

SONY®

360 Virtual Mixing Environment

Operating Instructions



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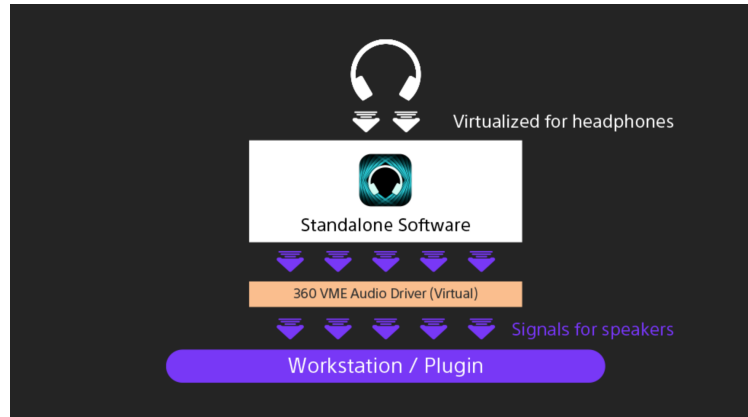
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Features

The 360 Virtual Mixing Environment is a 3D audio technology that accurately reproduces the sound field environment of a reference studio for sound production, using headphones, and is the name of this software. (The software is referred to as either the “360VME software” or “this software” for the rest of this document.)

By using this software in conjunction with DAWs and plugins, sound production using the above-mentioned technology becomes possible.



Preparation

Setting the 360VME software (macOS)

To install the 360VME software (macOS)

Install this software on your computer (macOS).
The supported OS is macOS version 10.15.7 and later.

- 1** Download the installer for this software, provided by the studio where the 360VME Profile was measured, to your computer.
- 2** Launch the downloaded installer.
- 3** When the installation screen appears, select [Continue].
- 4** Check [END USER LICENCE AGREEMENT], select [Continue], and then select [Agree].
- 5** Follow the on-screen instructions to complete the installation.

Note

The file path for the installation destination and the file name cannot include 2-byte characters.

To connect to DAW (macOS)

Connect this software to your DAW.
The following explains the setup method using Pro Tools (macOS version).

When using 360 WalkMix Creator™ (for 360 Reality Audio)

- 1** Launch Pro Tools and make the settings.
 - ① Open a session for 360 Reality Audio production created using the 360 WalkMix Creator plugin.
 - ② From the [Setup] menu, select [Playback Engine] and set any device other than "360VME Audio Driver 16ch" as "Playback Engine."
- 2** Launch 360 WalkMix Creator and make the settings.
 - ① Click the gear icon in the lower right corner of the 360 WalkMix Creator plugin screen.
The settings screen opens.
 - ② In the [Devices] tab of the sidebar, make the settings as follows:
 - Output type: CoreAudio
 - Output device: 360VME Audio Driver 16ch
 - Output sample rate: 48000
 - Output buffer size: Any size (1024 or 2048 is recommended)
 - ③ When headphone monitoring in the 360 WalkMix Creator plug-in is turned on, turn it off by clicking the headphone icon in the lower left corner of the screen.
- 3** Launch this software and open the [Profile] tab.

Load any 360VME Profile (.vme file). For details, see "[Profile] tab" (page 11).

4 Open the [Settings] tab of this software.

① Click [Audio Settings] to open the “Audio Settings” screen and make the settings as follows:

- Output: Audio driver capable of outputting to the headphones you are using*
- Input: 360VME Audio Driver 16ch
- Sample rate: 48000 Hz
- Audio buffer size: Any size (1024 or 2048 is recommended)

* If using the Output Speaker function, set also an audio driver capable of outputting to the speaker. For details of the Output Speaker function, see ““Output Speaker” checkbox” (page 18).

② From the output channels available on the audio driver set as “Output” in step 4-①, select the checkboxes for the channels that this software will use as output destinations.

For each of the selected output destination channels, checkboxes will be displayed in “Headphone Output Channels” on the [Settings] tab screen.

③ Select the channels you want to use for headphone output from the checkboxes displayed in “Headphone Output Channels” on the [Settings] tab screen.

5 Play the session opened in step 1 with Pro Tools and check if the input signal is being received in this software.

You can check the input signal on the [Input Monitor] tab or the [Input Level] tab.

If the input level lamp for the set channel ([Input Monitor] tab) or the input level meter ([Input Level] tab) is lit, the connection is successful.

When using multi-channel tracks without an external renderer

1 Launch Pro Tools and make the settings.

From the [Setup] menu, select [Playback Engine] and set “360VME Audio Driver 16ch” as “Playback Engine.”

2 Launch this software and open the [Profile] tab.

Load any 360VME Profile (.vme file). For details, see “[Profile] tab” (page 11).

3 Open the [Settings] tab of this software.

① Click [Audio Settings] to open the “Audio Settings” screen and make the settings as follows:

- Output: Audio driver capable of outputting to the headphones you are using*
- Input: 360VME Audio Driver 16ch
- Sample rate: 48000 Hz
- Audio buffer size: Any size (1024 or 2048 is recommended)

* If using the Output Speaker function, set also an audio driver capable of outputting to the speaker. For details of the Output Speaker function, see ““Output Speaker” checkbox” (page 18).

② From the output channels available on the audio driver set as “Output” in step 3-①, select the checkboxes for the channels that this software will use as output destinations.

For each of the selected output destination channels, checkboxes will be displayed in “Headphone Output Channels” on the [Settings] tab screen.

③ Select the channels you want to use for headphone output from the checkboxes displayed in “Headphone Output Channels” on the [Settings] tab screen.

4 Play the session opened in step 1 with Pro Tools and check if the input signal is being received in this software.

You can check the input signal on the [Input Monitor] tab or the [Input Level] tab.

If the input level lamp for the set channel ([Input Monitor] tab) or the input level meter ([Input Level] tab) is lit, the connection is successful.

Setting the 360VME software (Windows)

To install the 360VME software (Windows)

Install this software on your computer (Windows).
The supported OS is Windows 10 and later.

- 1** Download the installer for this software, provided by the studio where the 360VME Profile was measured, to your computer.
- 2** Launch the downloaded installer.
- 3** When the installation screen appears, select [Continue].
- 4** Check [Read License], select [Agree], and then select [Continue].
- 5** Follow the on-screen instructions to complete the installation.

Note

The file path for the installation destination and the file name cannot include 2-byte characters.

To connect to DAW (Windows)

Connect this software to your DAW.
The following explains the setup method using Pro Tools (Windows version).

When using 360 WalkMix Creator (for 360 Reality Audio)

1 Launch Pro Tools and make the settings.

- ① Open a session for 360 Reality Audio production created using the 360 WalkMix Creator plugin.
- ② From the [Setup] menu, select [Playback Engine] and set any device other than "360VME ASIO Driver" or "360VME Audio Driver 16ch" as "Playback Engine."

2 Launch 360 WalkMix Creator and make the settings.

- ① Click the gear icon in the lower right corner of the 360 WalkMix Creator plugin screen.
The settings screen opens.
- ② In the [Devices] tab of the sidebar, make the settings as follows:

When using 360VME ASIO Driver

- Output type: ASIO
- Output device: 360VME ASIO Output Driver

When using 360VME Audio Driver

- Output type: Windows Audio
- Output device: 360VME Audio Driver 16ch
- Output sample rate: 48000
- Output buffer size: Any size (1024 or 2048 is recommended)

- ③ If you have selected 360VME ASIO Driver in step 2-②, click [Open device settings panel] to open the "360VME ASIO Settings" screen, and make the settings as follows:
 - Buffer Size: Any size (1024 or 2048 is recommended)
 - Sampling Rate: 48000 Hz
 - Sample Format: Any format*

* Set according to the project settings of your DAW.

- ④ When headphone monitoring in the 360 WalkMix Creator plug-in is turned on, turn it off by clicking the headphone icon in the lower left corner of the screen.

3 Launch this software and open the [Profile] tab.

Load any 360VME Profile (.vme file). For details, see “[Profile] tab” (page 11).

4 Open the [Settings] tab of this software.

- ① Click [Audio Settings] to open the “Audio Settings” screen and make the settings as follows:

When using 360VME ASIO Driver

- Output audio device type: Any output device*¹
- Output: Audio driver capable of outputting to the headphones you are using*²
- Output audio buffer size: Any size (1024 or 2048 is recommended)
- Input audio device type: ASIO
- Input: 360VME ASIO Input Driver
- Input audio buffer size: Buffer size set in step 2-③ (1024 or 2048 is recommended)
- Sample rate: 48000 Hz

When using 360VME Audio Driver

- Output audio device type: Any output device*¹
- Output: Audio driver capable of outputting to the headphones you are using*²
- Output audio buffer size: Any size (1024 or 2048 is recommended)
- Input audio device type: Windows Audio
- Input: 360VME Audio Driver 16ch
- Input audio buffer size: Any size (1024 or 2048 is recommended)
- Sample rate: 48000 Hz

*¹ If you are using an audio output device with an ASIO driver, set “ASIO.”

*² If using the Output Speaker function, set also an audio driver capable of outputting to the speaker. For details of the Output Speaker function, see ““Output Speaker” checkbox” (page 18).

- ② From the output channels available on the audio driver set as “Output” in step 4-①, select the checkboxes for the channels that this software will use as output destinations.
For each of the selected output destination channels, checkboxes will be displayed in “Headphone Output Channels” on the [Settings] tab screen.
- ③ Select the channels you want to use for headphone output from the checkboxes displayed in “Headphone Output Channels” on the [Settings] tab screen.

5 Play the session opened in step 1 with Pro Tools and check if the input signal is being received in this software.

You can check the input signal on the [Input Monitor] tab or the [Input Level] tab.

If the input level lamp for the set channel ([Input Monitor] tab) or the input level meter ([Input Level] tab) is lit, the connection is successful.

When using multi-channel tracks without an external renderer

1 Launch Pro Tools and make the settings.

When using 360VME ASIO Driver

- ① From the [Setup] menu, select [Playback Engine] and set “360VME ASIO Output Driver” as “Playback Engine.”
- ② From the [Setup] menu, select [Hardware Setup] and check that “360VME ASIO Output Driver” is displayed in “Peripherals.”
- ③ Click [Launch Setup App] to open the “360VME ASIO Settings” screen and make the settings as follows:
 - Buffer Size: Any size (1024 or 2048 is recommended)
 - Sampling Rate: 48000 Hz
 - Sample Format: Any format*

* Set according to the project settings of your DAW.

When using 360VME Audio Driver

From the [Setup] menu, select [Playback Engine] and make the settings as follows:

- Playback Engine: Windows Audio Device
- Output Device: 360VME Audio Driver 16ch

2 Launch this software and open the [Profile] tab.

Load any 360VME Profile (.vme file). For details, see “[Profile] tab” (page 11).

3 Open the [Settings] tab of this software.

- ① Click [Audio Settings] to open the “Audio Settings” screen and make the settings as follows:

When using 360VME ASIO Driver

- Output audio device type: Any output device*¹
- Output: Audio driver capable of outputting to the headphones you are using*²
- Output audio buffer size: Any size (1024 or 2048 is recommended)
- Input audio device type: ASIO
- Input: 360VME ASIO Input Driver
- Input audio buffer size: Buffer size set in step 1-③ (1024 or 2048 is recommended)
- Sample rate: 48000 Hz

When using 360VME Audio Driver

- Output audio device type: Any output device*¹
- Output: Audio driver capable of outputting to the headphones you are using*²
- Output audio buffer size: Any size (1024 or 2048 is recommended)
- Input audio device type: Windows Audio
- Input: 360VME Audio Driver 16ch
- Input audio buffer size: Any size (1024 or 2048 is recommended)
- Sample rate: 48000 Hz

*¹ If you are using an audio output device with an ASIO driver, set “ASIO.”

*² If using the Output Speaker function, set also an audio driver capable of outputting to the speaker. For details of the Output Speaker function, see ““Output Speaker” checkbox” (page 18).

- ② From the output channels available on the audio driver set as “Output” in step 3-①, select the checkboxes for the channels that this software will use as output destinations.
For each of the selected output destination channels, checkboxes will be displayed in “Headphone Output Channels” on the [Settings] tab screen.
- ③ Select the channels you want to use for headphone output from the checkboxes displayed in “Headphone Output Channels” on the [Settings] tab screen.

4 Play the session opened in step 1 with Pro Tools and check if the input signal is being received in this software.

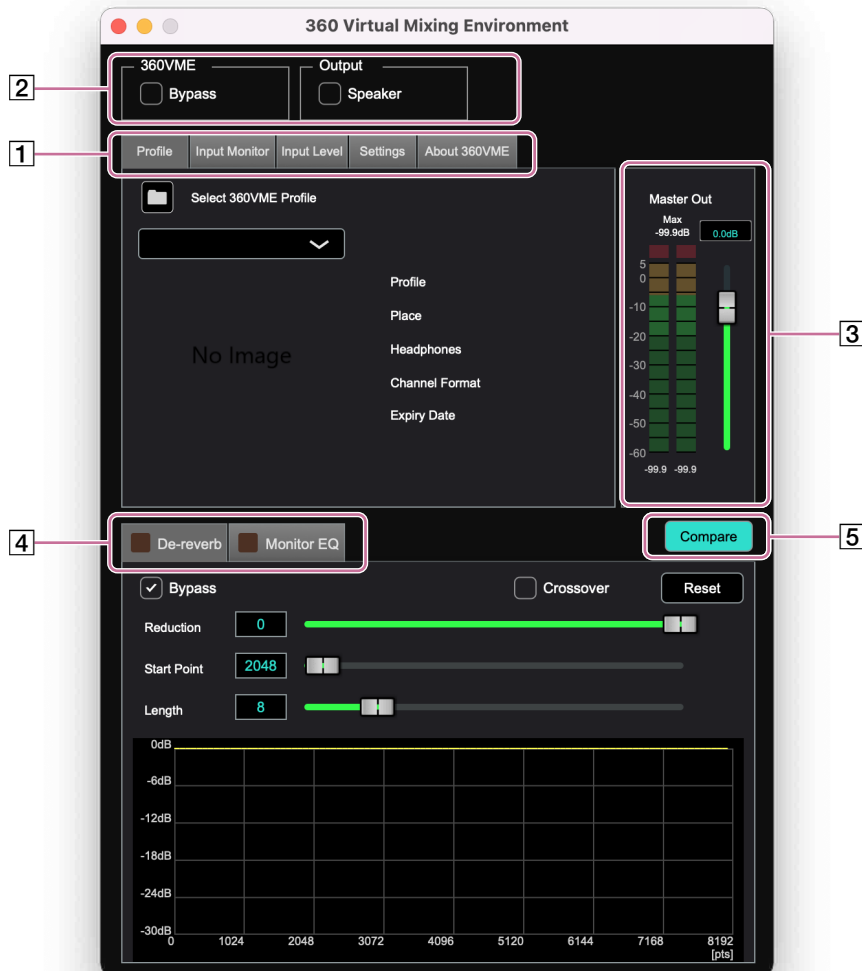
You can check the input signal on the [Input Monitor] tab or the [Input Level] tab.

If the input level lamp for the set channel ([Input Monitor] tab) or the input level meter ([Input Level] tab) is lit, the connection is successful.

How to use

Screen configuration

This section explains the home screen of this software.



1 Settings tabs

The following tabs are available. Select the tab for the setting you want to make.

- [Profile] tab
Load, switch, and check information about the 360VME Profile.
- [Input Monitor] tab
Check input levels, switch channels between solo and mute, and change channel routing.
- [Input Level] tab
Check input levels and switch each channel between solo and mute.
- [Settings] tab
Check and set input/output devices, drivers, output channels, etc. You can also save settings and load saved settings.
- [About 360VME] tab
Displays information about this software, license information, and the software license agreement.

2 Bypass settings

The following two checkboxes are displayed.

- “360VME Bypass” checkbox
Switches the sound output to the headphones.
- “Output Speaker” checkbox
Switches the sound output to the speaker.
This checkbox is not displayed by default. For details, see ““Output Speaker” checkbox” (page 18).

3 Output level meter

Check and adjust the level of the output signal.

4 Adjustment tabs

The following tabs are available. Select the tab of the item you want to set.

- [De-reverb] tab

Adjust the spread of the output signal.

- [Monitor EQ] tab

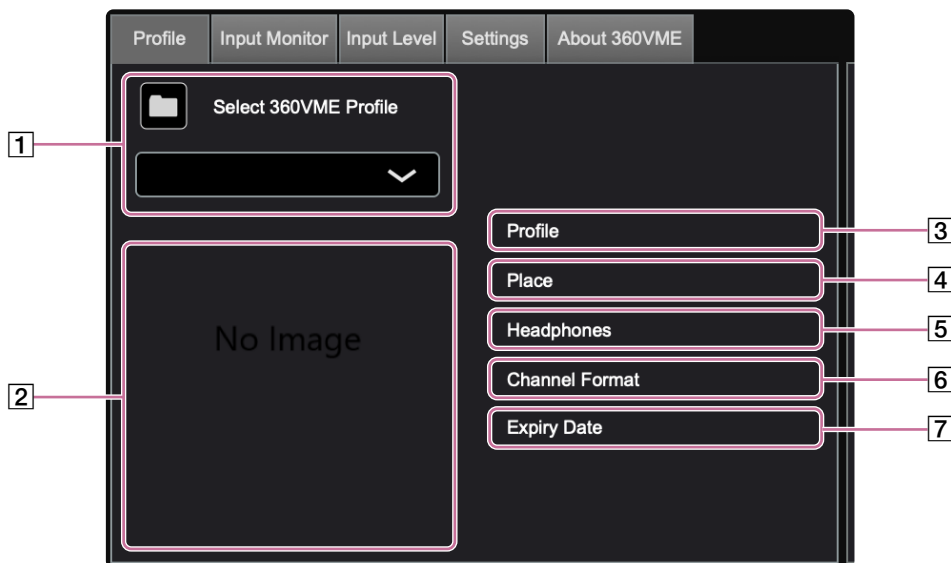
Make the equalizer settings.

5 Compare

In the [De-reverb] tab and the [Monitor EQ] tab, compare two patterns of parameter settings.


[Profile] tab

In the [Profile] tab, you can load, switch, and check information about the 360VME Profile.



1 Select the 360VME Profile

Load the 360VME Profile measured in the studio.

Click the  (folder) icon to open the “Choose a file” screen, and select the desired 360VME Profile (.vme file).

Note

The file path for the 360VME Profile cannot include 2-byte characters.

Hint

- If multiple 360VME Profiles are in the same folder, you can switch between the 360VME Profiles, using the pulldown menu.
- You can also drag and drop a 360VME Profile into the [Profile] tab to load it.

2 Thumbnail image

The thumbnail image of the studio where the 360VME Profile was measured is displayed.

3 Profile

The 3-digit number assigned in the studio is displayed.

4 Place

Information about the studio where the 360VME Profile was measured is displayed.

5 Headphones

The headphones used during the measurement of the 360VME Profile are displayed.

The 360VME Profile is created based on the combination of the studio and headphones used for measurement. Check that you are using the same headphones as displayed.

6 Channel Format

The channel format of the 360VME Profile is displayed as one of the following:

- 13ch (360 Reality Audio): A speaker layout designed for the 360 Reality Audio Speaker System
- 9.1.6ch: A speaker layout for production environments with up to 9 channels on the horizontal plane, up to 6 channels on the upper layer, and up to 1 subwoofer channel
- Custom: A speaker layout for production environments that do not correspond to 13ch (360 Reality Audio) or 9.1.6ch

The channel format is linked to the speaker layout displayed in the [Input Monitor] tab.

For “Custom,” the operation in the [Input Monitor] tab is disabled.

For details, see “[Input Monitor] tab” (page 12).

7 Expiry Date

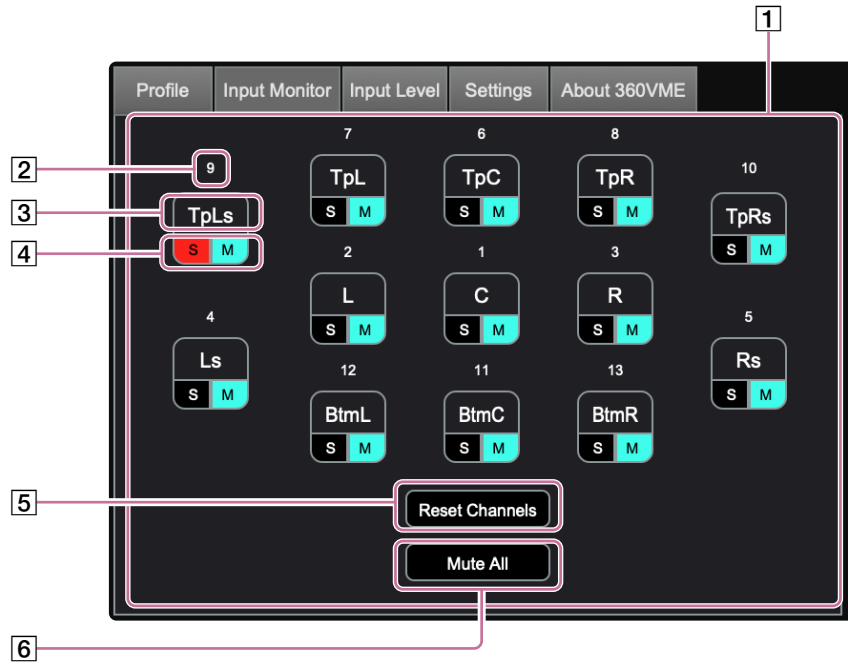
The expiration date of the selected 360VME Profile is displayed.

The selected 360VME Profile is valid until 0:00 (midnight) the day after the displayed date.

[Input Monitor] tab

In the [Input Monitor] tab, you can check input levels, switch channels between solo and mute, and change channel routing.

If the channel format of the 360VME Profile is "Custom," the operation in the [Input Monitor] tab is disabled.

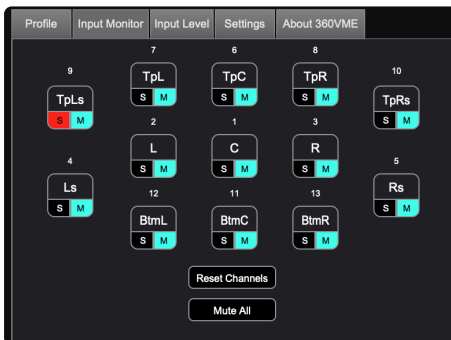


1 Speaker layout

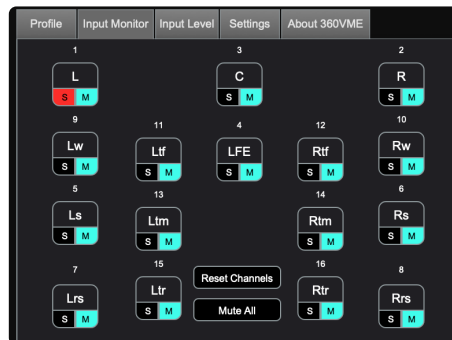
Information about the channel format included in the 360VME Profile is displayed.

The data displayed in the [Input Monitor] tab changes depending on the channel format information. The following are examples of the setting screen for each format.

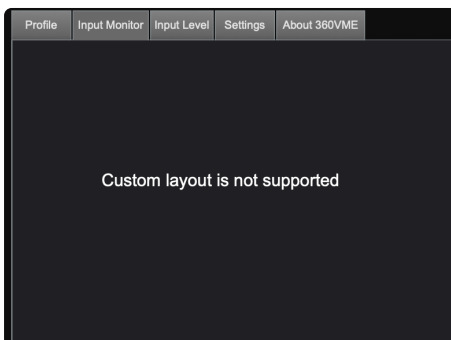
• 13ch (360 Reality Audio)



• 9.1.6ch



• Custom



2 Channel label

You can change the channel routing by editing the channel labels. The following are the channel routings for 13ch (360 Reality Audio) and 9.1.6ch.

- 13ch (360 Reality Audio)

ch1	ch2	ch3	ch4	ch5	ch6	ch7	ch8	ch9	ch10	ch11	ch12	ch13
C	L	R	Ls	Rs	TpC	TpL	TpR	TpLs	TpRs	BtmC	BtmL	BtmR

- 9.1.6ch

ch1	ch2	ch3	ch4	ch5	ch6	ch7	ch8	ch9	ch10	ch11	ch12	ch13	ch14	ch15	ch16
L	R	C	LFE	Ls	Rs	Lrs	Rrs	Lw	Rw	Ltf	Rtf	Ltm	Rtm	Ltr	Rtr

3 Input level lamp

- Holding down the click will enable solo mode for that duration.
- The color of the lamp changes depending on the gain of the input signal.
 - Red: When it exceeds 0 dBFS
 - Yellow: When it is equal to or less than 0 dBFS but exceeds -6 dBFS
 - Yellow-green: When it is equal to or less than -6 dBFS but exceeds -20 dBFS
 - Green: When it is equal to or less than -20 dBFS

4 Solo/Mute button

Click [S]/[M] for each channel to switch the channel between solo and mute.

5 Reset Channels

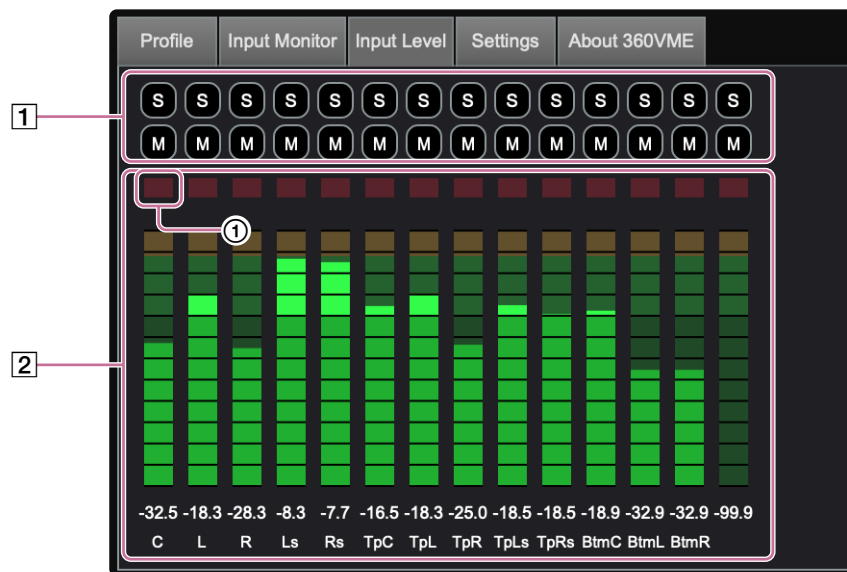
Click this to reset the channel routing to its default settings.

6 Mute All

Click this to mute/unmute all channels.

[Input Level] tab

In the [Input Level] tab, you can check input levels and switch each channel between solo and mute.



1 Solo/Mute button

Click [S]/[M] for each channel to switch the channel between solo and mute.

2 Input level meter

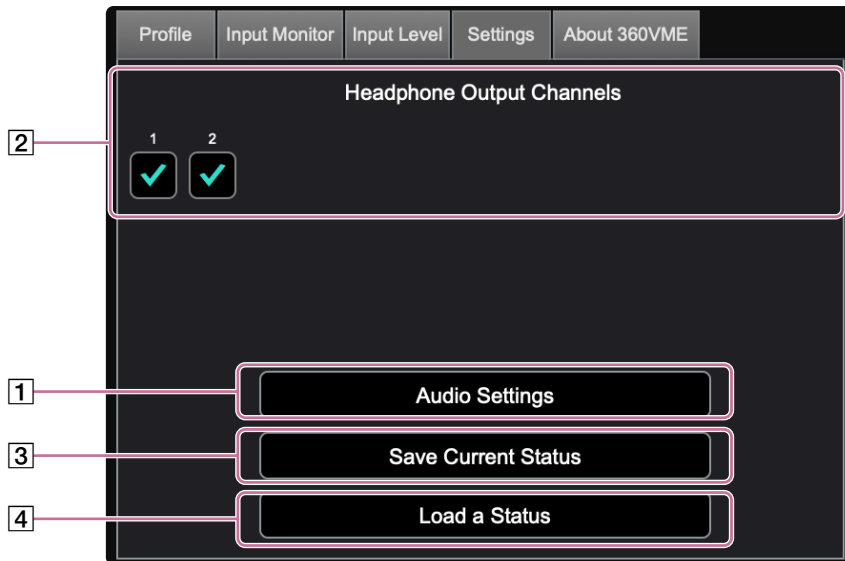
When the input signal exceeds 0 dB for a channel, the top lamp (red) (1) lights up. In this case, click on the input level meter to reset the lamp.

Hint

The order of the channels varies depending on the channel format of the 360VME Profile.

[Settings] tab

In the [Settings] tab, you can check and set input/output devices, drivers, output channels, etc. You can also save settings and load saved settings.



1 Audio Settings

Check and set input/output devices, drivers, output channels, sample rate, and buffer size. On the “Audio Settings” screen, displayed by clicking, set each item.

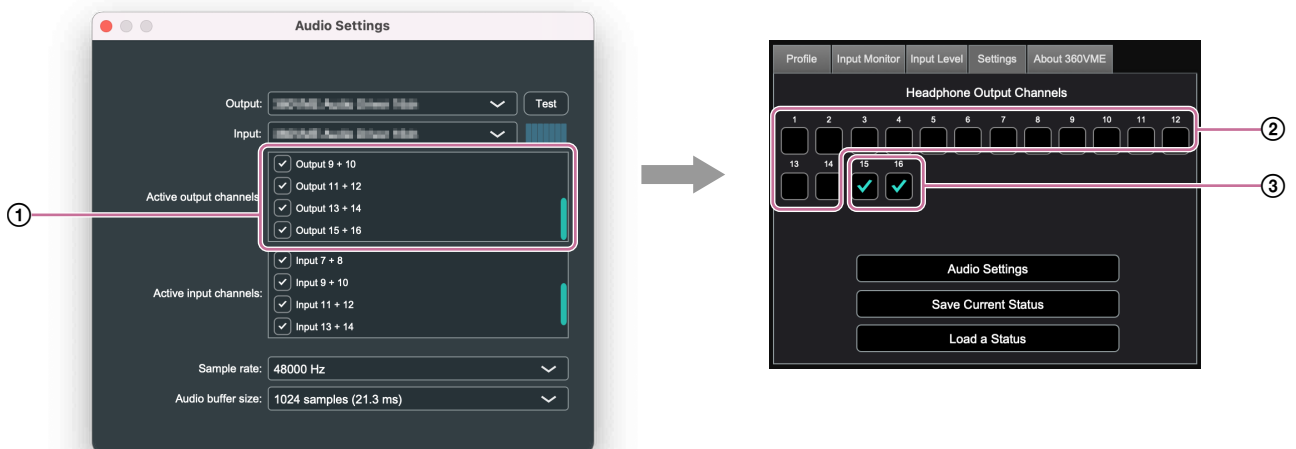
Note

If the set sample rate differs from the sample rate recorded in the 360VME Profile, an error message will appear in the upper right corner of each tab screen. In this case, change the setting to the same value as the sample rate recorded in the 360VME Profile.

2 Headphone Output Channels

The output channels available for use with this software, which have been set in “Active output channels” of [Audio Settings], are displayed. Select the channels you want to output to your headphones. Channels that are not checked will be used for speakers.

Output channel setting examples



①: Output channels available for use with this software

②: Speaker output channels

③: Headphone output channels

Note

If no channel is selected in “Headphone Output Channels,” no sound will come from the headphones.

3 Save Current Status

Saves your current settings. In the "Save Current Status" screen, displayed by clicking, specify the file name and the folder to save the file in.

4 Load a Status

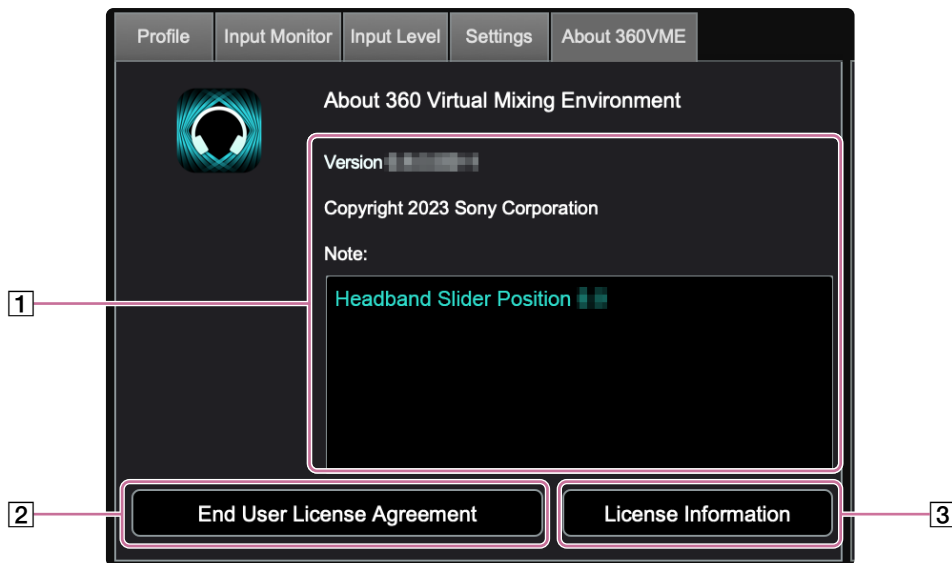
Loads a saved configuration file. In the "Load a Status" screen, displayed by clicking, select the desired configuration file.

Note

The file path and the file name to specify and select in [Save Current Status]/[Load a Status] cannot include 2-byte characters.

[About 360VME] tab

In the [About 360VME] tab, you can find information about this software, license information, and the software license agreement.



1 Information about this software

The following information is displayed:

- Version of this software
- Copyright
- Auxiliary information recorded in the 360VME Profile
You cannot edit the auxiliary information.

2 End User License Agreement

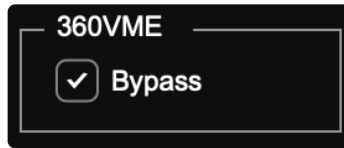
Displays the software license agreement.

3 License Information

Displays the license information.

“360VME Bypass” checkbox

By selecting the “360VME Bypass” checkbox, you can switch the sound output to the headphones. The default setting is off.



When the checkbox is selected, the virtualizer is turned off, and the input signal is downmixed to 2 channels and output to the headphone channels.

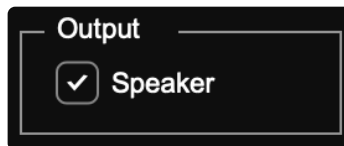
Normally, using the bypass function in a DAW creates a difference in sound pressure, but this bypass function can reproduce the downmixed 2-channel output with a sound pressure close to the virtualized output.

“Output Speaker” checkbox

By selecting the “Output Speaker” checkbox, you can switch the sound output to the speakers.

This checkbox is only displayed when the number of channels checked in “Active output channels” in the [Audio Settings] of the [Settings] tab is greater than the total number of channels for the channel format and headphone output.

The default setting is off.



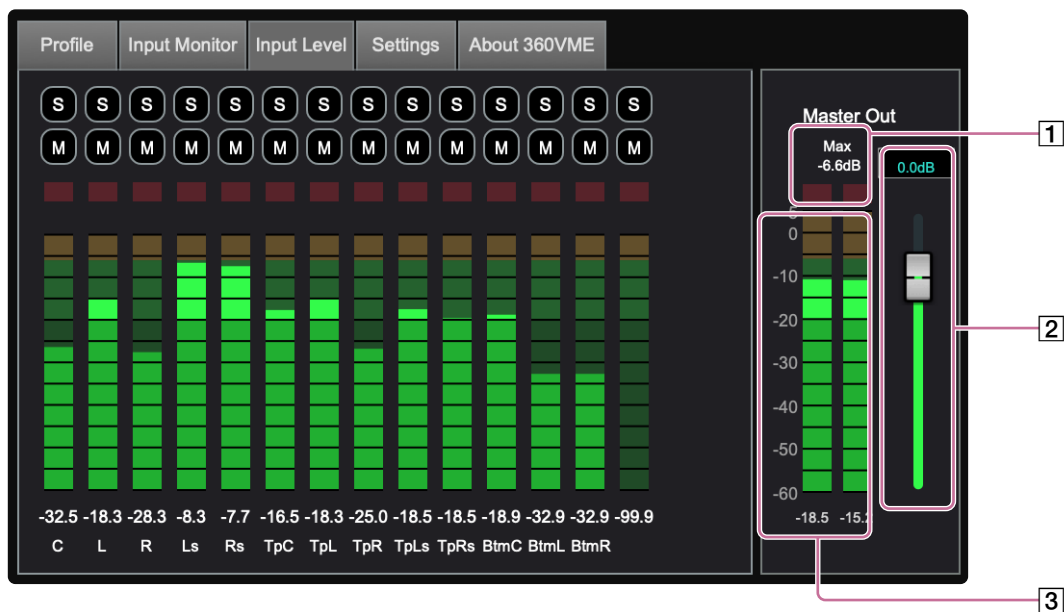
When the checkbox is selected, the input signal of this software passes through and is output to the speaker channels.

Hint

To set the channels output to the headphones, go to the [Settings] tab. The channels not selected for headphones use will be set to the speakers. For details, see “[Settings] tab” (page 15).

Output level meter

The output level meter is used to check and adjust the level of the output signal.



1 Maximum peak level display and lamp (red)

The "Max" value indicates the maximum peak level so far. If the signal exceeds 0 dB, the lamp (red) lights up. If the lamp (red) lights up, lower the output volume. Click on the output level meter to reset the "Max" value and lamp display.

2 Output volume

You can adjust the output volume. Enter a value (in dB) in the box at the top of the slider or move the slider. To disable volume adjustment while operating the slider, hold the Shift key while moving the slider.

3 Output level meter

Displays the level of the output signal.

[De-reverb] tab

In the [De-reverb] tab, you can adjust the spread of the output signal. Unchecking the “Bypass” checkbox in the tab will light up the tab lamp and allow you to make settings. The settings are only effective while the tab lamp is lit.



1 Reduction/Length [k]

Adjust the level of the reverberation component. Lowering either setting value will make the slope steeper, reducing the reverberation component. Enter a value in each box or move the slider to adjust the value.

2 Start Point

Set the start value of the sample you want to remove reverberation from. Enter a value in the box or move the slider to adjust the value.

3 Crossover

By selecting the checkbox, only the reverberation in the mid and high frequencies is adjusted.

4 Compare

Compare two patterns of parameter settings. For details, see “[Compare]” (page 22).

5 Reset

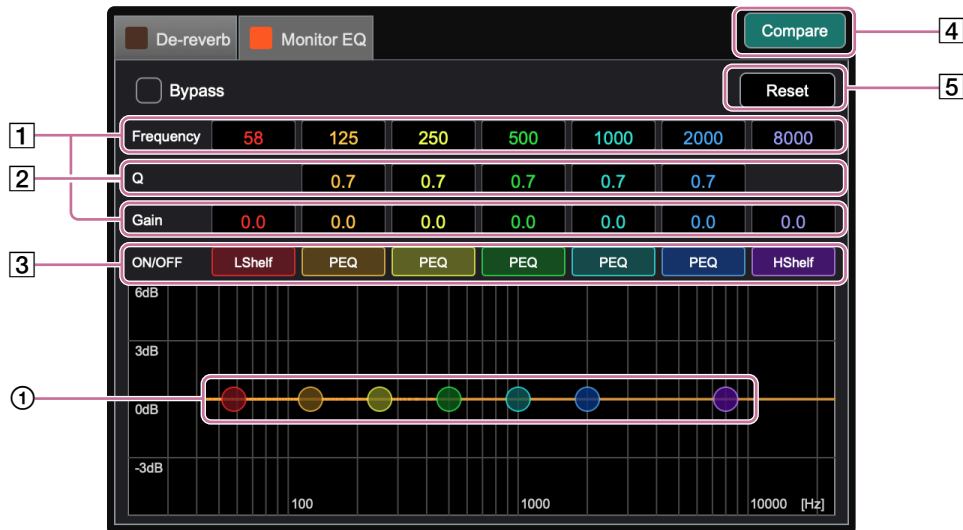
Reset the settings made in the [De-reverb] tab to their default values. If you have created two patterns of settings using the Compare function, the displayed one is reset to the default settings.

[Monitor EQ] tab

In the [Monitor EQ] tab, you can make the equalizer settings.

Unchecking the "Bypass" checkbox in the tab will light up the tab lamp and allow you to make settings.

The settings are only effective while the tab lamp is lit.



1 Frequency/Gain

Set the center frequency and gain for each filter. Enter a value in each box for adjustment. You can also adjust the values by moving the graphic EQ handle (1) of each filter.

2 Q

Set the frequency bandwidth for each filter. Enter a value in the box for adjustment.

3 ON/OFF

Click the button for each filter to turn the filter effect on or off.

4 Compare

Compare two patterns of parameter settings. For details, see "[Compare]" (page 22).

5 Reset

Reset the settings made in the [Monitor EQ] tab to their default values.

If you have created two patterns of settings using the Compare function, the displayed one is reset to the default settings.

[Compare]

In the [De-reverb] tab and the [Monitor EQ] tab, compare two patterns of parameter settings.

1 Create the first pattern and click [Compare].

The color of [Compare] changes, and the pattern is saved.



2 Create the second pattern and click [Compare].

The color of [Compare] changes, and the pattern is saved.



3 Click [Compare] to listen to the two patterns of parameter settings.

Each time you click, the sound switches between the two patterns of parameter settings. By switching between the two patterns of parameter settings, you can compare the differences in the sound.

Troubleshooting

Our FAQ site contains frequently asked questions and their solutions.

Visit the URL below to view them.

<https://www.sony.net/Products/create360RA/360VME/>

License

Read the license carefully. You can view the license details at the following URL.

<https://www.sony.net/Products/create360RA/360VME/>

Trademarks

- Windows is a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.
- Mac and macOS are trademarks of Apple Inc., registered in the U.S. and other countries.
- ASIO is a trademark and software of Steinberg Media Technologies GmbH.