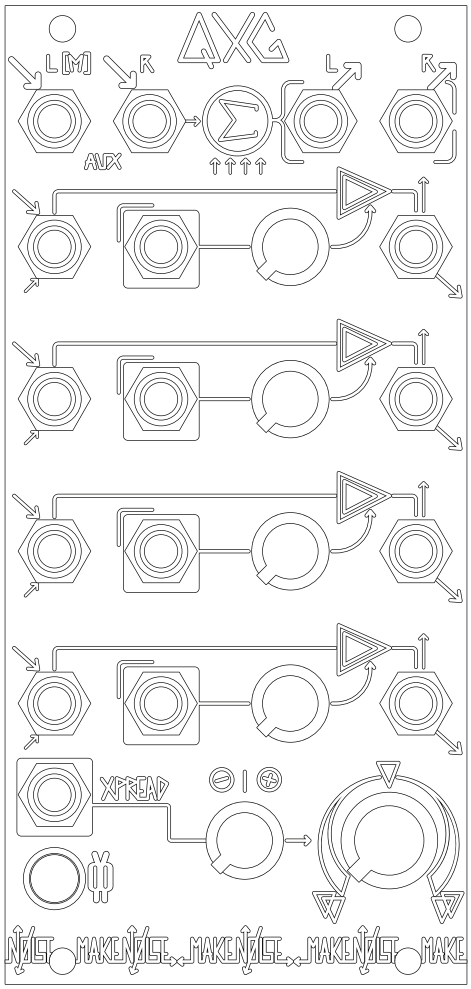
ΔXG



MAKENOISE

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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, removing knobs, changing faceplates, 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.

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, Return To Manufacturer Authorization, or any needs & comments.

http://www.makenoisemusic.com

About This Manual:

Written by Tony Rolando and Walker Farrell
Illustration and layout by Lewis Dahm

INSTALLATION

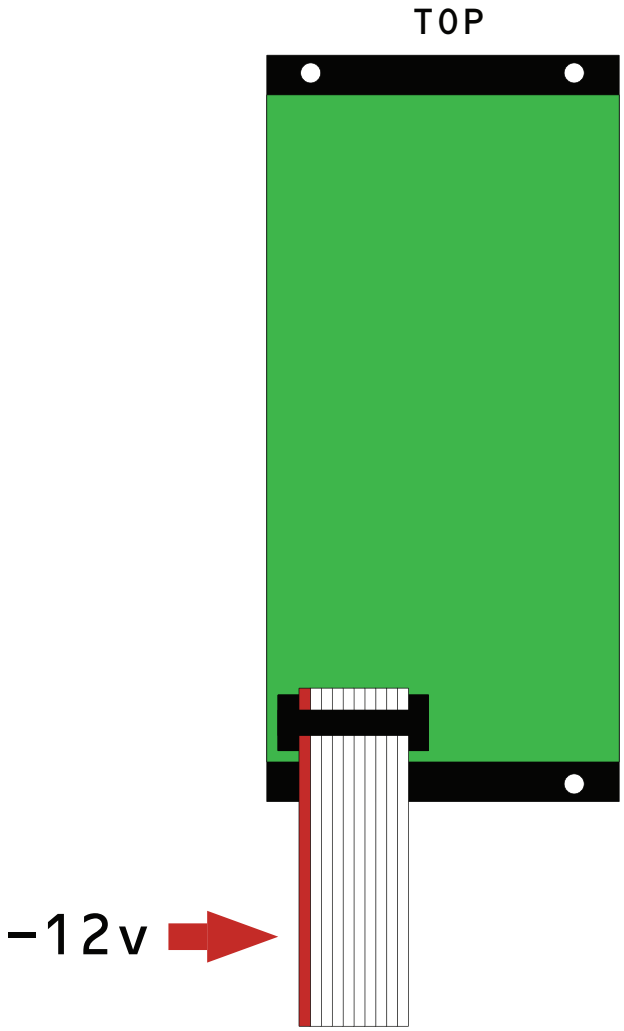
Electrocution hazard!

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

The Make Noise QXG is an electronic music module requiring 65mA of +12VDC and 75mA of -12VDC regulated voltage and a properly formatted distribution receptacle to operate. It must be properly installed into a Eurorack format modular synthesizer system case.

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

To install, find 12HP in your Eurorack synthesizer case, confirm proper installation of 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 manufacturer's specification for location of the negative supply.

INTRODUCTION

The Quad Stereo Gate (QXG) music synthesizer module is a Four Channel Stereo Low Pass Gate and Mixer. It follows in the footsteps of the QMMG, Optomix, RxMx, DynaMix, LxD, and DXG.

A pair of QXG modules is specially designed to connect to PoliMATHS and our forthcoming multi-channel oscillator to complete the eight voice core of the New Universal Synthesizer System. When these connections are made, the eight channels of the oscillator are distributed to the eight signal inputs, while the eight channels of the PoliMATHS are distributed to the eight control inputs.

Like the DXG before it, the QXG utilizes a new low pass gate circuit that does not use vactrols. This circuit is 100% analog and its response was arrived at after many months tailoring it to meet or exceed the expectations that have been set by all the vactrol low pass gates that Make Noise has created over the years.

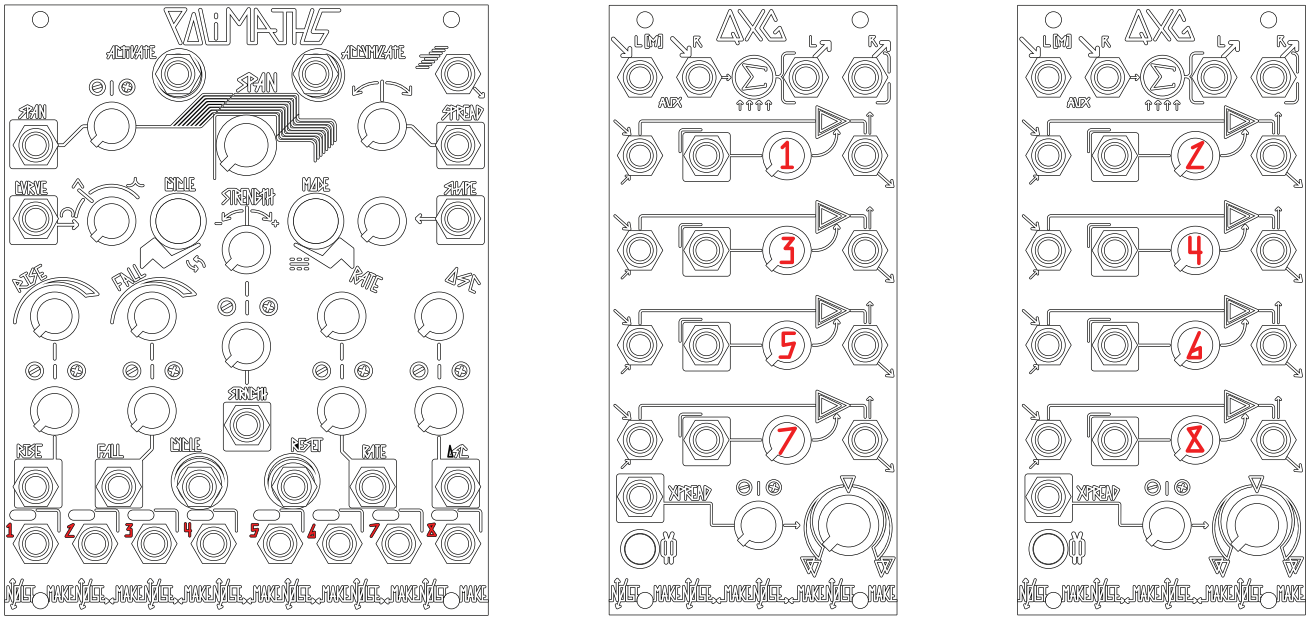
As on all of our low pass gates, the QXG's CTRL parameter is used to set both the amplitude and the frequency content of the sound that passes through it.

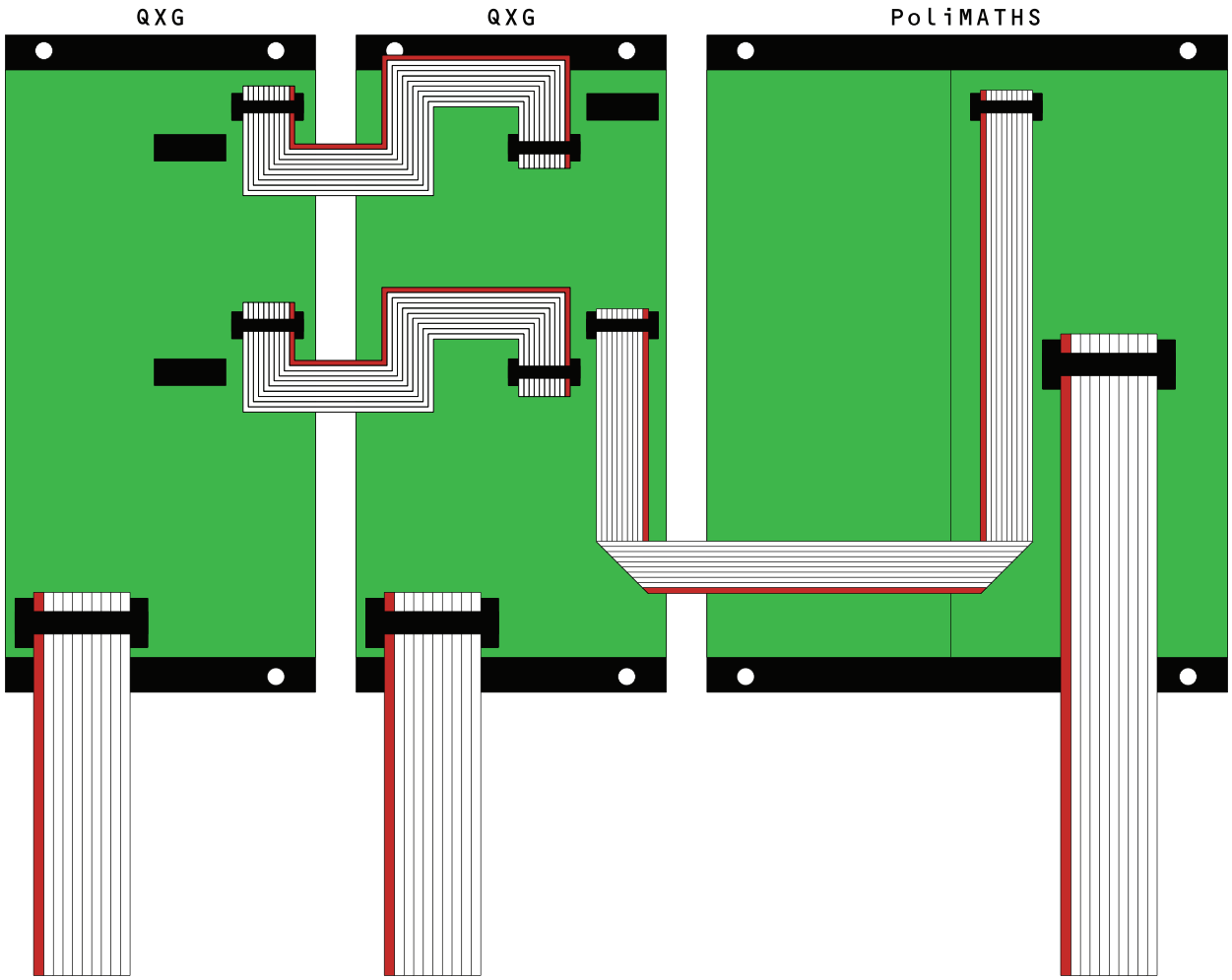
Additionally the QXG adds a Vactrol button to select between a Slow, vactrol-type response emulating the decay time of a vactrol (Vactrol button ON), and a Fast precision response that still maintains the gentle filtering characteristic (Vactrol button OFF). Fast response can be especially useful when patching QXG with complex and quickly-changing functions such as those generated by PoliMATHS.

The QXG also includes a Stereo Sum Output with voltage controllable Stereo Spread to quickly route all four channels across the stereo field. Each channel also has an individual output that removes the channel from the Sum when patched.

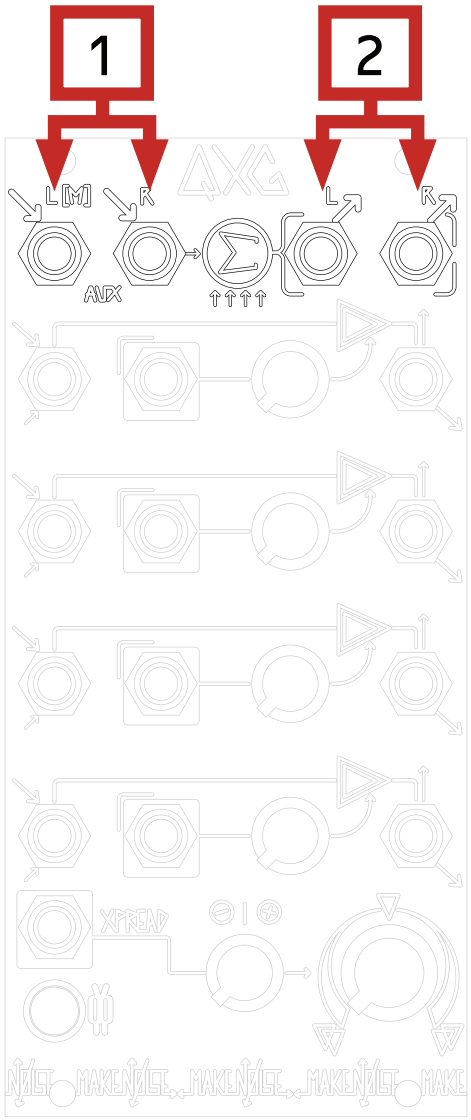
QXG also includes signal and control input headers for creating pre-patched connections from the outputs of PoliMATHS and our forthcoming multi-channel oscillator.

QXG's stereo Aux input can be used to chain together larger decentralized mixes, and are also useful in quickly connecting two QXG together when used with the eight channels of PoliMATHS and #$%@$!, creating an eight channel stereo submix if so desired.



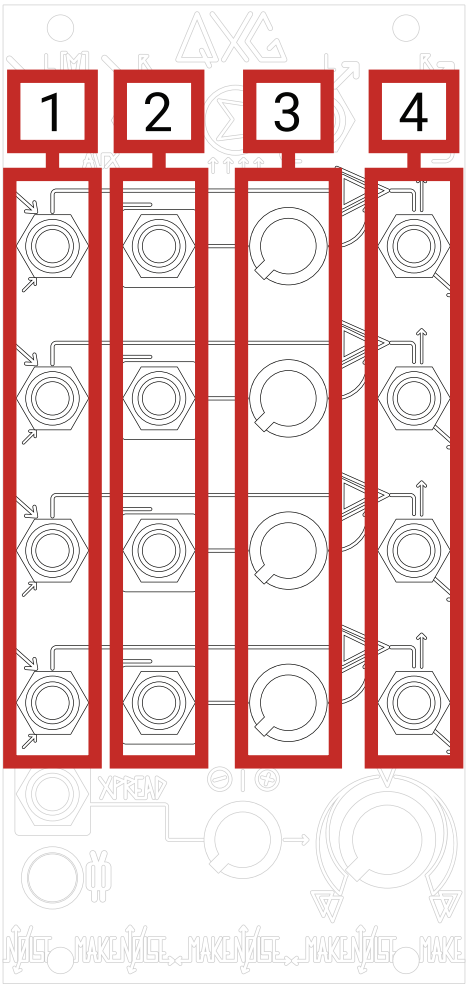

QXG
QXG
PoLiMATHS

PANEL CONTROLS



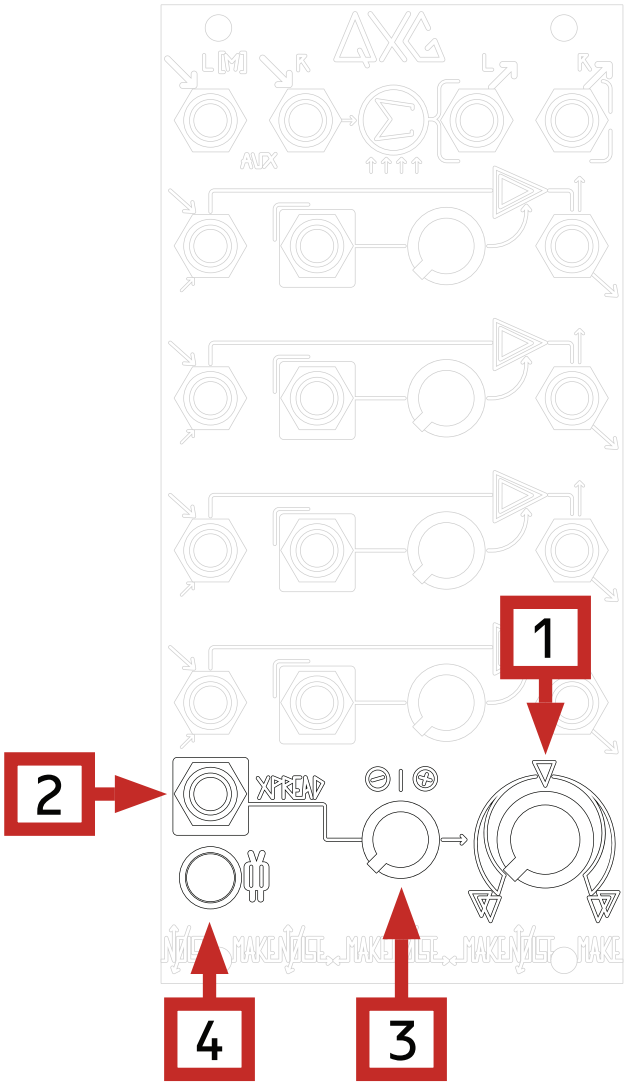
1. **Left (Mono) and Right Aux Inputs:** Patch a signal to these inputs to mix it directly to the Mix outputs. Useful for chaining with a second QXG for eight-channel N.U.S.S. patches, or adding any other audio source to the mix. Patch only to Left input for mono use (left input will appear at both Mix outputs).
2. **Left and Right Mix Outputs:** Stereo mix of all channels and Aux inputs according to the individual channels' control levels and the Xpread parameter.

PANEL CONTROLS



1. **Signal Inputs 1-4:** Signal inputs for the four low pass gate circuits. Normalled to Signal Input header for use with N.U.S.S. audio sources (#!$%&!*#@ or MultiMod). Patching to the input breaks this connection, per channel.
2. **Control Inputs 1-4:** Control voltage inputs for the four low pass gate circuits. Normalled to Control Inputs header for use with N.U.S.S. control voltage sources (PoliMATHS or MultiMod). Patching to the control input breaks this connection, per channel.
3. **Control combo pots 1-4:** Panel controls for the low pass gate circuit. Attenuates signal at Control Input, or normalled control signals from N.U.S.S. Control Inputs header. If header is not in use, combo pot operates as a panel control when its Control Input is unpatched.
4. **Channel outputs 1-4:** Outputs for the four low pass gate circuits. Unpatched channels are sent to the Mix outputs via the XPREAD parameter. Patching an output removes the channel from the Mix.

PANEL CONTROLS



1. **XPREAD Panel Control:** Sets the Stereo Spread for the four low pass gate channels. At 12:00, all channels are centered. At full clockwise, channels are distributed to the outputs from left to right: Channel 1 in left channel only, Channel 2 weighted left, Channel 3 weighted right, Channel 4 in right channel only. At full counterclockwise, channels are distributed to the outputs from right to left: Channel 4 in left channel only, Channel 3 weighted left, Channel 2 weighted right, Channel 1 in right channel only.

2. **XPREAD CV Input:** Control voltage input for XPREAD parameter.

3. **XPREAD CV Input attenuverter:** Bi-polar attenuator for XPREAD CV input.

4. **Vactrol Button:** Selects between a Slow response emulating the decay time of a vactrol (Vactrol button ON), and a Fast response that still maintains the gentle low pass gate filtering characteristic (Vactrol button OFF).