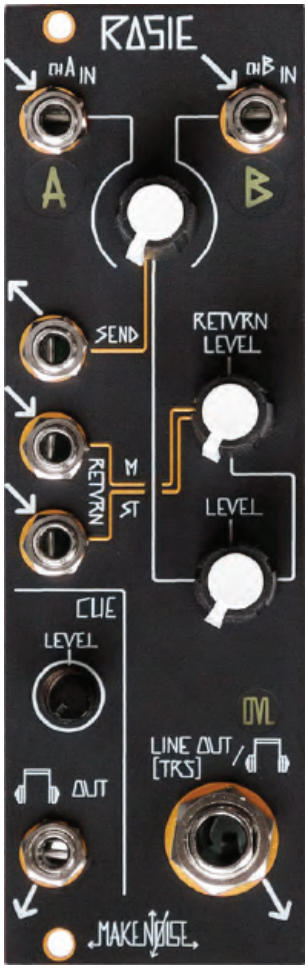
Rosie



MAKENOISE

v2.0

Limited WARRANTY:

Make Noise warrants this product to be free of defects in materials or construction for a period of one year from the date of purchase (proof of purchase/invoice required).
Malfunction resulting from wrong power supply voltages, backwards or reversed eurorack bus board cable connection, abuse of the product or any other causes determined by Make Noise to be the fault of the user are not covered by this warranty, and normal service rates will apply.

During the warranty period, any defective products will be repaired or replaced, at the option of Make Noise, on a return-to-Make Noise basis with the customer paying the transit cost to Make Noise. Please contact technical@makenoisemusic.com for Return To Manufacturer Authorization.

Make Noise implies and accepts no responsibility for harm to person or apparatus caused through operation of this product.

Please contact technical@makenoisemusic.com with any questions, needs & comments, otherwise...
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INSTALLATION

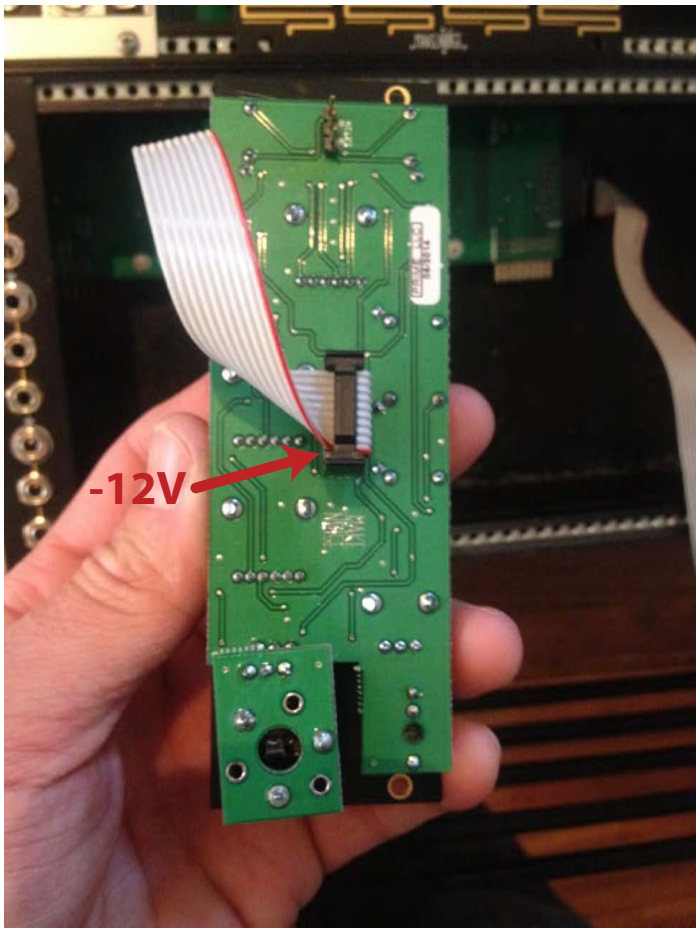
Electrocution hazard!

Always turn the Eurorack case off and unplug the power cord before plugging or un-plugging any Eurorack bus board connection cable cable.
Do not touch any electrical terminals when attaching any Eurorack bus board cable.

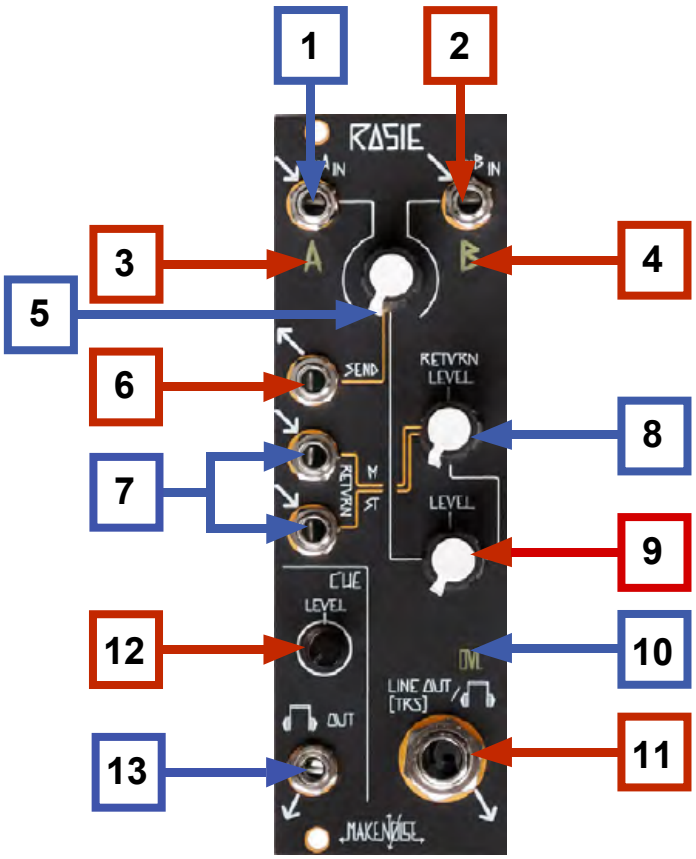
The Make Noise Rosie is an electronic music module requiring 30mA of +12VDC and 30 mA of -12VDC regulated voltages and a properly formatted distribution receptacle to operate. It is designed to be used within the Eurorack format modular synthesizer system.

Go to http://www.makenoisemusic.com/systems.shtml for examples of Eurorack Systems and Cases.

To install, find necessary space in your Eurorack synthesizer case, confirm proper installation of included eurorack bus board connector cable on backside of module (see picture below), plug the bus board connector cable into the Eurorack style bus board, minding the polarity so that the RED stripe on the cable is oriented to the NEGATIVE 12 Volt line on both the module and the bus board. On the Make Noise 6U or 3U Busboard, the negative 12 Volt line is indicated by the white stripe.



Please refer to your case manufacturers' specifications for location of the negative supply.



Rosie Panel Connections

1. Channel A Signal Input: expects typical 10Vpp Audio signal from Modular System. AC coupled.
2. Channel B Signal Input: expects typical 10Vpp Audio signal from Modular System. AC coupled.
3. Channel A Level Indicator: LED lights to show strength of signal patched to Channel A input.
4. Channel B Level Indicator: LED lights to show strength of signal patched to Channel B input.
5. Crossfader: selects between Channel A and B or some combination of A and B to be sent to FX Send and Master Line Out.
6. FX Send output: Mono 10Vpp Audio signal intended to be patched into the Modular System. Also possible to use with external Line Level devices if attenuation is applied.
7. FX Return input(s): operates as Mono (use only top jack, marked M) or Stereo (use both Jacks marked M and ST) return for the FX Loop. Expects typical 10Vpp Audio signal from Modular System. AC coupled. May be used with Line Level devices as well (set Return Level to Max and adjust output volume at external device).
8. Return Level: manually operated panel control to set the Level of the FX Loop Return in the Master Output. Range of 0% to 120%
9. Master Level: Sets the volume of the Master Line Out.
10. OVerLoad indicator: OVL lights when signal Level is too high.
11. Master Line OUT: 1/4" TRS jack wired as Stereo output. Low output impedance (60 ohms) allows this output to drive Headphones as well as Line Level inputs.
12. CUE Level: Sets volume of the signal for CUE Headphones OUT.
13. CUE Output: TRS Mini-Jack wired as MONO. Low output impedance (30 ohms) allows this output to drive Headphones, as well as Line Level inputs.

Overview

Rosie is an output interfacing module with the added functionalities of a FX Loop, Crossfader and Auto-Cue system. It features two Mono Inputs (Channel A and B) each with LED indication of signal strength, a crossfader to select between Channel A and B, a Mono FX Send with Stereo FX Return and Return Level control, a Master Level control with Limiting and overload indication, a Line Level 1/4" Stereo output and the Auto-CUE system with independent Level control and Headphone output. Both the CUE and Master Outputs use high quality Burr Brown line drivers capable of driving long cable runs out to the PA or a set of headphones.

The Rosie is designed to facilitate live performance on the modular synthesizer by allowing the artist to preview and modify portions of a patch using the Auto-CUE system, while the audience is listening to a different portion of the patch as selected by the crossfader. Additonally it allows for stereo processing of all sounds that are live in the PA using the the FX Loop. The Rosie is also suitable for headphone monitoring of the modular system for personal use and for interfacing the modular system to a recording environment. Because all signal levels are scaled within the Rosie, the user does not need to be concerned with interfacing the large signal levels from the modular system to the more typical Line Level inputs found on most audio gear.

It is designed to be installed in the bottom most row, at the right hand edge of system. This prevents physical interference from the bulky 1/4" cable.

The Crossfader and Auto Cue System

The crossfader is the topmost knob on the Rosie. It allows for manual crossfading between Channel A and B. It works together with the FX Send (FX Loop) and Auto-CUE system. When the crossfader is set to be Full Counter Clock-Wise, Channel A is selected and the signal patched to Channel A signal input will be routed to the FX Send output and Master Line OUT. The signal at the FX Send output will be at Untiy (this means signal will be same level as it was at the input, with respect to the crossfader setting). In most cases this will be around 10Vpp. The signal at the Master Line Out will be at Line Level (around 2Vpp with Max 3Vpp) and is determined by the setting of the Master Level panel control. This makes it easy to plug the modular synthesizer system into most other audio devices (mixers, amplifiers, recording interfaces and etc…). While Channel A is routed to the FX Send OUT and Master Line OUT, Channel B is routed to the CUE Headphone OUT, the level of which is set by the CUE Level. This allows the user to monitor and preview Channel B while the audience is listening to Channel A. The CUE system is automatic. The user does not need to do anything for the CUE channel to change. When user sweeps crossfader from Full CCW to Full CW, Channel B will then be routed to the FX Send output and Master Line OUT. The audience will listen to Channel B. While Channel B is routed to the FX Send OUT and Master Line OUT, Channel A is routed to the CUE Headphone OUT for user to preview. The CUE Headphone OUT is designed to work well with Headphones, but it will also drive just about any Line Level destination.

The FX Loop

The FX Send is same signal as the Master Line OUT, but at the typical 10Vpp modular signal level. To use the FX Loop, patch the FX Send to the input of any processing module in the system (ECHOPHON or Erbe Verb for example). If the processing module has a Mix control, set it to be 100% WET (no dry/ unprocessed signal). Patch the output of the processing module to the FX Return input on the Rosie. Your FX loop could have multiple processing stages. The modules used for processing could be just about anything you'd like to use. Even filters, ring modulators and other processors are OK to use. Be careful that the Phase of the processor is not inverted, as it could result in phase errors that cause signal loss (which might be something fun to experiment with as well). It is important to set the Mix control to 100% Wet when possible, as the DRY Signal will already be routed to the Master Line OUT on the Rosie.

The Return Level on the Rosie will set the amount of processed signal that is blended in with the dry/ unprocessed signal. The Master Level control will set the overall volume of the signal at the Master Line OUT. It is not possible to have a 100% WET mix using the Rosie FX Loop.

The CUE signal is not routed to the FX Send as you would not want audience to hear your CUE signal in the FX processing. However, as the cued signal is crossfaded into the Master Line Out, it is applied FX Send as well. This allows for some fantastic smearing of Channel A and B as you fade between the two channels.

For Voltage control over FX Loop, patch Send output to VCA before processing module. The VCA will control the Level/ Amount of signal sent to FX processing Loop.

The Line Output

The LINE out level is clean up to about 75%, where it will start to overload and clip. The OVL (overload) indicator will light to indicate this clipping. The LINE Out is a Tip Ring Sleeve jack the provides a Stereo output on a single jack. It is also OK to use this output as a Mono output by using a Tip Sleeve jack. The LINE out level is clean up to about 75%, where it will start to overload and clip. The OVL (overload) indicator will light to indicate this clipping. This output is capable of driving loads typical of Headphones, long cables runs to a mixer and just about any line level input.

The Cue Output

Cue output will always be opposite of the Line output. So when crossfader is set for CH. A the CUE automatically cues up ch. B so you could monitor another part of the patch to prepare to fade into the live Line output. In other words, plug headphones into CUE and plug the Line OUT to your PA system.

The cue signal is not routed to the fx Send because you would not want the audience to hear your cue signal. The module is designed for use in a small live system allowing for setting up patches/ live patching while audience hears the patch that is already in progress.

Patch Examples:

“DJ” Cueing System

Patch two audio signals to ChA and ChB inputs. Choose patch to send to PA with Crossfader, output Master Line OUT to PA. Monitor Cue Output with headphones to audition the other patch. When ready, use Crossfader to switch to the other patch in the PA.

Two-input mixer

Patch two audio sources to ChA and ChB Inputs. Set mix with Crossfader. Take output from Master Line OUT. With mix at 50%, the Master and Cue OUTs will be identical, allowing multiple sets of headphones to monitor.

Mono/Stereo Effects Loop

Start with DJ Cueing or Two-Input Mixer patch. Patch Send output to effects module of your choice, such as Erbe-Verb or Echophon. Set effects module MIX control to 100% wet, and patch its output to Mono Return input. For Stereo effects, patch left and right outputs of stereo effects module (such as Erbe-Verb) to L and R Return inputs on Rosie. Set effects volume with Return level control. Optional: Patching a VCA in series will allow dynamic control of effects volume. For example, patch Send to an Optomix, take Ch1 OUTput to the Erbe-Verb Input, and use a cycling MATHS channel patched to the Optomix Control Input to dynamically modulate the level of signal being sent to the Erbe-Verb.

Three-input mixer (2 mono channels + 1 mono/stereo channel)

Start with Two-input mixer patch, and add a third audio source to one or both of the FX Return inputs. Set “channel 3” level with Return Level control.

Stomp Box Integration using CV Bus (no adapter cables necessary)

Set up patch of your choice. Patch Send output to Mono input on CV Bus Output stage, setting level with the CV Bus output Level knob. Patch CV Bus ¼” output to first input on pedalboard. Patch final output of pedalboard to CV Bus ¼” INput, and set level with CV Bus input Level knob. Patch OUT to Mono Return Input on Rosie, and set Return amount with Return Level control.\

Ping Pong Reverb

Patch audio of your choice to either or both of the Rosie inputs. Patch SEND to Erbe-Verb IN. Set Erbe-Verb MIX to 100% wet. Patch Erbe-Verb Left OUT to Optomix Ch1 Signal IN, and Erbe-Verb Right OUT to Optomix Ch2 Signal IN. Set up MATHS for 281 Quadrature mode (see MATHS manual). Patch MATHS Ch1 Unity OUT to Optomix Ch1 CONTROL In, and MATHS Ch4 Unity OUT to Optomix Ch2 CONTROL In. Patch Optomix Ch1 OUT and Ch2 OUT to M and S Return INputs on Rosie. Set Return level, MATHS and Erbe-Verb settings to taste. Take stereo output from Rosie LINE out. (OPTIONAL: use ModDemix instead of Optomix for different timbres.)