Universal Audio

VARIABLE BANDPASS FILTERS

MODELS 555 (Mono)
556 (Stereo)





Models 555 and 556 filters are variable frequency cutoff filters designed to allow adjustment of the audio frequency bandwidth of program material. Applications include AM and FM broadcasting where band restriction can improve loudness; recording, hum and noise reduction, telephone simulation, disc-mastering, tape duplicating, re-recording, and driver protection in high power P.A. Systems. TRS jacks on the front panel normalled to barrier strips on the rear allow for easy connection and patching. LED indicators are provided to warn of input levels approaching overload.

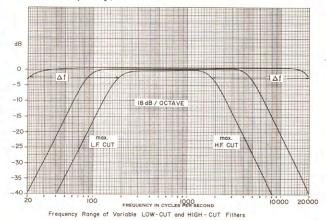
The filters are 18 dB/octave VCVS types designed for Butterworth response. The cutoff frequencies are continuously tunable, making possible fine adjustment to any desired frequency within their ranges.

The low end cutoff filter can be adjusted to any frequency from 20 Hz to 200 Hz. The high end cutoff filter may be set to any frequency from 2 kHz to 20 kHz. An in-out switch is provided for A - B comparisons.

The Model 556 is a stereo version with close channel to channel tracking and is therefore ideal for use in any stereo chain, or in disc mastering for equal filtering of program and preview channels.

FEATURES:

- 18 dB/octave slopes.
- Compact 1/2 rack size.
- State variable filters.
- Precise control of filter characteristics.
- Large, easy to read dials.
- · O db insertion loss.
- LED overload indicators.
- · Built in power supply.
- UREI quality, of course.



TECHNICAL SPECIFICATIONS

555 -- 556

ELECTRICAL:

GAIN

: Unity (O dB).

FILTER TYPE

: 3 pole Butterworth.

OPERATING LEVEL

: Nominally +4 with 16 dB of headroom.

CALIBRATION

: Within 10% of dial indications.

DISTORTION

: Less than 0.25% THD at $+\,14$ dBm input, 30 Hz to 14 kHz.

NOISE

: Typically less than $-95~\mathrm{dBm}$ at output terminals. Guaranteed less than $-85~\mathrm{dBm}$. (15.7 kHz equivalent noise band-

width).

FREQUENCY RESPONSE

: Within ± 0.5 dB in passband, -3 dB at set frequencies,

18 dB/Octave out of passband.

TUNING RANGE

Low cut 20 Hz to 200 Hz. High cut 2 kHz to 20 kHz.

INPUT IMPEDANCE

: 20 kohms bridging.

OUTPUT IMPEDANCE

Designed for 600 ohm or greater load. Transformer coupled.

POWER OUTPUT

: +20 dBm into 600 ohms.

MAINS REQUIREMENT

: 110 - 125 VAC or 220 - 250 VAC 50 - 60 Hz, 10 W maximum.

ENVIRONMENTAL CONDITIONS :

Operation from 0° C to 50° C, Storage from -20° C to $+60^{\circ}$ C.

PHYSICAL:

PANEL FINISH

: Black anodized brushed aluminum.

DIMENSIONS

: 31/2" High, 81/2" Wide, 10" Deep.

(89 X 216 X 254 mm).

WEIGHT

: 10 pounds, 4.5 kg.

SHIPPING WEIGHT

: 13 pounds, 5.9 kg.

CONTROLS AND TERMINATION:

INPUT-OUTPUT

: TRS jacks on front panel normalled to barrier strip on

rear panel.

IN-OUT SWITCH

: Front panel in-out switch for A - B comparison.

ACCESSORIES

: DR-3A Mounting Kit: For mounting two units (555 or 556)

side by side in a 19" Rack.

SR-3A Mounting Kit: For mounting one unit in a 19" Rack.