UREI ELECTRONIC PRODUCTS OCTAVE GRAPHIC EQUALIZER

FEATURES:

Synthesized LC filter circuitry with smooth combining characteristic.

Gain variable from -10 to +20 dB, wide dynamic range.

Low distortion, low noise, minimum phase shift.

10 adjustable equalizers on ISO one-octave center frequencies.

12 dB boost or 12 dB attenuation at each center frequency.

The 533 Octave Graphic Equalizer is a studio quality product which has wide application in recording, sound reinforcement, radio and TV production, and high fidelity music systems. It offers 10 filter sections with large control range and signal handling capability.

The 533 provides I2 dB of boost or cut at each of its 10 frequencies, which are centered at ISO one-octave increments from 31.5 Hz to 16 kHz. Filter parameters have been optimized for excellent combining action with minimum phase shift. The positions of the control arms of the vertical, stepless controls provide a graphic representation of the response curve selected.

Signal-to-noise ratio is better than 106 dB at maximum output, thanks to sophisticated new active circuitry and components. Input capability of +20 dB and output capability of +24 dBm, combined with this excellent noise figure, provide exceptional dynamic range.



The filters are active, minimum phase 2 pole synthesized LC networks, whose skirts combine for minimum ripple when used in combination. A front panel control adjusts the gain from -10 to +20 dB. A bypass switch permits switching the equalization out for A-B tests.

The 533 is completely self-contained, with regulated power supply operable from either 100-125 V AC or 200-250 V AC, 50/60 Hz.



SPECIFICATIONS

ELECTRICAL:	
Input:	Balanced bridging differential amplifier.
Input Impedance:	40 kohms, used as balanced input. 20 kohms, used as unbalanced (single ended) input.
Maximum Input Level:	+20 dBu
Equivalent Input Noise:	Less than —86 dBm, (15.7 kHz bandwidth) with all controls set flat, output terminated with 600 ohm load.
Gain:	Variable $-10 \text{ dB to } +20 \text{ dB}, \pm 1 \text{ dB}.$
Frequency Response:	±1 dB, 20 Hz - 20 kHz (with no EQ).
Output:	Floating, transformer isolated.
Output Load:	150 ohms or greater.
Power Output:	+24 dBm into 600 ohm load (12.28 V), +20 dB into 150 ohm load (Ref. 0.775 V rms).
Distortion:	Less than 0.25% THD, 30 Hz - 15 kHz, at maximum rated output.
Filter Type:	2 pole synthesized LC.
Filter Bandwidth:	One-octave at -3 dB points with 8 dB boost or cut.
Center Frequencies:	Standard ISO, (Hz) 31.5 63 125 250 500 lk 2k 4k 8k 16k.
Range of Boost and Cut:	0 to ± 12 dB, single filter section.
Power Requirements:	Less than I0 W. 100-125 V AC or 200-250 V AC. 50/60 Hz, switch selectable.
Environment:	Operating 0°C to +50°C. Storage -20°C to +60°C.
CONTROLS:	
Equalization:	Vertical slide controls, continuously variable 0 to ± 12 dB.
Gain:	Screwdriver adjustable from -10 dB to +20 dB.
EQ In/Out:	Front panel toggle switch.
Power:	Front panel toggle switch.
Indicators:	LED, power ON. LED, overload condition, levels monitored at three circuit points.
Mains Voltage:	Rear panel slide switch, 115/230V
PHYSICAL:	
Connections:	Input and output, through rear chassis barrier strip. Power through 3-wire IEC style connector.
Dimensions:	216 \times 89 mm rack panel, depth behind panel 203 mm, (8 1/2 in \times 3 1/2 in \times 8 in).
Finish:	Panel is 3.18 mm (1/8in) brushed clear anodized aluminum in two shades. Chassis is cadmium plated steel.
Weight:	2.95 kg (6.5 lb).
Shipping Weight:	3.18 kg (7 lb).
Accessories:	SR-I Single Rack Mount Kit. DR-I Double Rack Mount Kit. Model 301 XLR/QG Adapter for input and output.

Note: 0 dBm = 1 mW0 dBu = 0.775 volts

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