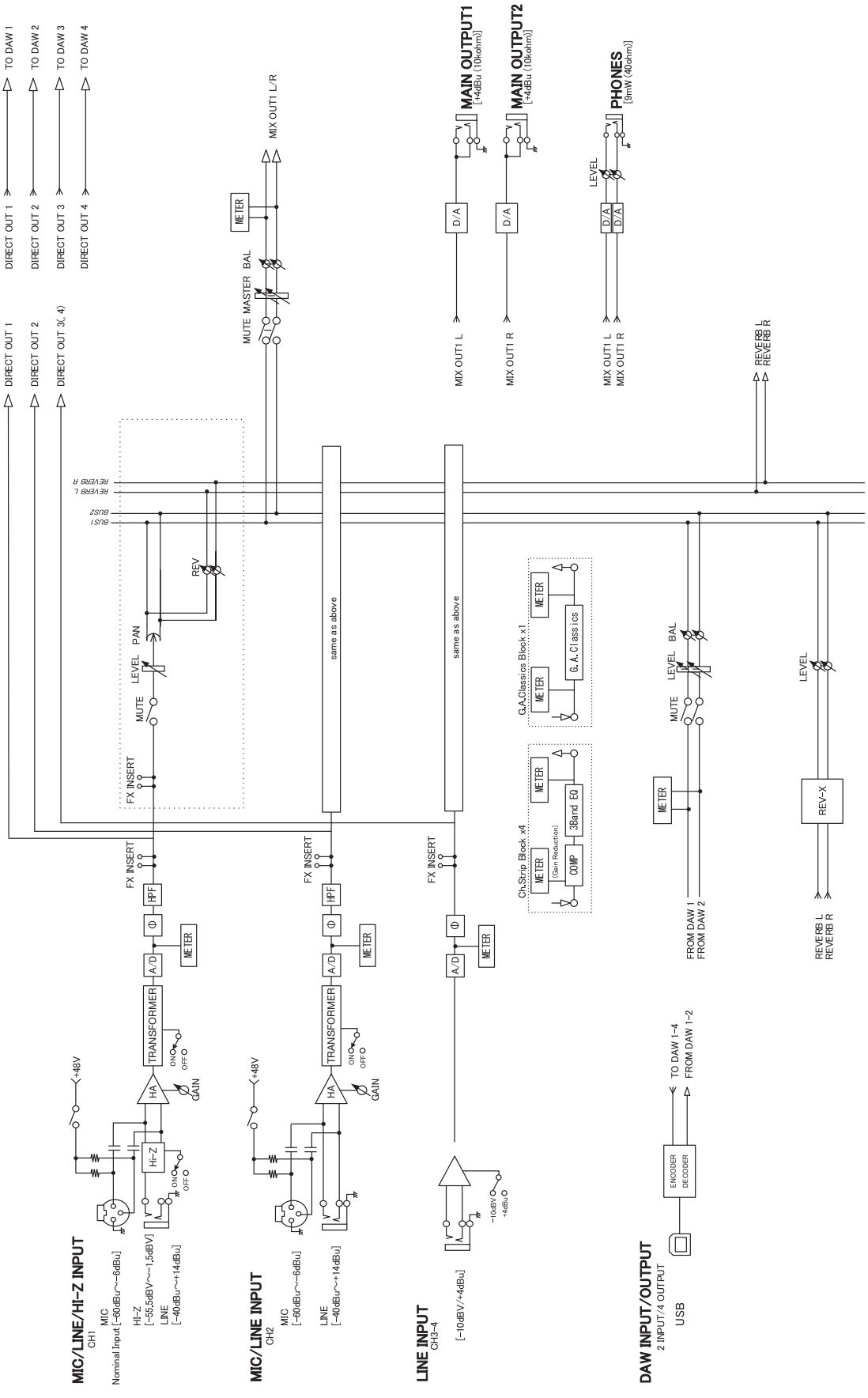
UR-RT2 – 44.1/48/88.2/96 kHz



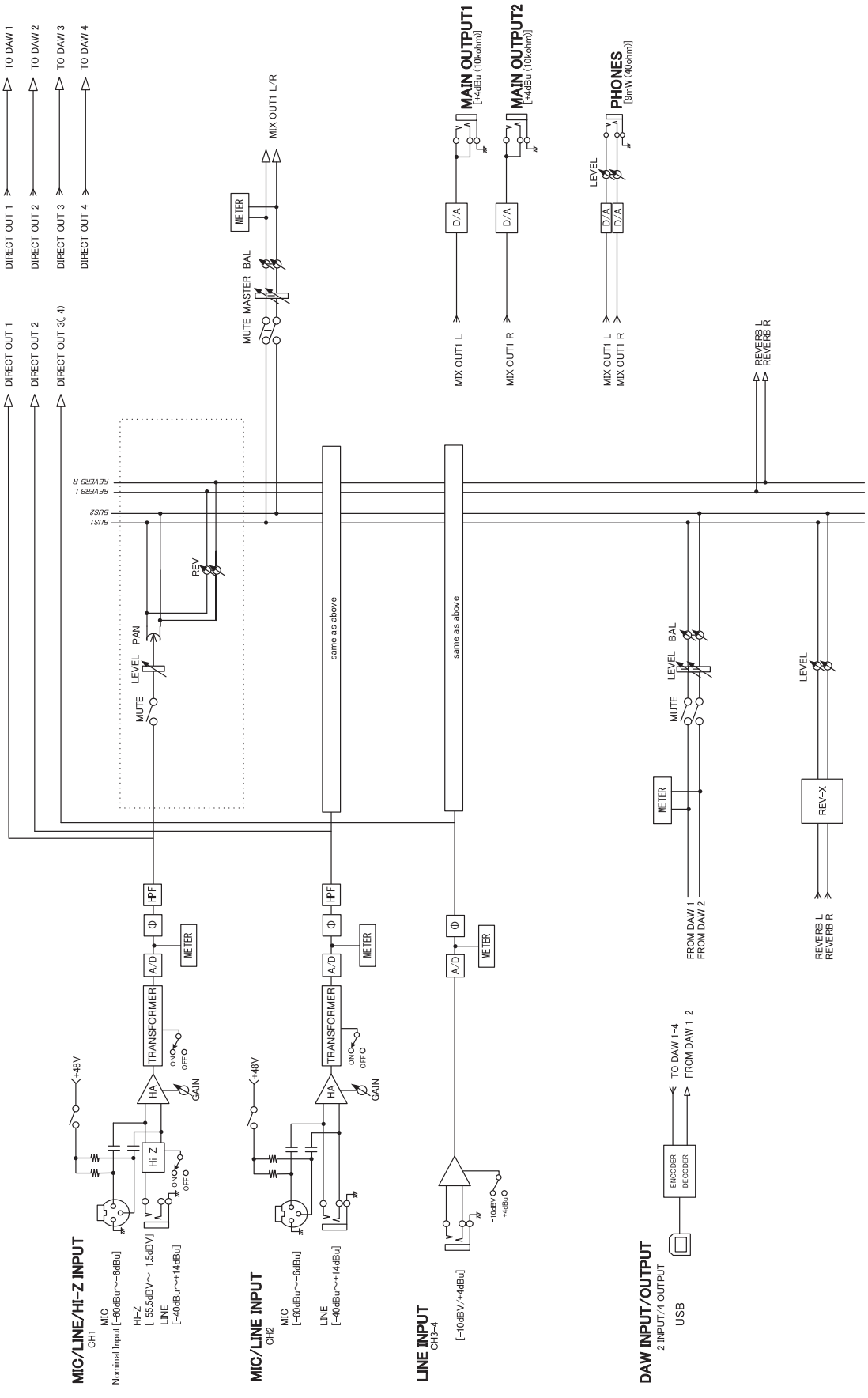
UR-RT2 – 176.4/192 kHz



UR-RT2 – 44.1/48/88.2/96 kHz – iOS device



UR-RT2 – 176.4/192 kHz – iOS device



General Specifications

UR-RT4

Power Requirements	18 W
Dimensions (W × H × D)	267 × 47 × 208 mm
Net Weight	2.4 kg
Operating Free-air Temperature Range	0 – 40 °C
Included Accessories	- AC adaptor (PA-150B or equivalent) - TOOLS for UR-RT4 CD-ROM - Startup Guide (brochure) - CUBASE AI DOWNLOAD INFORMATION (printed) - ESSENTIAL PRODUCT LICENCE INFORMATION (printed) - USB cable

UR-RT2

Power Requirements	18 W
Dimensions (W × H × D)	198 × 47 × 208 mm
Net Weight	1.7 kg
Operating Free-air Temperature Range	0 – 40 °C
Included Accessories	- AC adaptor (PA-150B or equivalent) - TOOLS for UR-RT2 CD-ROM - Startup Guide (brochure) - CUBASE AI DOWNLOAD INFORMATION (printed) - ESSENTIAL PRODUCT LICENCE INFORMATION (printed) - USB cable

The contents of this manual apply to the latest specifications as of the publishing date.
To obtain the latest manual, access the Steinberg website then download the manual file.

Technical Specifications

UR-RT4

MIC INPUT 1-4 (balanced)*	
Frequency Response	+0.1/-0.3 dB, 20 Hz to 22 kHz
Dynamic Range	101 dB, A-Weighted
THD+N	0.0035 %, 1 kHz, -3 dBFS, 22 Hz/22 kHz BPF
Maximum Input Level	+4 dBu
Input Impedance	4 kΩ
Gain Range	+6 dB – +60 dB
HI-Z INPUT 1/2 (unbalanced)	
Maximum Input Level	+8.5 dBV
Input Impedance	1 MΩ
Gain Range	-0.7 dB – +53.3 dB
LINE INPUT 3/4 (balanced)	
Maximum Input Level	+24 dBu
Input Impedance	20 kΩ
Gain Range	-14 dB – +40 dB
LINE INPUT 5/6 (balanced/unbalanced)	
Frequency Response	+0.1/-0.1 dB, 20 Hz to 22 kHz
Dynamic Range	102 dB, A-Weighted
THD+N	0.0025 %, 1 kHz, -3 dBFS, 22 Hz/22 kHz BPF
Maximum Input Level	+22 dBu (+4 dBu input), +2.1 dBV (-10 dBV input)
Input Impedance	30 kΩ (+4 dBu input) / 20 kΩ (-10 dBV input)
Gain Selection	+4 dBu or -10 dBV input Switchable
LINE OUTPUT 1-4 (balanced/unbalanced)	
Frequency Response	+0.1/-0.1 dB, 20 Hz to 22 kHz
Dynamic Range	114 dB, A-Weighted
THD+N	0.0015 %, 1 kHz, -3 dBFS, 22 Hz/22 kHz BPF
Maximum Output Level	+16 dBu
Output Impedance	75 Ω
MAIN OUTPUT (balanced/unbalanced)	
Frequency Response	+0.1/-0.1 dB, 20 Hz to 22 kHz
Dynamic Range	114 dB, A-Weighted
THD+N	0.0015 %, 1 kHz, -3 dBFS, 22 Hz/22 kHz BPF
Maximum Output Level	+16 dBu
Output Impedance	75 Ω
PHONES 1/2	
Maximum Output Level	100 mW+ 100 mW, 40 Ω
USB	
Specification	USB2.0, 24-bit, 44.1 kHz/48 kHz/88.2 kHz/96 kHz/176.4 kHz/192 kHz
XLR INPUT	
Polarity	 1: Ground, 2: Hot (+), 3: Cold (-)

*[TRANSFORMER] switch OFF

UR-RT2

MIC INPUT 1/2 (balanced)*	
Frequency Response	+0.1/-0.3 dB, 20 Hz to 22 kHz
Dynamic Range	101 dB, A-Weighted
THD+N	0.0035 %, 1 kHz, -3 dBFS, 22 Hz/22 kHz BPF
Maximum Input Level	+4 dBu
Input Impedance	4 kΩ
Gain Range	+6 dB – +60 dB
HI-Z INPUT (unbalanced)	
Maximum Input Level	+8.5 dBV
Input Impedance	1 MΩ
Gain Range	- 0.7 dB – +53.3 dB
LINE INPUT 1/2 (balanced)	
Maximum Input Level	+24 dBu
Input Impedance	20 kΩ
Gain Range	-14 dB – +40 dB
LINE INPUT 3/4 (balanced/unbalanced)	
Frequency Response	+0.1/-0.1 dB, 20 Hz to 22 kHz
Dynamic Range	102 dB, A-Weighted
THD+N	0.0025 %, 1 kHz, -3 dBFS, 22 Hz/22 kHz BPF
Maximum Input Level	+22 dBu (+4 dBu input), +2.1 dBV (-10 dBV input)
Input Impedance	30 kOhm (+4dBu input), 20 k Ohm (-10 dBV input)
Gain Selection	+4dBu or -10dBV input Switchable
MAIN OUTPUT L/R (balanced/unbalanced)	
Frequency Response	+0.1/-0.1 dB, 20 Hz to 22 kHz
Dynamic Range	114 dB, A-Weighted
THD+N	0.0015 %, 1 kHz, -3 dBFS, 22 Hz/22 kHz BPF
Maximum Output Level	+16 dBu
Output Impedance	75 Ω
PHONES	
Maximum Output Level	100 mW + 100 mW, 40 Ω
USB	
Specification	USB2.0, 24-bit, 44.1 kHz/48 kHz/88.2 kHz/96 kHz/176.4 kHz/192 kHz
XLR INPUT	
Polarity	 1: Ground, 2: Hot (+), 3: Cold (-)

*[TRANSFORMER] switch OFF

Uninstalling TOOLS for UR-RT

To uninstall the software, you must remove the following software one by one.

- Yamaha Steinberg USB Driver
- Steinberg UR-RT Applications (Steinberg UR-RT4 Applications or Steinberg UR-RT2 Applications)
- Basic FX Suite

Follow the steps below to uninstall TOOLS for UR-RT.

Windows

1. Disconnect all USB devices other than the mouse and keyboard from the computer.

2. Start the computer and log on to the Administrator account.

Exit any open applications and close all open windows.

3. Open the window for the uninstall operation as follows.

[Control Panel] → [Uninstall a Program] to call up the [Uninstall or change a program] panel.

4. Select the software to be uninstalled from the list.

- Yamaha Steinberg USB Driver
- Steinberg UR-RT Applications
- Basic FX Suite

5. Click the [Uninstall] / [Uninstall /Change].

If the [User Account Control] window appears, click [Continue] or [Yes].

6. Follow the on-screen instructions to remove the software.

Repeat steps 4 through 6 to uninstall the remaining software you have not selected.

Uninstalling TOOLS for UR-RT is now complete.

Mac

1. Disconnect all USB devices other than the mouse and keyboard from the computer.

2. Start the computer and log in to the Administrator account.

Exit any open applications and close all open windows.

3. Insert the TOOLS for UR-RT CD-ROM into the CD-ROM drive.

4. Open the CD-ROM then double click the following files.

- Uninstall Yamaha Steinberg USB Driver
- Uninstall Steinberg UR-RT Applications
- Uninstall Basic FX Suite

5. Click [Run] when the "Welcome to the ***uninstaller." message appears.

The characters *** represent the software name.

After that, follow the onscreen instructions to uninstall the software.

6. Click [Restart] or [Close] when the "Uninstallation completed." message appears.

7. When the message prompting you to restart your computer appears, click [Restart].

Repeat steps 4 through 7 to uninstall the remaining software you have not selected.

Uninstalling TOOLS for UR-RT is now complete.

Steinberg Website
http://www.steinberg.net/

Manual Development Group

Published 02/2018 MW-A0

steinberg