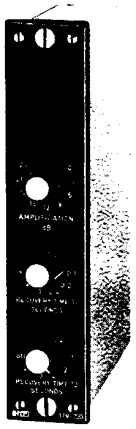
Limiter Amplifier
type 179-230

The limiter was designed according to an entirely new principle, involving a combination of a relatively long attack time with a symmetric logarithmic clipping circuit. This design eliminates the well known transient noise during striking. The recovery circuit is program dependent based on the dual time constant principle, eliminating pumping and similar effects. The LED on the front panel indicates limiting. Besides, an lmA instrument may be connected to indicate the actual gain reduction.



TECHNICAL SPECIFICATIONS

Supply Voltage		24 V dc ±10%
Maximum Ripple Voltage		0.1 V pp
Current Consumption, Steady State		approx. 75 mA
Current Consumption, during Heat-up		200 mA in 45 seconds
Temperature Range		−20°C to + 60°C (−4°F to + 140°F)
Frequency Response		±0.5 dB 20 Hz to 20 kHz
Input Impedance 20 Hz to 20 kHz		≧10 kohms balanced floating
Input Overload Level		+21 dBu (8.6 V rms)
Output Impedance 20 Hz to 20 kHz		≦ 40 ohms floating
Minimum Load		200 Ohms
Basic Amplification		0 ±0.5 dB
Preamplifier Gain - adjustable		0 to 24 dB in 3 dB steps
Limiting Threshold, re. to Output		+6 dBu (1.55 V rms) ±0.5 dB
Limiting Range		More than 30 dB
Distortion 20 Hz to 20 kHz Steady Conditions		0 to 20 dB limitation 0.3% 20 to 30 dB limitation 0.5%
Attack Time	Note 1	1.5 msec. combined with fullwave logarithmic clipping circuit
Recovery Time T1 adjustable		0.1–0.2–0.4–1–2–4 sec.
Recovery Time T2 adjustable		1–2–4–10–20 "off" sec.
Control Voltage output	Note 2	5 dB/V ref. to pin 5
Instrument Output		0 to 1 mA for 0 to 20 dB Limitation. Linear dB scale.
Signal to Noise Ratio at lim. Threshold		84 dB A-curve

2.77.

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Standard Colour	Dull black
Connector	Amphenol Tuchel 2700 000
Mechanical Outlines	see drawing
Pre-emphasis: 50μ sec.	(normally not connected)
Weight	0,900 kg

NOTE 1.
The limiting threshold stated above applies to steady state conditions. Peaks shorter than 1.5 msec. will be limited at a level max. 3 dB above steady state conditions.

NOTE 2.
Stereo Operation:
The Control Voltage of two units may be linked together to obtain equal gain reduction in the two stereo channels.

NOTE. Either polarity of the power supply may be grounded. A build-in active voltage splitter provides an internal common reference (+ 12 V dc). This reference is available at terminal 5.