

Noise Engineering

Xer Dualis

A 6 HP mixer with four stereo channels featuring level controls and mutes.

Overview

Type	Stereo mixer
Size	6 HP
Depth	.9 inches
Power	2x5 Eurorack
+12V	40mA
-12V	40mA
+5V	0mA

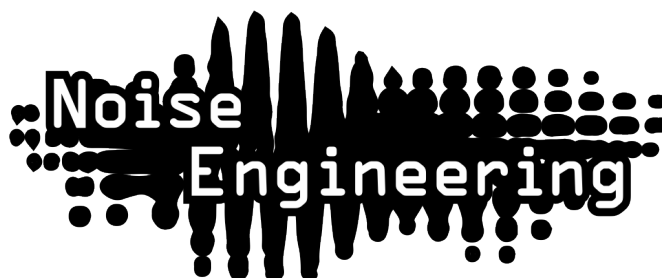
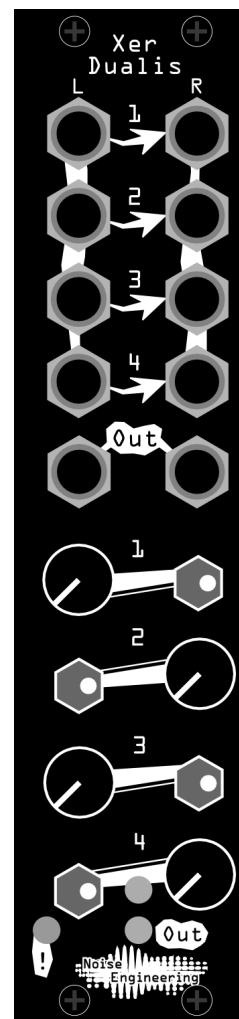
Xer Dualis is a compact four-channel stereo mixer. Each channel has left and right inputs, a level control, and a mute. Want to use mono signals? No problem! The left inputs normal to the right ones. On the stereo pair output, XD features a simple meter and a clip indicator to keep your mix clean. Xer Dualis is a compact and performable choice whether you need a submixer for a large system or a way to mix all the elements of a portable case together.

Etymology

Xer - from Greek cherest: "here is"

Dualis - from Latin: "containing two"

"Here is stereo"



Power

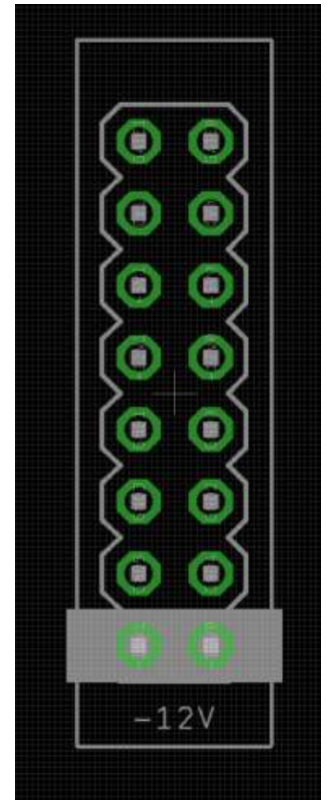
To power your Noise Engineering module, turn off your case. Plug one end of your ribbon cable into your power board so that the red stripe on the ribbon cable is aligned to the side that says -12v and each pin on the power header is plugged into the connector on the ribbon. Make sure no pins are overhanging the connector! If they are, unplug it and realign.

Line up the red stripe on the ribbon cable so that it matches the white stripe and/or -12v indication on the board and plug in the connector.

Screw your module into your case BEFORE powering on the module. You risk bumping the module's PCB against something metallic and damaging it if it's not properly secured when powered on.

You should be good to go if you followed these instructions. Now go make some noise!

A final note. Some modules have other headers -- they may have a different number of pins or may say NOT POWER. In general, unless a manual tells you otherwise, DO NOT CONNECT THOSE TO POWER.



Warranty

Noise Engineering backs all our products with a product warranty: we guarantee our products to be free from manufacturing defects (materials or workmanship) for one year from the date a new module is purchased from Noise Engineering or an authorized retailer (receipt or invoice required). The cost of shipping to Noise Engineering is paid by the user. Modules requiring warranty repair will either be repaired or replaced at Noise Engineering's discretion. If you believe you have a product that has a defect that is out of warranty, please contact us and we will work with you.

This warranty does not cover damage due to improper handling, storage, use, or abuse, modifications, or improper power or other voltage application.

All returns must be coordinated through Noise Engineering; returns without a Return Authorization will be refused and returned to sender.

Please contact us for the current rate and more information for repairs for modules that are not covered by our warranty.

Interface

L 1-4

Left inputs. If R is unpatched, the L signal is normalized there for mono use.

R 1-4

Right inputs. If left unpatched, the L signal is normalized here for mono use.

Out L/Out R

Stereo outputs.

Switches 1-4

Mute switches. Channels are muted in the left position, and unmuted in the right.

Knobs 1-4

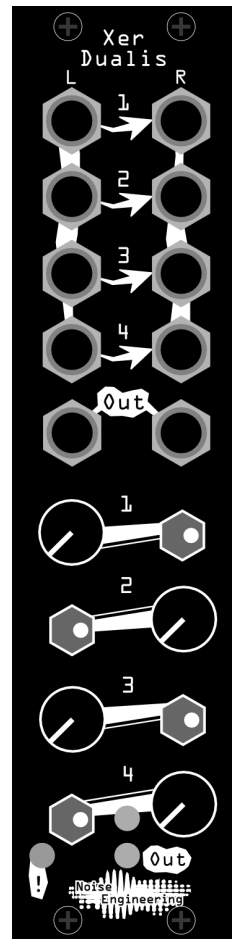
Controls the level of each channel.

Out (LEDs)

Level indicators for mix.

! (LED)

Flashes when the mixer is approaching the clipping range.



Patch Tutorial

Turn the level knobs down (remember that things can get loud!). Patch some sounds into the input channels of XD. If sounds are mono, patch them to the L inputs, and patch stereo sounds to the L and R inputs.

Patch the L and R outputs to your audio interface, output module, or another mixer.

Use the knobs to adjust the levels of each channel, and the mute switches to bring sounds in and out of your mix.

Input and output voltages

Xer Dualis is AC coupled, and compatible with Eurorack-level signals up to about 16V peak-to-peak.

Design Notes

Xer Dualis is a project that was started long, long ago.

We've had many ideas for compact mixers (you may have seen some prototypes if you've been to any of our in-person demos over the years) but coming up with a final module that worked well and did what we wanted it to proved a challenge.

XD changed size a number of times (it was 4 at one point, then 12, then 8, then, finally, 6 HP), and its features varied, too. (Do we want mutes? Do we not want mutes? Should the inputs be mono or stereo? How many channels do we need? What about LEDs?)

Once we finally settled on a final featureset and layout, we put it all together, ordered a prototype, put it in a case, tested it out... and realized that we all put mixers in the bottom right of our cases and, because of this, we actually wanted the jacks on the top instead of on the bottom.

This was a great move except that the next prototype came out entirely backwards after a bit of distraction during the flip. Yes, we make mistakes... In this case, it led us to complete confusion when we thought the whole thing was broken for a few minutes, and then we finally realized what was going on. Go team!

We made a few more adjustments to the final to make it as affordable as possible while not compromising on the feature set we had (finally) decided we considered core to this product.

And thus XD was born: we're quite proud of its form-from-function design, and compact-yet-usable layout fills a space in all of our cases. As our product line expands into the stereo field, XD's utility has proven itself time and time again. Sometimes you just need to mix four Versios into a Librae Legio.

Special Thanks

Markus would personally like to thank Kris for not firing them on the spot for suggesting approximately 14 separate layout changes in the design process. (Kris would like to say Markus is still on thin ice.)