

## INS-2MX, dual insert voltage controlled amplifier

The main purpose with the INS-2MX is, together with MX-4S, stand alone or other module(s), insert effects in the audio (or control signals) chain.

The INS-2MX consists of two VC amplifiers, two insert VC amplifiers and controllers. All parameters can be controlled manually (with knobs) or by external signals. The main VCA works in a semi-logarithmic mode.

The semi-logarithmic transfer function is much more practical than a true logarithmic because it "imitates" the natural behaviour of volume controllers. All VC amplifiers accept both DC and AC signals.

The INS-2MX has two outputs (a single channel); a mixed signal output and SEND output for an external effect device(s). The MIX controller combines incoming (dry) signal with processed signal from an external effect device. The MIX LEVEL controls outgoing (output MIX) and the SEND output.

External devices (effects) are, usually, inserted between SEND and RETURN sockets. The INS-2MX can also be used as a morphing device; two signals are coupled to VCA's two inputs (inputs AUDIO and INSERT). The morphed outgoing signal (MIX output) is controlled by knob (MIX) or CV signal (MIX/LEVEL CV) and attenuation by knob (MIX LEVEL) or by CV signal (VCA/LEVEL CV).

### Performances

|                                    |  |
|------------------------------------|--|
| Total frequency controllable range | DC to 50 kHz   |
| Maximal input/output audio signal  | 20 Volts p-p   |
| MIX                                | manually (knobs) or linear:<br>VCA; 0dB gain @ 0 Volts CV input<br>INSERT; 0dB gain @ +5 Volts<br>CV input |
| MIX LEVEL                          | manually (knobs) or<br>semi-logarithmic<br>0dB gain @ +5 Volts CV input<br>-80dB gain @ 0 Volts CV input   |
| Total distortion                   | less than 0.1% @ 10 Volts input  |
| Audio impedance                    |  |
| INPUTS                             | 20kohms  |
| OUTPUTS                            | 1kohms   |
| Current consumption                | 30mA   |
| Dimensions                         | 128.4mm (H), 50.4mm (B)<br>3 HE, 10TE  |

