ANUBIS VENUE MISSION

MISSION APPENDIX

06.07.2024

Contents

VENUE MISSION APPENDIX

This appendix comes as a supplement to the Anubis User Manual and is intended to take you through the ANUBIS VENUE+MISSION in detail. We encourage you to first familiarize yourself with MERGING+ANUBIS User Manual prior to reading this appendix.

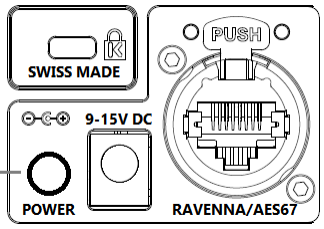
To ensure the safe operation of your Anubis, please read the instructions, important safety information and warnings carefully before installation and use.

SWITCHING ON MERGING+ANUBIS

1. Press the switch on the unit's rear panel next to the DC input, as shown on the Back-Panel figure.

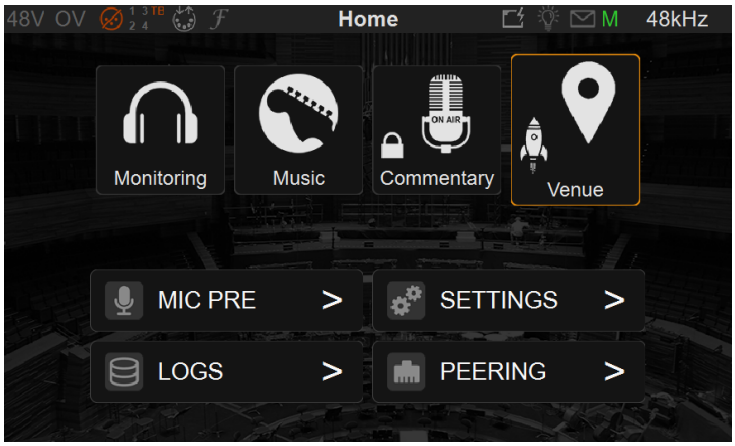
Pressed = ON

Released = OFF



2. The Anubis Soft buttons will light up orange when the unit initiates the boot-up sequence, the TFT display will follow soon after. During this time the unit will perform a series of self-test and initialization routines.

3. Once the Anubis TFT display shows the Home page, the unit is ready for use.
Note: To turn OFF Anubis, press the POWER button to the released state.



Merging License Manager – Enabling the Venue Mission

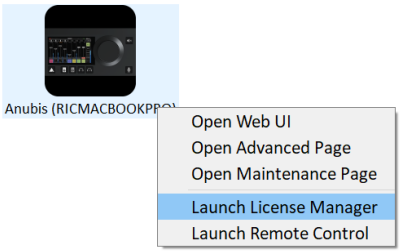
Some specific Products (Missions or Features) will require a valid License Activation key prior to operations. This is the case for the Anubis Venue Mission. Contact your Merging Local Sales Partners to purchased or get trial activation key. Once you have received your key code enter this one into your Anubis from the Merging License Manager.
See our knowledge base website for details.

Steps to add a Product License with MLM

Requirements:

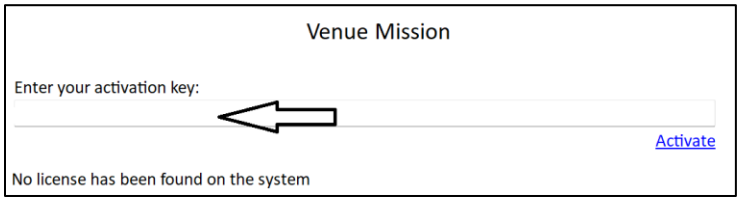
- A MERGING+ANUBIS connected in RAVENNA/AES67 to your system (mac or PC)
- A valid product licenses key code
- One of Merging latest application (MAD, VAD, ANEMAN, MTDiscovery)
- The latest Anubis Firmware version

Procedure:
1. Connect your Anubis to your system
2. Open one of Merging's applications: MAD, VAD, ANEMAN or MTDiscovery.
3. Right click on the discovered Anubis icon and select "Launch License Manager"



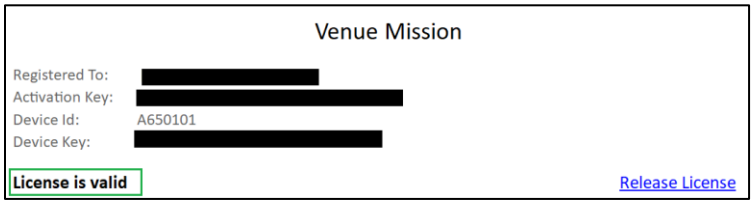
4. This will open the Merging License Manager from which you can enter the activation key of the Product feature you wish to activate.

In the example here we will activate the Venue Mission.



5. Enter the received key code you have received for the Product Feature. It should look as such AXXXX-XXXXX-XXXXX-XXXXX-XXXXX-X
Enter this code in the activation field and press the Activate entry line

6. This will activate the Product (Venue Mission in this example) and make this one available on that specific Anubis.



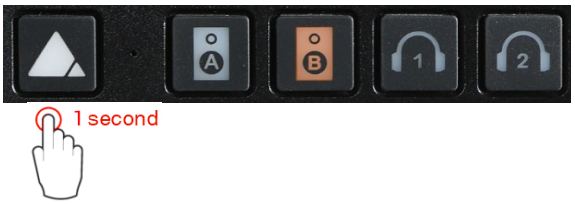
Note: A given activation key code can only be activated on one Anubis at the time.
You can Release a License to activate it on another Anubis device at any time

VENUE MISSION LAUNCH

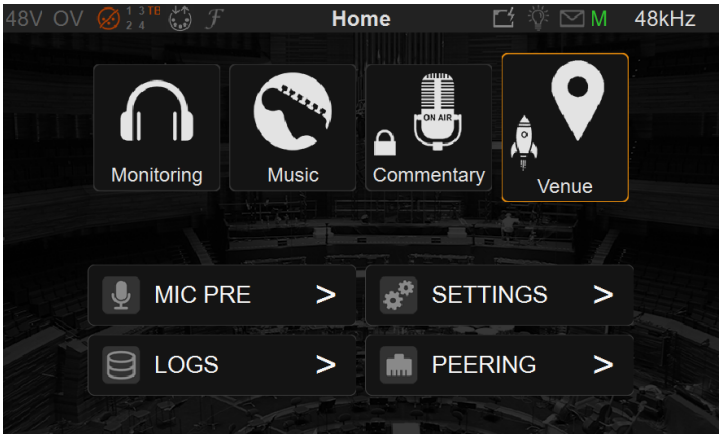
Access the Anubis Home page to launch the Venue Mission or to access the Settings, Preamps, Logs (messages) and Peering.

The Anubis Home page can, at all times, be accessed by a long press on the Anubis Home button.

Note that the Anubis Home page access can be restricted by a password for safety reasons.

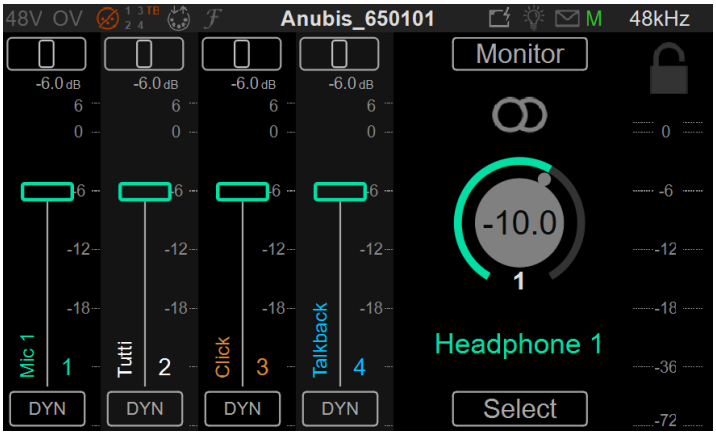


In the Home page select the Mission you plan to use, in this case the Venue Mission..



If you do not see the Venue Mission icon, make sure you are on the latest Anubis Firmware (1.5.2 and above required) and have entered the Venue Mission license, please see the MLM section above.

Once the Venue Mission is selected and launched the Main Page will be displayed and is ready for operation.



ABOUT THE VENUE MISSION

From multi-seats Personal Mix to Live performance. The venue mission can be used typically for Live concerts with multiple performers, for its high quality stage preamps or in recording studios when requiring personal Mixes and preamps.

OVERVIEW

The Venue Mission allows for a musician's personal mixers. With optional EQ, Dynamics and Reverb processing.

Mixer controls and monitoring features are at all times accessible and operated on the local ANUBIS unit Touch Interface, while at the same time can be accessible and operated on one or more remote Web Interfaces and Remote Application.

The user interface can be customized to show the Mixer channels required by the performer, so that this one can concentrate on his performance while still having control over his own mix and monitoring.

Venue Mission typical use cases

- Symphonic orchestral Live performance
- Complex band monitor setup
- Small band without monitor engineer
- Orchestral studio recording
- Speaker booth / ADR studio

Hardware Highlights

Minimal wiring

- Power supplied through PoE+
- Deployment ease
- One network cable for 2 mics
- Up to 4 stereo monitors
- Talkback built-in mic

Short analog path

- Reduced skin effect
- Limited impedance issues
- Minimal electromagnetics disturbances

Audio Quality

- 139dBA dynamic range on input preamp
- HiFi Headphone and DAC quality grade
- 32bit audio bit depth (no more need of preamp control by using digital gain)

Robustness and comfort

- Unibody aluminum box
- Dimmable LED and TFT
- Ethercon / Mic stand fixation

Software Highlights

Personal monitor mix

- 16 channels stereo/mono mixing, panning and balance
- 16 mono or stereo inputs whatever the sampling rate
- Inputs may be a local analog input or an AoIP incoming stream
- Volume control and mono function
- Solo, mute, param EQ, dynamic processing on inputs
- Reverb effect with individual send levels
- Intuitive UI, custom naming and colors
- Setup lock (with password) and various lock functions
- Pan control on mono inputs, balance control on stereo inputs
- Ability to add some delay on inputs (from 1.4 ms up to 20 ms)

Remote control

- Web access
- Windows/MacOS remote app for a total control

- Configuration and monitoring tools enabling actions on multiple Anubis

Interoperability

- Standalone solution but interoperable with any mixing console and DAW
- Loopback monitor streams for monitor check and RF broadcasting
- Ability to listen back the monitor through an AoIP stream

MISSION UI and NAVIATION

- Touch/push and turn control paradigm
    - Fader
    - Paner
    - Gain
    - Volume
- Home/Settings long push access
- Screen Lock
    - Lock specific pages and elements with password
    - Lock status displayed
- Push Anubis Physical buttons A, B, 1, 2 to access to the monitor mixer page
- Talk button in latch mode
- Mute any monitor

I/O Latency Specifications

Latency introduced by the AD-processing-DA and latency introduced by the AES67/RAVENNA network

Anubis Max latency in milisecond (AD to DA)

	44.1	48	96	192	kHz
Personal Monitor	0.11 0.09 0.20 **0.41**	0.10 0.08 0.19 **0.38**	0.05 0.04 0.09 **0.19**	0.03 0.02 0.05 **0.10**	AD Proc DA** ms
Personal Mixer	0.11 0.50 0.20 **0.82**	0.10 0.46 0.19 **0.75**	0.05 0.23 0.09 **0.38**	0.03 0.11 0.05 **0.19**	AD Proc DA** ms max*

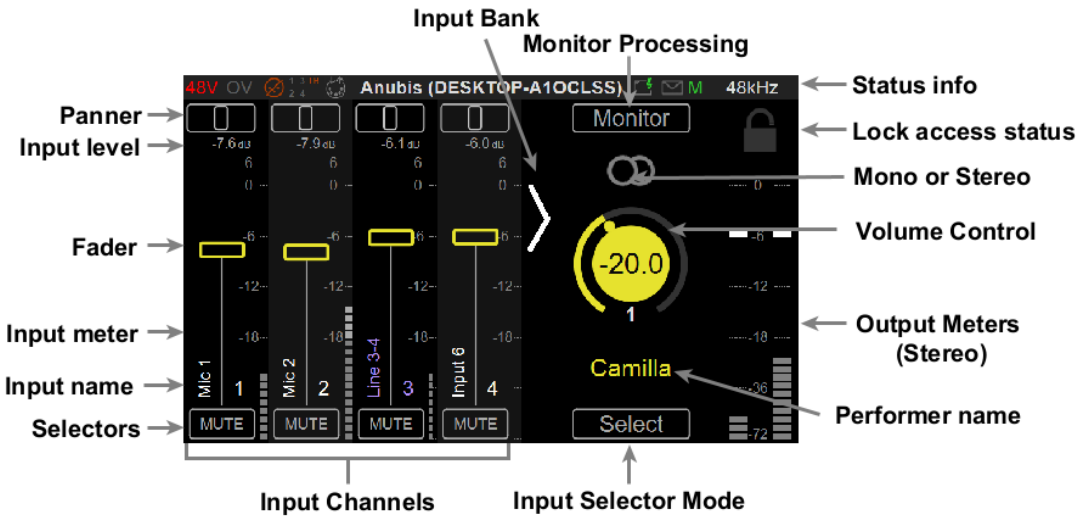
** latency max when all input and output processing are activated*

*** Roll off filter set to slow (default)*

AES67 network latency in milisecond

	44.1	48	96	192	kHz
AES67 48 smpl	**1.09**	**1.00**	**1.00**	**1.00**	ms
AES67 12 smpl	**0.27**	**0.25**	**0.25**	**0.25**	ms
AES67 6 smpl	**0.14**	**0.13**	**0.13**	**0.13**	ms

VENUE MISSION USER INTERFACE



Panner

In each input source channel a panner is available to balance the mix.
Select the panner and use the Rotary Encoder to change its value.

Fader Level (dB)

Numeric readout value of the current fader position. Range -infinite, -40dB to +6dB

Faders

Use the Fader to adjust the level of the Input channel within the Mix. With your finger select the fader region and move up or down the fader, release your finger when desired level is reached. Alternatively select the fader and use the rotary button knob. The default fader value is nominal 0dB while the fader max value is +6dB.

Input Peak Meter

It indicates the input level coming into the channel. Scaled in dBFS with +6dBFS at the max scale. 0dBFS corresponds to digital clipping, levels should be adjusted to avoid clipping.

Input names

Channel source input name. A given name and color can be edited under the Settings>Inputs.

Selector

Solo: Tap the Solo button to solo a signal. This will route the channel signal directly to the Monitor Outputs (see Output Routing for details) and will override the signal previously being auditioned.

Select/Solo: When inputs are in solo the Select menu becomes a Solo Clear button
Mute: Tap the Mute button to mute an input signal, this will unroute the channel signal to the Monitor Outputs.

EQ: Tap the EQ button to access the parametric EQ display. The button is lit when EQ correction is applied.

Dyn: Tap the DYN button to access the parametric Dynamics display. The button is lit when Dynamic processing is applied.

Reverb: Tap the REV button to access the Reverb. The button is lit when Reverb is applied to the input. Note that the Reverb effect is shared with all the monitors.

Input Channels

Channel input sources are first defined under the Settings>Inputs. Once created and enabled a Input Channel source will then appear on the Mixer view.
Note: Inputs channel source should be patched to have signal coming it.

Select channel mode

When pressed, a menu popup allowing to choose the function of the input selector. These can be Mute-Solo-Param EQ- Dynamics-Reverb. Depending on some options chosen in Settings>Monitor, the menu items may be hidden. This menu is not available in Personal Monitor mode

Input bank switch

Tap the scroll button in order to navigate to the additional input channel strips of your Mixer
Note: the scroll button will only appear if additional channels are available to scroll to.

Performer name

Personalize and edit the name of your performer from the Settings>Monitor

Volume Control

Control for the monitoring volume level of the performer, it can be operated by selecting it and turning the Anubis rotary encoder.
Note that the on-screen knob will unselect itself after 2 seconds of inactivity. The Volume can also be locked in the Anubis Settings>Monitors under the selected Monitor set of the performer (e.g. Headphone 1) you will find a Volume Locked option.

Monitoring Mode (Stereo or Mono)

Select if you want the performer to monitor in Stereo or Mono mode.
Overlapping circle indicated the Stereo mode while a single circle is Mono.

Monitor processing

When pressed, a menu popup allowing to access to a monitor processing window. These can be Param EQ (12 bands) - Dynamics. Depending on some options chosen in Settings>Monitor, the menu items may be hidden. This menu is not available in Personal Monitor mode.

Output Meters

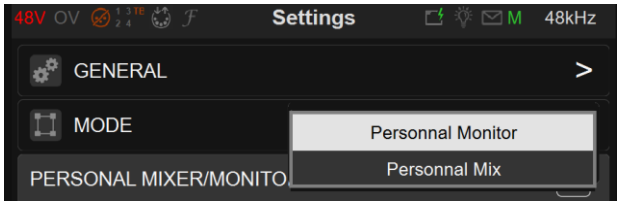
Stereo output meters are available for the performer monitor. Clicking on it reset the peaks.

Access lock status

The lock have two states: open and close. When closed, this means that pages defined in the Access Control sections have an access restriction requiring a password. When opened, you can click on it to enable all the restrictions defined in Access Control.

OPERERATION MODES

The Venus Mission can be operated in two different modes. Either Basic Personal Monitoring Mode or Personal Mixer Mode with Processing.
The operation mode can be selected under the Anubis Settings>Mode.



Note : when switching from Personal Mix to Personal Monitor, Eq Dynamics and Reverb will be disable but the parameters remains stored.

Personal Monitoring Mode

From simple to complex multi-seats monitoring.

From a Musician perspective

This is the ideal mode for a Musician point of view as it provides him the basic monitoring features without any additional disturbance on the artist performance.

Features

- 2 independent headphone circuits

- Ability to mix up to 32 inputs / streams
- Volume, mute, and mono for each of monitors
- Stereo output peak meters
- The monitor source is an AoIP stream or a physical (Mic/Line/Instrument) input

This mode is a quick monitor deployment solution for musicians who need to listen to a mix (provided by the monitor console) and control their own Volume. In such mode the Musician only needs to connect their headphone and adjust their volume.

From a Technician perspective

Benefit from top quality preamps and distribute personal mixes to any performer

Features

- Manage multiple Anubis with ease
- Capture the audio without any audio compromise
- Remote control every mic/line/instrument preamps
- Deploy Mixes over the network to anyone using an Anubis
- Parametric EQ, Dynamics and Reverb is still possible but not accessible to the musician.

Easy setup with short cable. High preamp quality. Monitor and remote control

Personal Monitoring Mode Operations

Monitoring and Volume control

Select the volume control through physical button – Push and Turn the Anubis encoder to adjust the volume.

Note that the on-screen knob will unselect itself after 2 seconds of inactivity.

The Volume can be locked in the Anubis Settings>Monitors under the selected Monitor set of the performer (e.g. Headphone 1) you will find a *Volume Locked* option.

Mixer Balance

On the Mixer User Interface adjust the channels faders balance in order to set your desired and comfortable mix.

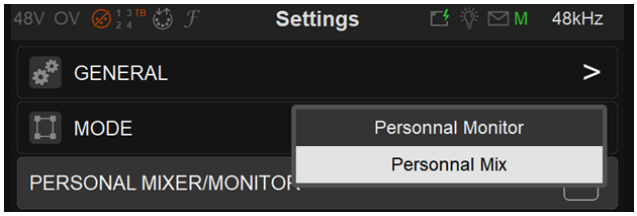
Mixer Customization

Customize the performers Mixer's to his desire and needs, you can hide, move, name and color channels.

Renaming & color code

Performers name and coloring code can be applied from the Anubis Settings>Monitors under the selected Monitor set of your choice.

Personal Mix Mode



Provide a personal mix with balance control, effects realtime processing and monitor for each one of your performers.

Features

- Full 16 channel independent mixer for each of 4 monitors
- 16 mono or stereo inputs whatever the sampling rate
- Inputs may be a local analog input or an AoIP incoming stream
- Ability to show/hide mixer's inputs for each of monitors
- Pan control on mono inputs, balance control on stereo inputs
- Inputs naming/colorization
- Ability to add some delay on inputs (from 1.4 ms up to 20 ms)
- Peak meters for every input
- Ability to listen back the monitor through an AoIP stream
- Strip processing with Effects
- Mute and Solo any input channel
- Monitors processing with Effects

Personal Monitoring Mode Operations

Monitoring and Volume control

Select the volume control through physical button – Push and Turn the Anubis encoder to adjust the volume.

Note that the on-screen knob will unselect itself after 2 seconds of inactivity.

The Volume can be locked in the Anubis Settings>Monitors under the selected Monitor set of the performer (e.g. Headphone 1) you will find a *Volume Locked* option.

Mixer Balance

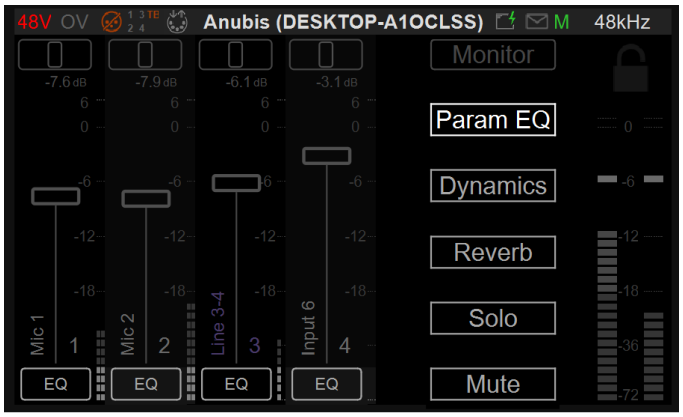
On the Mixer User Interface adjust the channels faders balance in order to set your desired and comfortable mix.

Mixer Customization

Customize the performers Mixer's to his desire and needs, you can hide, move, name and color channels.

Mixer Effects

Apply Reverb, EQ, Compression, Gate or limiting to any of your input channels and monitored outputs.

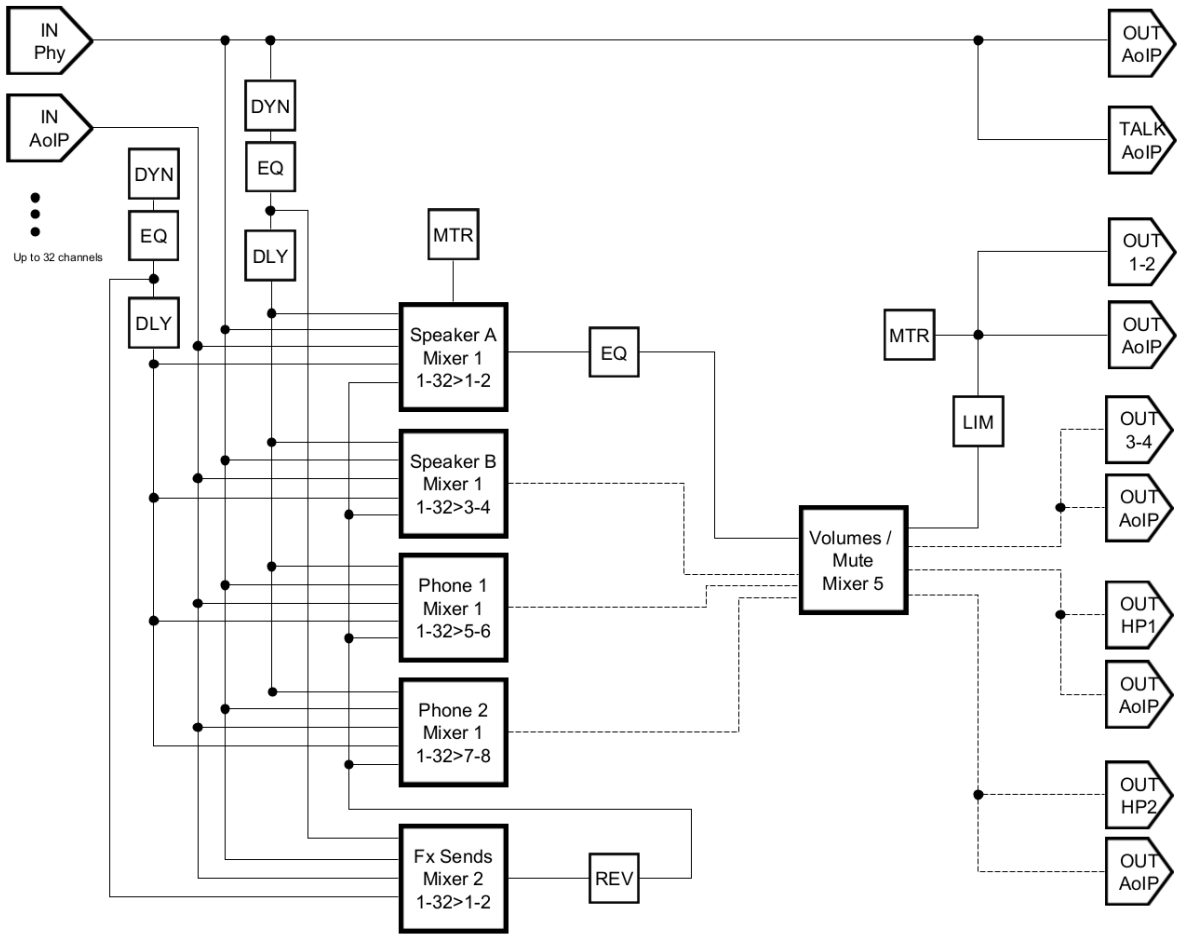


Available in Personal Mix mode only

Renaming & color code

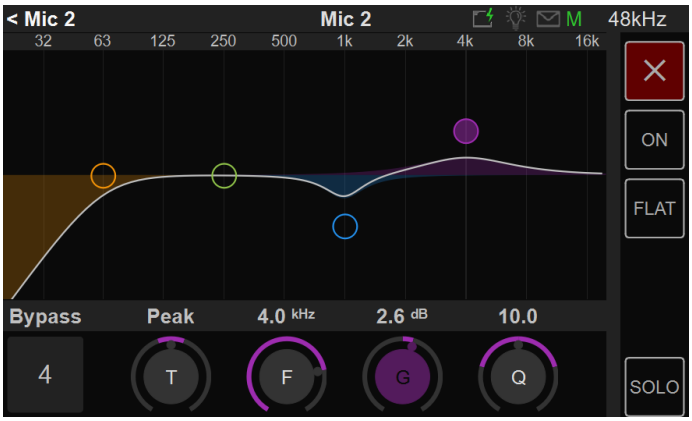
Performers name and coloring code can be applied from the Anubis Settings>Monitors under the selected Monitor set of your choice.

SIGNAL FLOW


IN
Phy
IN
AoIP
Up to 32 channels
DYN
EQ
DLY
DYN
EQ
DLY
MTR
Speaker A
Mixer 1
1-32>1-2
Speaker B
Mixer 1
1-32>3-4
Phone 1
Mixer 1
1-32>5-6
Phone 2
Mixer 1
1-32>7-8
Fx Sends
Mixer 2
1-32>1-2
EQ
REV
Volumes /
Mute
Mixer 5
MTR
LIM
OUT
AoIP
TALK
AoIP
OUT
1-2
OUT
AoIP
OUT
3-4
OUT
AoIP
OUT
HP1
OUT
AoIP
OUT
HP2
OUT
AoIP

EFFECTS

MERGING+EQ



The Anubis EQ is built on the existing and universally acclaimed quality of the Pyramix EQ-X and offers extreme definition filtering at sampling frequencies up to DXD.

Our EQ support four bands of fully parametric EQ with independent control of filter type, gain boost and cut, frequency, and Q factor (bandwidth) for each band. With notch, low cut, hi cut, peak and shelving filter types available. The state space filter design of this extreme definition equalizer has been specifically optimized to deal with the highest audio resolutions while still permitting very low noise & distortion, typically offering a THD+N of better than -110dB, throughout the entire audible (and even non-audible) range. Of course, this new digital filter's topography, while designed with high sample rate in mind, also offers extra benefits and low noise to 1FS equalization.

EQ can be applied to any input (Local or Peered) or to any Monitor output (e.g. for headphones). The EQ resources are not cumulated but shared. This allows a complex equalization for each input or outputs, with a total of 32 EQ of 4 bands on inputs and 4 EQ of 12 bands on monitor output each available in the Venue Mission at any sampling rate.

ANUBIS EQ FEATURES

- EQ available for all Anubis users
- EQ Supported from 44.1khz up to 352.8kHz (DXD) and 384kHz

ANUBIS EQ PARAMETER CONTROLS

Operation:
Make sure you are in Personal Mix Mode to have the Dynamics available and form the Select Menu select the EQ entry. From each strip channel you can then access the EQ.
Select parameter to operate changes and use the Anubis Rotary to apply those. The EQ is also available on the Monitor output, select the Monitor button to access it.

EQ Band selection: Tap the frequency band on the UI itself that you want to adjust, the selected frequency band and use the bottom parameters to adjust it.

Bypass

Band Channel number: When a frequency band is selected, tapping this one under Bypass will Bypass that specific frequency only. (e.g. band 2)
Bypass Default Value: Disabled

Filter Type

Five Filter Types are available on all EQ bands.

Types:

- Low Cut (Lo Cut - high pass filter): 6 dB per octave
- Low shelving (Lo Shelf)
- Peak (Parametric)
- High shelving (Hi Shelf)
- High Cut (Hi Cut): 6 dB per octave low pass filter

Note: for 24dB per octave precision two bands are required.
Default Value: Peak

Band Frequency (up to 4)

Adjusts the center frequency for the band.
Unit: Hz and kHz
Value Range: 20Hz / 20kHz
Default Value for first five bands: 31Hz / 125Hz / 500Hz / 2kHz / 8kHz
Step: 24 steps per octave

Gain

This knob sets the gain in dB of the selected bands between -24 dB and +24 dB.
This setting is only used for Peak and Shelving filter types.
Note: Long pressing the Gain button will reset the frequency band to 0dB
Default Value: 0 dB
Step: 0.1 dB

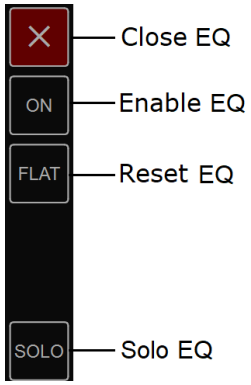
Band Q-Factor (7)

Adjusts the frequency range affected by Gain and Frequency on the band when the Parametric filter type is used. Q is only available for Peak Filter Type.

With a lower Q-Factor, a wider range of frequencies are affected, with a higher Q-Factor, a narrower range of frequencies are affected.

Value Range: 1 to 100
Default Value: 10
Step: 24 steps logarithmically distributed.

EQ Control Column



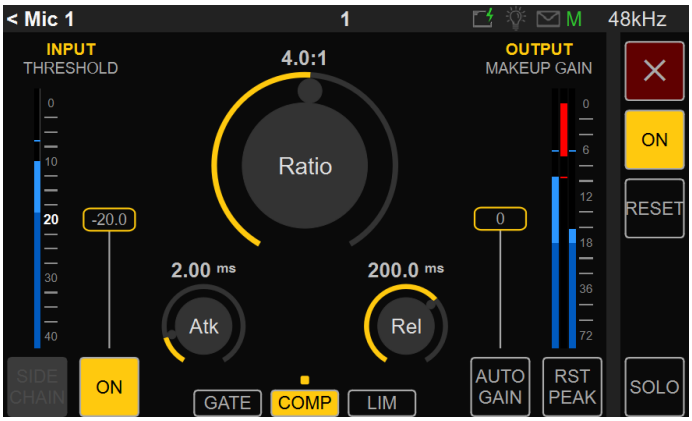
X
Close EQ UI and return to inputs settings

ON-OFF
Activate or not the EQ routing.

Flat EQ
Reset the EQ bands to flat (0)

Solo
Solo the EQ channel

MERGING+DYNAMICS



The Anubis Built-in Dynamics includes multi-modules. 1 X Gate, 1 X Compressor and 1 X Limiter that can be combined in series. With each module having its own parameter values.
Limit your outputs buses or strip channel, apply compression to your strips, gate your snares or kick, compress and limit your vocals, compress your drums in parallel and more.
The Dynamics can operate in Mono or Stereo mode.

Operation

Make sure you are in Personal Mix Mode to have the Dynamics available. Then select it from the Select entry and you will have the Dynamics available for each channel. The Dynamics is also available on the Outputs from the Monitor button.

ANUBIS MERGING+DYNAMICS FEATURES

- MERGING+DYNAMICS is available for all Anubis users
- MERGING+DYNAMICS Supported from 44.1khz up to 352.8kHz (DXD) and 384kHz
- MERGING+DYNAMICS supported instances
    - 64 x DYNAMICS instances at 1FS (44.1/48kHz)
    - 32 x DYNAMICS instances at 2FS (88.2/96kHz)
    - 16 x DYNAMICS instances at 4FS (172.4/192kHz)
    - 8 x DYNAMICS instances at 8FS (DXD-352.8/384kHz)

Dynamics Modules

The MERGING+DYNAMICS includes 1 X Gate, 1 X Compressor and 1 X Limiter

Gate

The Gate attenuates the signal with levels below the threshold

Compressor

Pure transparent and discrete compression with the option to produce classic fat compression making it perfect for both creative mixing and production as well as for discrete mastering and

post-production.

Limiter
Limits the level of a signal to a certain threshold

DYNAMICS PARAMETERS

Dynamics ON/OFF
Activation button, when set to ON the Dynamics is active, when disabled the Dynamics is not active, nor routed.

Threshold
Threshold control sets the level above or below which the plug-in will affect the dynamics of the input signal. Each module has its own Threshold value and range.

The Threshold fader has an auto-scroll scale for precise operation. When lowering the Threshold value, the metering scale will be adapted in a 40dB scale range view.
Gate Threshold range: -144dB to 0dB
Compressor Threshold range: -96dB to 0dB
Limiter Threshold range: -96dB to 0dB

Ratio
Compression ratio determines how much gain reduction the compressor applies when the signal

passes the threshold level.
For a 1:1 compression ratio, the processed signal isn't affected by the processing: A 1 dB variation above the threshold at the input is reflected by a 1 dB variation at the output. Try applying a 4:1 ratio, if the input signal rises above 4 dB the threshold value, the output signal rises only by 1 dB: Here is the compressor action. The input signal gain is reduced by a 4:1 ratio above the threshold point. Limit and Gate have fixed ratios.
Compressor Ratio Range: 1.0:1 to 32.0:1

Output / MakeUp Gain

The makeup gain parameter refers to a gain control at the output of a compressor. Compressors reduce the level of the loudest signals, so after implementing compression, you usually end up with a quieter signal than the original.
Range: +36dB to -36dB

Metering

Input level, gain reduction and output level meters. Their read-outs provide an immediate overview of the current levels.
Gain Reduction Meters: This shows the instantaneous gain reduction in dB (red below 0 dB) or gain increase in dB of the Dynamics processing
Output Meters: Full-scale meters with peak hold values for each channel.

Attack

Attack time sets the response speed of the processor when a threshold level is reached.
For transient-rich program material like drums, fast attack times are needed to minimize overshoot. For other program material, too short attack times may dull the sound or introduce audible distortion.
Range: 0.1ms to 200ms

Release

Release Time sets the rate at which applied gain change returns to unity after the threshold is no longer exceeded. In most cases, the release time is very program dependent.
Range: 11ms to 2 sec

ON/OFF

Module activation. The Gate, Compressor or Limiter modules have their own activation setting

Module Selector

Select which module you wish to operate by tapping and activating this one

In the image here the compressor module has been selected. 

Thus, all parameters reflect the selected module.

Module Status

Module LED indicator, indicates if a module is active.
In the example here the Gate and Limiter modules are enabled but not the compressor

Auto Gain

Automatic Gain adjusts the gain level based upon the strength of the incoming signal, in order to achieve a more consistent volume.

Reset Gain

Long press the output fader will reset it to 0dB

Peak Reset

Reset all the peaks of your Dynamics meters by tapping the Reset button.

MERGING+REVERB

The MERGING+REVERB is included in the Venue Mission. It can be applied to multiple channels using the Reverb strip channel option. The Reverb is a stereo Reverb.

Operation:

Make sure you are in Personal Mix Mode.
From the Settings>Monitor of your performer enable the Reverb, and from the Settings>Source make sure you create the Reverb Send source.
Afterwards form the Mixer page of a performer access the Reverb from the Select Menu. This one will then be available for each input channel.

Note: You will need increase the Reverb return input level in order for the Reverb signal to enter back into your mixer. The fader will then act as a Dry/Wet global parameter.

REVERB PARAMETERS

REVERB RETURN INPUT:

The Reverb return input channel is the same as the one found in the Main Mixer page.
Increase its level in order for the Reverb signal to return to your mixer. The fader will then act as a Dry/Wet parameter.

REVERB SIZE (Small to Large)

Adjusts the size and shape of the virtual room and will change the pattern and spacing of the reflections from a small room to a large room, hall or cathedral.
You can dial in short, bright reverb for a small room, up-front vibe, or long to dark reverb that places your mix in deep space.
The Reverb size parameter can be used in tandem with the other parameters to alter the room sound.

LOW CUT

Use this parameter to reduce low frequencies entering the reverb. This can prevent a muddy, indistinct sound that takes focus away from low frequency signal such as the drum kick and bass.
Low Cut Range: 10Hz – 20kHz

HIGH CUT (High Frequency Damping)

Reduces the high frequencies going into the reverb. If your reverb sounds metallic, reduce the highs starting at 4–8kHz.
High Cut Range: 10Hz - 20kHz

PRE-DELAY

When listening to a performance the direct sound is the first reaching us, followed by the reverberation coming from the room reflections.
The pre-delay is the amount of time between when the direct sound arrives and when the reflections arrive.
Pre-Delay Range: 0- 300ms

DECAY

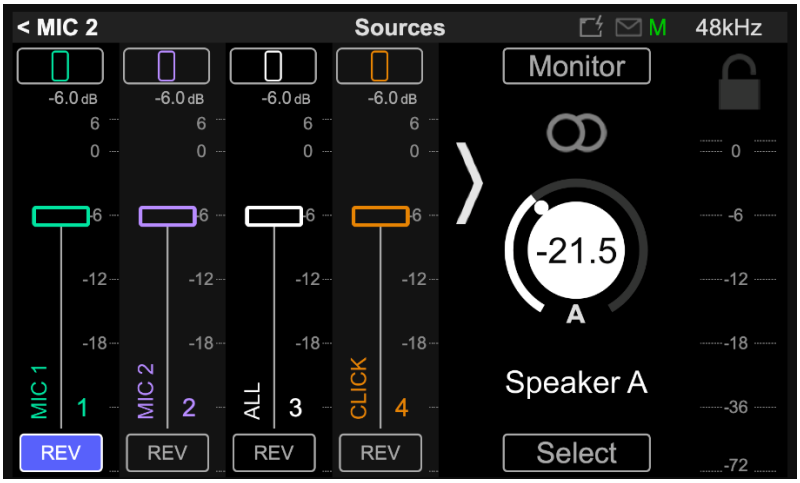
Represents the decay time of the Reverb. Which is the amount of time it takes for the sound pressure level (SPL) in a room to fall.
A reverb setting with strong early reflections and a quick decay is a great way to create a stereo effect from a mono source. Bigger rooms will have longer reverb tails, smaller rooms will have shorter reverb tails.
Decay Range: 0 -100%

DIFFUSION

Controls the rate at which the reverb tail reflections will be built in density. The higher the diffusion the more regular the density of reflections will be in terms of timing, levels and pan position. Generally, higher settings can make for a more natural-sounding reverb and lower settings for a more 'airy' effect.
Diffusion Range: 0 -100%

DRY/WET

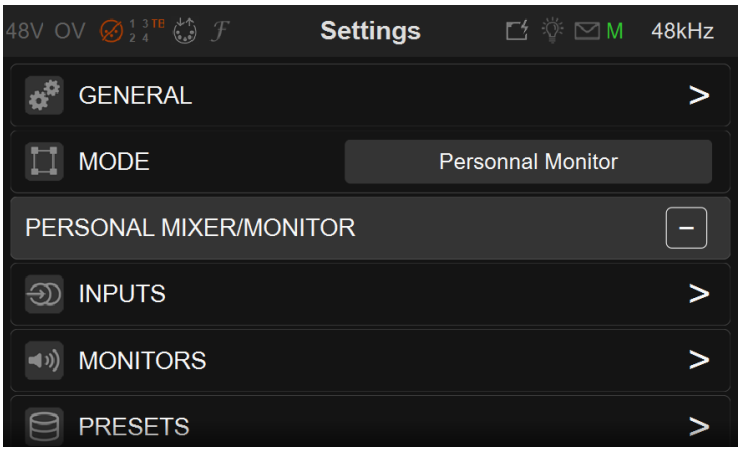
Dry and Wet level must be adjusted from the channel strip on the left.
The dry/wet control allows you to alter the balance between the untreated (dry) track and the track after reverb is applied.



Reverb Access within the channel strip.

SETTINGS CATEGORIES DESCRIPTION

GENERAL SETTINGS



Sample Rate

Sampling Rate

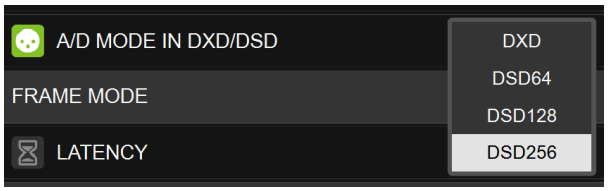
Selector to the different sampling rates, available from a dropdown menu.

Anubis Pro: 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz

Anubis Premium: 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz, 352.8kHz (DXD), 384kHz, DSD64, DSD128, DSD256.

Warning: DSD is not supported by the Venue Mission Mixer without alternative monitoring support. But it remains possible to record direct to a DAW in DSD while running the Venue Mission, but monitoring will not be possible from Anubis.

A/D Mode in DXD/DSD:
This format setup only applies to the AD (PreAmps) which can be set to either DXD - DSD64 - DSD128 - DSD256



The Anubis can be configured in DXD/DSD, in this mode the Anubis can receive any audio data format stream and can generate DXD or DSD64, DSD128 or DSD256 stream depending on the A/D or Stream audio data format chosen.

It is recommended to set the A/D mode to the same sampling rate as selected for your project. However, DAW's such as Pyramix can record in a DXD project with the A/D mode set to DSD formats, this feature is only available for MassCore users (not supported in Native/ASIO) and can be quite resource demanding for high channel counts.

Warning: The Music Mission Mixer does not support DSD but supports DXD/352.8kHz and 384kHz.


Auto

Auto Sampling Rate mode, when enabled, will make Anubis automatically follow the sampling rate given by a RAVENNA/AES67 source provided by either; ASIO, Virtual Audio Device (VAD), MassCore or another interface with PTP clock. Enabled by default.

Example 1: User using an external player (such as a DAW) can enable the Auto mode so that Anubis automatically changes its sampling rate according to the project settings.

Example 2: This Auto setting is also useful in a network configuration following the RAVENNA ASIO/Virtual Audio Device (VAD) settings, where Anubis will adapt its sampling rate automatically.

Note: Both examples above are valid provided at least one RAVENNA ASIO or Virtual Audio Device (formerly Core Audio Driver) stream is connected to an Anubis Source.

Note: If using ANEMAN with a Sampling rate zone the device on the Crown this one will decide of the Master sampling rate. In such a case it is recommended to disable the Anubis Auto Sampling Rate mode to avoid fights follow the sampling rate of the non-Crowned devices at a given moment, that could potentially sampling rate flickering.

Frame Mode


Latency

Modes available in samples: AES67 (6), AES67 (12), Ultra (16), Extra (32), AES67 (48)* & Low (64). The selected mode will determine the device latency over a AES67/RAVENNA network. When multiple AES67/RAVENNA devices (e.g. Anubis) are connected over a network, they should be configured in order to adjust themselves to the lowest latency that can be globally achieved.
** Ex-factory default mode*

Clock

About the PTP Clock: The Precision Time Protocol (PTP) is a protocol used to synchronize clocks throughout a computer network. Also known as IEEE 1588 or IEC 61588, it is a protocol designed to synchronize real-time clocks in the nodes of a distributed system. RAVENNA is based

on and uses V2 of this IEEE standardized protocol. PTP Clocks allow for time resolution to the Nanosecond.

 PTP Master

If multiple AoIP devices are used in a network environment, Anubis will try to be elected as the PTP Master priority when enabling this setting, using the Best Master Clock Algorithm (BMCA):

Note: Non-Merging devices might not consider Anubis as the PTP Master

 PTP Status

Information on the Anubis PTP status. Save or Master indicator and Unlock, Locking and Lock status.

 ASIO Clock

Auto: The ASIO clock will be generated by the Anubis which will be PTP Master
On: The ASIO clock will always be generated by this Anubis regardless of the Master
Off: The ASIO clock is never generated

Note: Set to Off only if you are sure that no Anubis will be PTP Master, or if you are configured for a Unicast (point to point) workflow.

Interface Controls

 Brightness Display

Adjust brightness of the TFT display using the Anubis rotary encoder to increase or decrease it.

 Buttons Intensity

Adjust brightness of the Anubis physical buttons by using the Anubis rotary knob to increase or decrease the intensity.

Fan

 Fan

Cooling Mode: Settings are available for either Low, Mid or High Cooling. This affects the threshold at which the fan will start to operate, with reference to the temperature measured internally. While there is no universal preferred setting, we recommend that unless noise levels are a concern, you leave the setting on Mid for adequate cool operation and protection.

- Low: Fan starts above 50°C
- Mid: Fan starts above 45°C
- High: Fan starts above 40°C

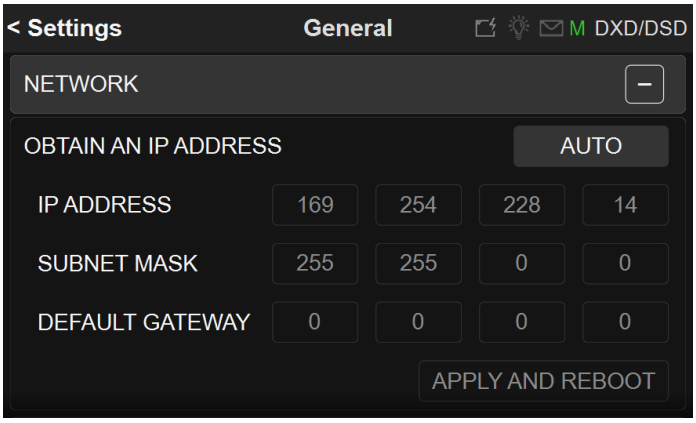
When above these thresholds, Fan always starts at the lowest speed (minimum noise), and gradually increases proportionally to the measured temperature.

Note: The Anubis will shut down automatically as a precaution when reaching a temperature of 66°C.

 Stop on Talk

Enabling the Stop on Talk option will stop the Fan when engaging the Anubis Talkback button. Once released, the fan will start back if it has to (depending of the measured temperature).

Network Settings



ST2022-7 mode

Anubis SPS model will show a ST2022-7 setting.
Refer to the Anubis User Manual ST2022-7 chapter for all details

Obtain an IP Address

Manual: Tap the address field you wish to edit and select the value using Anubis rotary knob
Auto: The IP address will be automatically attributed using ZeroConf/Auto-IP mechanism (address range 169.254.x.x if no DHCP server is present)
Note: By default, the Anubis IP setting is set to "Auto" configuration mode
For details on the Anubis SPS model refer to the SPS Manual section.

IP address

Set the IP Address for the Anubis unit by using box selection and changing the value using the Anubis rotary knob. Available only with IP Settings = Manual
Default: 169.254.x.x

Subnet mask

Set the Subnet Mask (subdivision of an IP network) for the Anubis unit by using box selection and changing the value using the Anubis rotary knob. Available only with IP Settings = Manual
Default: 255.255.0.0

Default gateway

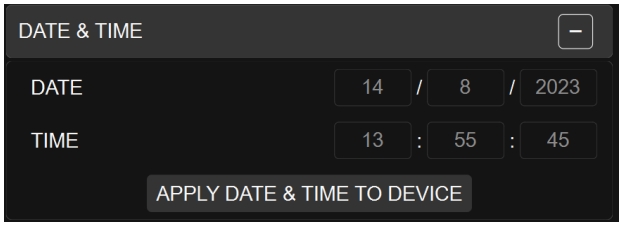
Computer network node using the Internet Protocol Suite that serves as the forwarding host to other networks when no other route specification matches the destination IP address of a packet
Default: 0.0.0.0

Apply & Reboot

Once changes have been made to this section, you must press this button to save the settings

and power cycle the Anubis unit, shutdown and reboot.

Date & Time
Anubis includes a real-time clock that is battery powered even in the absence of external power.



TimeZone
Select your local timezone from the dropdown menu

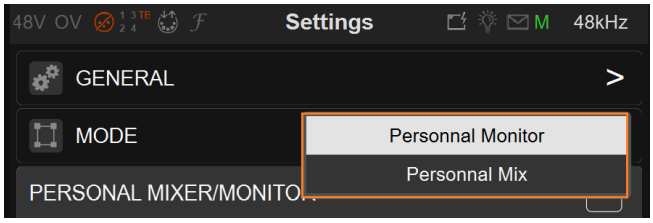
Date
Set the date by tapping each field (Day: Month: Year) one by one and using the Anubis rotary knob to adjust it.

Time
Set the date 24-Hours format by tapping each field (Hours: Minutes: Seconds) one by one and using the Anubis rotary knob to adjust.
Note: The Date and Time changes will be saved once you exit the Anubis Settings or if you Save the current configuration from Settings>Exit>Save

MODE

Two modes of Operations are available.

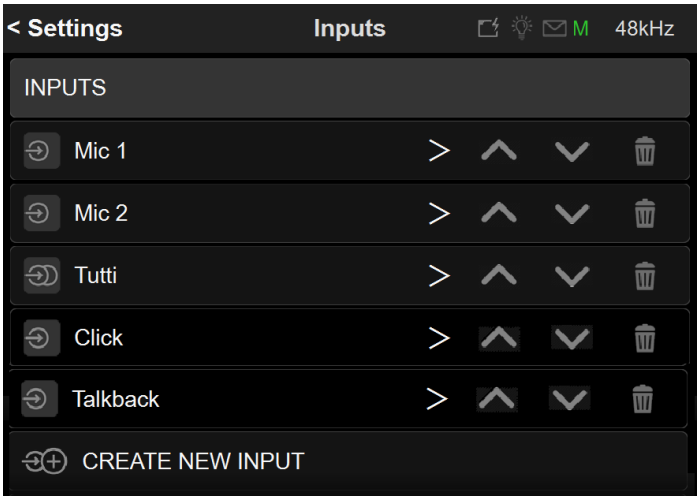
Personal Monitor
Personal Mix



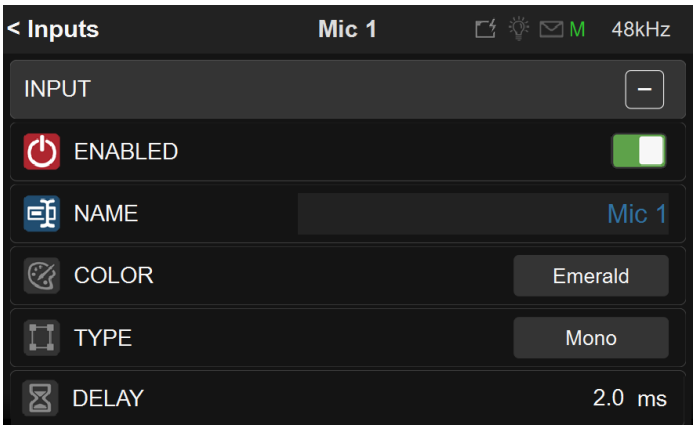
PERSONAL MIXER/MONITOR

INPUTS Settings

Access the Inputs setting to configure the performers Inputs sources.



Select an Input source to access its configuration settings



Enable

The operator can enable which existing Input should be proceeded. As many as input can be created but only 16 in total can be enabled

Name

Name the Source by taping the Blue text entry to open the Virtual Keyboard.

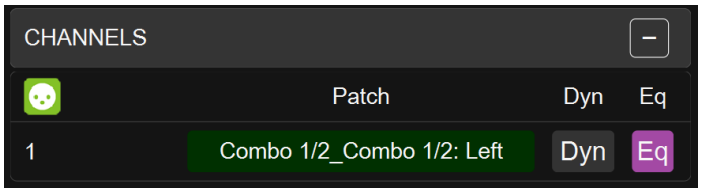
Color

Assign a color to an input source, this color will be displayed on the input channel source

Type
Select the source channel type from either mono or stereo channel mappings. tap to see all available entries.

Delay
Apply a delay to a source input from 0 to 20ms to ensure proper input alignment.

Channels



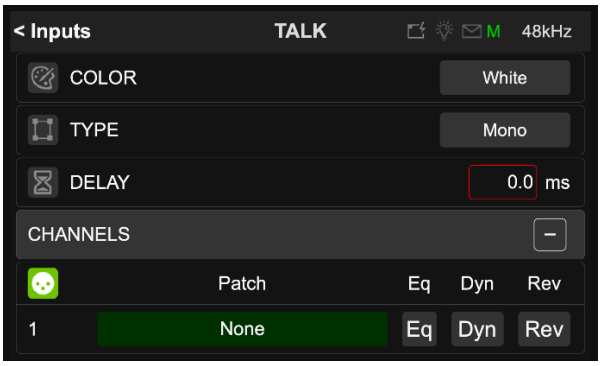
Number:
Channel numbering of the Source

Patch:
Configure the Input Source routing by patching each of the source channels. The Patch numbering in the Patching dialog starts with the Anubis Hardware Input sources followed by the external sources Streams, such as paired device streams from another Anubis, Horus or Hapi, ASIO, MAD, VAD or MassCore streams. Scroll to view the entire listing.
Note: The Patch can be done by using the Advanced Pages or ANEMAN

Dyn:
Dynamics can be applied to the channel input source (refer to Effect section)

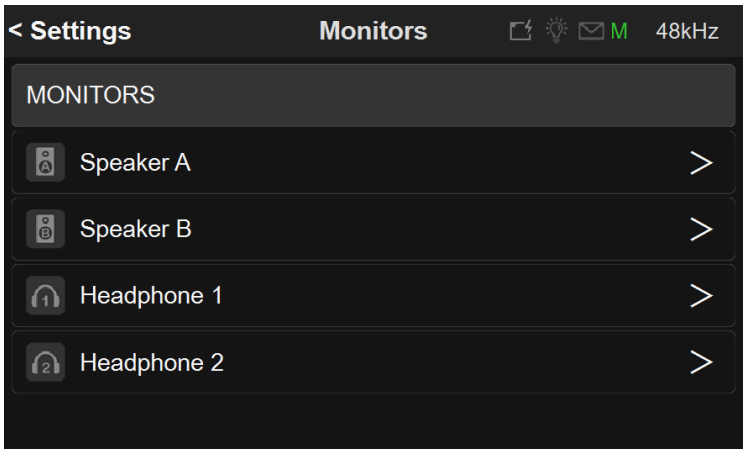
EQ:
Parametric EQ can be applied to the cannel input source (refer to Effect section)

Talks
Configure your Talkback mic and: choose which input is opened when Talk is pressed



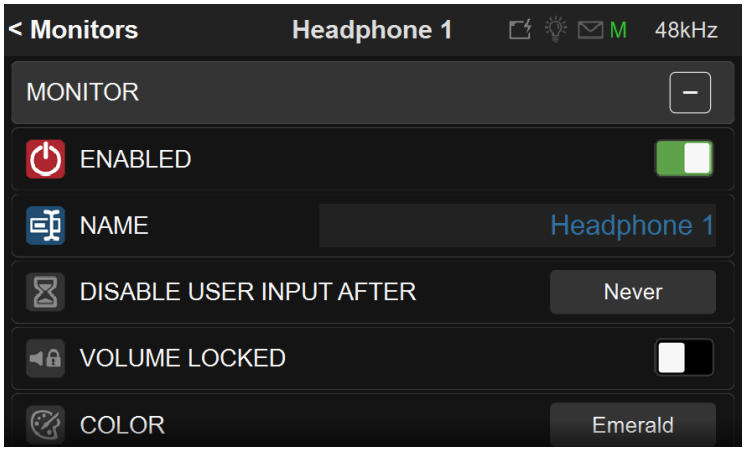
MONITORS Settings

Access the Monitors setting to configure the performers Monitors.



By Default 4 x Monitors are listed, those are assigned to the Physical buttons of the Anubis. Speakers A, Speaker B, Headphones 1 and Headphones 2.

Select a Monitor to adjust its parameters.



Enabled
The operator can enable which Monitor should be visible and operational for a performer

Name
Name the Monitor by taping the Blue text entry to open the Virtual Keyboard.

Color
Assign a color to an input source, this color will be displayed on the input channel source

Disable User Input
Decide the timeout length of the Monitor touchscreen actions. This setting is useful when

multiple performers use the same Anubis device. This guarantee to tweak the right monitor mix by selecting the physical monitor button first. Select the value from the drops down menu.

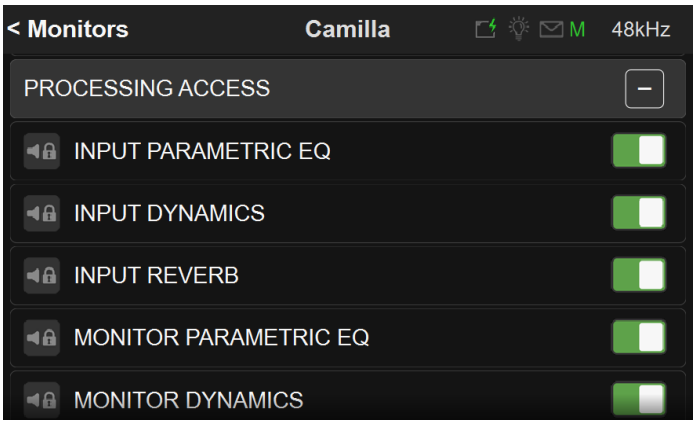
The Lock state will be indicated on the Monitor Volume Button

Volume Locked

Lock the Volume control of a given Monitor set. This volume will no longer be adjustable for the performer and will be fixed.

Color

Give a customized color code to your Performer's Mixer and Monitor control.



Processsing Access

Set of options to display or hide some controls for the performer Monitor set. Disabled options will not be available.

Input Parametic EQ

Enables the Anubis Parametric 4 x bands EQ for the selected Input channels availability allowing the operator to apply EQ any input channel of his Mixer.

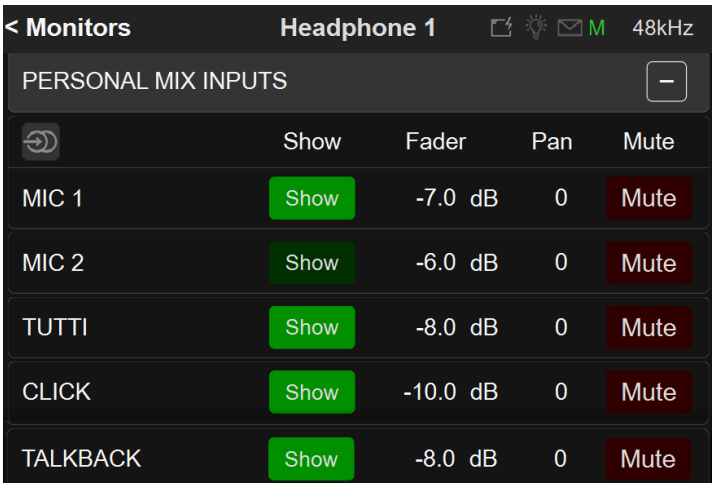
Input Dynamics

Enables the Anubis Dynamics for the selected Input channels availability allowing the operator to apply Compression, Gate or Limiter any input channel of his Mixer.

Input Reverb
Enables the Anubis Reverb for the selected Input channels availability allowing the operator to apply Reverb to any input channel of his Mixer.

Monitor Parametric EQ
Enables the Anubis Parametric 4 x bands EQ for the selected output allowing the operator to apply EQ to the output Bus (e.g. Headphones)

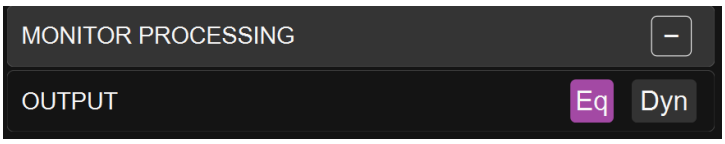
Monitor Dynamics
Enables the Anubis Dynamics for the selected output allowing the operator to apply Compression, Gate or Limiter to the output Bus (e.g. Headphones)



Personal Mix Inputs

Each input are listed in this section. The following actions are available for each monitor

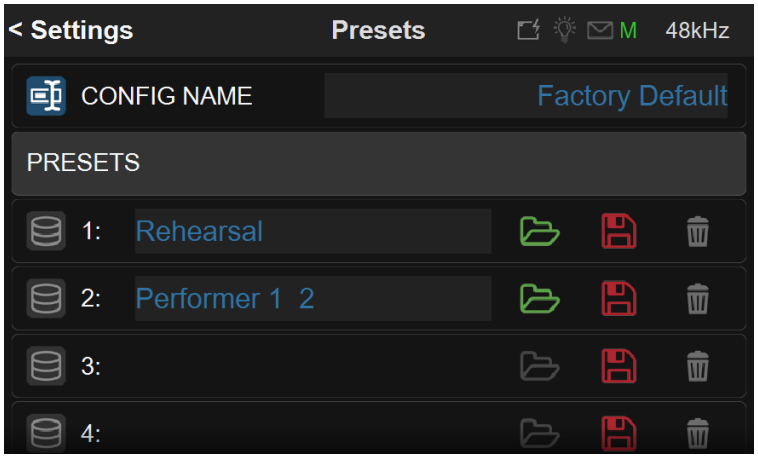
- Show : Show or Hide the input strip in the personnal monitor/mixer view
- Fader: Field Display of the fader value and ability to set it
- Pan: Field Display of the pan value and ability to set it
- Mute: Shows the mute status and ability to set it



Monitor Processing

Monitor processing may be accessilbe from here when the process menu is not available in the personal mixer view for the performer.
The technician may then do some correction while the musician cannot access those effects and their parameters.

PRESETS Settings



Preset Configuration Name. Identify your current configuration.

Full configuration save and recall for instant switching between various projects or configurations. Anubis ex-factory comes empty of presets, gray folders.

Load: 18* presets banks of different Anubis configurations can be loaded (one at a time)

Save: 18* presets banks are available to store different Anubis configurations

** 18 presets are available as of Anubis Firmware 1.1.11*

Empty a preset by selecting the trash and confirming is deletion

A prompt message box will ask you to confirm the save or load of a preset.
During the Preset loading the Anubis Mute button will blink muting all monitors for a short period

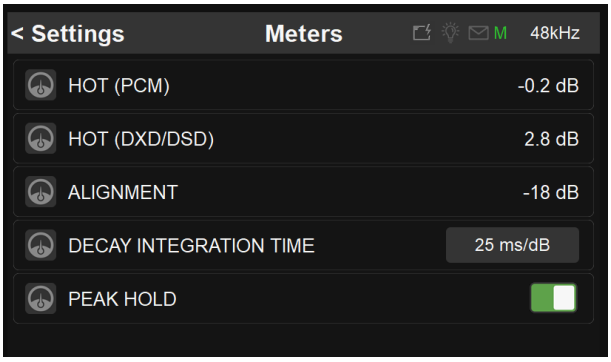
Rename your Preset by using the Anubis Virtual Keyboard (as of Firmware 1.1.18 and higher). Simply tap on the Preset name entry to open the Anubis Virtual Keyboard. Refer to the Virtual Keyboard here for more details.

Note: An unlimited number of Presets can be save and loaded from the Web Access (external Disk)

Warning: A Reboot to Factory will reboot the Anubis to the default factory settings, the current configuration will be lost, but all the saved Presets will be kept and can be reloaded.

Meters Settings

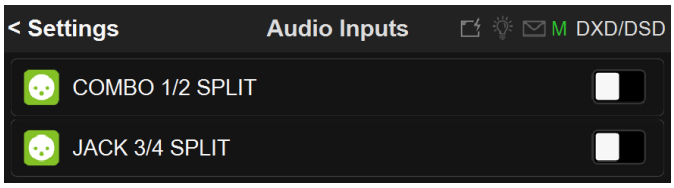
Adjust the PreAmps meters color range to your desire



Hot :	Sets the level above which the meter display will be red. If set to 0dB this will mean clipping. Range -2dBFS to 0dBFS (PCM) -2dB to 6dB SACD (DXD/DSD). Reminder: DSD users benefit from a +6dB headroom in DSD with distortion starting slightly and progressively from +3.1dB upwards and clipping once reaching +6dB SACD
Alignment:	Sets metering level alignment range (yellow LEDS). Range -24dBFS to 0dB
Decay:	Decay integration time sets the rate at which the level meter display decays after the level falls below the most recent Peak.
Peak Hold:	If ON it will keep the red Peak Hold Overload in display

I/0 SETTINGS

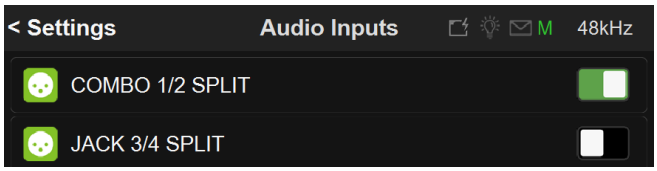
AUDIO INPUTS



The Anubis AD front-end topology gives also additional flexibility by offering a split channel functionality, where every input channel has a separate split gain control for sending them to different paths.

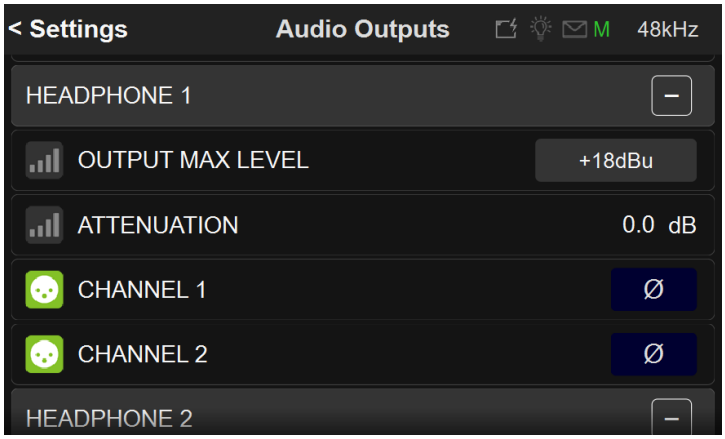
Use Case examples:

- Typically, an AD could be used for the recording device and have its split channel used for the FOH.
- Independently control the FOH & Monitoring Microphone Gains without any conflict
- The Split channel gives the operator the possibility to cut an input signal to the FOH while monitoring the same channel split that would be routed to another Monitoring set (e.g. Headphones). For signal check, changing a defective cable or searching for a proper sound or instrument FX, all this while muting the FOH feed.
- Possibility to record a duplicate of the input channel at a different input gain level (for backup or peak-safe recording).



When enabled, within the Anubis Preamps pages a second pair of Preamps will appear for each Split Channel pair. Allowing you Split control over: Gain, Polarity and Low Cut parameters.

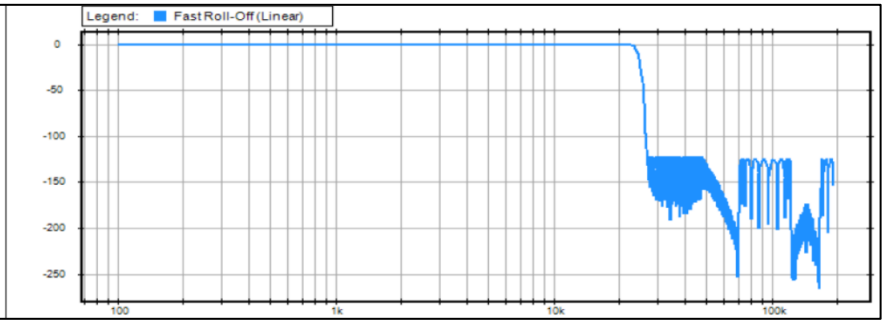
AUDIO OUTPUTS



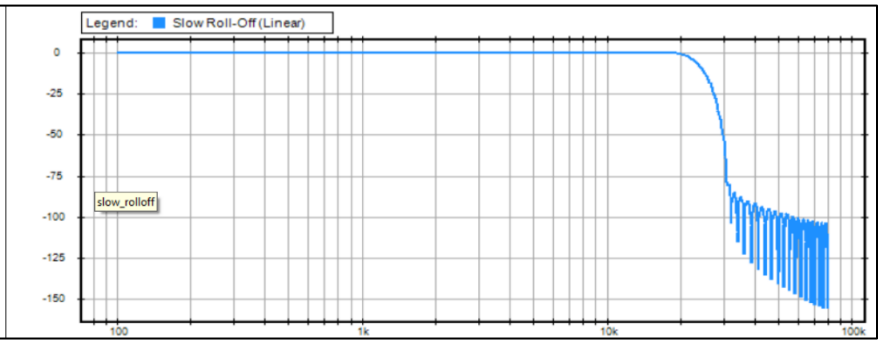
Global Outputs Setting

Roll Off Filter:

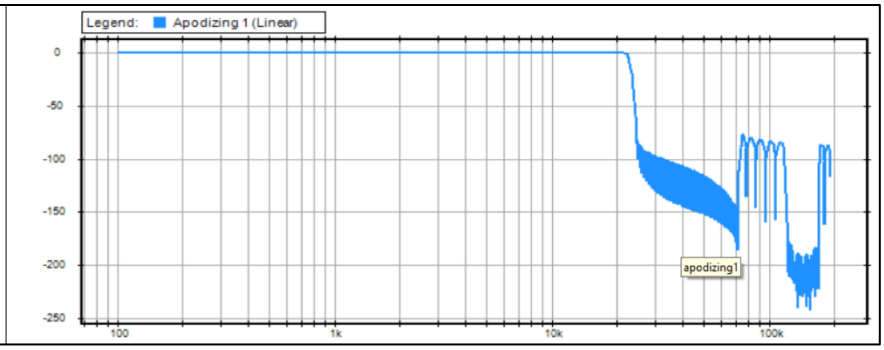
Sharp: Offers a flat frequency response with an attenuation of 3 dB at 0.484 x FS (23.2 kHz @48k), which has the tradeoff of 35 samples latency.

Fast Roll-Off, Linear Phase Filter (dB)	

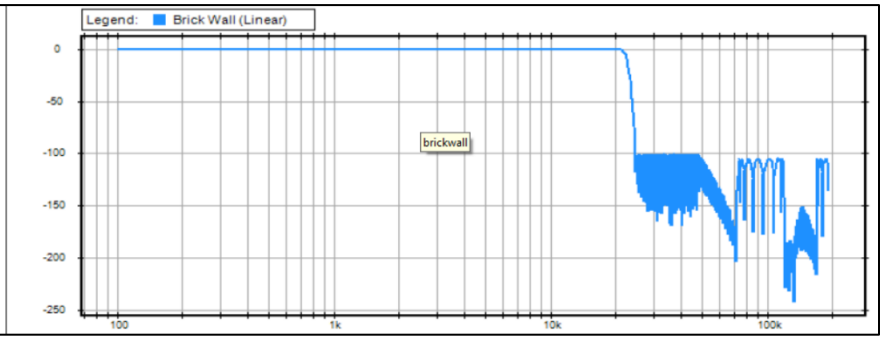
Slow (default): Offers the lowest latency of 9 samples, with the tradeoff of a gentle frequency response attenuation reaching -3dB at 0.45 x FS (21.6 kHz @48k)

Slow Roll-Off, Linear Phase Filter (dB)	

Apodizing: Fast Roll-Off filter, Linear phase filter. Latency of 35 samples

Apodizing, Fast Roll-Off, Linear Phase Filter (dB)	

Brickwall: Ensures rejection of more than -100dB at Nyquist (0.50 x FS, 24 kHz @48k). Latency of 35 samples

Brickwall Filter (dB)	

XLR 1/2: Line output level of the physical XLR outputs 1 and 2 located at the back to the Anubis
Max Output Level: +18dBu or +24dBu
Attenuation*: +0dBu or -36dBu
Channel 1: Polarity setting
Channel 2: Polarity setting

⚠ *Warning: Please refer to the section on How to connect a balanced line output to an unbalanced input regarding Max Output Level limitation.*

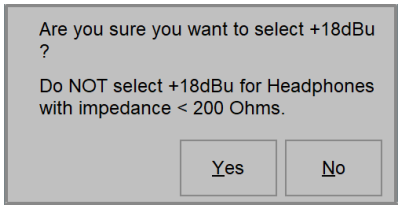
JACK 3/4: Physical TRS jack outputs 3 and 4 located at the back to the Anubis
Same parameters as above (XLR 1-2)

HEADPHONE 1: Headphone set 1 located at the front Anubis left side
Max Output Level: +9dBu or +18dBu
Attenuation*: +0dBu or -36dBu
Channel 1: Polarity setting
Channel 2: Polarity setting

HEADPHONE 2: Headphone set 2 located at the front right side of the Anubis
Same parameters as above (Headphones 1).
The Anubis digital to analog converters are designed to drive high or low impedance headphones

at high levels with significant audio output power undistorted.
User should be attentive to the impedance of the headphones being used and set the Anubis Max Output level accordingly.

⚠ *Warning: It is not recommended for headphones with an impedance below 200 Ohms to select an Output Level of +18dBu. As a preventive measure, a warning message will be displayed each time a user changes the Output Level of the Headphones from +9dBu to +18dB*



⚠ *Warning: The Anubis Headphones output level can make your headphones very loud if it is turned up too high, and that could cause permanent hearing damage. Please be careful with your ears when using the +18dBu setting.*

**As of Firmware 1.0.16 and higher. The Settings>Audio Outputs page no longer have per channel output trims. This was replaced by an Attenuation feature for the output pairs.*
Trim / channel have to be done in the Monitor from now on.

ACCESS CONTROL Settings

Access Control

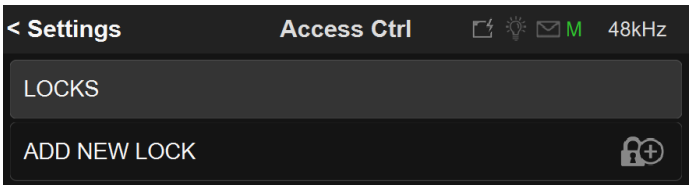
Apply security access to a list of parameters (items) in order to prevent some operators to have full access, you can thus limit those with a password protection.

Looks are independent to the Snapshots to guarantee full protection at all times.

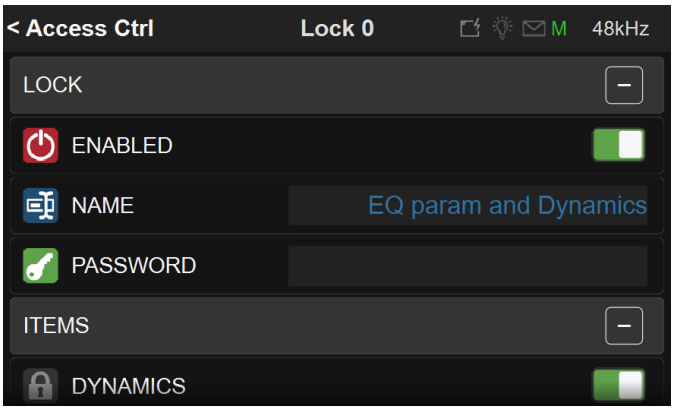
Lock procedure

1. Enter the Access Control entry

2. Add a new lock



3. A new Lock entry will be added.



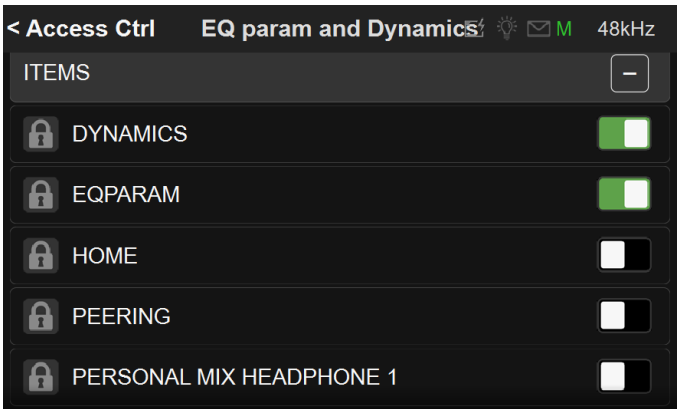
Lock

Name: Rename the lock if you wish (recommended for clarification)
Password: Apply the password for protection, the password will be linked to the Lock entry

Items

List of items that you can select and apply to the lock entry. The Items parameters listed for protection will vary with the Mission in operation and will be Mission dependent.

4. In the example here we enable a n EQ and Dynamics lock that will require a password



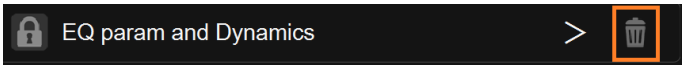
Note: The first of the Settings entry listed is the Main Settings (root) page entry.

5. In case of a wrong password entered the user access to those Settings will be denied.

Enter password (1234 in the example here)

6. This will open the Settings page

Delete Lock.
At all times a user can delete Lock entry to remove it



To reinitialize the applied Locks.

1. Save the current Preset
2. Open the Anubis advanced pages (this can be performed from the MT Discovery or Drivers
3. Go to the System Tab
4. Select Reboot

Warning: This will reinitialize all the applied Locks Settings.

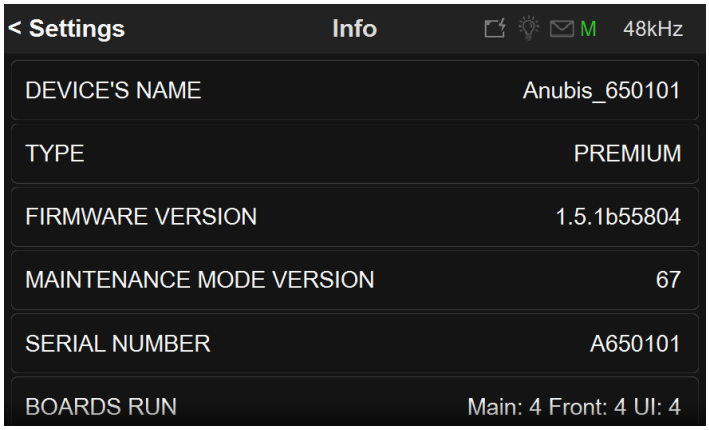
Note: About specific access control behaviour in Venue mission:

All the lock configured can be enabled by pressing the lock in the personal Monitor/Mixer. When a correct password is entered to access a restricted page, the related lock is automatically released. When at least one lock is disabled, the lock icon present in the Personal Monitor/Mix page is open.

INFO Settings

Info

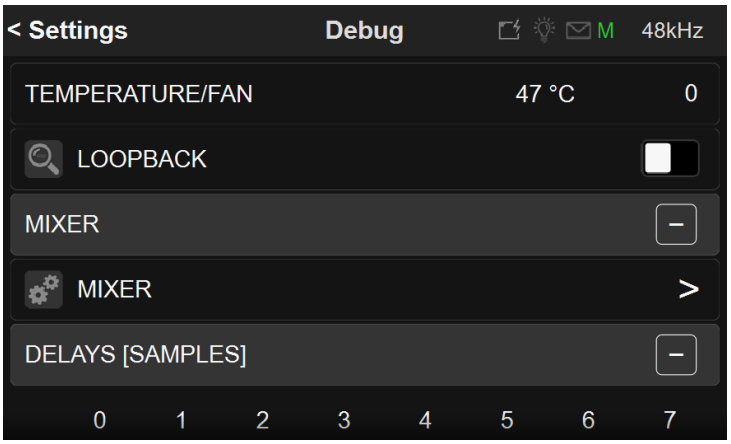
Find all information about the Anubis Name, Type, Firmware version, Maintenance mode and Serial Number along with additional information on the Anubis status: Temperature, CPU and Memory usage.



Note: Anubis users should regularly check if a new firmware is available. It is important to update to the latest firmware in order to benefit from the latest improvements and fixes.
Follow the firmware update procedure for all details.

DEBUG Settings

Debug

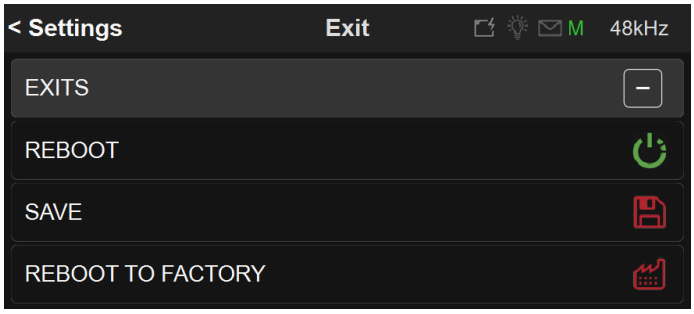


Loopback: Internal module with Generator (Supporting 1FS) and transparency check tool (Supported up to 384kHz). *Under Development.*

Enabling the Loopback will provide access to the Loopback module within the Anubis I/O's.

Note: The Loopback is for the moment only available as a debugging tool for the Merging Team.

EXIT Settings



Reboot

Reboot the Anubis

Note: To turn OFF Anubis, press on the POWER button to switch it to the released state.

Save

Save the current Anubis configuration

Note: The Anubis entire configuration is saved every 2 minutes, and also every time you exit the Anubis Settings. If changes are applied when in the Anubis Settings and you plan to power off the Anubis while in the Settings, it is recommended to first perform a Save configuration.

 Reboot to Factory

Reboot your Anubis to factory settings will recall the default factory settings.

Warning: All Sources, Monitors and Settings will be lost.
Since the saved Presets will not be erased, we recommend that you first back up your Anubis Configuration by saving it to a Preset.

 Press the Anubis Home button to exit the Settings and return to the Mixer view.

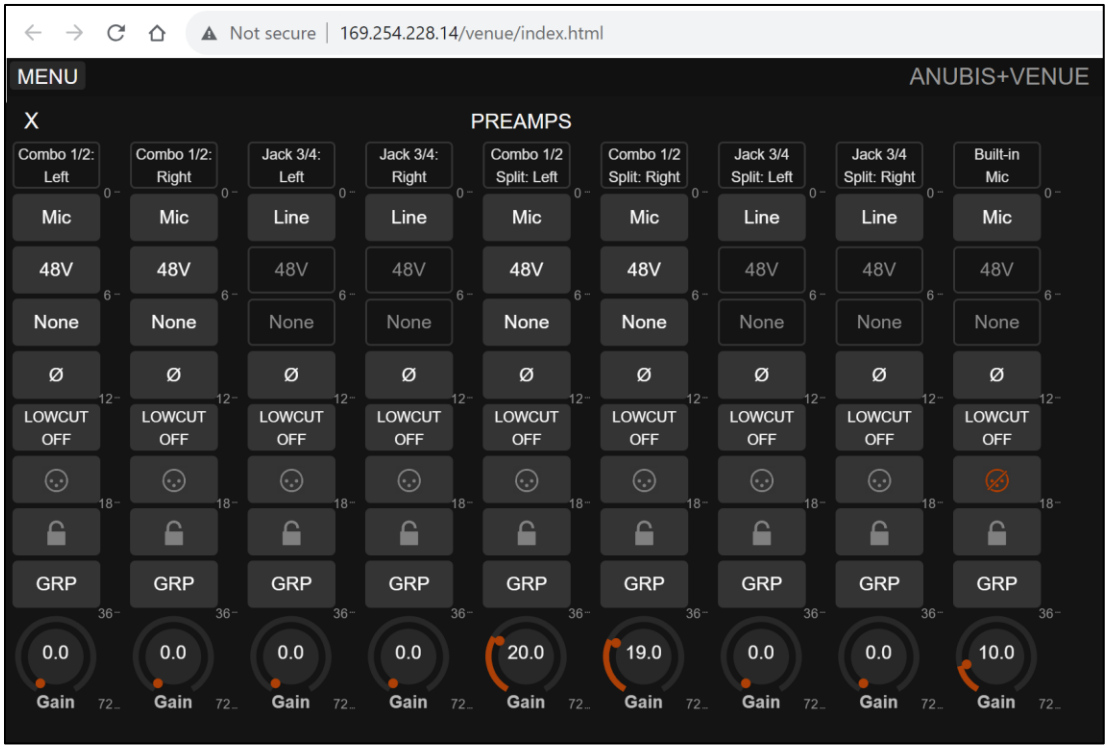
How to Open the Remote Web User Interface

PC Users:
Once Anubis is properly connected to your PC launch ANEMAN and double mouse click on the Anubis icon. This will open the Monitoring Web Access page into your default web browser. Users can also open the Web User interface page from MT Discovery by simply clicking on the Anubis entry.

Mac Users:
Once Anubis is properly connected to your Mac, open the VAD Panel and click on the Anubis Icon. This will open the Anubis Monitoring Web Access page in your default browser. Users can also open the Web User interface page from ANEMAN or MT Discovery by clicking on the Anubis.

Anubis_650017
Web User Interface Page

Venue Mission Remote PreAmps access



Identify Me - Device Location

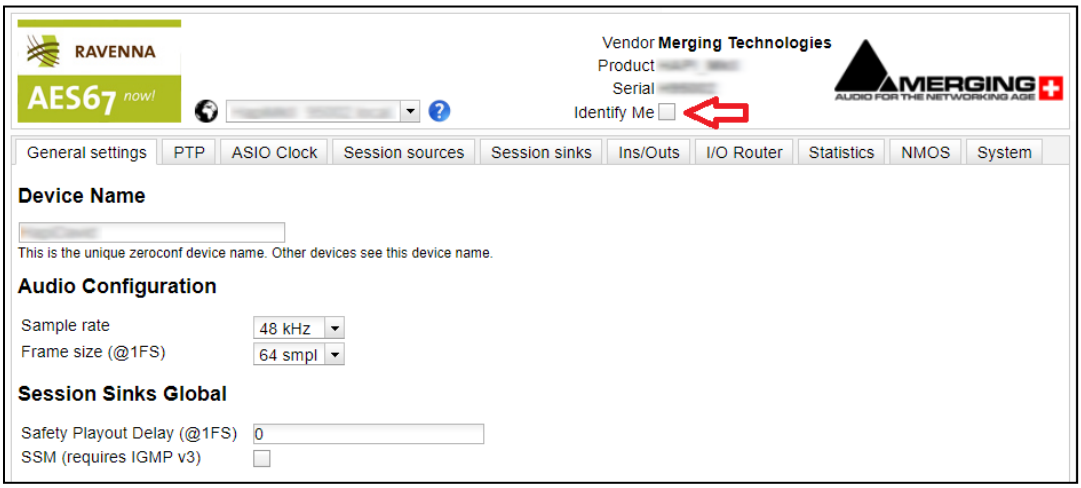
The Identify me feature is available to locate a device over a network. If you have multiple network interfaces over a network, you might at some point identify one of them.
The identified device will then blink so that you can locate it.

Procedure

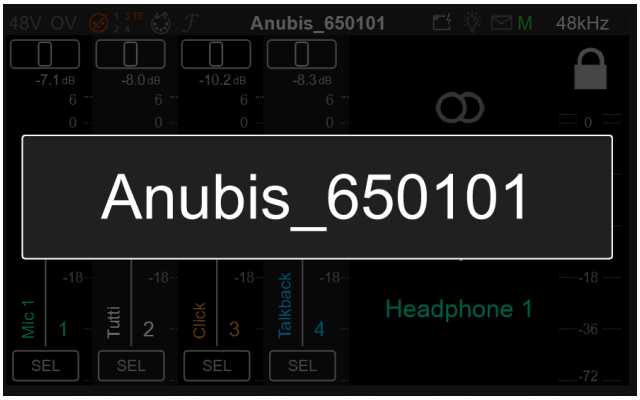
1. Open the Anubis advanced pages.
This can be done from the Driver (MAD or VAD) or from MTDiscovery by Mouse+Right clicking on the Anubis icon.

2. Once the advanced pages are open go to the top right of the page

3. Check the Identify Me box



4. This will identify the Anubis, make the Anubis Home button blink and display the Anubis bame on the TFT.



You have now identified an Anubis over the network.

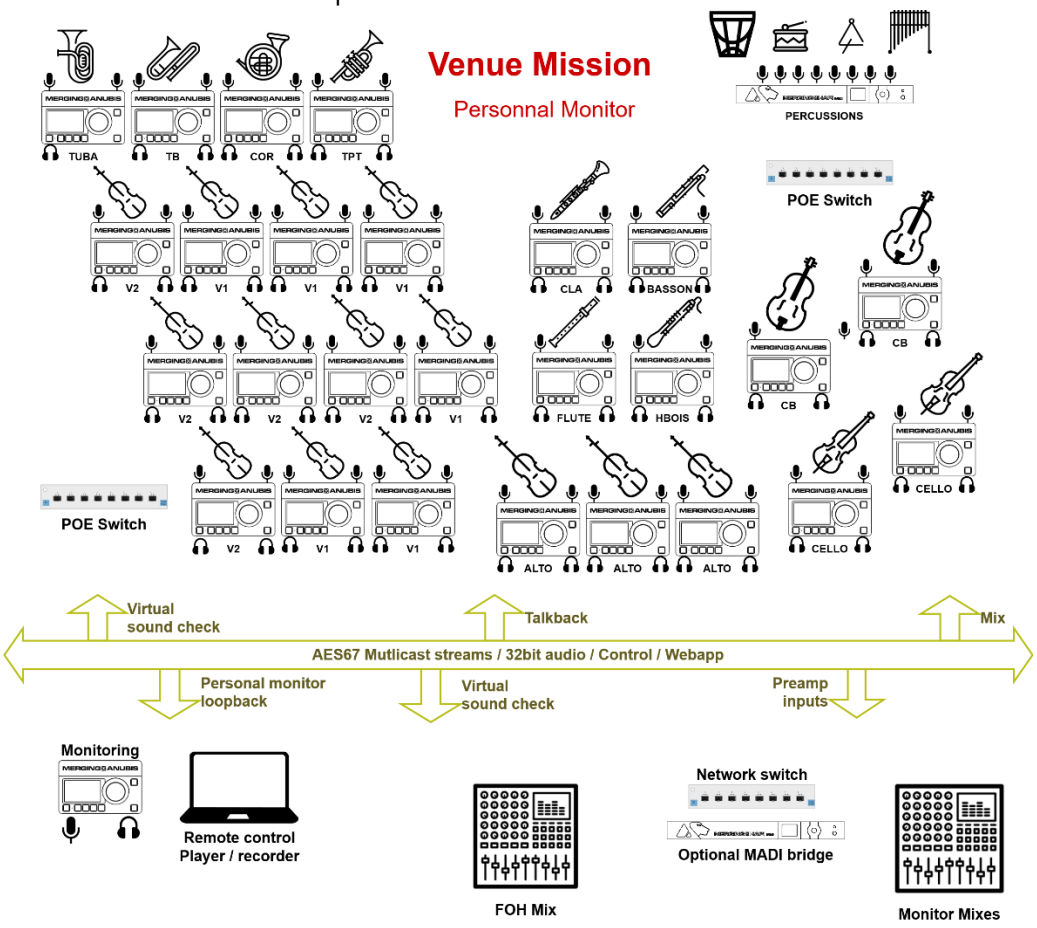
TROUBLESHOOTING

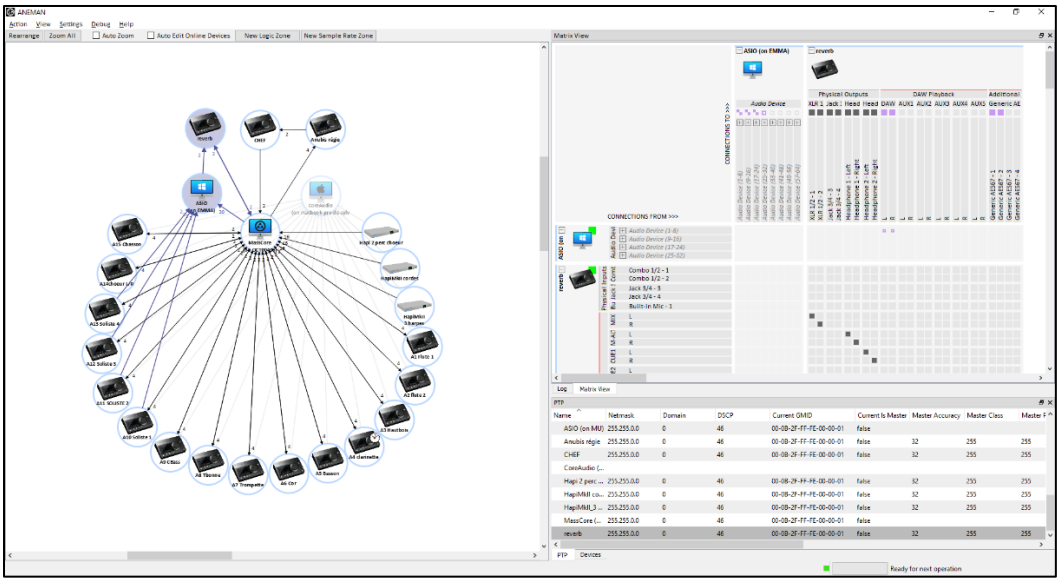
In progress.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Anubis		

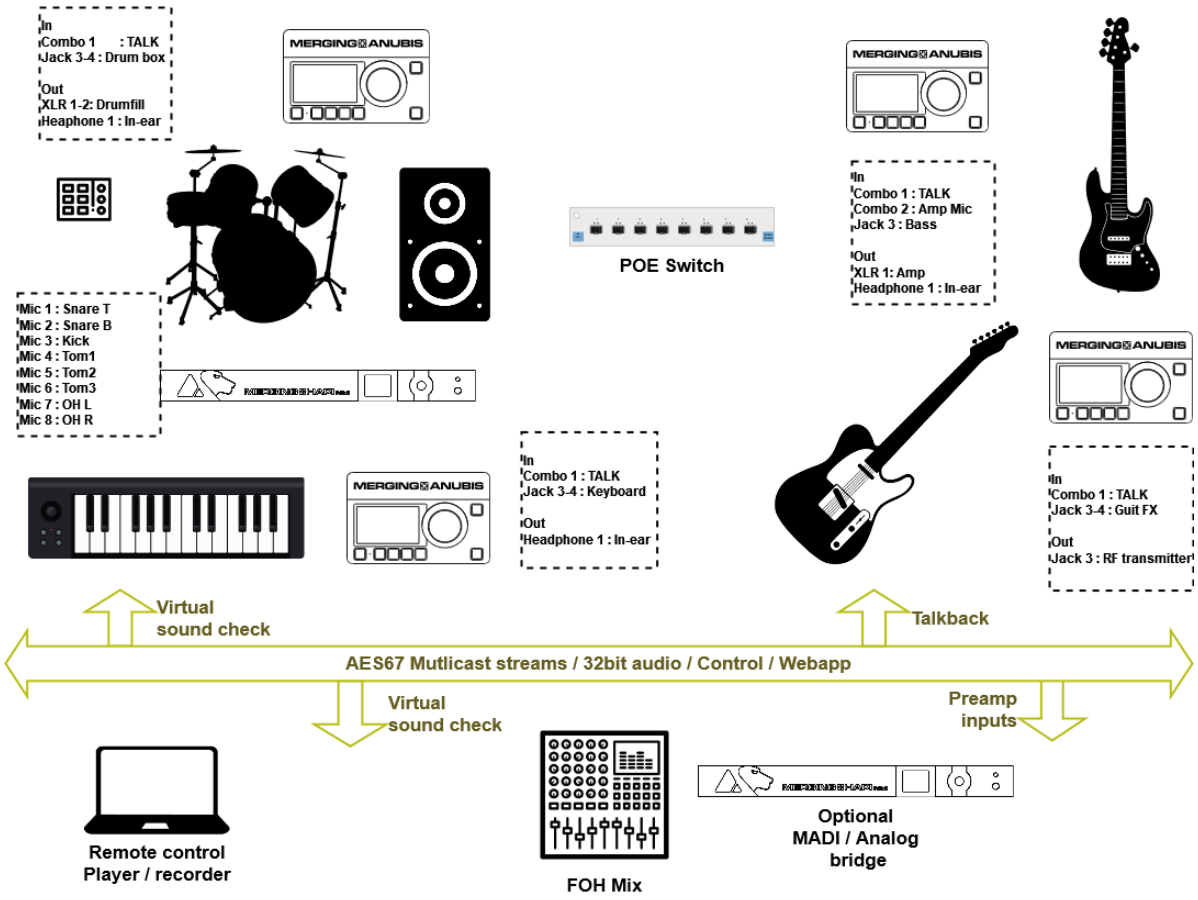
USES CASES

Symphonic orchestral Live performance





Complex band monitor setup



FOR MORE INFORMATION

MERGING+ANUBIS WEBSITE
https://www.merging.com/anubis

MUSIC+MISSION FAQ
https://merging.atlassian.net/wiki/spaces/PUBLICDOC/pages/4819845/MUSIC+Mission+FAQ.

MERGING+ANUBIS Knowledge Database, FAQs and Tutorials
https://merging.atlassian.net/wiki/spaces/PUBLICDOC/pages/4818696/MERGING+ANUBIS

MERGING+ANUBIS Downloads
https://www.merging.com/anubis/download

MERGING+ANUBIS USE CASES
https://merging.atlassian.net/wiki/spaces/PUBLICDOC/pages/4818957/Anubis+Use+Cases.

MERGING SUPPORT
support@merging.com

MERGING YouTube CHANNEL
https://www.youtube.com/channel/UCR5q_dlb9dYnXTrVDWMshgw