Sum & Diff Pak

Technical Specification

Input impedance:	>20k ohms balanced
Frequency response:	20Hz to 20kHz ±0.2dB
Common-mode rejection:	>60dB
Noise at unity gain:	-100dB ref. +8dBu
Distortion:	<0.005% 1kHz +8dBu output
Output gain:	adjustable 10dB loss to 20dB gain
Max. input level:	+25dBu
Max. output level:	+25dBu
Output impedance:	<1 ohm balanced and floating
Mains supply:	230 V AC 3 VA (115V available to order)
Dimensions:	254 (W) x 113 (D) x 52 (H)

0dBu = 0.775 volts RMS

Sum & Diff Pak Sum & Difference Matrix

The Sum & Diff Pak converts left and right line-level signals to Sum & Difference signals or will convert Sum & Difference signals to left and right. Primary uses include connection to mixer pre-fader insert points for conversion of M-S stereo microphone configurations to A-B. Also for converting A-B (left and right) to M-S (Sum and Difference) for feeding tape recorders, landlines and satellite links or any stereo circuit where phase errors may occur. A similar unit at the receive end reconverts the M-S signals to re-establish the left and right signals. Phase errors, critical when compatible mono is derived, are converted into a reduction of stereo width, which is far less objectionable than the loss or even complete cancellation of the phase-shifted frequencies. A complete 180º reversal of phase, common in outside broadcast circuits, results in a reversal of the stereo image rather than complete cancellation of central mono signals. Output gain is adjustable via accessible multi-turn presets. Audio inputs and outputs are via Neutrik XLR-type connectors. Mains input is via an IEC connector. This unit is currently not rack mountable.