

Monoid Passive

Description

The *Monoid Passive* is based on one of the most elementary audio circuits at all – the passive mix of two audio signals. No amplification is done at any stage – no power supply is needed at all. There are only jacks, potentiometers, resistors, wires and a simple housing.

The device is organized in two sections – the first serves as a 6-in-4-out aux bus routing mixer (send), and the second as an 8-in-2-out aux return summing mixer (return).

The send mixer features two mono and two stereo inputs at the left side (1/4" TRS or TS sockets). The signals are split then and led to the mixer and to direct outputs at the right side (1/4" TRS or TS as well). Each channel passes four aux send potentiometers that drive four mono aux send outputs (1/4" TS) at the front.

The return mixer features eight mono inputs at the front (1/8" TS), situated directly beside the send jacks. They are intended to be used as stereo pairs, but can be driven separately – in that case the return mixer is two 4-to-1 mixers in fact. Each input passes one potentiometer that controls the level at one of the two mono output jacks (each 1/4" TS).

The intended application is to expand aux send and return functionality of small live mixer setups. The idea is to insert the Monoid Passive channels in the main mixer channels, connect four send-return-fx devices to the send bus outs and the return inputs of the monoid and feed the aux return mix output to the aux return input of the main mixer. So you've got four additional aux sends on 6 main channels!

Apparently the Monoid Passive can be used in a lot of different ways, e.g. as a combination of three mono submixers, as a matrix device for multitracking purposes or in combination with external delays as a sophisticated feedback controller.

The big disadvantage in every case is loss of signal level at each mixing stage because of the passive construction. That's why an active version is planned with less routing possibilities but mute buttons for each channel, two bargraph meters for aux and main output, and a bass/treble equaliser at the main stage.