

THE COMPLETE REVERBERATION COLLECTION

The Master-Room™ XL-500 is a unique new concept in reverberation. This system incorporates unprecedented technological advancements that stem from years of research into the specific reverberation qualities and properties of live chambers, plates, and concert halls. Characteristics such as echo density, reverberation time versus frequency, and diffusive qualities were studied extensively to provide the XL-500 with the most exceptional performance and versatility of any reverberation system, including the all-digital systems.

The XL-500 offers three operational modes in full stereo that synthesize the reverberation characteristics of a plate, live chamber and concert hall. Any of these three modes can be easily selected on either the main or remote control unit. The control parameters allow a wide number of variations in each of these modes to specifically tailor any of the reverberation environments, providing a wide range of creative freedom. The continuously variable decay is easily adjustable from one to six seconds, and versatility is further enhanced by the extensive equalization capabilities on each channel. The XL-500 provides the professional user with the very best of all reverberation mediums and is unmatched in price, performance, and versatility.

The PLATE mode of the XL-500 offers a bright, clean sound with exceptionally high echo density and the instantaneous diffusive qualities of a plate-type reverberator. This type of reverberation has gained vast popularity in the recording and reproduction of popular music. A wide variety of plate sounds can be easily synthesized in this mode, and the decay time can be varied from 1 to 4 seconds.

The ROOM mode incorporates the most preferred and desired reverberation characteristics from some of the most popular live acoustic chambers in use in the recording industry. The live chamber has long been utilized and often preferred for many recording applications. The decay time is adjustable from 2 to 5 seconds in this mode, and the EQ allows the user to synthesize the sonic characteristics of a

large number of chambers.

The HALL mode provides the reverberation characteristics of a concert hall which can be widely varied in apparent size and sonic characteristics. This mode is ideal for the simulation of concert hall environments and for those situations requiring a more spacious reverberant sound with long decay times. The decay time is adjustable from 3 to 6 seconds.

The MAIN CONTROL UNIT is housed in a 1 1/2 inch rack mount package. All control functions are located on the front panel, and input/output connections are located on the rear panel.

CHAMBER SELECT switches are provided to choose between the PLATE, ROOM, and HALL reverb modes. Each channel operates independently and has the capability of one channel operating in one mode, while the opposite channel is in another. The continuously variable DECAY controls are utilized to adjust the desired amount of decay in each operational mode. The DECAY TIME is

indicated by a two-digit numeric display for each channel. The MIX control permits blending of the direct and reverberated signals in any desired amount for in-line applications. When operated with the echo send/return function of a console, this control would be placed in the FULL CHAMBER position. A five-LED display for each channel is utilized to indicate the CHAMBER DRIVE level.

The versatile CHAMBER EQUALIZATION allows the reverberant sound characteristics of each mode to be tailored for virtually any application. With this EQ section, a wide variety of plates, live chambers, and concert halls can be easily simulated. This section is a four-band peak/dip type with fixed high and low frequency sections and two sweepable mid-range controls. Each section has 12 dB of boost and cut, along with its own individual bypass switch that returns that particular section to the flat position without altering the control settings. A MASTER EQ BYPASS switch is also provided to defeat the

entire equalization section. An LED indicator is incorporated to display any EQ OVERLOAD condition.

All INPUT/OUTPUT connections are electronically balanced and will automatically adapt to unbalanced operation when used with single ended equipment. A transformer balanced option is available upon request.

The REMOTE CONTROL is provided as a standard feature with the XL-500. A variable DECAY slide control along with the DECAY TIME numeric display is contained on the remote unit. This control also includes the CHAMBER SELECT switches to choose between PLATE, ROOM, and HALL, along with an EQ BYPASS switch, a five-LED display of the CHAMBER DRIVE level, and an EQ OVERLOAD indicator. The remote control is activated by depressing any of the CHAMBER SELECT switches and is disabled by depressing any of the CHAMBER SELECT switches on the MAIN CONTROL UNIT. A 25-foot cable is supplied with the remote control, and the unit is small enough to be located comfortably on any console.

The CHAMBER unit contains the proprietary reverberation elements (patents pending) and is housed in a rosewood-finish cabinet. The unit is isolated to withstand high sound pressure levels and also features internal suspension to prevent any unwanted mechanical interference or vibration. Recessed handles are provided for ease in moving and the unit contains a 50-foot cable that connects with the MAIN CONTROL UNIT.

Digital and analog technology are combined in a unique balance that achieves maximum performance from each type of circuitry. The exclusive circuit design (patents pending) incorporates state-of-the-art electronic components in a modular construction pattern. Engineering excellence and superior performance, combined with the high quality workmanship all Master-Room™ products are known for, makes the XL-500 an outstanding, reliable reverberation system.



XL-500



EVALUATING REVERBERATION SYSTEMS

It is important when auditioning any reverberation system or device to listen to just the reverberant sound. As only this will reveal the true performance capabilities. A professional quality system should produce smooth, natural sounding reverberation completely free of unwanted side-effects.

Reverberation systems are often demonstrated by adding a small amount of reverb to smooth, dry signals, or by actually doing a mixdown. These methods are not acceptable for carefully evaluating the true character of a system. Such methods

often mask the true performance capabilities, and often conceal undesirable or unwanted side-effects.

One excellent evaluation technique is the use of a drum track or other sharp percussive signals. A drum shot is ideal, in that it will activate the chamber, and when the initial signal is gone only the sound of the chamber remains. Electronic pulse testing is an even more stringent evaluation method, and is widely used by the designers and manufacturers of reverberation systems for a more precise

and accurate evaluation. With this method, only the pure reverberant sound is heard and unwanted sounds or undesirable colorations become readily apparent.

Master-Room™ dealers are supplied with electronic pulse testing equipment to aid you in evaluating the exceptional performance of the XL-500 and the other fine reverberation systems manufactured by Master-Room. Visit your Master-Room dealer for this unique demonstration. Listen and compare... You'll hear the difference.

XL-500 SPECIFICATIONS

INPUT Ref: 0dBV = 0.775 volts Electronically balanced (Differential) Transformer isolated (Optional) Impedance	20k Ohms balanced 10k Ohms unbalanced	EQUALIZATION Reciprocal peak/dip Low	±12 dB @ 150 Hz fixed
Nominal Level Minimum Level Maximum Level	+4 dBV -15 dBV -22 dBV	Low-mid High-mid High	±12 dB @ 150 to 2k Hz sweepable ±12 dB @ 500 to 6k Hz sweepable ±12 dB @ 8k Hz fixed
OUTPUT Electronically balanced (Differential) Source Impedance	100 Ohms balanced 50 Ohms unbalanced	Each frequency band has a bypass switch, LED status indicator, Master EQ bypass EQ Overload Indicator	Peak responding LED
Nominal Level Maximum Level into 600 Ohm load Gain Adjustment Range	+4 dBm +24 dBm 20 dB	LEVEL INDICATORS Chamber Drive Level	5 Peak responding LED's Range: -6 to +6 dB
FREQUENCY RESPONSE Ref: 1 kHz Direct Channel (20-20k Hz)	±0.5 dB	CONNECTORS Input/output	XLR type
OUTPUT NOISE Ref: +4 dBm output Direct Channel (20-20k Hz bandwidth)	Better than -82 dBm	POWER REQUIREMENTS Voltage (50-60 Hz)	100/120/240 volts, +15%, -10%
Reverberant Channel (Any model)	Better than -82 dBm	Power Consumption	35 VA
HARMONIC DISTORTION Direct channel At 0 dBm (20-20k Hz) At +18 dBm (20-1k Hz) At +18 dBm (1k-20k Hz)	Less than 0.1% Less than 0.25% Less than 0.05%	DIMENSIONS Main Control Unit	5.94 x 19W x 11.75D inches 15.3 x 48.3 x 29.8 centimeters
REVERBERANT CHANNEL CROSS-TALK	Better than -45 dB	Remote Unit	5.294 x 5.94W x 1.75D inches 13.3 x 14.3 x 4.8 centimeters
DECAY CONTROL Continuously Adjustable Typical Decay Times	Rate: 1-4 seconds Room: 2-5 seconds Hall: 3-6 seconds	Chamber Unit	5.94 x 18.5W x 14D inches 15.7 x 47 x 35.6 centimeters
Numeric Display	2-digit, seven- segment LED	SHIPPING WEIGHT	120 lbs. 55 kilograms

Specifications are subject to change or product improvement without notice.

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