AUDIENT

evo 16

24in/24out Audio Interface

User Manual V2.2

WELCOME

Welcome to your new EVO 16 Audio Interface. EVO 16 has been designed to remove the technical barriers creatives face when exploring the often intimidating world of audio and make recording simple for everyone.

We hope you enjoy using EVO 16 and it helps you in your creative endeavours, whatever they may be!

Work smarter not harder.

EVO makes recording easy

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DECLARATION OF CONFORMITIES

This apparatus has been tested and found to comply with the limits of a class-A digital device, pursuant to Part 15B of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

01 Re-orient or relocate the receiving antenna

02 Increase the separation between the equipment and receiver

03 Connect the equipment into an outlet on a different circuit from that to which the receiver is connected

04 Consult the dealer or an experienced radio/TV technician for help

We, EVO Audient, Aspect House, Herriard, Hampshire, RG25 2PN, UK, 01256 381944, declare under our sole responsibility that the product EVO 16 complies with Part 15 of FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference,
2. This device must accept any interference received, including interference that may cause undesired operation

We, EVO Audient, declare that the product, the EVO 16, to which this declaration relates, is in material conformity with the appropriate CE standards and directives for an audio product designed for consumer use.

We, EVO Audient, declare that the product, the EVO 16, to which this declaration relates, is in material conformity with the appropriate UKCA standards and directives for an audio product designed for consumer use.

Audient Ltd has conformed where applicable, to the European Union's Directive EN 63000:2018 on Restrictions of Hazardous Substances (RoHS) as well as the following sections of California law which refer to RoHS, namely sections 25214.10, 25214.10.2, and 58012, Health and Safety Code; Section 42475.2, Public Resources

Under an environment with electrostatic discharge, the device may cease to output sound (EUT could not operate properly). This requires the user reset the device by unplugging & re-connecting to host computer.

As a device that provides power to other equipment power management features are inappropriate for this product.

We, EVO Audient, declare that the product, the EVO 16, to which this declaration relates, is in material conformity with the appropriate PSE standards and directives for an audio product designed for consumer use. METI Ordinance Appendix 12 J55032(H29).

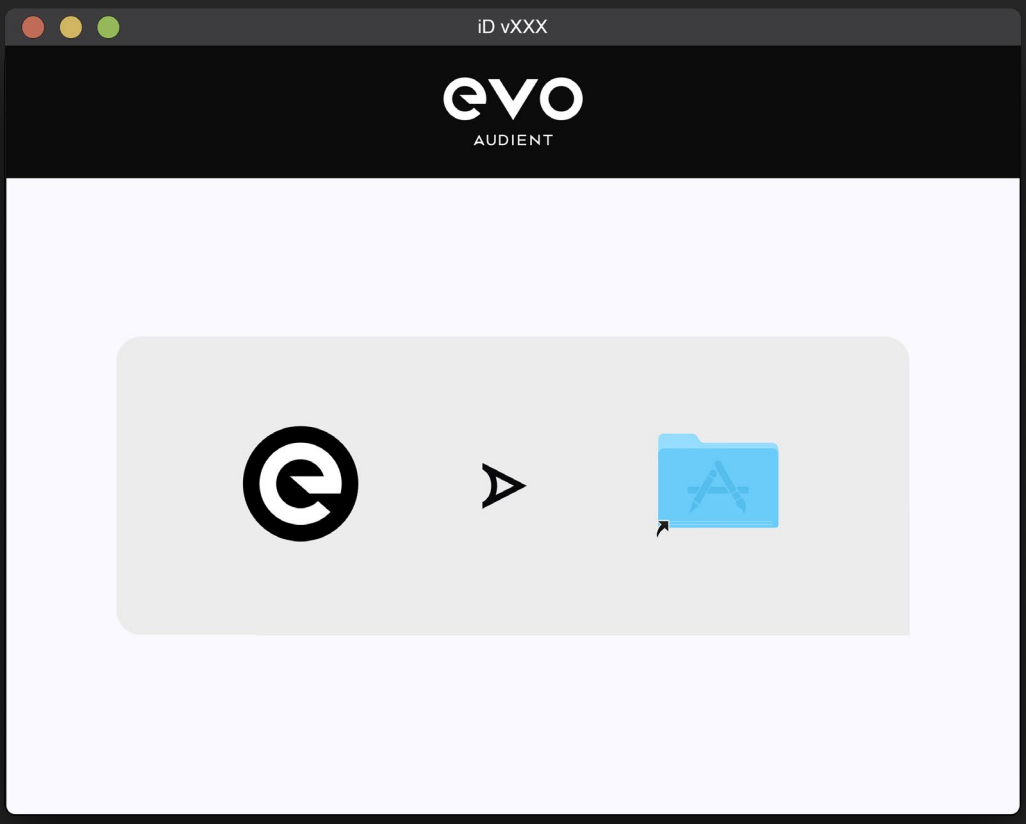
IEC 62368 Test Report with Japan deviation.

macOS

INSTALLATION / SETUP

On macOS, EVO 16 will work straight away without needing to install any drivers. However, we do recommend installing the EVO Mixer application, which gives you advanced control over your EVO 16 and lets you update your firmware when required.

Head to evo.audio/evo16/downloads to download the latest version of the application. Once downloaded, simply open the .dmg file and then drag and drop the EVO application into your applications folder.

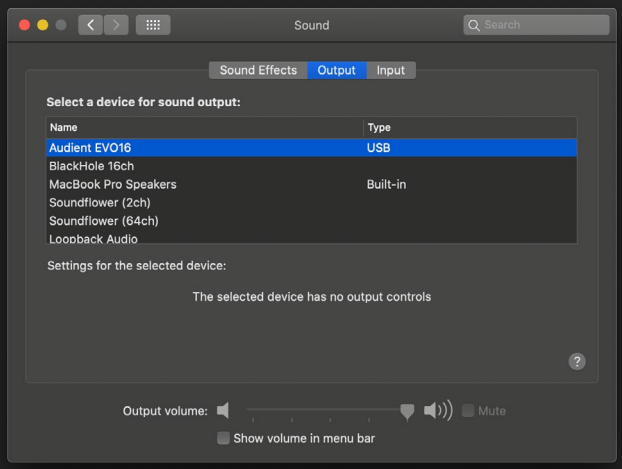


Carefully unpack your EVO 16, connect the included power cable and connect it to a USB port on your Mac. If your computer doesn't have the appropriate USB port you may need to use an adaptor, dongle or third party cable.

You can then set EVO 16 as your main output by going to **System Preferences > Sound** and then selecting the EVO 16 as your device for Input and Output.

System Preferences > Sound

Select EVO 16 as input / output



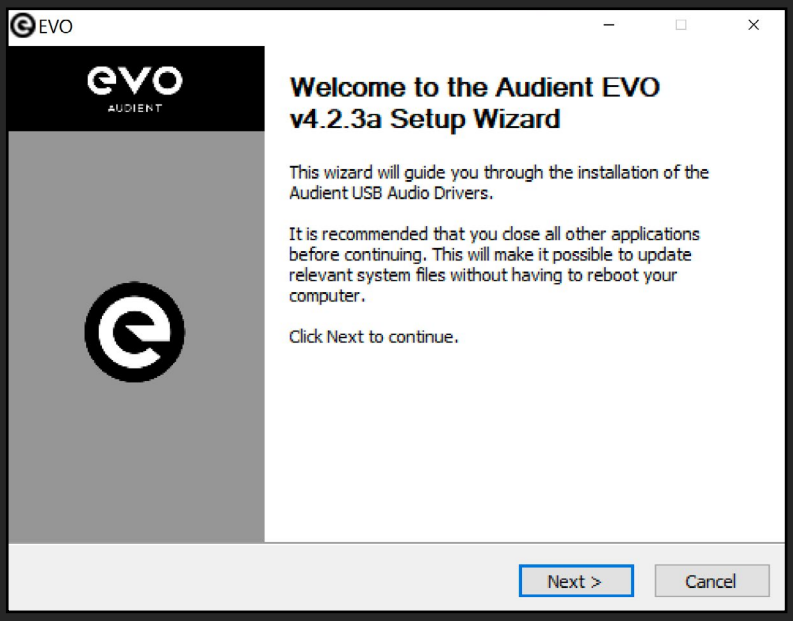
Windows

INSTALLATION / SETUP

EVO 16 will require drivers to work on Windows to ensure your computer and EVO 16 will work together correctly. You can download the drivers from the EVO website:

evo.audio/evo16/downloads

Once downloaded, run the .exe file to start the installation process.



Follow the instructions on screen to complete the installation.
This process may take a little while so please be patient.

Once complete, click finish. Now carefully unpack your EVO 16, power it on using the included power lead and connect it to the computer using the included USB cable.

To set the EVO 16 as your default sound device, go to **Control Panel > Hardware and Sound > Sound**. Now select the Playback tab.

In the list of devices, find EVO 16 Main Output 1+2, click on it and select **Set Default Device**.

Any audio played back from your PC will now be played through EVO 16.

Follow the same process for the Recording devices by selecting Inputs 1+2 from the list of input devices.

For more advanced settings such as changing your sample rate or buffer size, please read the Software features section, found later in this manual.

REGISTRATION WITH AUDIENT ARC

ARC

Compatible with all major audio software, EVO 16 comes bundled with a collection of professional software and services, giving you everything you need to start recording.

Go to arc.audient.com and select “register your product” and enter your details to create an account.

You will then receive a verification email to your inbox, double check your Spam and Junk folders if you cannot see this. Once you’ve verified your account, register your EVO 16 by entering the serial number and the unique 4 digit PIN found on the bottom of the EVO 16.

Once you have registered the product, you can now select from a wide array of free software and plugins, giving you easy access to powerful creative tools straight away.

REGISTRATION

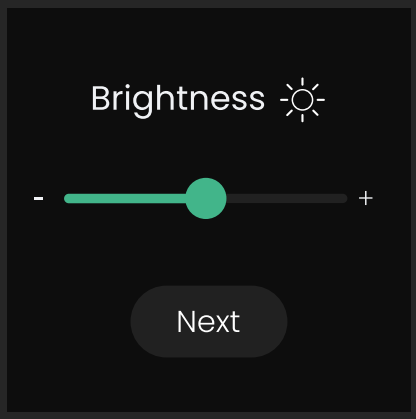
HARDWARE FEATURES

Initial Setup

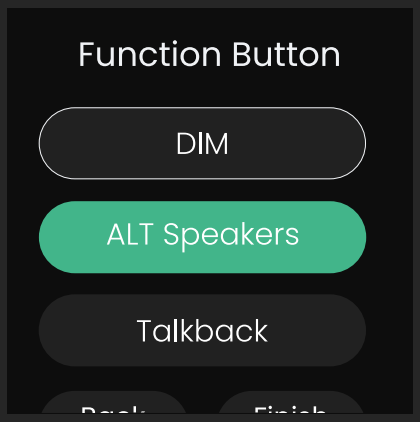
The Motion User Interface is a control system designed to change the way you interact with your audio interface. For the first time, a stunning high resolution, full colour screen intelligently displays information as you need it, transforming EVO 16 into a fully immersive, easy to use experience.

The first time powering on EVO 16, Motion UI will ask to follow the setup procedure, allowing you to customise EVO 16's settings to your liking.

Firstly, you can adjust and set the brightness of all of EVO 16's hardware LEDs, including the LED Ring, to suit your studio environment. Use the Control Wheel to adjust the slider and then press the Control Wheel down to save your settings and then hit 'Next'.



Next, you can choose which monitoring feature is assigned to the hardware F Button on the front of the unit when pressed:



DIM - Reduces the output level to the speakers by a set value
ALT Speakers - Switches between the Main and ALT Speaker outputs
Talkback - Toggles Talkback on and off
Mono - Sums the Monitor outputs to Mono

More detail on the Function Button and its settings can be found later in this manual.

Once selected, click 'Finish' to complete the setup.

Mic Preamps and Line Level Inputs

EVO 16 includes eight high-quality EVO Mic Preamps, available through the Combi jacks on the front and rear of the unit.

XLR Cable Connection

TRS Jack Connection

EVO 16 can lower the signal level by 8 decibels and boost it by up to 50 decibels allowing you to get the perfect recording level, this is known as the gain.

When pressing any input button on EVO 16's front panel, the input screen will show the Input Status Screen. The status screen will display: the input number, the input name assigned via the EVO Software Mixer, the gain setting in dB, and an independent channel meter for referencing your levels.

When an input is selected, the hardware will now control that channel, so you can use the Control Wheel to adjust the input gain with decibel level accuracy, as well as toggling channel mute, phantom power for condenser mics, or instrument mode for guitars and basses on channel 1+2.

Smartgain Mode

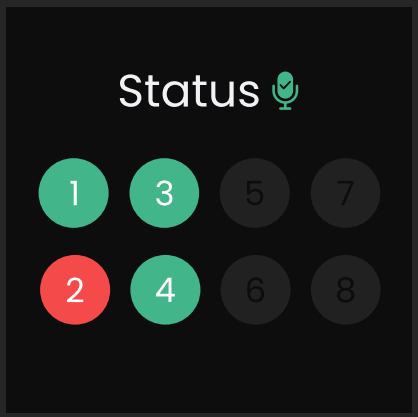
Smartgain is a powerful feature which helps you get recording as quickly as possible. It is able to listen to all the activated inputs, and set gain within a matter of seconds.

To activate Smartgain, press the green Smartgain button, you will then be prompted to select the channels you want to set the gain for. Select the channels you want using the channel buttons or press and hold the Smartgain button to quickly select all 8 channels at once.

Once you have selected the channels you require, press the Smartgain button again to start. You will now see a ‘Smartgain Listening’ screen, this is where you or your artist will need to start performing in order for Smartgain to analyse your signal.

If all selected channels are successfully set, you will see the ‘Smartgain Successful’ screen and you are ready to start recording.

If Smartgain fails for any reason you will see the ‘Issue Detected’ screen followed by the Smartgain Status screen. The Smartgain Status screen gives you an overview of the status of each channel in relation to Smartgain.



Green - means it was successful
Red - means it failed
Grey - means the channel was not selected

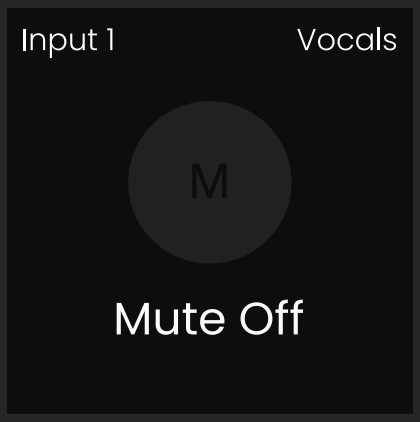
Smartgain will now return you to the 'Select Channels' screen with the failed channels automatically pre-selected, simply press Smartgain to start the process again.

For the channels that failed, double-check your microphone cables, check if phantom power is required for that microphone, or move the microphone closer to the sound source. Then try the Smartgain process again.

Note: there is no need to select the green channels again as they were already successfully set.

Input Mute

To quickly mute a channel, simply hold down the hardware channel button until the Mute Feature Toggle screen is shown, and the channel button begins flashing.



When a channel is muted, the gain level is replaced with the Mute icon, this will remain in place until mute is deactivated, by again holding down the channel button.

Stereo Linking

All of the input channels can be linked as stereo pairs, for example: Channel 1+2, 3+4, 5+6, 7+8. This allows you to match the gain for both channels to make sure your left and right channels are at the same level.

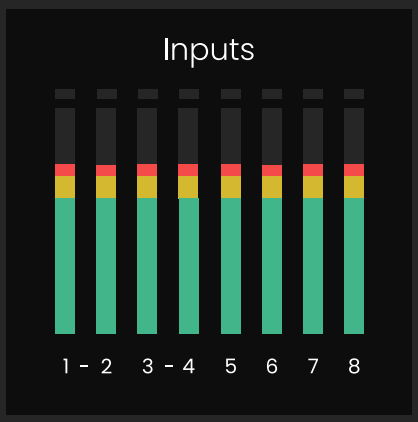
This would be used when recording an instrument using two microphones, such as a piano or guitar, or if inputting a stereo line signal like a synth or DJ decks.

To do this, press down the pair of input buttons (eg. 3 & 4) at the same time.The channels in the EVO Software Mixer will then automatically change to a stereo channel to reflect this (refer to the Software Mixer section of this manual).

Whilst two channels are linked, selecting one of the channels will automatically select the linked channel as well.

When two channels are linked, a ‘Link’ icon will appear on the Input Status Screen and the input name will update.

When on the input metering screen, you will also see a small hyphen connecting the linked channel numbers.

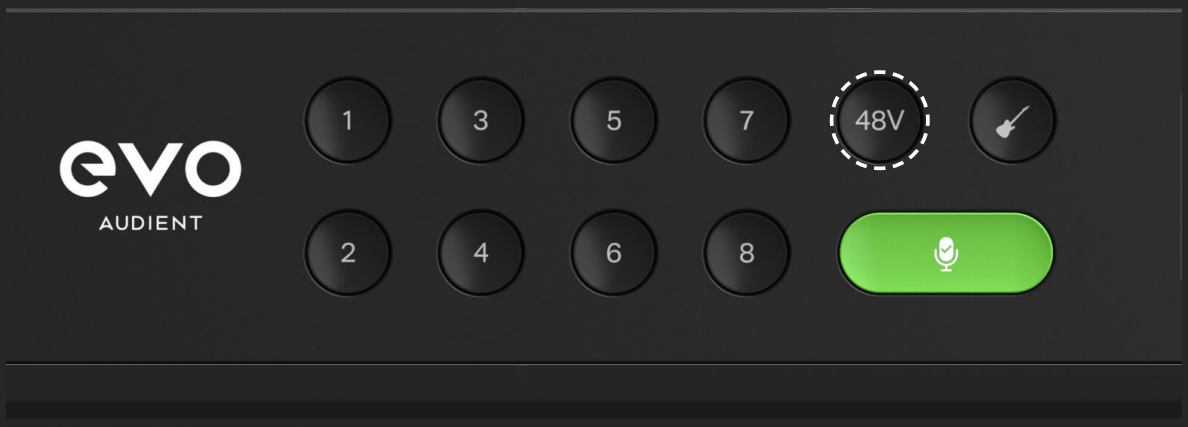


Phantom Power (48V)

Some microphones will require phantom power in order to function. This is +48 volts of power sent via the XLR cable and used to correctly power up the microphone and allow it to work.

Microphones that require phantom power are typically condenser microphones.

In rare cases, some microphones that don't require phantom power can be damaged by providing phantom power to them so we'd recommend checking the microphone's documentation to see if you need to provide phantom power or not.



To activate phantom power, select the channel, then press the 48V button, which will then illuminate red as well as activate a temporary popup on screen.

This is set independently per channel so if you navigate away to a different channel, where phantom power isn't activated, the 48V button will no longer be illuminated.

To turn off 48V, press the 48V button again, which will display the feature toggle screen.

When turning on and off phantom power, EVO 16 will automatically mute the input to avoid unwanted noises coming through to your speakers or headphones.

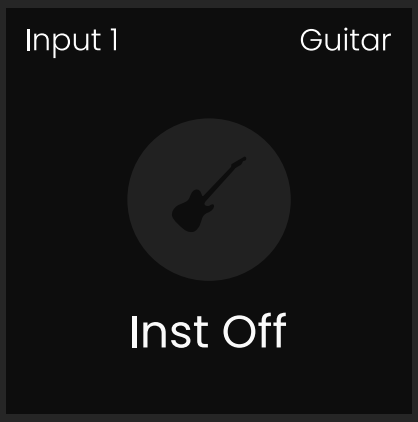
Instrument Input

EVO 16 includes two instrument inputs to directly connect instruments such as electric guitars and basses. The instrument input is sometimes also known as a DI (Direct Injection) and provides a high input impedance, which enables you to get the best tone from your instruments.

The two instrument inputs are found on the front of EVO 16, and accept unbalanced TS jacks, just like the ones you'd plug into a guitar amp.

By default, these inputs are used as line & microphone level inputs but they can both be changed to Instrument Mode.

To do this, select either channel 1 or 2, then press the Instrument button. The button will then illuminate as well as display the temporary popup on screen. To turn off Instrument mode, press the Instrument button again.



If you try and activate phantom power on Channels 1+2 whilst the instrument input is active, an error screen will show as it is not possible to have both active at once.

When using the instrument inputs set your gain as you would with the Mic/ Line inputs, either using Smartgain or the Control Wheel.

Remember: *After you've finished recording via the instrument inputs, you'll need to switch them back to line & microphone level inputs. To do this, press whichever instrument channel button you're using, then press the Instrument button. This essentially turns off the DI circuit, allowing you to use line and & microphone level devices.*

ANALOGUE OUTPUTS

Headphone Outputs

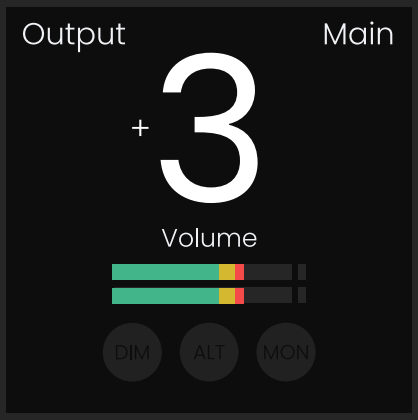
EVO 16 provides you with separate controls for each of the headphone outputs. Pressing the Headphone 1 or 2 button will allow you to independently adjust the volume for each output. To adjust the output volume, simply tap the output you wish to adjust and turn the Control Wheel. The Meter ring will illuminate to show the current volume level.

Line Outputs

EVO 16 also provides you with eight dedicated line level outputs, which can be found at the rear of the unit.

By default, pressing the Speaker button on the front of the unit, then turning the Control Wheel will change the volume of line outputs 1+2. You can adjust any of the other line outputs in the EVO Software Mixer.

Pressing any of the hardware Output buttons will bring up the Output Status Screen. Similar to the Input Status Screen, with a few key differences, the Output Status Screen displays: the output name, the volume level, stereo meters, as well as a feature status display. With an output selected, the Control Wheel will now control the volume of that output, ranging from 0 to 100.



To quickly mute an output, hold down the channel button until the Mute screen is shown, and the channel button begins flashing. When a channel is muted, the volume level is replaced with the Mute icon, this will remain in place until mute is deactivated, by again holding down the output button.

Function Button

Various monitoring and communication functions of the EVO Software Mixer can be assigned to the hardware Function Button found on the front panel of the EVO 16. This enables you to quickly control your monitoring at the click of a button. To assign a monitor control to the F-Button, refer to either the Software Mixer or Motion UI Settings section of this manual.

The following functions can be assigned:

Mono

Sums the stereo outputs down to mono. This can be used to quickly check the mono compatibility of your mix to make sure it'll sound great almost anywhere!

ALT

ALT allows you to quickly switch your monitor path to a secondary set of speakers to let you check how your mix translates on various speakers. You can select which outputs the ALT monitor control flips to in the System Panel.

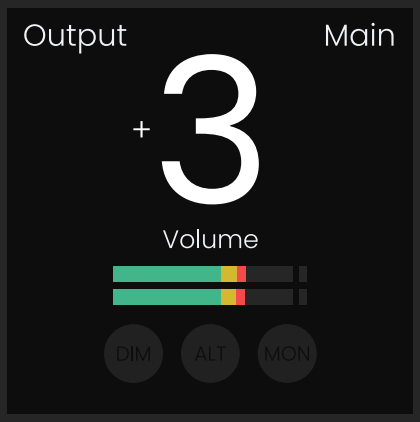
Dim

Reduces the output level by a pre-set amount which can be great if you get a call or need to quickly chat to someone during a session.

TB (Talkback)

Toggles talkback on and off.

With the main speaker outputs selected, under the meter, you are able to see the status of the output functions, Dim, ALT speakers, and Mono.



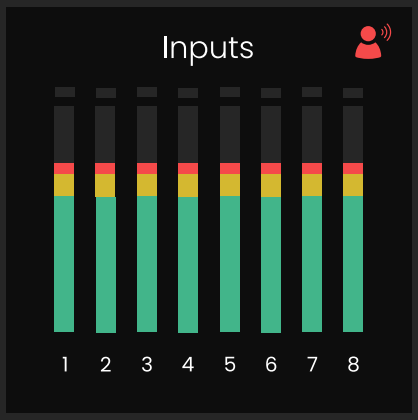
Whenever these features are toggled, the corresponding screen is displayed, before reverting back to the output status screen.

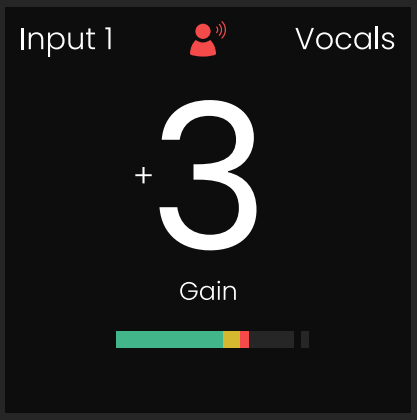
Talkback

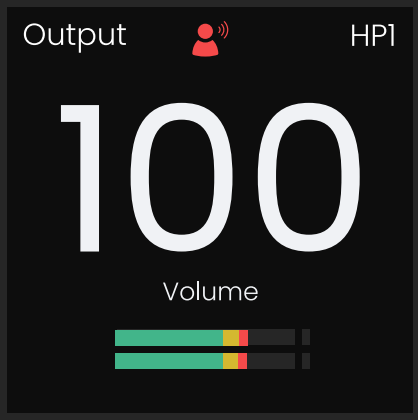
The F-button can also be used to activate Talkback, enabling you to stay in contact with an artist through their headphones. This is configured in the EVO Mixer App's Settings Panel.

When Talkback is activated, whether using the F-button or the EVO Software Mixer, the Talkback screen is breifly shown.

If at any point you navigate to a different screen while talkback is still activated, the Talkback Icon will be visible.







HARDWARE

OPTICAL INPUTS & OUTPUTS

EVO 16 features two optical inputs and two optical outputs. Each of these can be set to operate using optical stereo S/PDIF or 8-channel ADAT using the EVO Software Mixer. All i/o will operate at up to 96kHz, with ADAT dropping to 4 channels at sample rates of 88.2kHz or higher.

Running in S/PDIF mode, the optical i/o provides the option to integrate external digital outboard, allowing up to 4 channels of audio in and out of the EVO 16 at sample rates up to 96KHz.

Running in ADAT mode, the optical i/o provides a great way to expand to 24 inputs for recording via an external mic preamps such as the Audient ASP800. The ADAT outputs could also be connected to headphone distribution systems such as a HearbackTM system or to an 8-channel DAC for summing purposes.

When using higher sample rates such as 88.2kHz and 96kHz, you are restricted to a total of 8 digital inputs and 8 digital outputs due to the limitations of the ADAT protocol.

World Clock Output

The EVO 16 includes a BNC Word Clock output which allows you to clock multiple digital devices to the EVO 16's master clock and keep everything in sync.

The Word Clock output will send a clock signal at the same sample rate (44.1, 48, 88.2 or 96kHz) that the EVO 16 is operating at. This will occur regardless of whether the EVO 16 is being clocked internally or externally.

Clocking Configurations

When connecting external digital devices to the EVO 16, it's important to ensure that all devices are synchronised.

To ensure this, one device in the setup must be set as the master clock. The other devices will then use the master clock signal to stay in sync. There can only ever be one masterclock present in a chain.

The master clock signal can be sent either via an optical cable embedded into the digital signal data, or through a BNC clock line cable. Please bear in mind that the clock will only travel in one direction through these connections, from a device's output to a device's input.

Choosing a Master Clock

In a digital setup, there can be a number of options when determining which device should be your master clock. Quite often the best device to set as the master is the one that is connected to the computer such as an audio interface. This way, when you open a project in a DAW, the audio interface should change automatically to match the project sample rate, and therefore change the sample rate of all the slave devices. However this depends on the devices being used.

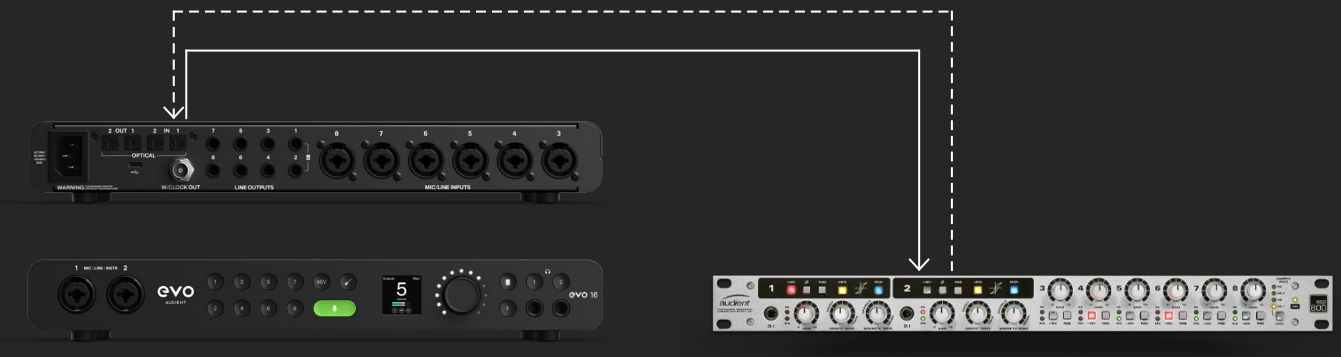
EVO 16 as the Master Clock

With the EVO 16 set as the master clock the other devices in the chain can be clocked by either the optical output port or the BNC word clock output.

If you are using multiple devices then it is recommended to use the BNC word clock output and then use T-connectors to daisy chain the devices together. It is important to note that the final device in the chain should have its BNC connector terminated with 75 Ohms to stop reflections of the clock signal. This should be a switchable option on most devices.

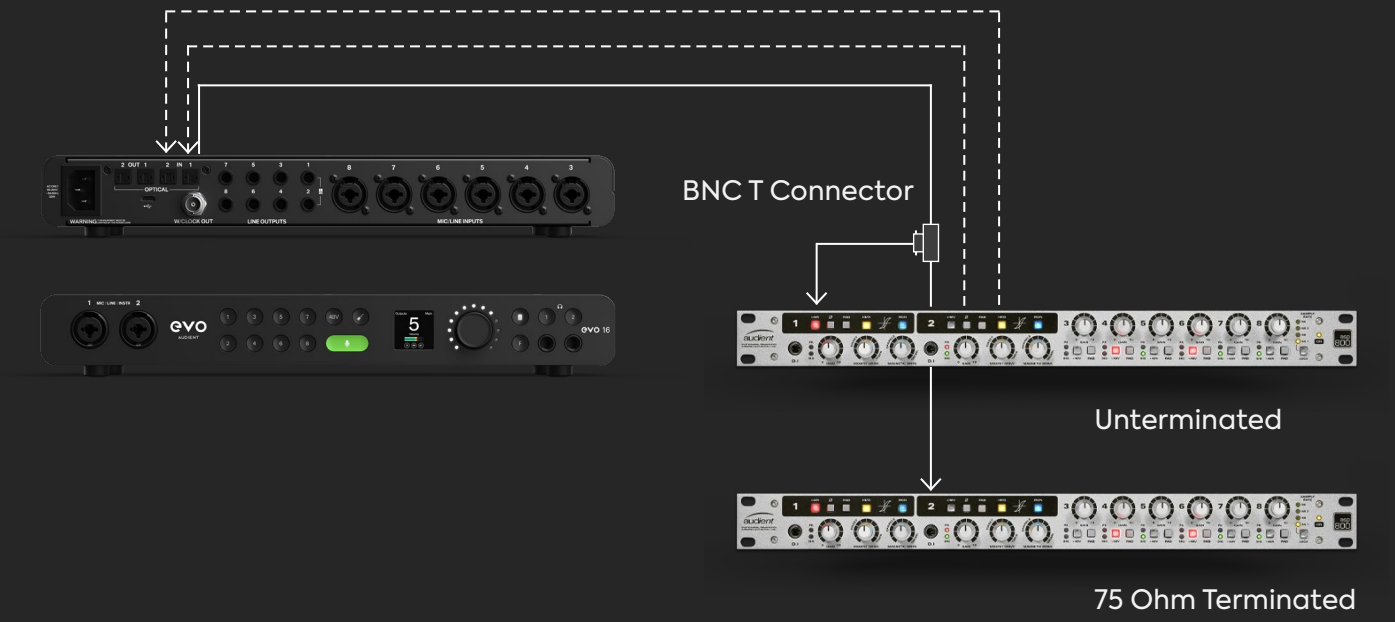
Key: Optical TOSlink Cable ----------> BNC Word Clock Cable ——————>

EVO 16 with single BNC connection



75 Ohm Terminated

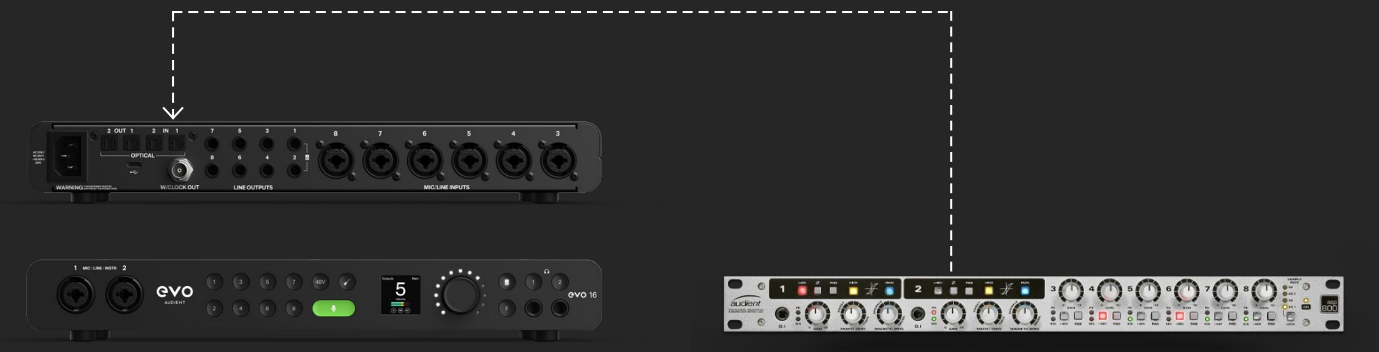
EVO 16 with daisy chained BNC connection



EVO 16 as the Slave Clock

The EVO 16 can also act as the slave to an external master clock via it's optical inputs. In this case, you would connect the optical output of a device to the EVO 16's optical input. Then, in the EVO mixer application, select the optical input you wish to be used as the clock source. You would also need to set the inputs to either ADAT or S/PDIF depending on the specification of the external device.

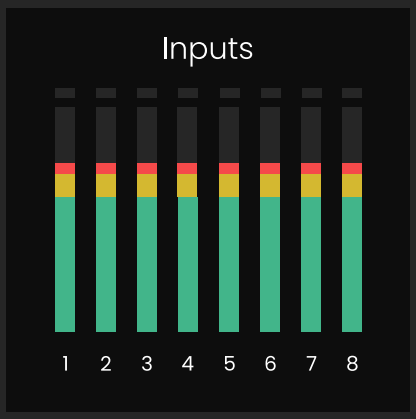
EVO 16 clocked via the optical port

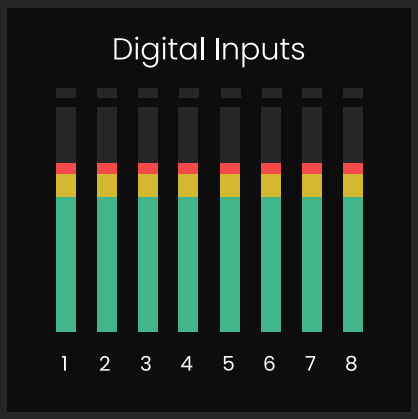


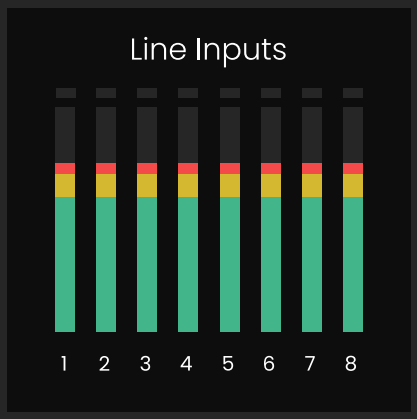
Metering

When not adjusting settings or pressing buttons on EVO 16 for more than 5 seconds, the screen will default to display either the input or output meters, depending on whether you last pressed an input or output button.

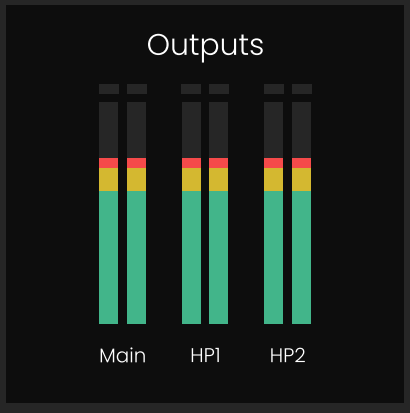
The input meters display the levels of all 8 channels at the same time, enabling you to keep track of your recording levels. If you are using the digital inputs, you can quickly cycle through the input meter screens to view their levels by pressing the Control Wheel.

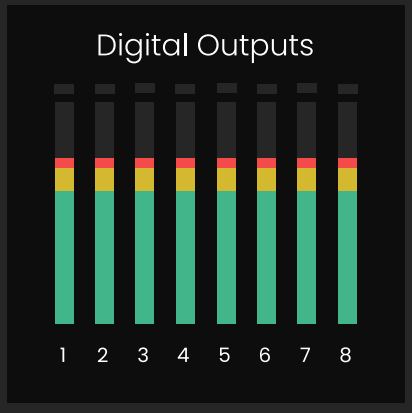


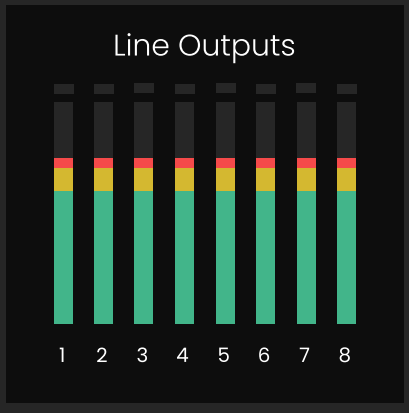




The output meters display the levels coming out of your main speaker outputs and both headphone outputs. Similar to the inputs, you can navigate to view the level of your line outputs and digital outputs by tapping the Control Wheel.



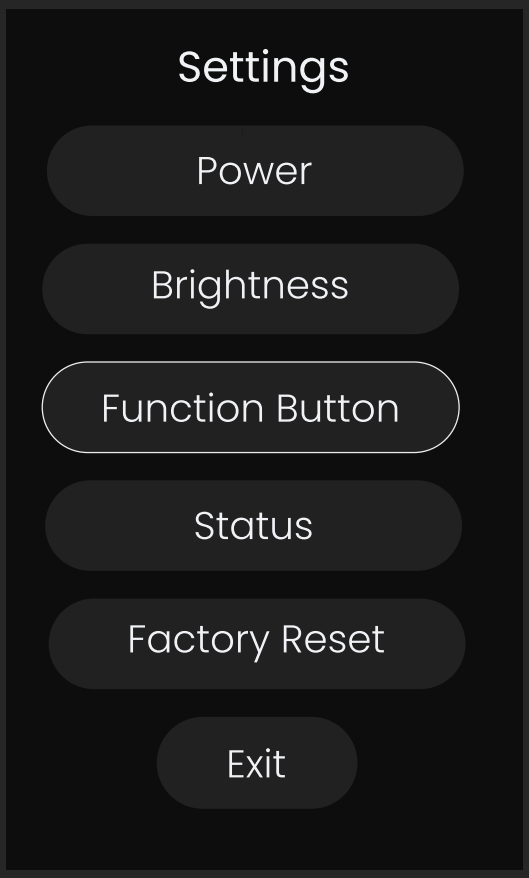




Motion UI Menu

In the Motion UI menu, you will find the options to power the unit down, customise the brightness levels of the LEDs, assign any of the monitoring functions to the hardware F-button, check the audio status of your unit, and reset the unit to the factory settings.

To open the Motion UI menu, momentarily hold the Control Wheel down.



Power

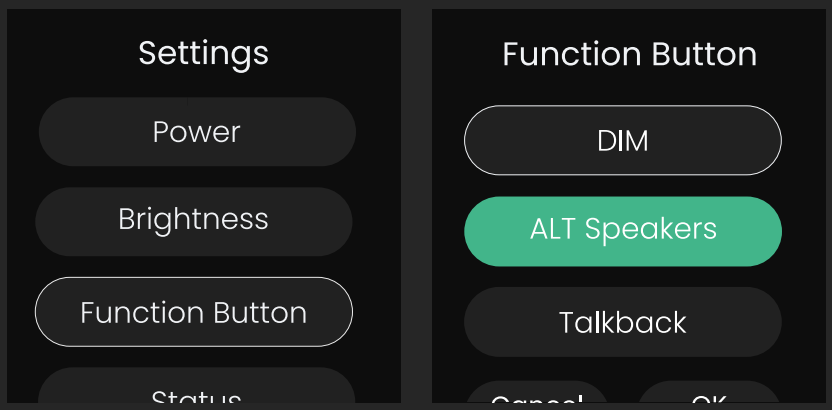
To power off the unit, rotate the Control Wheel until Power is selected, and then press the Control Wheel down to select. You will then be prompted to confirm if you want to turn off EVO 16, select Yes, and press the Control Wheel to confirm.

This will put EVO 16 in a low-power standby mode. To turn the unit back on, hold down the Control Wheel until the screen illuminates.

You can also turn off EVO 16 without navigating to the settings menu by simply holding the Control Wheel down for 5 seconds.

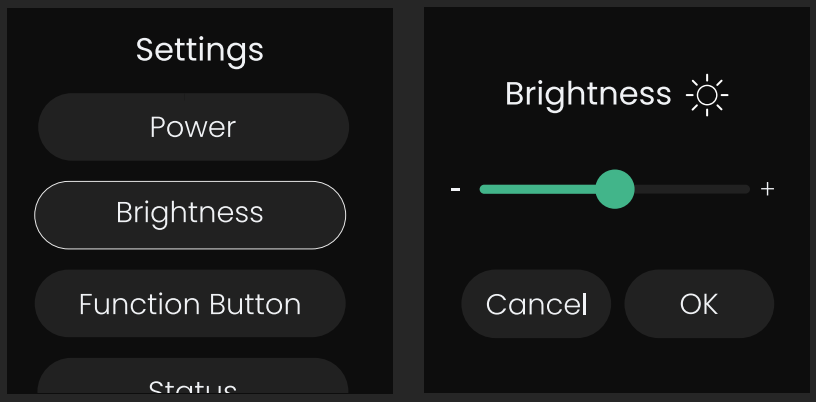
Function Button

This allows you to choose what the F-button on the front panel controls. Here, rotate the Control Wheel between the different options, and press the Control Wheel to select it. Then press OK to confirm your selection.



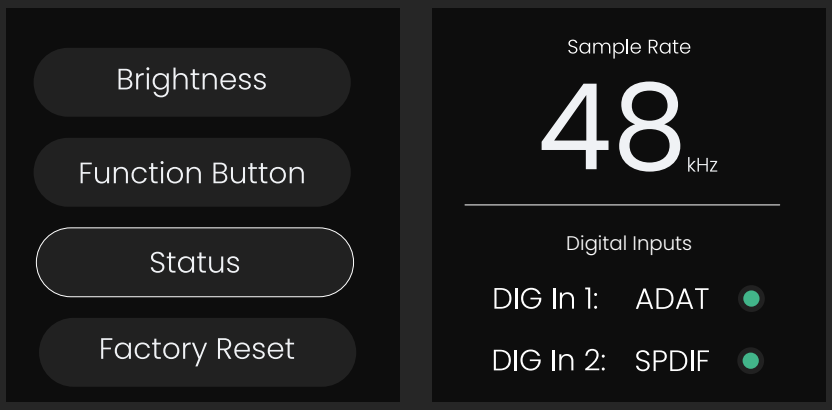
Brightness

The brightness option allows you to adjust the brightness of the LEDs to reduce glare in darker studios.



Status Menu Screen

The status screen displays the sample rate EVO 16 is currently set to via the EVO Mixer as well as showing what protocol both the digital inputs are set to and whether they have been successfully clocked.

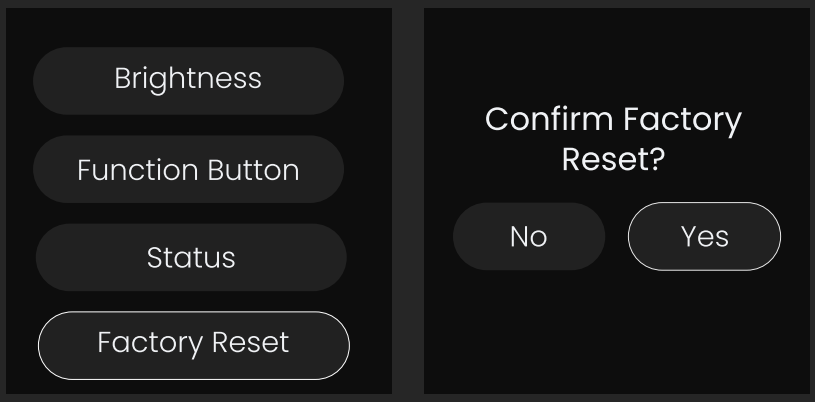


If the light is green, this means that the unit has been successfully clocked, if amber the unit is receiving a signal but in the wrong sample rate, and if red, no signal is detected. To dismiss the screen, press the Control Wheel.

Note: the sample rate and clock settings cannot be edited from this screen.

Factory Reset

To reset EVO 16 to its factory settings, select the factory reset button and select Yes to start the process.



Note: Be aware this will remove any of your currently saved settings.

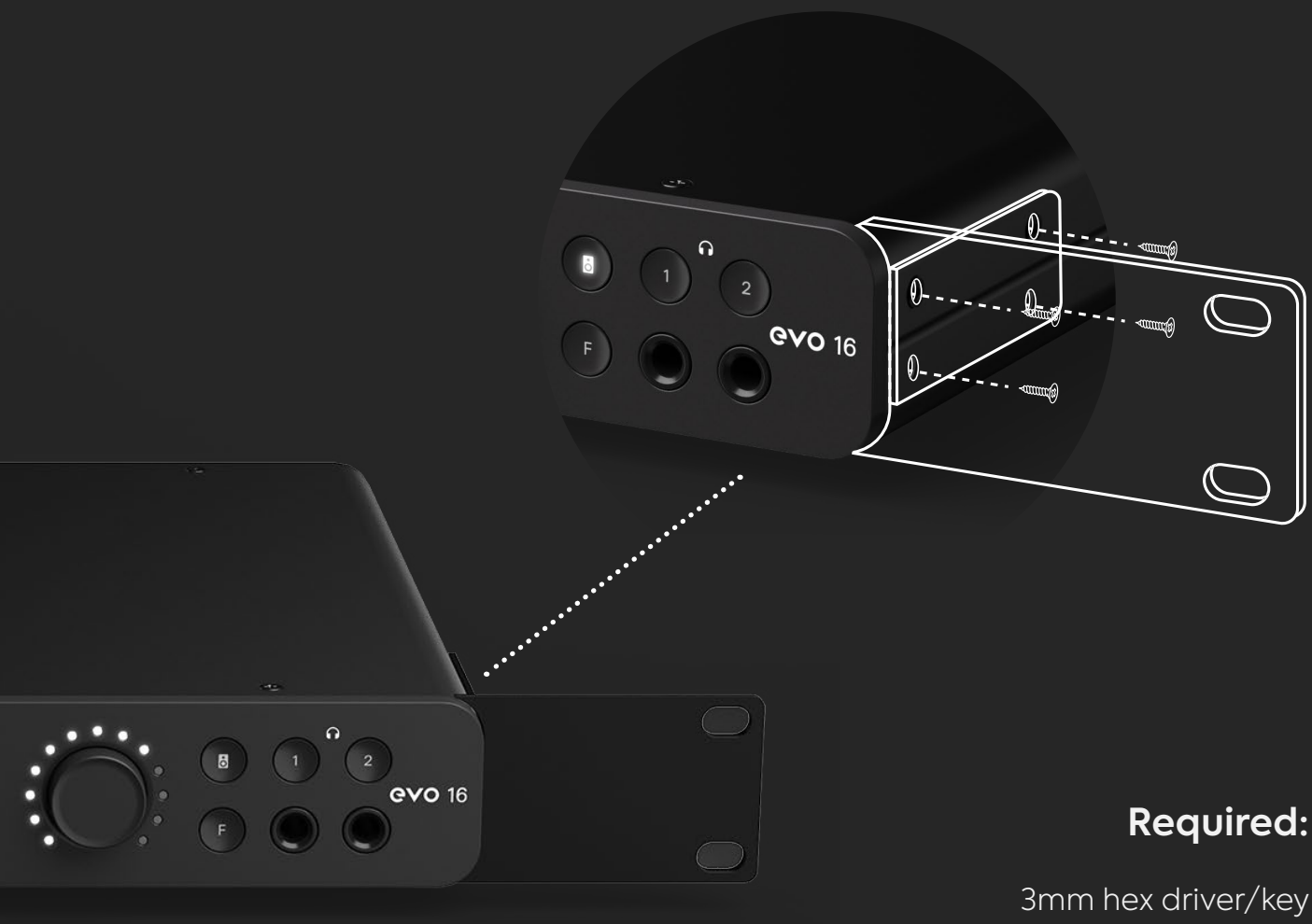
EVO 16 RACK MOUNTING

How to install the rack mount ears

1. Use a 3mm hex driver to remove the two screws either side near the front of the unit.

2. Position rack ear so that the four screw holes are inline with the four holes found on the side of the EVO 16. Refer to the image above for correct positioning. Insert the x4 M4 screws into the holes, and tighten until firm. Repeat proccess again for other rack ear.

3. Remove the rubber feet which are located on the bottom of the EVO 16 using a Pozidriv screwdriver.



Required:

3mm hex driver/key
Pozidriv screwdriver

Caution regarding placement

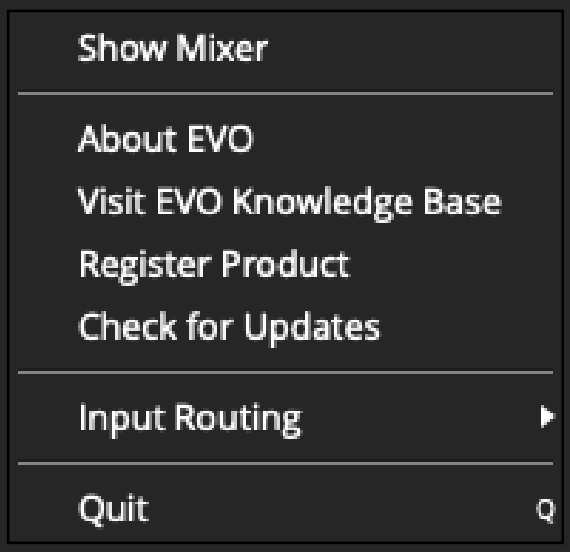
It is not advised to run the unit in a rack above or below hot units such as valve outboard and multichannel AD/DA converters without suitable ventilation space around the unit.

We would suggest a space of at least one rack unit above and below the unit.

Ensure side air vents are not covered. Additionally, do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

SOFTWARE FEATURES

EVO 16 includes a powerful software mixer giving you complete control over your monitoring and audio loop-back. On MacOS, the EVO Software Mixer will open in the Menu Bar in the top right hand corner of the screen.



On Windows It will open in the system tray found in the bottom right hand corner of the screen.

The Menu gives you the following options:

Show Mixer

This menu item opens the Software Mixer Window. More information about the mixer can be found in the EVO Mixer section.

Quit

This fully quits the application and stops it from running in the background.

About EVO

The About EVO option allows you to check your current software and firmware versions and provides further information about the software.

Visit EVO Knowledge Base

This option will open a browser window allowing you to access technical support and FAQ's for EVO 16.

Register Product

This will open a browser window for the Audient ARC website where you can register your interface to access free promotions and software. More information about ARC can be found on **page 12.**

Check for Updates

This option will check if any updates are available for your EVO 16 to add new features or support for future operating systems. If any updates are available then you'll be prompted to install them.

Input Routing

This allows you to select which channels are sent to your loopback inputs. More information about loopback can be found on **page 63**.

EVO SOFTWARE MIXER

The EVO Software Mixer allows you to completely control your monitoring for recording, mixing or content creation.

Each fader has the following functions:

Pan Control

This allows you to monitor the audio on either the left speaker, the right speaker or anywhere in between.

Stereo/Mono

Adjacent tracks can be stereo linked for when you are recording a stereo source, such as a synth or when using stereo mic techniques.

Solo (S)

Solo will mute every other input apart from the channels that have the solo button selected.

Mute (M)

This will mute the track so it is no longer being monitored.

Meter

This shows the current input level of a particular channel. If the signal level is too high, a red “Clip” indicator will show at the top of the meter. In this instance, you may need to adjust the gain of your inputs or the volumes in your recording software.

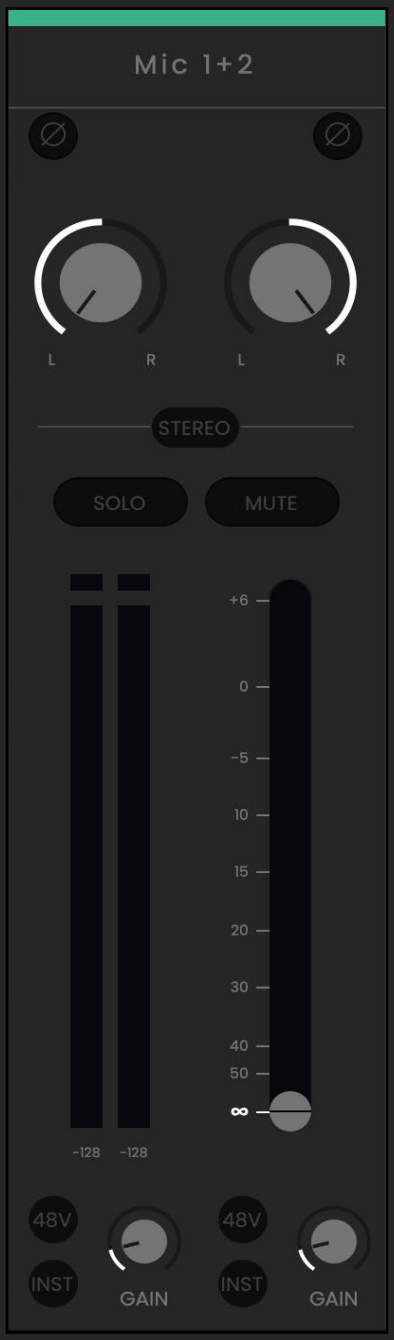
Phase Flip

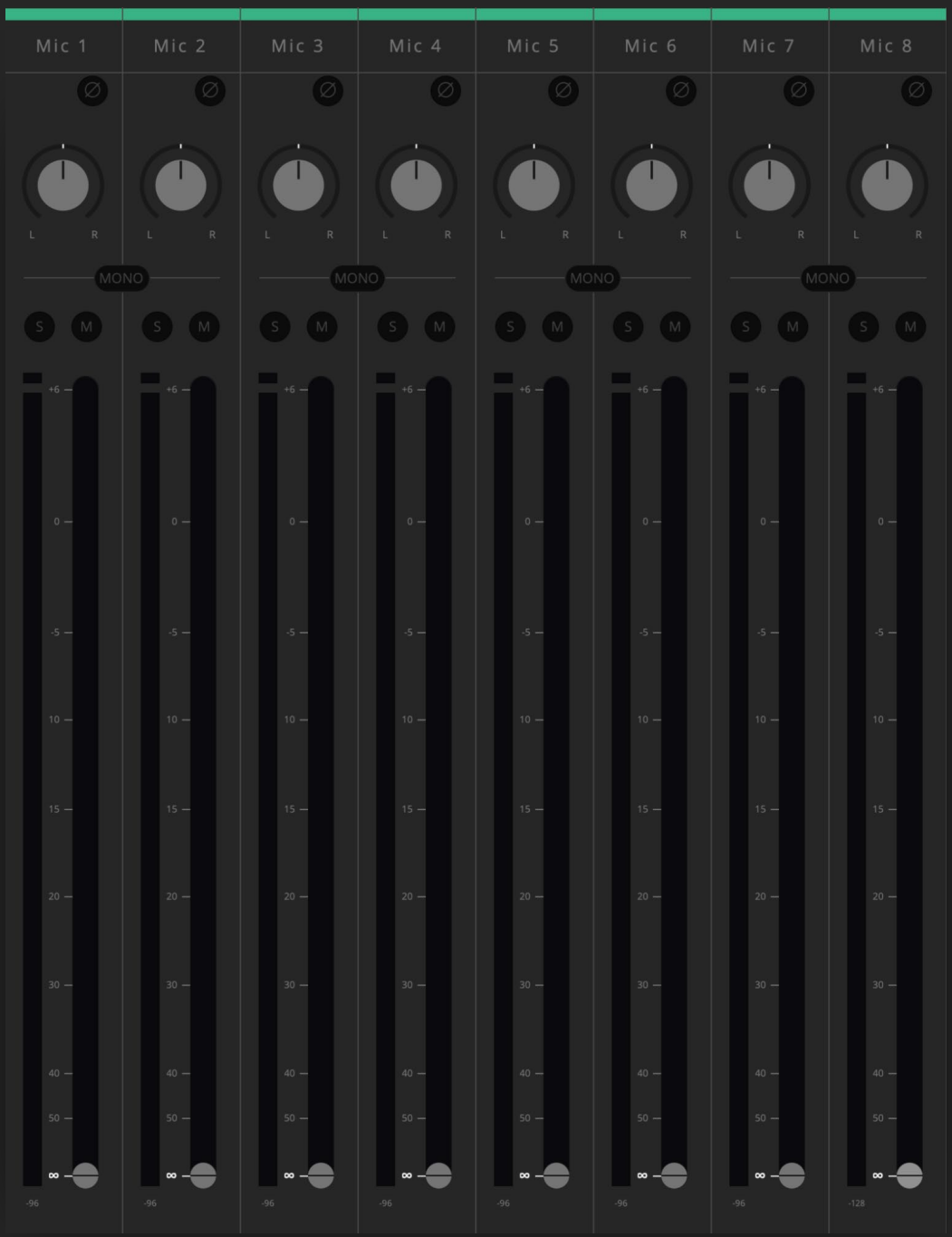
Inverts the polarity of the signal by 180° to stop phase cancellation. This is useful if you are micing the rear of a guitar amplifier or the underside of a snare drum.

Faders

The fader determines how much signal is sent to the outputs. The faders have an additional 6dB of monitoring gain available allowing you to boost a quiet signal, this is done by pulling up the fader to the +6dB point.

In the mixer there are multiple channels from different sources. These different channels are explained below:



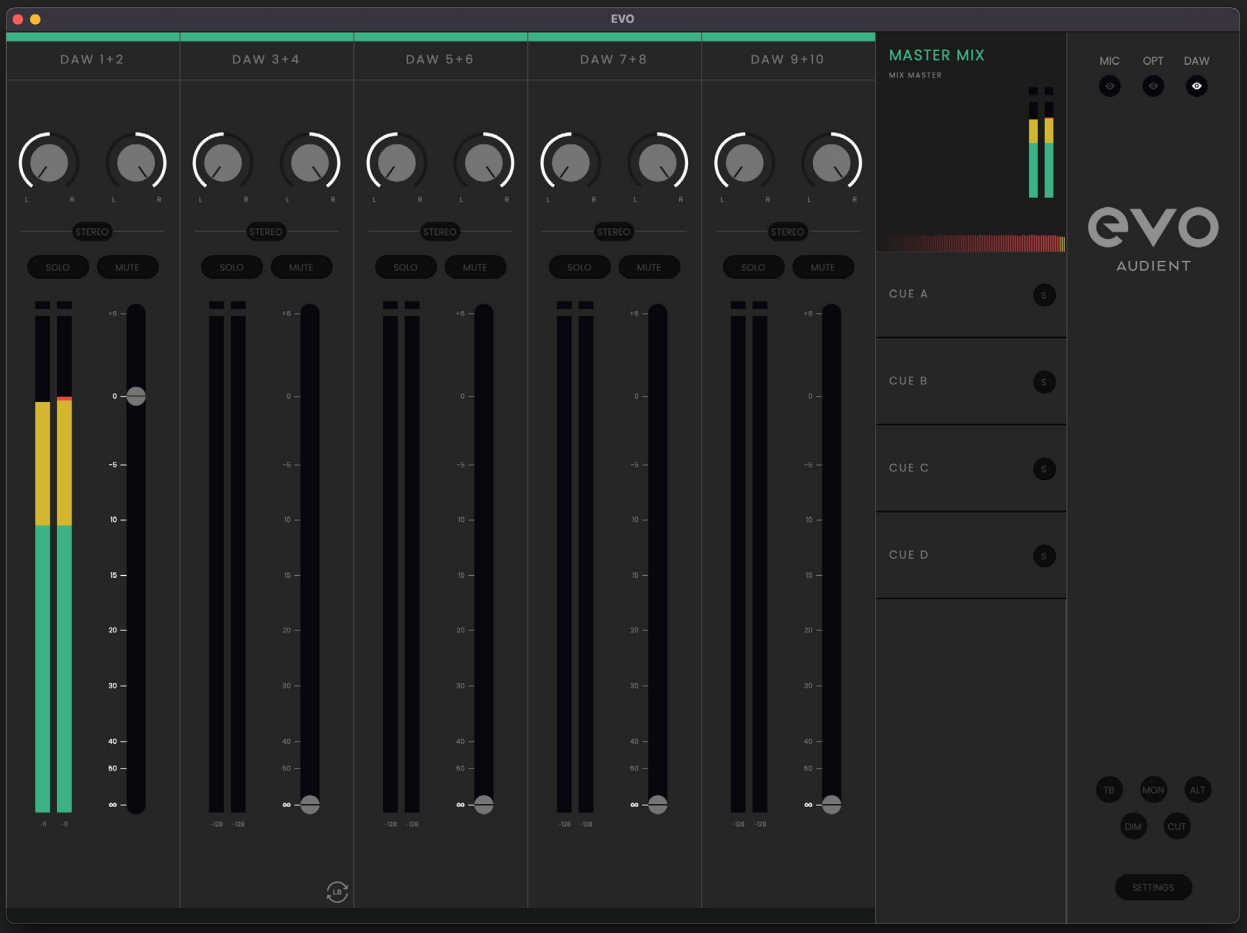


Mic 1, 2, 3, 4, 5, 6, 7 & 8

These are the eight microphone inputs of the EVO 16. Pulling up the faders for these channels allows you to listen to the eight inputs through your speakers or headphones with very low latency.

DAW 1+2, 3+4, 5+6, 7+8

On the far right side of the mixer is the master section. From here you can adjust the output levels of the line outputs 1+2, 3+4, 5+6, 7+8, which are found at the rear of the unit.



This is your playback from your computer, such as playing back recordings or instruments from your DAW, or just playback from media players or web browsers. Pulling up the fader for these channels allows you to play this back through your EVO 16.

The EVO 16 Software Mixer has 8 DAW Return Channels allowing you to set up multiple cue mixes or sends to hardware outboard gear. Using these three channel types, you can build up your main monitor mix and up to four additional cue mixes. Its important to note that the EVO Software Mixer only controls the monitoring of the EVO 16. Changes made to the EVO Software Mixer won't affect the level present in your DAW or audio software.

Digital Inputs

These are the inputs from the EVO's optical inputs. The number of digital inputs present on the EVO mixer application depends on the digital input type (S/PDIF or ADAT) and the sample rate being used.

Master Section

Clicking on one of the mixes allows you to make changes to that mix. When a mix is selected, it expands to reveal additional controls for that mix.

Cue Mix Name

Double clicking on a Cue Mix's name allows you to rename it. If for example you were creating mixes for four separate band members, you could name them 'Drummer', 'Guitarist', 'Bassist'... etc.

Mix Solo

The Solo button allows you to audition each of the Cue Mixes through your speakers.

Mix Level

The Mix level allows you to control the overall level of the Cue Mix that is sent to the outputs.

Mix Meters

The Mix meters show the master signal level of the selected Mix.

Channel Views

These three buttons allow you control which of the three channel types are shown in the mixer. If for example you weren't using the digital inputs for a particular project, you can simply hide the optical channels by clicking on the OPT control.

Monitor Controls

These five buttons control various aspects of the EVO 16 monitor controller capability:

TB (Talkback)

The talkback button switches talkback on and off. More information regarding talkback and its various settings can be found in the 'System Panel' section of this manual.

Mono

The mono button sums the stereo outputs down to mono. This can be used to quickly check the mono compatibility of your mix to make sure it'll sound great almost anywhere!

ALT

Alt allows you to quickly switch your monitor path to a secondary set of speakers to let you check how your mix translates on various speakers. You can select which outputs the ALT. monitor control flips to in the System Panel.

Dim

Reduces the output level by a pre-set amount which can be great if you get a call or need to quickly chat to someone during a session.

Cut

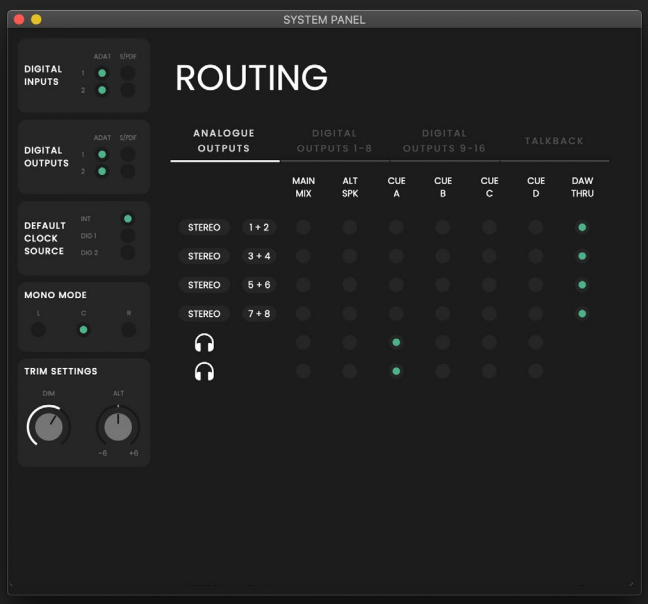
The cut button cuts the signal to the speakers. All these controls can be controlled from the EVO 16 itself, either by assigning them to an F-Key, or using the dedicated Dim and Cut controls..

Assigning the F-Button

Various functions of the EVO Software Mixer can be assigned to the Function Key of the EVO 16 to allow you to quickly control your monitoring at the click of a button. To assign a monitor control to an F-Button, simply right click on the control and select the F-Button.

System Panel Features

The system panel can be accessed via the menu or simply by pressing the ‘Settings’ shortcut on the mixer front panel.



Digital Inputs/Outputs

Allows you to select whether each optical input or output uses ADAT or S/PDIF digital format.

Default Clock Source

The Clock source can be selected from either the internal clock or one of the two optical inputs. More information about choosing a clock source can be found in the clocking section of this manual. When using an external clock source the indicator beside the selector shows the current status of the clock on that input.

- **Red** - No clock signal detected on input
- **Amber** - A clock signal is detected but at a different sample rate to EVO 16
- **Green** - A clock signal is detected and is at the correct sample rate.

For an external clock source to be working correctly you would want the indicator to be green. If the indicator isn’t green, EVO 16 will default back to the internal clock until it detects a valid clock input.

Mono Mode

When the EVO 16 Mono feature is engaged this option controls whether the mono signal is sent to the left, right or both speakers.

Dim Level

When the EVO 16 dim button is pressed, this control defines how much the level is reduced by.

ALT Speaker Trim

This control defines the level drop/boost when the EVO 16 is switched to ALT speaker mode. This is used to balance levels between different speaker brands or types.

Output Routing Selection

Opens the routing matrix for either the Analogue Outputs, Digital Output 1, Digital Output 2 or the Talkback channel.

Routing Matrix

The Routing Matrix allows you to control the audio source for each of the EVO 16 outputs from the following options:

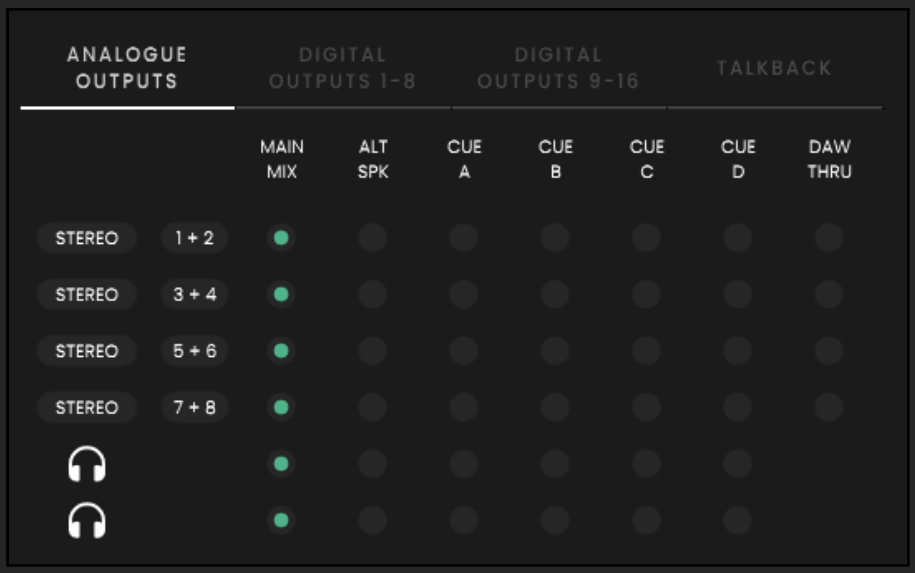
- **Main Mix** – This takes signal from the Master Mix of the EVO Software Mixer. This is what is usually used for most standard playback.
- **ALT** – This takes signal the Master Mix but only when the ALT speaker mode is active.
- **Cue A, B , C, D** – This takes signal from the four cue mixes which can be created using the iD mixer.

Please note that the hardware volume control does not affect these mixes and the Cue's have seperate trims which can be adjusted when the Cue Mix is selected in the Main Mixer Window.

- **DAW THRU** – This allows you to route to outputs exactly as they would appear in your DAW. For example, if you set Analogue out 1+2 to DAW THRU, anything your DAW sends out to Outputs 1+2 will be sent directly to Analogue outputs 1+2.

This can also be applicable for the digital outputs meaning you can have numerous sends direct from your DAW out via the optical outputs for adding outboard gear or for extensive fold-back solutions. As an example, setting digital outputs 1+2 to DAW THRU would allow you to directly send audio to this output from your DAW by setting channels in your DAW to playback via outputs 9+10 (outputs 1–8 would be your analogue outputs). Digital outputs 3+4 would be outputs 11+12... and so on.

Please note that in DAW THRU, the channel in question will bypass any volume control and audio will be passed at full scale. If this output is sent to a set of speakers without inline attenuation, this may be very loud. The DAW THRU function is not available on the headphone outputs.



Talkback Source

The Talkback source allows the talkback input to be taken from one of the EVO 16 internal inputs or from a device connected to the host computer (such as a built-in microphone or USB microphone).

When you select an input as your Talkback channel, the channel strip in the EVO Software Mixer will be changed to a talkback channel which will have a TB button in the centre. If using an external device, the talkback signal will appear on channel DAW 10. Faders will only appear for these channels on the Cue Mixes, not on the Main Mix.

Talkback Device

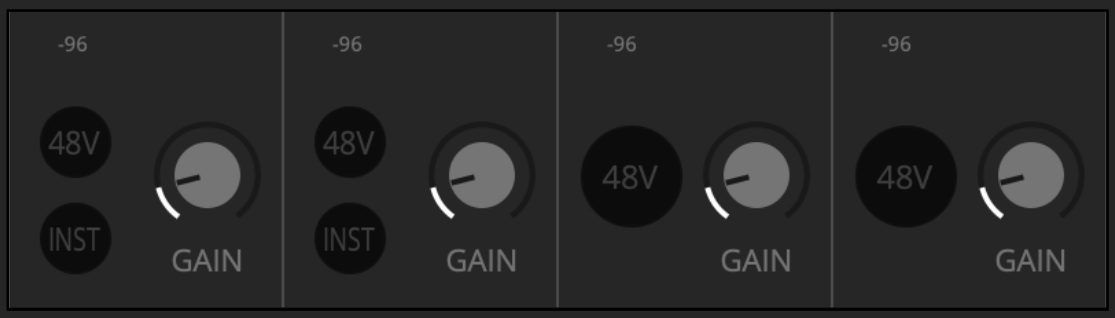
If an external device is selected then this allows you to select which connected device is used.

ADVANCED FEATURES

Mic Preamp Controls

The Mic preamps on EVO 16 can be remotely controlled from the EVO Software Mixer. To enable this go to the “View” menu and select “Show Mic Pre Controls”.

Once this is enabled, on the bottom of each channel, you’ll see a gain control and a +48v button.

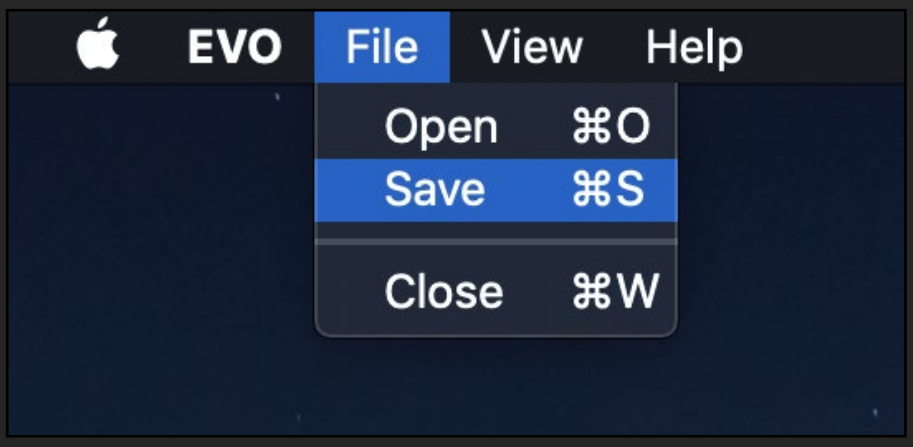


The +48v button will enable phantom power on this channel and the Gain control will adjust the gains on the EVO 16 itself. Allowing you to make quick changes to your setup without having to look away from the computer during a busy session.

Saving and Opening EVO Configurations

If you have a configuration you want to use again in the future then you can save it as a preset. EVO 16 will save all your settings to allow for speedy recall.

To Save a configuration, go to **File > Save**.



You can then give the configuration a name and click Save. If you'd like to send your settings to another computer or EVO 16 user, you can click 'Export Mixer Setting to File' and you can save this to your documents.

To open a previously saved configuration, Go to **File > Open** and select the configuration from the list..

You can also delete a previously saved configuration by clicking the red 'X' next to it.

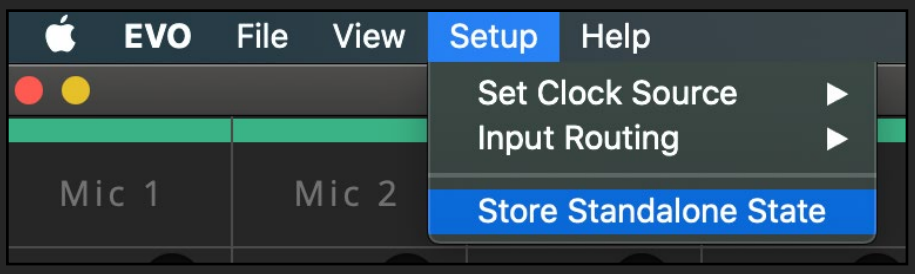
If you'd like to open an EVO 16 configuration from your documents, simply click 'Load From File' and then use the file explorer to find the setting you wish to load.

Standalone Operation

If you would like to use EVO 16 without a host computer, EVO 16 can be configured to operate in standalone mode. This is great for setting up complex tracking setups in remote locations.

To setup Standalone mode, first setup the iD mixer in the way that you wish to be saved onto your EVO 16. This includes your digital I/O settings, output routings and talkback settings in the System panel.

Now navigate to the Setup menu and select Store Standalone State. The EVO Software Mixers current configuration will then be saved onto the EVO 16 itself, ready to be recalled when the EVO 16 is next powered on.

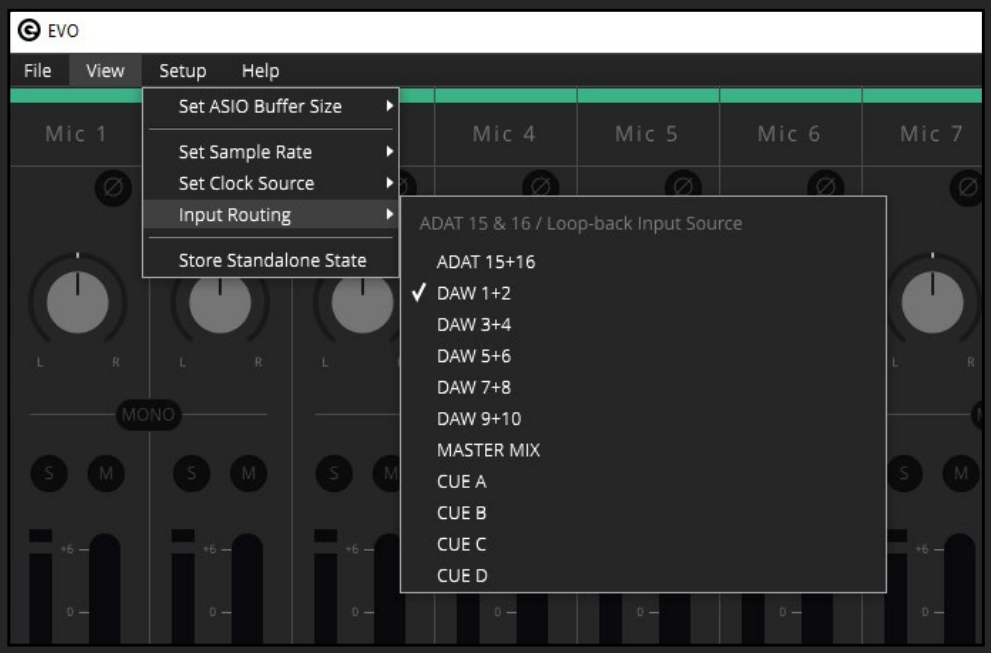


Using Audio Loop-back on EVO 16

EVO 16 includes Loop-back channels that allow you to take audio from applications on your computer and feed it to another application, great for recording video interviews or for setting up gaming streams. You can think of it as a virtual cable that runs from your outputs and back to the inputs.

Selecting the Loop-back Source

Firstly, you would need to select which output of the EVO 16 you wish to use as your source for the Loop-back channels. This is done by going to 'Setup > Input Routing':



Below is a breakdown of each source and where it takes audio from:

DAW 1+2 – Any audio being sent to outputs 1+2 of the EVO16

DAW 3+4 – Any audio being sent to outputs 3+4 of the EVO16

DAW 5+6 – Any audio being sent to outputs 5+6 of the EVO16

DAW 7+8 – Any audio being sent to outputs 7+8 of the EVO16

DAW 9+10 – Any audio being sent to outputs 9+10 of the EVO16

Master Mix – The audio mix created in the EVO mixer on the Main Mix panel

Cue A – The audio mix created in the EVO mixer on the CUE A panel

Cue B – The audio mix created in the EVO mixer on the CUE B panel

Cue C – The audio mix created in the EVO mixer on the CUE C panel

Cue D – The audio mix created in the EVO mixer on the CUE D panel

Tip – Using the Master or Cue Mixes is a great way of combining audio from a number of sources (Mic Inputs, Digital inputs, DAW Channel...etc) into one stereo feed, which is great for streaming apps where you can only use a single stereo input. See earlier in the manual for how to adjust the Main and Cue Mixes.

The Loop-back icon as a visual aid will appear on the source you have selected.

Recording/Streaming your Loop-back Channels

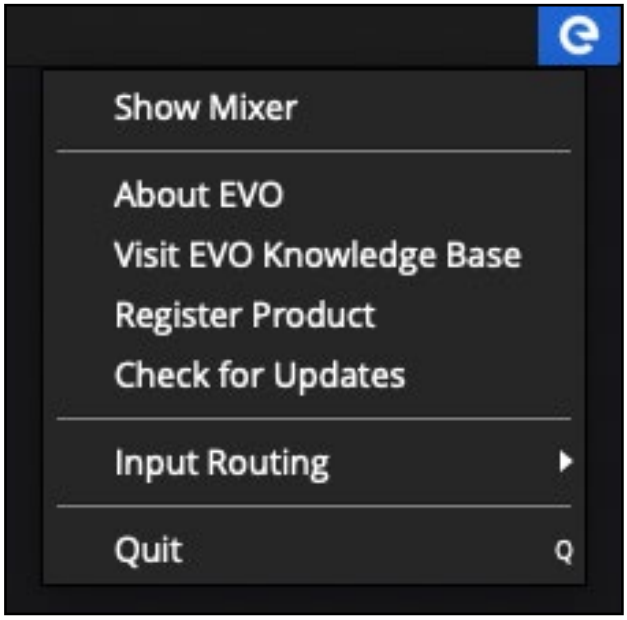
Once you have selected your source, set up your recording/streaming software to capture audio from the EVO 16's Loop-back channels. The Loop-back channels will appear on Channels 23-24.

For example, when using a DAW, create a new stereo track that takes the signal from Input 23-24. When you hit record, this will record any audio present on the selected Loop-back source at that time.

Similarly, in a streaming application such as OBS or Zoom, you'd set your input device to EVO 16 channels 23-24. (Please note that not all applications will allow you to access channels 23 and 24, which may mean you are unable to use loop-back with this application).

Firmware Update Procedure

To update your firmware, go to the EVO Application Menu and select ‘Check for Updates’.



Provided you have an internet connection, the EVO App will now check with our update service to see if there are any new firmware updates for your EVO 16.

If a firmware update is available, you’ll be prompted to install it directly from our update service. This should take no longer than a minute or so. We recommended that all speakers are switched off before updating.

During the update procedure, the unit will restart multiple times.


evo
AUDIENT
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SPECIFICATIONS

MICROPHONE PREAMPLIFIER:

Mic Gain Range:	58 dB
Line Gain Range:	58dB with -10dB Pad
Phantom Power:	48v +/-4v @ 10mA/Channel
CMRR:	>80dB @ 1kHz
Maximum Input Level:	+16dBu
Input Impedance (Mic):	>3kΩ Balanced
Input Impedance (Line):	>10kΩ Balanced
Frequency Response:	+/-0.5dB 10Hz to 40kHz
Crosstalk:	<-105dBu @ 1kHz <-103 @ 10kHz
THD+N @ 0dBu (1kHz):	<0.0015%
SNR:	100dB
Mic EIN:	<-127.5dBu

XLR:	Pin 2 (Hot), Pin 3 (Cold) & Pin 1 (Shield)
1/4” Jack:	TIP (Hot), RING (Cold) & SLEEVE (Shield)

D.I:

D.I Gain Range:	58dB
MAXIMUM INPUT LEVEL:	+10dBu
INPUT IMPEDANCE:	500k
THD+N @ 0dBu (1kHz):	<0.1%
SNR:	100dB
FREQUENCY RESPONSE:	+/-0.5dB 10Hz to 20kHz
1/4” JACK:	TIP (Hot) & SLEEVE (Shield)

ANALOGUE TO DIGITAL CONVERTER

Digital Reference Level:	0dBFS = +10.5dBu
Frequency Response:	+/-0.5dB 10Hz to Fs/2
Crosstalk:	-125dBu @ 1kHz & 10kHz
THD+N @ -1dBFS (1kHz):	<0.001%
Dynamic Range:	112.5dB A-Weighted

DIGITAL TO ANALOGUE CONVERTER

Maximum Output Level:	12dBu
Digital Reference Level:	0dBFS = +12dBu
Output Impedance:	<50Ω
Frequency Response:	+/-0.5dB 10Hz to Fs/2
Crosstalk:	<-110dBu @ 1kHz
THD+N @ -1dBFS (1kHz):	<0.001%
Dynamic Range:	121dB A-weighted
1/4" Jack:	TIP (Hot), RING (Cold) & SLEEVE (Shield)

HEADPHONE OUTPUT:

Max Output Level:	11.25dBu
Output Impedance:	<50Ω
Frequency Response:	+/-0.5dB 10Hz to Fs/2
Crosstalk:	-108dBu @ 1kHz
THD+N @ -1dBFS (1kHz):	<0.001%
Dynamic Range:	118dB A-weighted
Max Level Into 30ohms:	+8.5 dBu, 0.00094% THD+N, 1.66Vpk Power: 86mW
Max Level Into 60ohms:	10 dBu, 0.00079% THD+N, 2.55Vpk Power: 104mW
Max Level Into 600ohms:	11.2 dBu, 0.00057%THD+N, 3.83Vpk Power: 24mW
1/4" Jack:	TIP (Left), RING (Right) & SLEEVE (Shield)

WARRANTY INFORMATION

Warranty Statement

Your EVO 16 comes with a manufacturer's warranty for three years (36 months) from the date of despatch to the end user.

The warranty covers faults due to defective materials used in manufacture and faulty workmanship only.

During the warranty period Audient will repair at its discretion or replace the faulty unit provided it is returned carriage paid to an authorised Audient service centre. We will not provide warranty repair if in our opinion the fault has resulted from unauthorised modification, misuse, negligence or accident.

We accept liability to repair or replace your EVO 16 as described above. We do not accept any additional liability. This warranty does not affect any legal rights you may have against the person who supplied this product – it is additional to those rights.

Warranty Limitations

This warranty does not cover damage resulting from accident or misuse.

The warranty is void unless repairs are carried out by an authorised service centre.

The warranty is void if the unit has been modified other than at the manufacturer's instruction.

The warranty does not cover components which have a limited life, and which are expected to be periodically replaced for optimal performance.

We do not warrant that the unit shall operate in any other way than as described in this manual.

Tel: 0044 1256 381944

IMPORTANT SAFETY INSTRUCTIONS

• **Read instructions** – All the safety and operating instructions should be read before the product is operated.

• **Retain instructions** – The safety and operating instructions should be retained for future reference.

• **Heed Warnings** – All warnings on the product and in the operating instructions should be adhered to.

• **Follow Instructions** – All operating and use instructions should be followed.

• **Cleaning** – Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a dry cloth for cleaning.

• **Attachments** – Do not use attachments not recommended by the product manufacturer as they may cause hazards.

• **Water and Moisture** – Do not use this product near water-for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.

• **Accessories** – Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult and serious damage to the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

• **Flame Sources** – No naked flame sources, such as lighted candles, should be placed on the product.

• **Ventilation** – Slots and openings in the cabinet are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

• **Power Sources** – This product should be operated only from the type of power source indicated on the marking label and connected to a MAINS socket outlet with a protective earthing connection. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.

• **Power-Cord Protection** – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

• **Mains Plug** – Where the mains plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

• **Lightning** – For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

• **Power Lines** – An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

• **Overloading** – Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

• **Object and Liquid Entry** - Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

• **Headphones** - Excessive sound pressure form earphones and headphones can cause hearing loss.

• **Damage Requiring Service** - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

– When the power-supply cord or plug is damaged.
– If liquid has been spilled, or objects have fallen into the product.
– If the product has been exposed to rain or water.
– If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
– If the product has been dropped or damaged in any way.
– When the product exhibits a distinct change in performance-this indicates a need for service.

• **Replacement Parts** - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

• **Battery Disposal** - When disposing of used batteries, please comply with governmental regulations or environmental public instruction's rules that apply in your country or area.

• **Safety Check** - Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

WARNING

THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED “DANGEROUS VOLTAGE” WITHIN THE PRODUCT’S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.

THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.

CAUTION REGARDING PLACEMENT

To maintain proper ventilation, be sure to leave a space around the unit (from the largest outer dimensions including projections) than is equal to, or greater than shown below.

It is not advised to run the unit in a rack above hot units such as valve outboard and multichannel AD/DA converters without suitable ventilation space around the unit. Ensure side air vents are not covered.

Left and Right Panels: 10 cm
Rear Panel: 10 cm
Top Panel: 10 cm

DO NOT install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

DO NOT defeat the safety purpose of the polarized or grounding – type plug. A polarized plug has two blades with one wider than the other. A grounding type plughas two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

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FCC STATEMENT

This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio TV technician for help.

• This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1 this device may not cause harmful interference, and
2 this device must accept any interference received, including interference that may cause undesired operation.

• To prevent electric shock, match wide blade of plug to wide slot, fully insert (Applies only to devices that uses plug with wide blade).
• For the appliance provided with a protective earth terminal should be connected
to a mains outlet with a protective earth connection.
• Mains plug is used as disconnect device and it should remain readily operable during intended use. In order to disconnect the apparatus from the mains completely, the mains plug should be disconnected form the mains socket outlet completely.
• Marking and rating plate are located at the back or bottom of the apparatus.


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