STEREO MATRISE

STEREO MATRISE is an active matrix audio mixer sporting four stereo inputs, four stereo outputs, sixteen level adjustment knobs and individual phase inversion switches for each of the four stereo output channels. This makes for a powerful tool to experiment with signal routing and feedback loops. Among other things the device can be used to run parallel effect loops or amplifiers, add a clean-blend to an effect, or regenerate effects or even the mixer itself. *A matrix mixer is a mixer with multiple inputs and outputs, where any input can be routed to any output.*

HOW IT WORKS

The Grid: The 16 knobs set the volume of each input present at each of the outputs. There are 16 knobs since 4 x 4 = 16. Each input has four outputs to choose from, just as each output has four inputs to choose from.

Polarity: Each output channel has a phase inversion switch. In the 'O' position the original phase is retained. In the 'Ø' position it's inverted. This is a handy tool for instance when running parallel loops or feedback loops as some devices invert the phase of your signal. With the phase inversion switch you are able to correct such phase cancellations. Adding positive versus negative feedback across some time-based pedals will yield different textures. Experiment! An audible “pop” may be heard when switching polarity.

Gain: Each knob in the matrix grid has up to +6dB of gain. Unity gain is around 2 o’clock.

Internal switches: Each input is tied to a dual DIP switch. These allow for either stereo or mono operation. Chose between connecting jack-tip to the left channel and jack-ring to the right channel (stereo) or jack tip to both the left and right channels (parallel mono). These options are labeled S (stereo) and M (mono).

Each outputs right channel is tied to a DIP switch. These allow you to disconnect the jack-ring from the outputs right channel. This can be useful for stability in mono output operation as you won’t cause a connection between ground and the right channel when using a mono (TS) jack. That being said you won’t damage the mixer by using mono jacks without first adjusting the internal switch.

Active vs Passive: Some matrix mixers on the market are passive. Though they do not require a power supply, they come with limitations and drawbacks. For one, a passive matrix will load down your signal resulting in attenuation and loss of frequency content. Another common issue is channel crosstalk causing signal interference across the outputs. Features like signal boosting and inversion is not available with a passive matrix. Short version: active mixers like this one is better for stability and signal integrity.

Feedback loops: Feeding the output of a pedal back to its input can be a fun way to experimenting with sound. Different pedals behave differently and some might not produce positive feedback unless you invert the signals phase. Beware of loud signals and take care not to damage your ears or equipment.

TECHNICAL SPECIFICATIONS

Input impedance:	1 MΩ (500kΩ for mono input split operation)
Output impedance:	~1 kΩ
Voltage:	9 to 12 VDC center negative (Regular Boss/Ibanez style).
Current draw:	100mA
Dimensions:	150 mm x 125 mm x 65 mm
Weight:	670 g