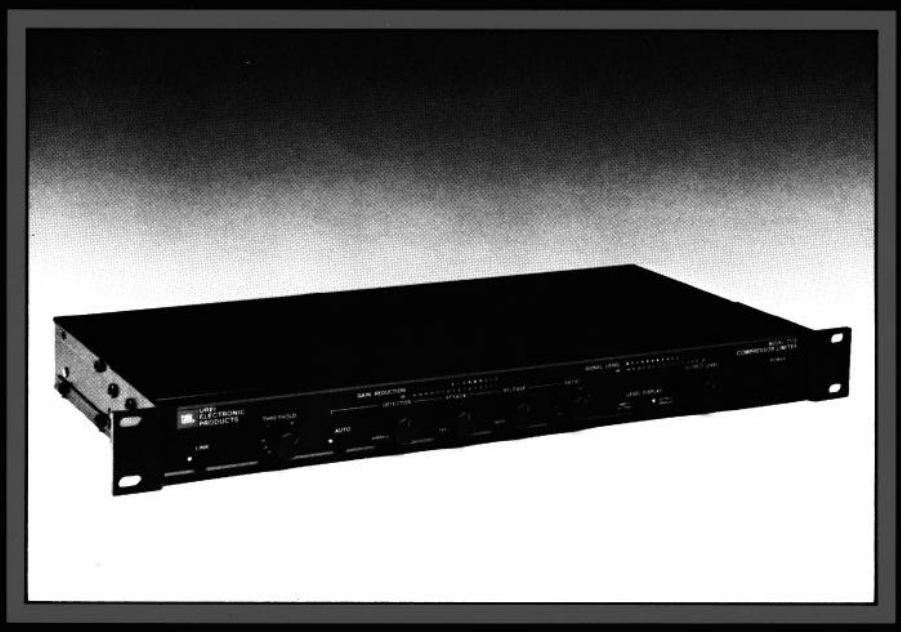
7110 LIMITER COMPRESSOR



FEATURES:

New Smart-Slope™ compression characteristics

Both peak and/or average gain reduction

User control of threshold, peak/average blend, attack and release times and compression ratio

Simple set-up with Automatic Preset pushbutton

Bright, easy to read displays

Space saving single rack space size

The JBL/UREI 7110 Limiter/Compressor is built in the tradition that has made UREI limiter/compressors the audio professionals' choice world-wide. Incorporating both peak and average gain reduction detectors in a single rack space size, the Model 7110 is equally at home in the small recording studio, the sound contractor's rack, portable sound systems, broadcasting studios or anywhere audio levels need to be automatically controlled.

The 7110 offers new smooth sounding Smart-Slope compression ratios adjustable from 1.5:1 thru infinity:1 and permits independent settings for limiting threshold, attack and release times, and output level. Additionally, the gain control action can be continuously varied between either peak or average detectors, giving the user a choice of either mode, or a mix of both, for versatility. Simple set-up is accomplished with a single Automatic Preset pushbutton that engages a program dependent variable attack and release circuit and fixes the compression ratio and

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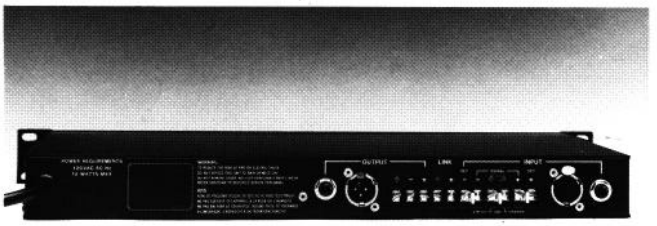
peak/average blend controls to critically accepted settings. A simple link function, selected from the front panel, is provided for multiple channel limiting.

The JBL/UREI 7110 features an active balanced input with enough threshold range to provide full limiting action with input signals down to −20 dBm. Bright high resolution LED displays indicate gain reduction and either input or output levels. The output display's zero reference is adjustable from −10 dBm to +8 dBm. The unbalanced output is capable of +22 dBm into 600 ohms; an optional output transformer accessory is available. The 7110 automatically bypasses itself, connecting the input directly to the output, when power is off.



REAR PANEL VIEW

ARCHITECTS AND ENGINEERS SPECIFICATIONS:

The limiter/compressor shall provide both peak and average responding gain reduction on input signals as low as −40 dBm. The limiter/compressor shall have two LED displays, one indicating gain reduction and the other switchable between input and output levels.

The limiter/compressor shall have a frequency response of 20 Hz to 20 kHz ±0.5 dB and accept a +22 dBm input signal. The unit shall be capable of +22 dBm output into 600 ohms, unbalanced.

The limiter/compressor shall have separate controls for threshold, attack time, release time, compression ratio, output level and output display zero reference. Additionally, there shall be a pushbutton and barrier type connector for multi-limiter linking.

There shall be a control for blending the ratio of the peak and average limiting detectors and the average detector's compression ratio shall be program dependent. There shall be an automatic preset pushbutton that engages program dependent variable attack times and release times and sets the compression ratio and peak average detector blend controls to fixed settings.

The limiter/compressor shall have barrier, XL type and 6.3 mm (¼ in.) phone input and output connectors. The detector's balanced input shall be a three conductor 6.3 mm (¼ in.) phone jack, normalled through to the input barrier strip.

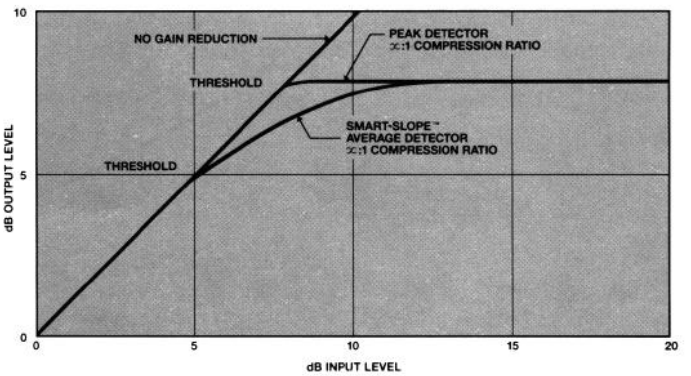
The limiter/compressor shall be packaged in a black painted steel chassis with a black painted aluminum front panel having a polycarbonate overlay. The unit shall have extruded aluminum rack ears for mounting in a standard EIA rack. It shall be possible to move the rack ears forward to allow the controls to be recessed or to allow a security cover to be mounted flush with the rack ears.

The limiter/compressor shall be the JBL/UREI Model 7110 Limiter/Compressor.

SPECIFICATIONS

Input:	Balanced bridging differential amplifier
Input Impedance:	20k ohms balanced input, 10k ohms unbalanced (with detector normalled to input)
Maximum Input Level:	+22 dBu (9.75 VRMS)
Gain:	±20 dB, adjustable with front panel output level control
Frequency Response:	20 Hz to 20 kHz ±0.5 dB
Attack Time:	
Average Detector:	1-50 ms
Peak Detector:	Less than 100 µs
Release Time:	
Average Detector:	100 ms — 5 s for 20 dB of release
Peak Detector:	10 ms
Compression Ratio:	Adjustable from 1.5:1 to ∞:1
Threshold of Limiting:	Adjustable from −40 dBu to +10 dBu
Output:	Unbalanced Balanced with optional transformer
Maximum Output Level:	+22 dBm into 600 ohm load
Power Requirement:	100-125 VAC 50/60 Hz, 15 W maximum 220-240 VAC 50 Hz available
Controls, Pushbuttons and Indicators:	Variable controls for limiting threshold, peak/average mix, attack time, release time, compression ratio, output level and output meter zero reference. Pushbuttons for multi-limiter linking, selection of Automatic Preset and selection of input or output level display. Separate sixteen segment displays for gain reduction and either input or output level
Connectors:	
Input and Output:	Barrier strip, 6.3 mm (¼") phone jack and XL type
Limiting Detector:	6.3 mm (¼") phone jack normalled to input
Dimensions:	483 mm W x 216 mm D x 44 mm H (19 in W x 8½ in D x 1¾ in H)
Finish:	Polycarbonate overlay on extruded aluminum front panel. Extruded aluminum rack ears and steel chassis painted black.
Weight:	3.4 kg (7.5 lbs)
Shipping Weight:	4.5 kg (10 lbs)
Accessories:	SC-6 Security Cover 16-14550 Output Transformer

Note: 0 dBu = 0.775 VRMS
0 dBm = 1 mW



TYPICAL INPUT VERSUS OUTPUT LEVEL CURVES FOR 7110 LIMITER/COMPRESSOR

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JBL Professional, 8500 Balboa Boulevard, P.O. Box 2200, Northridge, California 91329 U.S.A.