

5330 VCA CONTROLLED MICROPHONE MIXER



FEATURES:

All microphone inputs switchable for line level use.

Two voltage controlled outputs are standard to allow remote control.

Plug in VCA option available for remote control of inputs 1 through 6.

Low cut filters on all microphone inputs.

Electronically balanced inputs for outstanding common mode rejection and R.F. immunity.

Built in output limiter to avoid blasting or overload.

48 volt phantom supply built in.

The JBL/UREI Model 5330 Microphone Mixer is a multi-input dual output mono microphone mixer which has been optimized for the demands of fixed installation sound systems.

The Model 5330 has 7 input positions with independent front panel gain controls. Channels 1-6 include Mic/Line switches, recessed input level trims and switchable low cut filters to accommodate a wide range of installation requirements. Input 7 is an unbalanced high level input with the rear panel input connector normalised through a front panel 1/4 inch phone jack.

The output circuits of the Model 5330 are quite versatile. Two separate transformer isolated outputs are supplied for individual amplifier feeds, each with its own level control and output level trim. An effects loop has been provided which allows the connection of equalizers, compressors, expanders, delays, or other signal processing equipment.

A linking function allows several Model 5330's to

share a common mix buss.

Tone controls are provided with their boost/cut ranges reduced or defeated by an installer adjusted trim control.

Additional features include a 48 volt phantom power supply for condenser microphones or active direct boxes, bargraph output meter for easy visual monitoring of both mixer outputs and a switchable built-in limiter to prevent system overload.

Remote control capability is standard on the two output channels and optional on Input Channels 1-6 with the addition of the 5336 Remote Control Option Card. Remote control is accomplished by adding a user supplied 50k ohm linear potentiometer for each function to be controlled.

A mute function disables all inputs except Channel 1 for purposes such as chairman override, etc.

The Model 5330 has been designed for long life and reliability. All input and output level controls are quiet and smooth acting. All rear panel signal and control connections are through reliable barrier strip connections. The construction techniques employed insure reliable operation. Components are operated well within their ratings to insure reliability in continuous duty service.

ACCESSORIES

5336 Remote Control Card
SC5 Security Cover

5336 REMOTE CONTROL OPTION

The rear panel of the 5330 has a removable plate that covers a slot for the 5336 Remote Control Option. The 5336 card easily slides into a connector inside the 5330.

The 5336 has 6 VCA controlled circuits that will convert the 6 MIC/LINE inputs to remote controlled operation. The 5336 has been designed to plug into an already adjusted system and not require additional level adjusting. The 5336 does not require the removal of top or bottom cover or any modification of internal components.

RACK EAR PLACEMENT

The 5330 chassis provides for placing the rack ears in either of two positions. When shipped, the rack ears will be in the rearward position. The forward position may be used to either recess the controls or to allow the security cover to be installed flush with the rack ears.

ARCHITECTS AND ENGINEERS SPECIFICATIONS

The monaural mixer shall have six input channels, each equipped with a channel volume control, a variable input trim control, and a switchable 200 Hz low frequency roll off filter.

The input channels shall be balanced, bridging for use with low impedance microphones. Each channel shall have a rear panel switch to insert a 30 dB pad for use as a line level input.

Phantom powering must be supplied to condenser microphones via an internal + 48V power supply and will be switched by a master pushbutton. Phantom voltage will be disconnected from each input which is switched to line.

A seventh channel for unbalanced signals shall be incorporated with a separate front panel volume control and with both front and rear panel connectors.

There shall also be an effects send and return circuit to allow the use of external signal processing. Also incorporated into the mixer shall be a mixing buss terminal to allow linking of multiple mixers. The mixer shall have equalizers that boost and cut the signal ± 10 dB at 100 Hz and at 10 kHz. It must be possible to restrict or completely disable the range of boost/cut by a recessed trim control.

A rear panel switch shall engage a peak limiter that will limit the two output's maximum level to a preset point.

Two independent output level controls and output trims shall be standard with LED bargraph style VU metering, switchable to read either output.

The two independent outputs shall have remote level adjustment capability through VCA control and be transformer isolated.

The mixer must be able to accept a remote control option card that will provide VCA control of Inputs 1-6 and have full range of level control.

The mixer shall be powered by an external wall mount power transformer which connects to the mixer by a 5 pin DIN connector.

The mixer will have a two position rack ear that allows for flush mounting when installed with an optional security cover.

The mixer shall meet or exceed the following performance specifications:

Maximum gain 84 dB. Maximum output + 24 dBm into 600 ohms. THD less than 0.1% 20 Hz to 20 kHz. Frequency response + 0, - 1 dB, 20 Hz to 20 kHz. MIC EIN - 126 dB with 150 input ohm termination.

The mixer shall have the following dimensions:

3.5" tall

8" deep

19" EIA standard width

8.5 pounds weight

The mixer shall be JBL/UREI Model 5330 MICROPHONE MIXER.

SPECIFICATIONS

Frequency Response	+0, -1 dB: 20 Hz to 20 kHz	
THD:	Less than 0.1% 20 Hz to 20 kHz @ nominal operating level	
Microphone Noise:	EIN -126 dBu 15.7 kHz Noise Bandwidth	
Common Mode Rejection Ratio:	Greater than 60 dB @ 60 Hz MIC nominal Greater than 40 dB @ 60 Hz LINE nominal	
Input Impedance:	MIC: 3.3 k ohm LINE: 16 k ohm	LINK IN: 22 k ohm AUX IN: 10 k ohm, unbalanced PATCH RTN: 44 k ohm

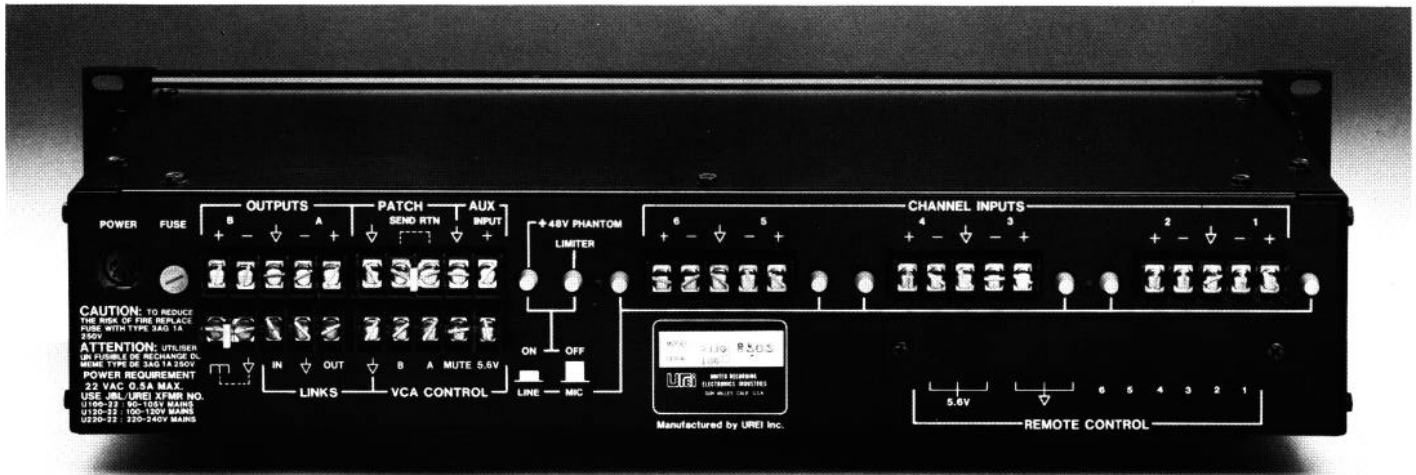
MAXIMUM INPUT LEVELS	
Mic Position:	Input Trim Setting - Min. -5 dBu Max -35 dBu
Line Position:	Input Trim Setting - Min. +25 dBu Max. -5 dBu
Patch RTN:	+20 dBu

MAXIMUM OUTPUT LEVELS	
Output:	+24 dBm into 600 ohm load
Patch:	+20 dBm into 600 ohm load

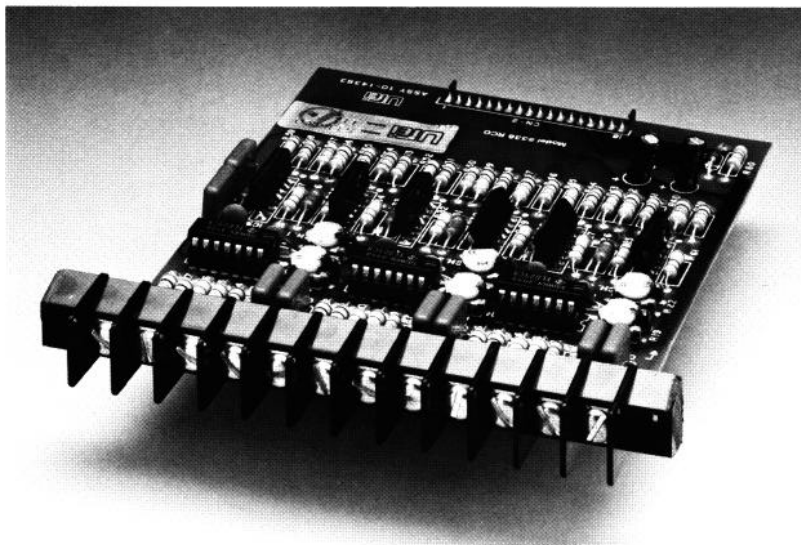
Note: 0 dBm = 1mW
0 dBu = 0.775 volts

Low Cut Filter Slope:	6 dB/octave -3 dB @ 200 Hz
Limiters Threshold:	Fixed at -3 on output meter
Compression Ratio:	Signal dependent to 10:1 maximum
Environment:	Operating: 0°C to +50°C (+32°F to +122°F) Storage: -20°C to +60°C (-4°F to +140°F)
Power Consumption:	Less than 20 watts. The 5330 must use the JBL/UREI power transformer, Model # U100-22 when operating from 90-105V mains, Model #U120-22 when using 105-120V mains, and Model # U220-22 when using 220-240V mains

PHYSICAL SPECIFICATIONS	
Dimensions:	
Front Panel:	88.9 x 483 mm (3½ x 19 in.) EIA rack mount.
Depth Behind Panel:	203 mm (8 in.), 234 mm (9.2 in.) recess mounted.
Finish:	Polycarbonate overlaid front panel. Chassis is black painted steel.
Net Weight:	3.85 kg (8.5 lb.)
Shipping Weight:	5.22 kg (11.5 lb.)



Rear panel view.



Optional remote control card, Model 5336.