HARDWARE FEATURE MANUAL

LUNA-U

Unified audio matrix processor

Table of contents

- Mapping
- Pre-Gain, Gain & Automatic Gain Control (AGC)
- LP/HP filter (Input Filter & Output Filter)
- WaveDynamics™
  - WaveTune™
  - WavePreset™
- Volume
- Antifeedback
- Delay
- Trigger Level
- Mixer
- Test (Test Signal)
- Talkover
- Paging
- Voice File
- Priority
- Compressor
- Antiphase
- File Browser
- Event Handler
- Voice File Player

Mapping

A maximum of 16 channels can be selected from any input or zone. That is, an already mixed zone can be part of another mix too. A zone can be mapped into all output channels.
Note: Test, Talk Over and Priority sources do not need to be mapped to the corresponding zone's mixer. Those sources are picked up once they are assigned within that DSP feature.

Note: If a mapped input or zone is removed from the list in a zone, a blank box is left there. You may remove the blank box by clicking on the bin icon again. This removal will shift the mixer levels to the channels that come after. In other words, mixer settings stay constant but mapped channels shift upwards.

Note: If a mapped input or zone is removed from the list in a zone, a blank box is left there. You may remove the blank box by clicking on the bin icon again. This removal will shift the mixer levels to the channels that come after. In other words, mixer settings stay constant but mapped channels shift upwards.

Parameter Name	Parameter Range	Parameter Definition
Plus Icon	Selection	Opens a list of selectable/available items for mapping.
Cross Icon	Yes/No	Asks permission to remove the entire mapping list.
Pen Icon	Selection	Opens a list of selectable/available items for exchanging the mapped item.
Bin Icon	Not Available	Removes the mapped item from the list.
Hamburger Icon	Not Available	Changes the order of mapping in the zone block.

Training Video

You can click on the video or scan the code to watch the training video of this DSP feature.

Note: The video content may be changed or updated in time.

Pre-Gain, Gain & Automatic Gain Control (AGC)

Pre-Gain

Manually adjustable pre-gain for microphone/line level adjustment is available for input signals up to 22dBV/24dBu. It is a digitally controlled analogue gain stage. Pre-Gain can be used with both Gain and AGC.

Parameter Name	Parameter Range	Parameter Definition
Pre-Gain	-6/0/34/40 dB	The Pre-Gain parameter offers a selection of four gain levels for the microphone level, line level, and hot signal source (e.g., DJ setup).

Gain

Gain is available for all input channels with a range of -35 and 35 dB. It is also possible to adjust the input gain automatically.

Parameter Name	Parameter Range	Parameter Definition
Gain	+/-35 dB	Input signal up to 22dBV/24dBu

Automatic Gain Control (AGC)

All inputs contain the possibility to enable Automatic Gain Control (AGC). This continuously adjusts the input gain, ensuring a constant output level while the input level varies. The gain adjustments are made in extremely small step adjustable sizes ensuring high-quality audio, even during gain changes.

Parameter Name	Parameter Range	Parameter Definition
Target (A)	-20 - 6 dB	The Target parameter specifies a signal's target level before entering the Matrix. Continuously, the signal matching the level specified by the target parameter will be attempted to adjust.
Max Gain (B)	0 - 30 dB	The Max Gain parameter specifies the maximum gain adjustment which can be achieved between the input level and the target level. This can be used to prevent excessive noise or microphone feedback when, for example, a microphone is not being used. Note that this setting may prevent the AGC from reaching the target level, but this behavior is desirable to achieve the best overall sound.
Hold (C)	0.1 - 60 second	The Hold parameter specifies the AGC hold time during which no action will be taken when the output level falls below the target output level. This is used to prevent the gain from modulating on low frequencies which may cause distortion. For line signals, it is recommended to specify a long hold time to prevent the AGC from adjusting the volume during quiet music passages.
Decay (D)	5 - 200 dB/sec	The Decay parameter specifies the time the AGC will take to increase the gain, raising the signal from the current level (below the target level) to the target level. A slow Decay setting can be used if a fixed output level should be maintained, while a fast Decay setting can be used to compress the dynamic range of speech.
Attack (E)	5 - 200 dB/sec	The Attack parameter specifies the reaction time in which the AGC starts attenuating after a sudden increase in input level above the target level. The attack time should be fast to avoid any distortion caused by clipping, but when the attack time is too fast, the AGC will overreact to short peaks, causing audible distortion.
Threshold (B)	-90 - 30 dB	The Threshold parameter specifies the level at which the noise gate will be enabled. When the level of the applied input signal is below the set threshold level, the noise gate will be enabled. This will cut off the signal, resulting in no noise on the outputs. To avoid unwanted noises (noise gate opening and closing rapidly) when the signal level is close to the threshold level, the noise gate function uses a time-out period in combination with hysteresis.
Gain Freeze	Selection	The Gain Freeze will freeze the reached gain level and keeps it fixed.
Gain Recovery	Selection	The Gain Recovery will recover the reached gain level back to 0dB

		0dB.

Training Video

You can click on the video or scan the code to watch the training video of this DSP feature.

Note: The video content may be changed or updated in time.

LP/HP filter (Input Filter & Output Filter)

2 bands of semi-parametric 2nd order high pass and low pass filters are available on each input channel and can be individually enabled and disabled. Frequency and Q-factor can be adjusted, and channels can be enabled individually. With cascading or combining the available filters, bandpass or 4th order high pass or low pass filters can be created.

Parameter Name	Parameter Range	Parameter Definition
Show Table	Enable/Disable	Opens a table showing the filters that can be applied.
Type	High Pass/Low pass	Opens a list of filters that can be selected.
High Pass	Selection	With a High-Pass filter, the frequencies below the crossover frequency will be suppressed.
Low Pass	Selection	With a Low-Pass filter, the frequencies above the crossover frequency will be suppressed.
Frequency	20Hz -20kHz	The Frequency parameter indicates the centre frequency of the filter. This is the central frequency between the upper and lower cutoff frequencies of the filter. The frequency can be set between 20Hz and 20kHz.
Q-factor	0.01 - 15	The Q-factor parameter is the quality factor related to the bandwidth of the filter. A higher Q-factor indicates a more selective filter with a smaller bandwidth. The standard Q-factor value for the 7-band EQ is set to 0.9, whereby the 7 bands have good coverage over the entire audio spectrum. A higher Q-factor makes it possible to influence specific frequency ranges of the audio spectrum.
Boost	Not Available	Boost is not available on the input filter.
Enabled	Enable/Disable	Enables or disables the desired filter.

Training Video

You can click on the video or scan the code to watch the training video of this DSP feature.

Note: The video content may be changed or updated in time.

WaveDynamics™

WaveDynamics™ is an audio control and processing technology implemented in AUDAC products. Thanks to the powerful DSP processors built into our products it can deliver effortless control over the most advanced acoustic configurations.

Training Video

You can click on the video or scan the code to watch the training video of this DSP feature.

Note: The video content may be changed or updated in time.

WaveTune™ is a seven-band full parametric equalizer with dedicated EQ gain that each band can enable individually. This unique function allows fine-tuning of the source signal with different diverse types of filtering. This gives the possibility of tailoring the source for optimal performance.

Parameter Name	Parameter Range	Parameter Definition
Preset List	Selection	Opens a list of factory and custom presets which can be imported, exported or edited in WaveDynamics ™ .
Apply Preset	Not Available	Recalls the selected preset to the output channel.
Show Table	Enable/Disable	Opens a table showing the filters that can be applied
Type	Selection	Opens a list of filters that can be selected
Peaking	Selection	Peaking Filter provides a boost or a cut to a band of frequencies around a center frequency.
Low Pass	Selection	Applies Second Order Low Pass filter. With a Low-Pass filter, the frequencies above the crossover frequency will be suppressed.
High Pass	Selection	Applies Second Order High Pass filter. With a High-Pass filter, the frequencies below the crossover frequency will be suppressed.
Linkwitz	Selection	Linkwitz Transform changes effective frequency and Q-factor to desired values. Typically, this is used to lower F to get more low bass output or to lower the Q to make the box behave like a larger box.
All Pass	Selection	All-pass filter passes all frequencies equally in gain but changes the phase relationship among various frequencies.
Low Shelf	Selection	Low Shelf filter boosts or reduces the audio level below the desired frequency rather than removing them.
High Shelf	Selection	High Shelf filter boosts or reduces the audio level above the desired frequency rather than removing them.
First Order Low Pass	Selection	Applies First Order Low Pass filter. With a Low-Pass filter, the frequencies above the crossover frequency will be suppressed.
First Order High Pass	Selection	Applies First Order High Pass filter. With a High-Pass filter, the frequencies below the crossover frequency will be suppressed.
Frequency	20Hz -20kHz	The Frequency parameter indicates the center frequency of the filter. This is the central frequency between the upper and lower cutoff frequencies of the filter. The frequency can be set between 20Hz and 20kHz.
Q-factor	0.01 - 15	The Q-factor parameter is the quality factor related to the bandwidth of the filter. A higher Q-factor indicates a more selective filter with a smaller bandwidth. The standard Q-factor value for the 7-band EQ is set to 0.9, whereby the 7 bands have good coverage over the entire audio spectrum. A higher Q-factor makes it possible to influence specific frequency ranges of the audio spectrum.
Boost	-15 – 15 dB	The Boost boosts or cuts the desired filter by 15 dB.
Enabled	Enable/Disable	Enables or disables the desired filter.

WavePreset™ is a twelve-band full parametric equalizer with dedicated EQ gain that each band can enable individually. This unique function allows fine-tuning of the speaker for its optimal performance.

A complete library of AUDAC loudspeakers and set solution presets is available for your projects, making it easy to pick the right file, load it and play it! Besides the optimal acoustic configurations, this library also includes the loudspeaker performance parameters providing bulletproof protection for them.

Parameter Name	Parameter Range	Parameter Definition
Show Table	Enable/Disable	Opens a table showing the filters that can be applied
Type	Selection	Opens a list of filters that can be selected
Peaking	Selection	Peaking Filter provides a boost or a cut to a band of frequencies around a center frequency.
Low Pass	Selection	Applies Second Order Low Pass filter. With a Low-Pass filter, the frequencies above the crossover frequency will be suppressed.
High Pass	Selection	Applies Second Order High Pass filter. With a High-Pass filter, the frequencies below the crossover frequency will be suppressed.
Linkwitz	Selection	Linkwitz Transform changes effective frequency and Q-factor to desired values. Typically, this is used to lower F to get more low bass output or to lower the Q to make the box behave like a larger box.
All Pass	Selection	All-pass filter passes all frequencies equally in gain but changes the phase relationship among various frequencies.
Low Shelf	Selection	Low Shelf filter boosts or reduces the audio level below the desired frequency rather than removing them.
High Shelf	Selection	High Shelf filter boosts or reduces the audio level above the desired frequency rather than removing them.
First Order Low Pass	Selection	Applies First Order Low Pass filter. With a Low-Pass filter, the frequencies above the crossover frequency will be suppressed.
First Order High Pass	Selection	Applies First Order High Pass filter. With a High-Pass filter, the frequencies below the crossover frequency will be suppressed.
Frequency	20Hz -20kHz	The Frequency parameter indicates the center frequency of the filter. This is the central frequency between the upper and lower cutoff frequencies of the filter. The frequency can be set between 20Hz and 20kHz.
Q-factor	0.01 - 15	The Q-factor parameter is the quality factor related to the bandwidth of the filter. A higher Q-factor indicates a more selective filter with a smaller bandwidth. The standard Q-factor value for the 7-band EQ is set to 0.9, whereby the 7 bands have good coverage over the entire audio spectrum. A higher Q-factor makes it possible to influence specific frequency ranges of the audio spectrum.
Boost	-15 – 15 dB	The Boost boosts or cuts the desired filter by 15 dB.
Enabled	Enable/Disable	Enables or disables the desired filter.

Volume

Sets the attenuation of the input source in the Input Block and the mixer output in the Zone Block.

Note: Volume in Zone Block has the identical functionality as the master volume of the mixer.

Parameter Name	Parameter Range	Parameter Definition
Volume	-90 – 0 dB	Sets the attenuation level of the audio block.

Training Video

You can click on the video or scan the code to watch the training video of this DSP feature.

Note: The video content may be changed or updated in time.

Antifeedback

Antifeedback enables automatic detection of feedbacking frequencies and applies a notch filter to prevent feedbacking.

Parameter Name	Parameter Range	Parameter Definition
All Off	Selection	Disables all antifeedback filters.
All Auto	Selection	Applies a dynamic filter to all twelve filters.
Off	Selection	Disables the selected filter.
Auto	Selection	Applies dynamic filters to avoid feedback.
Fixed	Selection	Applies permanent filters to avoid feedback.

Training Video

You can click on the video or scan the code to watch the training video of this DSP feature.

Note: The video content may be changed or updated in time.

Delay

The delay can be adjusted by moving the corresponding fader left and right. The delay time is indicated in milliseconds on the left side of the fader and the audio transmission distance in meters is shown accordingly with the delay time under the fader. Please note that the meter indication is in average conditions at an air temperature of 21^{o}C.

Parameter Name	Parameter Range	Parameter Definition
Enabled	Enable/Disable	Enables or disables the DSP feature.
Delay	0.06 – 100ms	The delay can be enabled on all inputs for audio-video sync purposes (except Test).
Delay	0.06 – 2000ms	The delay can be enabled on all outputs for various purposes such as delay lines.

Training Video

You can click on the video or scan the code to watch the training video of this DSP feature.

Note: The video content may be changed or updated in time.

Trigger Level

The Trigger level is the universal threshold level of the source to trigger Talkover or Priority in the zones where the input is selected as a source in Talkover or a trigger in Priority.

Parameter Name	Parameter Range	Parameter Definition
Trigger Level	-90 – 0 dB	The Trigger level sets the threshold level of the source to engage.

Mixer

The mixer function makes it possible to create a mix of all mapped audio inputs in a zone.
Using the universal network/PoE wall panel controller NCP105, 16 mapped sources, 8 mixed scenes and an off state can be selected easily in a zone.

Note: Volume in Zone Block has the identical functionality as the master volume of the mixer.

Note: In the network input and output wall panel NWP series, the mixer function is available in the Output Block, yet has no Scene feature.

Parameter Name	Parameter Range	Parameter Definition
Channel Volume Slider	-90 – 0 dB	The channel volume slider sets the mix level of the mapped source.
Route	Enable/Disable	The attenuation value of the source selected with the route becomes 0dB, and the attenuation value of the other mapped sources decreases to -90dB or in other words muted.
Scene	Apply/Save	Up to 8 mixing scenes can be saved and recalled.
Master Volume Slider	-90 – 0 dB	The master volume slider sets the mixer or zone output level. In the zone block, the master volume slider and volume settings are identical.
Master Mute	Enable/Disable	The master mute mutes the mixer or the zone output.

Training Video

You can click on the video or scan the code to watch the training video of this DSP feature.

Note: The video content may be changed or updated in time.

Test (Test Signal)

An internal digital signal generator is provided which can generate white noise, pink noise, and Sinusoidal signals with selectable frequencies. The test signal generator can be found in the Input Block.

Parameter Name	Parameter Range	Parameter Definition
White Noise	Selection	White noise has constant power and energy per frequency is equal.
Pink Noise	Selection	Pink noise has lesser power as the frequency gets higher and more energy is allocated to lower frequencies.
Sine Wave	Selection	Sinusoidal waveforms are periodic waveforms.
Frequency	20Hz -20kHz	When a sinusoidal signal is selected, the frequency can be adjusted by clicking the up and down arrows displayed next to the indicated frequency.

The signal generator can be injected into any zone, without mapping required, by enabling the Test function in the Zone Block.

Parameter Name	Parameter Range	Parameter Definition
Enabled	Enable/Disable	Enables or disables the DSP feature.

Training Video

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Note: The video content may be changed or updated in time.

Talkover

The talkover function sets the talkover source level, and zone level during the talkover, hold, and fade speed for recovery of the source level.

Parameter Name	Parameter Range	Parameter Definition
Enabled	Enable/Disable	Enables or disables the DSP feature.
Talkover Source	Selection	Opens a list where you can select the source that applies ducking to the current audio source.
Matrix Level	-90 – 0 dB	Sets the attenuation level for the output of the zone mixer.
Talkover Level	-90 – 0 dB	Sets the talkover channel level
Hold	0.1 – 60 second	Sets how long all channels should be suppressed with no talk-over signal present.
Fade Speed	0.5 – 200 dB/sec	Sets the time to increase the ducking level from the user-dependent ducking level to 0dB.

Training Video

You can click on the video or scan the code to watch the training video of this DSP feature.

Note: The video content may be changed or updated in time.

Paging

Sets the attenuation of the paging announcement in the zone. In addition, the paging console can give an offset to the default paging level. For example, EVAC can be at a higher volume.

Parameter Name	Parameter Range	Parameter Definition
Paging Volume	-90 – 0 dB	Sets the attenuation of the paging announcement in the zone.
GPO	Selection	Automatic GPIO output triggering while paging. GPIO should be set as GPO in LUNA-F.

Training Video

You can copy and paste the link below or scan the code to watch the training video of this DSP feature.

Note: The video content may be changed or updated in time.

Voice File

Voice file sets the available audio messages or announcements in the zone from the internal memory (SD Card) or external memory (USB Type C inputs). Up to 100 items can be selected and priority levels and file paths can be adjusted on the Voice Files overview screen. Voice files can be triggered by GPIO or timed events. MP3 and WAV are supported file formats.

Parameter Name	Parameter Range	Parameter Definition
Voice file	Selection	Up to 100 items can be selected.
Audio Source	Selection	Mono OS1+2 is set by default but not enabled on the overview screen. Also available inputs are OS In1 and OS In2 which are already enabled.
Volume	-99 – 0 dB/sec	Sets the attenuation level for the voice file in the zone.
GPO	Selection	Automatic GPIO output triggering with Voice File. GPIO should be set as GPO in LUNA-F.

Training Video

You can click on the video or scan the code to watch the training video of this DSP feature.

Note: The video content may be changed or updated in time.

Priority

The priority settings menu makes it possible to configure the priority channels. The LUNA series offers four levels of priority that can be triggered by stereo or mono analog inputs, Flex inputs, Dante inputs, and OS inputs.

Parameter Name	Parameter Range	Parameter Definition
Enabled	Enable/Disable	Enables or disables the DSP feature.
Trigger	Selection	The Trigger is the source that triggers the priority to engage. The trigger can be an input coming from a fire alarm system.
Input	Selection	Input sources that can be patched in case a priority situation occurs. This includes all physical inputs, Dante inputs etc.
Hold Time	0.1 – 30000 second	Hold time for the priority after the input message or voice file ends.
Fade Speed	1 -200 dB/sec	Set the fade speed to disengage the priority after a certain hold time.
Volume	-99 – 0 dB/sec	Sets the attenuation level for the input message or the voice file of the priority.
Contact	Selection	List of GPIO that can receive contact because of the received priority trigger.

Using Voice Files with Priority

The procedure to use OS input as a priority input is explained below in steps.

1. Create a voice file event in the Voice Files.
2. Create an event in the Event Handler that uses an alarm system as a GPIO trigger.
3. The created event should trigger the previously created voice file event.
4. In the Priority section of the zone, select OS1, OS2 or Mono OS 1+2 as your trigger and input. If you select Mono OS1+2, that channel should be enabled.
5. The voice file event will be played in that zone as a priority whether it is assigned or not to the zone's Voice File section.

Training Video

You can click on the video or scan the code to watch the training video of this DSP feature.

Note: The video content may be changed or updated in time.

Compressor

A compressor/limiter is an automated volume control tool with the setting of maximum volume to avoid any clipping caused by the signal dynamics or peaks. Threshold and ratio indicate how much the signal is going to be attenuated.

Parameter Name	Parameter Range	Parameter Definition
Enabled	Enable/Disable	Enables or disables the DSP feature.
Threshold	-60 – 6 dB	The threshold control sets the level at which the compression effect is engaged. It will be compressed only when a level passes above the threshold. If the threshold level is set at say -10 dB, only signal peaks that extend above that level will be compressed. The rest of the time, no compression will be taking place.
Knee	0 -20 dB	The knee is assigned as a numerical value yet can be described as qualitatively: soft, hard, or somewhere in between. The hard knee curve shows a sudden change in slope (ratio) that begins at the threshold. The soft knee curve, in contrast, shows a more gradual change.
Ratio	1-100 (n:1)	Specifies the amount of attenuation applied to the signal. A ratio of 1:1 (one to one) is the lowest and it represents unity gain, or in other words, no attenuation. These compression ratios are expressed in decibels so that a ratio of 2:1 indicates that a signal exceeding the threshold by 2 dB will be attenuated down to 1 dB above the threshold. A ratio of around 3:1 is considered moderate compression, 5:1 would be medium compression, 8:1 starts getting into strong compression and 20:1 thru infinity to one would be considered limiting by most and can be used to ensure that a signal does not exceed the amplitude of the threshold.
Release Time	0 – 1000 second	It is the time it takes for the signal to go from the compressed "or attenuated" state back to the original non-compressed signal. Release times will be longer than attack times, ranging anywhere from 40-60 ms to 2-5 seconds, depending on which unit you are working with. Typically, release time should be set as short as possible without producing a "pumping" effect, which is caused by cyclic activation and deactivation of compression.

Training Video

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Note: The video content may be changed or updated in time.

Antiphase

Using the Antiphase option, the output signal rotates over 180° for applications where a contrary phase is desirable.

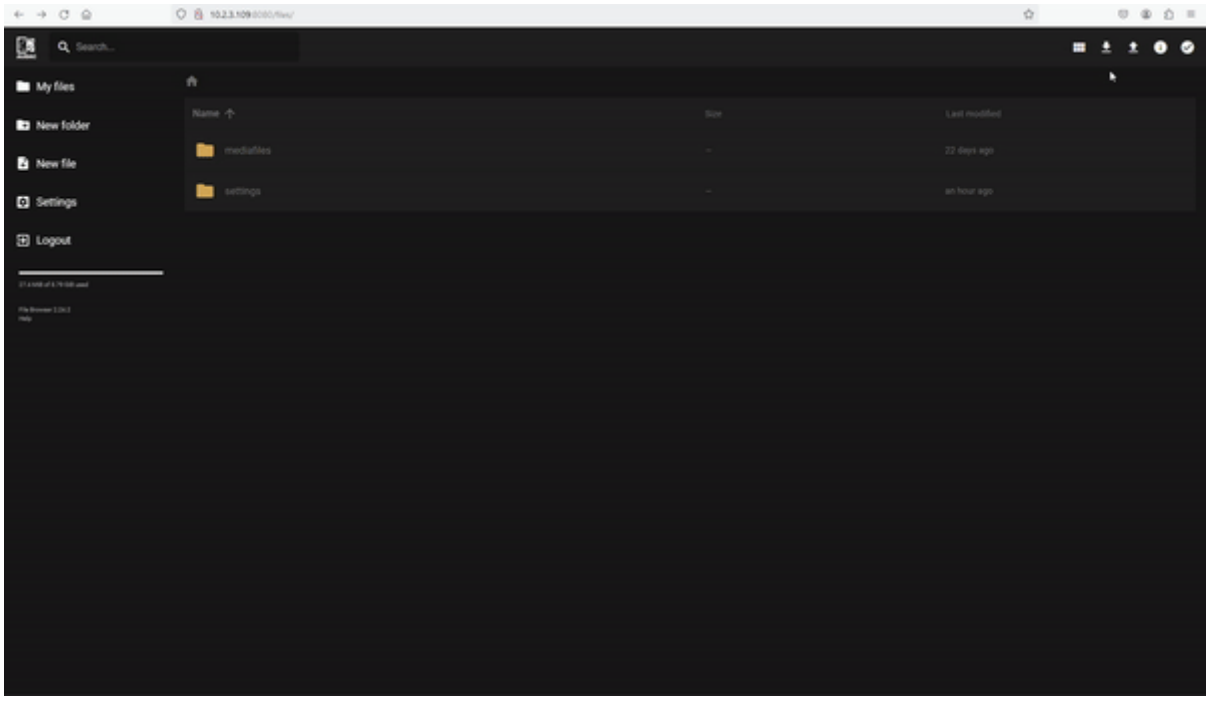
Parameter Name	Parameter Range	Parameter Definition
Enabled	Enable/Disable	Enables or disables the DSP feature.

File Browser

The file browser is available with the LUNA firmware **V 1.2.1**. This appendix is created to explain how to use the file browser and to download or upload files on the internal uSD card. The procedure is available for two purposes:

- To download or upload the settings file that will enable the settings backup of the LUNA series audio matrix processors. **(settings folder)**
- To upload announcement messages (MP3 or WAV) that will be recalled on events of the Voice Files feature. **(mediafiles folder)**

Note: Currently you have more than 8GB of storage for messages on the internal uSD card if you use 128kb/s MP3s. That is 150 hours of messages which should be plenty. You can check the Voice Files feature for details.



Extensions

.sav

a settings file, this is the file with the last saved settings of the LUNA.

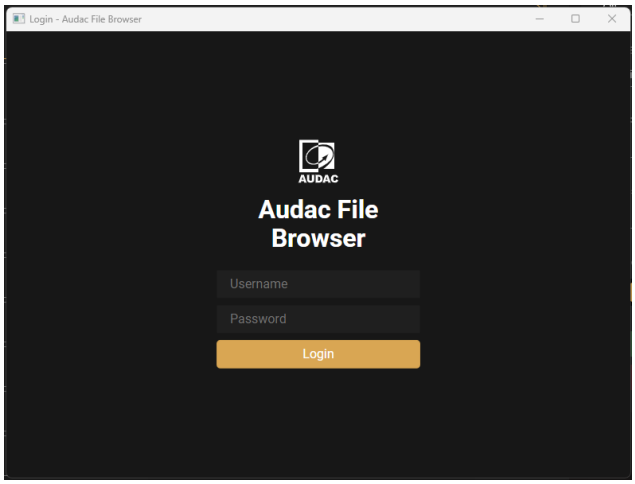
.load

This is a renamed .sav file and is used to perform a manual restore to a specific set of settings.

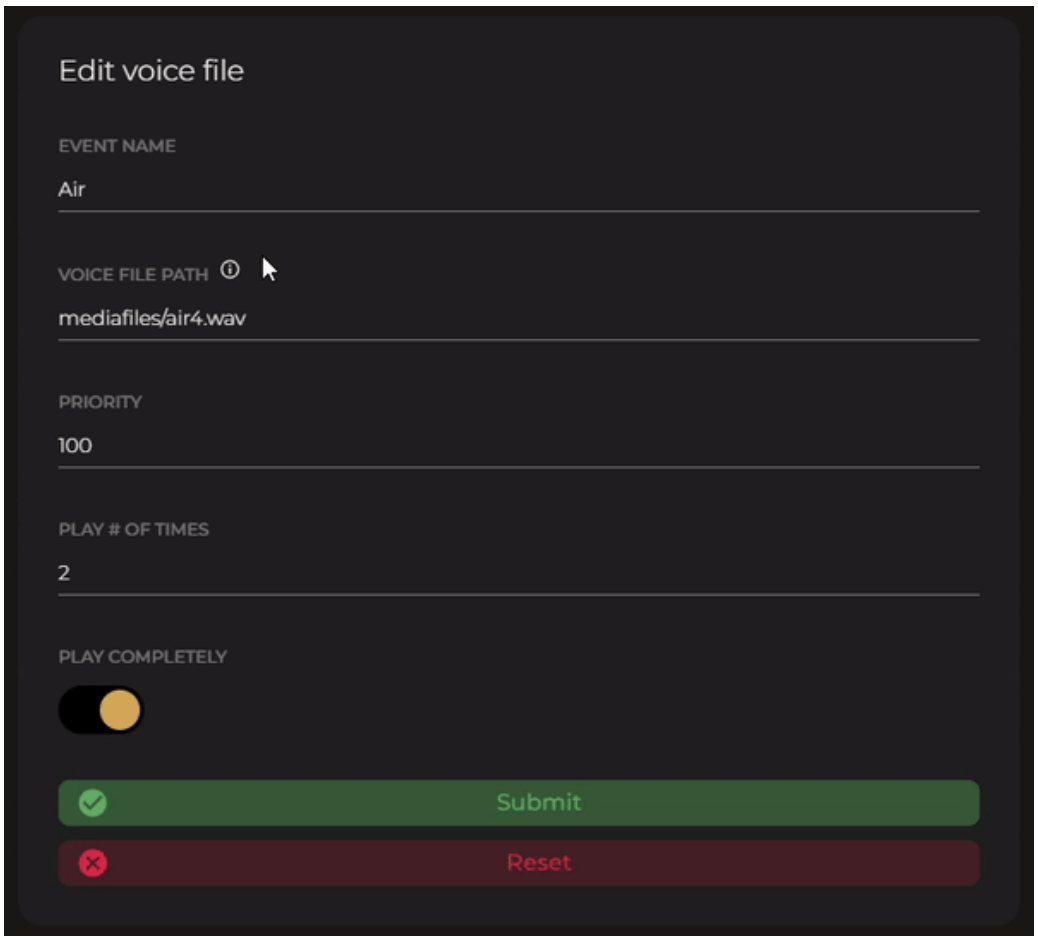
Opening the file browser

The file browser can be accessed using any browser on your computer. You can access it by typing in <IP address>:8080 in the address bar. You will then be asked to log in before you can use the file browser.

Example: *192.168.10.10:8080*



It is also possible to access the file browser using the link that you can see when you hover your pointer on the information icon next to the voice file path.



User levels

Two user levels can access the file browser:

admin:

- The default username and password is *"admin"*.
- The password can be changed on the settings page when logged in.
- Admin can edit, download, and upload files.

user:

- The password is *“user”*.
- The password cannot be changed.
- The user can only see the files and cannot download, edit, or upload them.
- An example use case can be to see the names of the MP3 or WAV files in the file browser to recall them.

Settings

Settings can be downloaded to your computer, and these can be restored to the device later using the file browser.

In the *“settings”* folder on the browser, you can see different .sav files, these are the saved files of the different services running on the device. This file is updated each time a setting is changed related to this service, and before shutting down.

We discourage doing anything other than downloading these files, to avoid issues and confusion.

Because this file is continuously overwritten, it’s not possible to simply change this file to restore an older setting. For this, we introduced .load files. They are in every way the same as a .sav file, but this file is only read by the application, never written to.

Example: Performing a backup of the settings in the LUNA and restoring them later. Download the *“luna.sav”* file to your computer. This is a snapshot of the current settings.

1. Download the current settings file: *“luna.sav”* from the file browser to your computer.
2. Experiment with the current settings, the *“luna.sav”* on the device will be overwritten during this process.

To restore the old settings:

1. Rename the extension of downloaded *“luna.sav”* as *“luna.load”*. You may receive a warning on Windows, you can ignore this warning.
2. Upload the *“luna.load”* settings file to the same folder in the file browser where *“luna.sav”* is located.
3. Reboot the device.

More in-depth explanation

Only when the device (re)boots, the settings are loaded from the file system. The application first searches for its save file with the *“.load”* extension (e.g. *“luna.load”*). If this file exists, it will load the settings from this file, save this into *“.sav”* (*“luna.sav”*), and delete the .load file.
If this file does not exist, it will read the settings from the *.sav* (*“luna.sav”*) file.

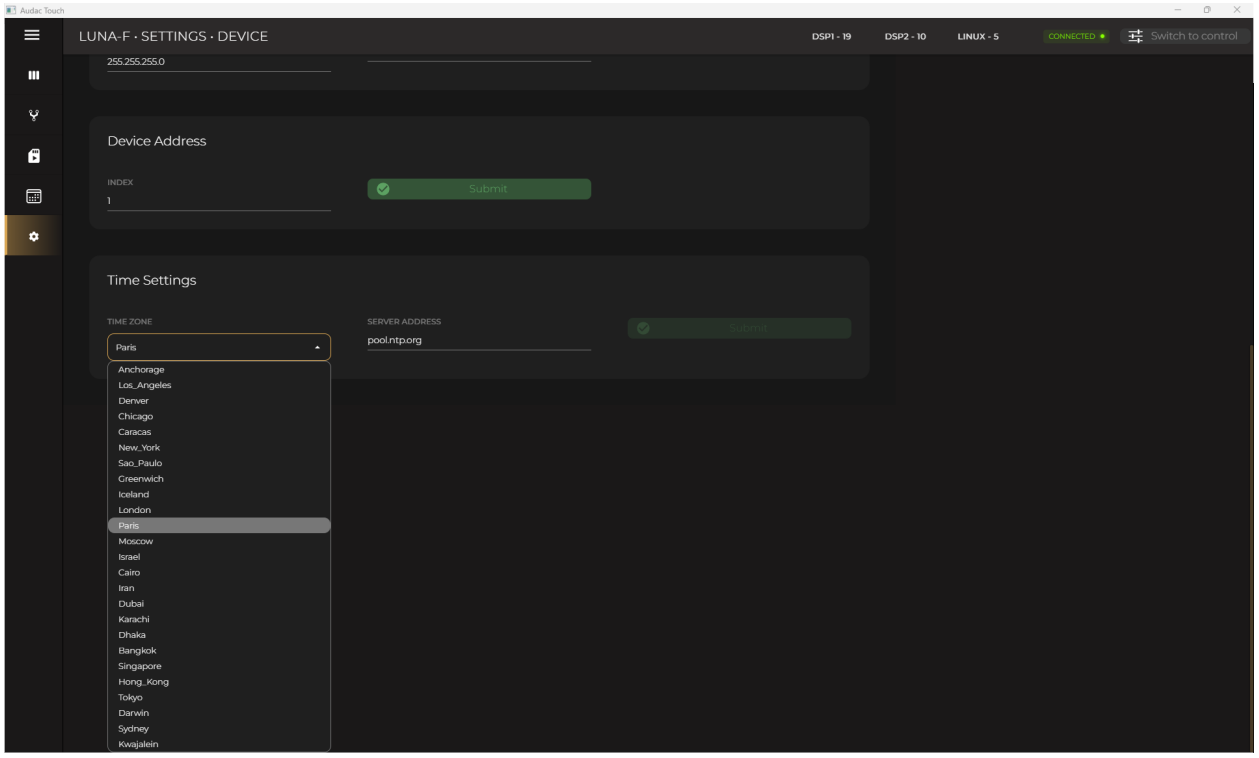
If no *.sav* file exists, the LUNA will load the default settings (this is the same as performing a factory reset).

Event Handler

Fundamentally, the event handler differs from a timer scheduler in that it enables multiple actions to be triggered by a single event or recurrence that can be further tailored with rules. Configuration can be performed using the AUDAC Touch. GPIO or timed events can all trigger the event handler.

Note: Up to 100 events can be created using the event handler.

Note: In order for the event handler to work, the time region should be set correctly on the device settings.



Event Settings

Parameter Name	Parameter Range	Parameter Definition
Enabled	Enabled/Disable	Enables or disables the event. When a new event is created, it is enabled by default.
Name	Not Available	Gives the event a unique name (maximum 40 characters)
Description	Not Available	Description of the event

Action Settings

Parameter Name	Parameter Range	Parameter Definition
Actions	Add Action/Remove Action	Each event can have **up to 10 actions** that can have **up to 5 commands**.
Actions	Edit	Open a window to configure the commands of the action.
Action Commands	Add Command/Remove	Adds a new command or removes the selected command. An action can have **up to 5 commands**.
Select Device	Selection	A drop-down menu shows all the available devices that can be controlled.
Parameter	Selection	A drop-down menu shows all the available functions that be controlled.
Volume	Selection	If the volume of an input or a zone wants to be controlled, a desired value can be set at the bottom of the drop-down menu.
Mute	Selection	Mutes the desired input or zone.
Mixer	Selection	Adjusts the volume of one of 16 mapped sources to the desired value.
Route	Selection	The desired channel's volume is set to 0 dB whereas the rest is set to -90dB or muted. The selection is available at the bottom of the drop-down menu.

Trigger Settings

Contact Trigger

Parameter Name	Parameter Range	Parameter Definition
Execute From-Until	Not Available	Sets a time limit for the event that will occur. The default last date is **18/01/2038**, the limit cannot go beyond that date.
Contact Trigger	Add Contact Trigger/Edit/Remove Contact Trigger	Each event can have **up to 16 contact triggers.**
Select Device	Selection	A drop-down menu shows all the available devices that can receive GPI.
GPI Contact	Selection	A list of GPIO ports that can trigger the event.
Trigger Type	High/Low/High and Low	Selection of GPI states to trigger the event.

Time Trigger

Parameter Name	Parameter Range	Parameter Definition
Time Trigger	Add Time Trigger/Remove Time Trigger	Each event can have **up to 10 time triggers.**
Years	Selection	Each time trigger can have up to **8 year selection options between 2023 and 2030.** A selected year cannot be selected again. **If the year is selected as a repeat parameter, more than one year rule might be confusing.**
Months	Selection	Each time trigger can have up to **12 month selection options between January and December.** A selected month cannot be selected again. **If the month is selected as a repeat parameter, more than one month rule might be confusing.**
Days of Month	Selection	Each time trigger can have up to **32 selection options between 1st-31st or the last day of the month.** **Only a single day matching rule is allowed. The other day matching rules were disabled.**
Weekdays of Month	Selection	Selection list of 1st,2nd,3rd,4th,5th, or the last weekdays of the month. Each day can be selected as a trigger date. **Only a single day matching rule is allowed. The other day matching rules were disabled.** **If the day is selected as a repeat parameter, more than one day rule might be confusing.**
Weekdays	Selection	Selection list of weekdays. Each day can be selected as a trigger date. **Only a single day matching rule is allowed. The other day matching rules were disabled.** **If the day is selected as a repeat parameter, more than one day rule might be confusing.**

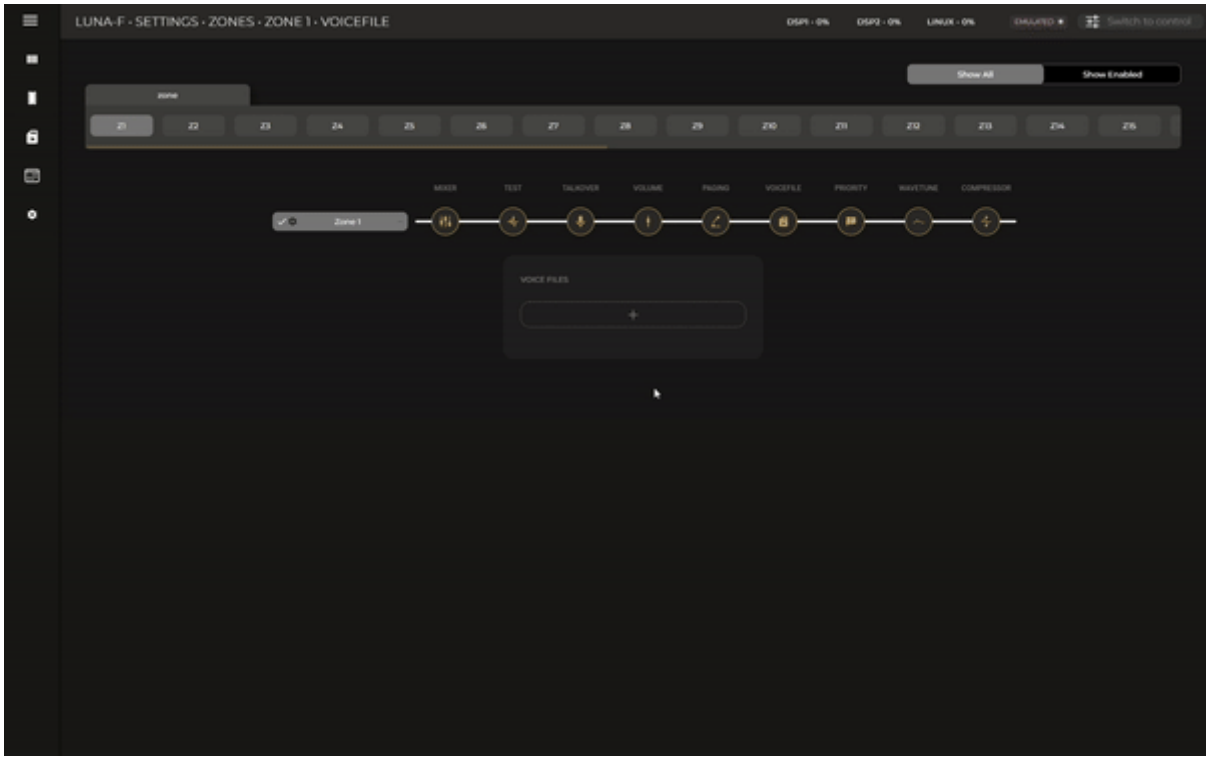
Times	Selection	Sets at what time the event should occur.
Repeat	Year/Month/Week/Day	Sets how often the event repeats.

Time Triggers Preview

Time triggers can be easily previewed annually, monthly and daily on the left side.

Voice File Player

Voice File Player supports MP3 and WAV formats. The storage location can be an external USB drive or an internal SD card. Both FAT32 and exFAT USB drive formats are supported. Voice file events can be recalled in the zone block Voice File when they are assigned.



Voice File Overview

Available events with assigned voice files can be previewed on this list with additional information such as importance level or priority and number of repeats.

Events are queueable when another event with a higher/same priority is playing.

Parameter Name	Parameter Range	Parameter Definition
Play and Stop Buttons	Not Available	Created voice file events can be tested using play and stop buttons.

Edit Voice File

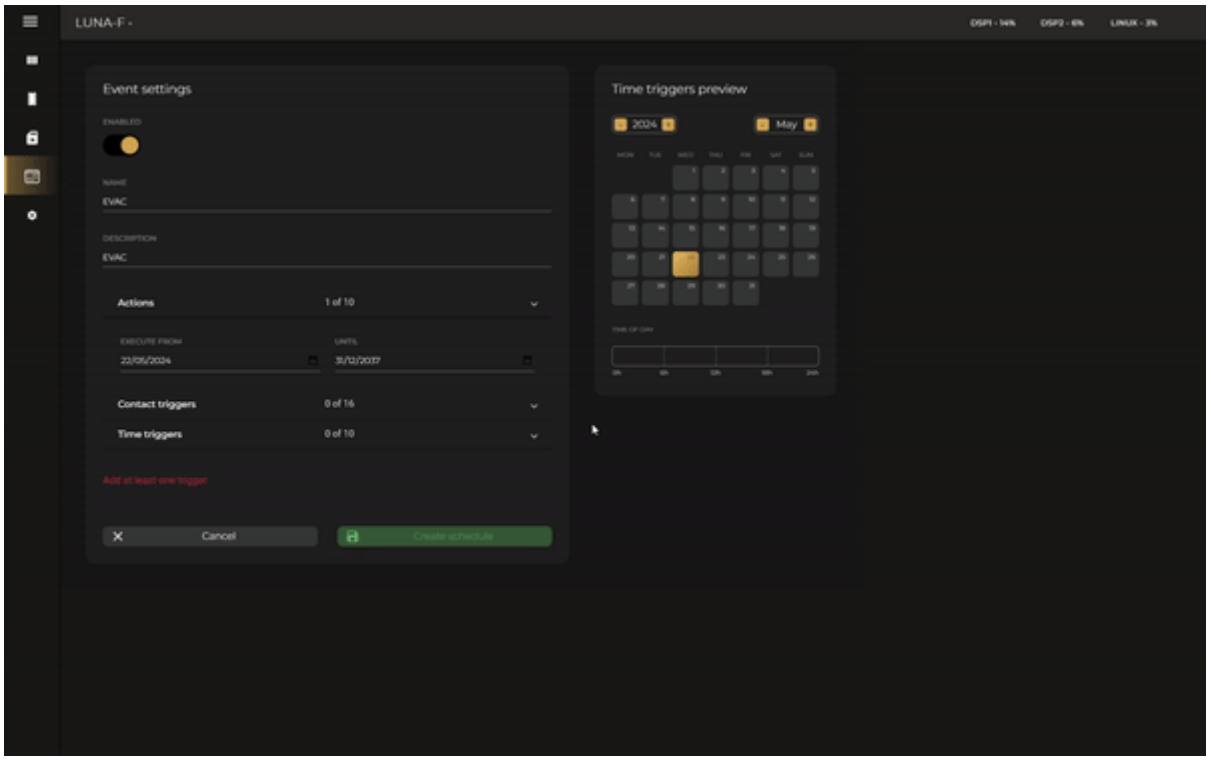
Parameter Name	Parameter Range	Parameter Definition
Edit Voice File	Submit/Reset	
Event Name	Not Available	Name of the event (eg. Evacuation)
Voice File Path	Not Available	Make sure to add the usb/ or mediafiles/ folder in the path field in Audac Touch (e.g.mediafiles/audio1.mp3) Please note that the file path is case sensitive.
Priority	Not Available	The importance of the event ranges from 0 to 100. The lower the number the higher the priority. For example, priority 1 is more important than priority 6.
Play # of Times	Not Available	Repeat the event a specific amount of times, up to 255. When the file is played this amount of times it is removed from the queue. When this variable is set to 0 the file will be played infinitely.
Play Completely	Enable/Disable	

Upload voice files

You can check File Browser topic regarding MP3 or WAV file uploading to internal storage.

Selecting voice file event in the Event Handler

It is possible to trigger a voice file event with a GPI trigger or timed event trigger in the Event Handler. You can find the Voice File Player as a device with the same IP as the LUNA in the drop-down menu.


LUNA-F -
DSP1 - 14%
DSP2 - 6%
LINUX - 3%
Event settings
ENABLED
NAME
EVAC
DESCRIPTION
EVAC
Actions
1 of 10
EXECUTE FROM
22/05/2024
UNTIL
31/12/2037
Contact triggers
0 of 16
Time triggers
0 of 10
Add at least one trigger
Cancel
Create schedule
Time triggers preview
2024
May
MON
TUE
WED
THU
FRI
SAT
SUN
TIME OF DAY
0h
6h
12h
18h
24h