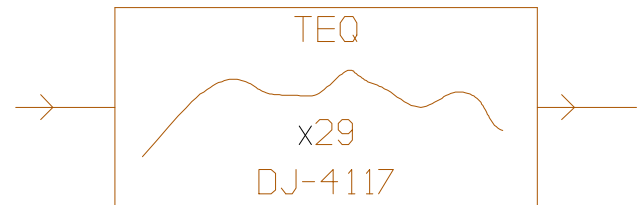


DESCRIPTION

The DJ-4117 provides 29 bands of Transversal Equalization (TEQ®) positioned at $\frac{1}{3}$ octave ISO frequencies, selectable high-pass and low-pass band-limiting filters, and selectable high frequency shelving pre-emphasis. TEQ® eliminates the transient ringing, frequency response ripples, and coloration common to tuned filter equalizers.

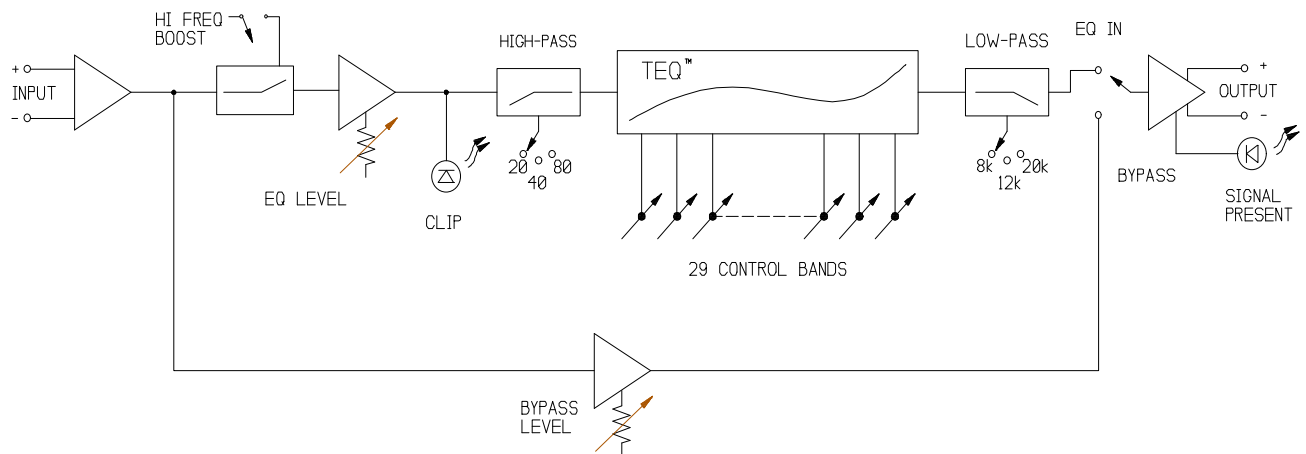
DESIGN SYMBOL



FEATURES

- 29 control frequencies
- Minimum phase transversal technology
- 20dB control range
- Quasi parametric control action
- Combined ripple of less than ± 0.1 dB at any level of cut or boost
- EQ Level Control
- Switch selectable 18dB/octave Butterworth high-pass filter: 20 Hz, 40 Hz, 80 Hz
- Switch selectable 12dB/octave Butterworth low-pass filter: 8 kHz, 12 kHz, 20 kHz
- Switch selectable high frequency pre-emphasis
- Bypass level control
- Single module width

FUNCTIONAL DIAGRAM



SPECIFICATIONS

LINE INPUT	Standard SYSTEM 41 active balanced
Impedance	82k Ω balanced, 41k Ω unbalanced
Maximum Input	+ 19dBV
LINE OUTPUT	Standard SYSTEM 41 active balanced
Impedance	200 Ω for 600 Ω or greater load
Maximum Output	+ 19dBV unloaded
MAIN FILTER	
Type	Minimum Phase Transversal
Control Frequencies	32 Hz and 20 kHz shelving; 40 Hz through 16 kHz Ω octave spacing
Control Range	20dB
Response Ripple	± 0.1 dB maximum at any control level
HIGH-PASS FILTER	
Type	18dB/octave Butterworth
Selection	20 Hz, 40 Hz, 80 Hz
LOW-PASS FILTER	
Type	12dB/octave Butterworth
Selection	8 kHz, 12 kHz, 20 kHz
HIGH FREQUENCY BOOST	
Type	+ 10dB shelving, + 3.0dB @ 3.2 kHz, approximately 3dB/octave
Selection	in/out
GAIN	0dB (all main filter controls set to 0)
Bypass Mode	0dB nominal
FREQUENCY RESPONSE*	Per selected frequency settings, +0dB, -0.5dB in bypass
THD*	Less than .02% @ 0dBV
EQUIVALENT INPUT NOISE*	Less than -92dBV at any control setting
CURRENT CONSUMPTION	110 mA
MODULE SPACE	One Unit, 1.2 inches

* Measured over a 20 Hz - 20 kHz bandwidth

ARCHITECT'S SPECIFICATIONS

The equalizer shall combine frequency bands to produce a flat frequency response with less than ± 0.1 dB ripple over 100% of a 20dB adjustment range. The equalizer shall function equally well in a cut only, boost only, or in a boost/cut mode of adjustment. The equalizer shall provide 29 control frequencies positioned at ISO 1/3 octave intervals from 40 Hz to 16 kHz, with 32 Hz and 20 kHz shelving bands. The equalizer shall use non-resonant circuits to achieve the equalizing function and avoid unnecessary ringing in response to a transient signal. A high-pass filter, 18dB per octave Butterworth, having switch selectable frequencies of 20 Hz, 40 Hz, or 80 Hz shall be provided. A low-pass filter, 12dB per octave Butterworth, having switch selectable frequencies of 8 kHz, 12 kHz, or 20 kHz shall be provided. A switch selectable high frequency pre-emphasis providing +10dB shelving response shall be provided. THD shall be less than .02% at 1 kHz and 0dBV. Equivalent input noise shall be less than -92dBV at any control setting. A bypass switch and a bypass level control shall be provided. An input overload LED shall be provided. The output signal shall be monitored by a signal present LED. The equalizer shall mount in and be powered by the IRP Model DJ-4100, DJ-4101, DJ-4150 or DJ-4151 mainframe. The equalizer shall be the IRP Model DJ-4117.

ORDERING INFORMATION

Specify: 29 Band Transversal Equalizer DJ-4117