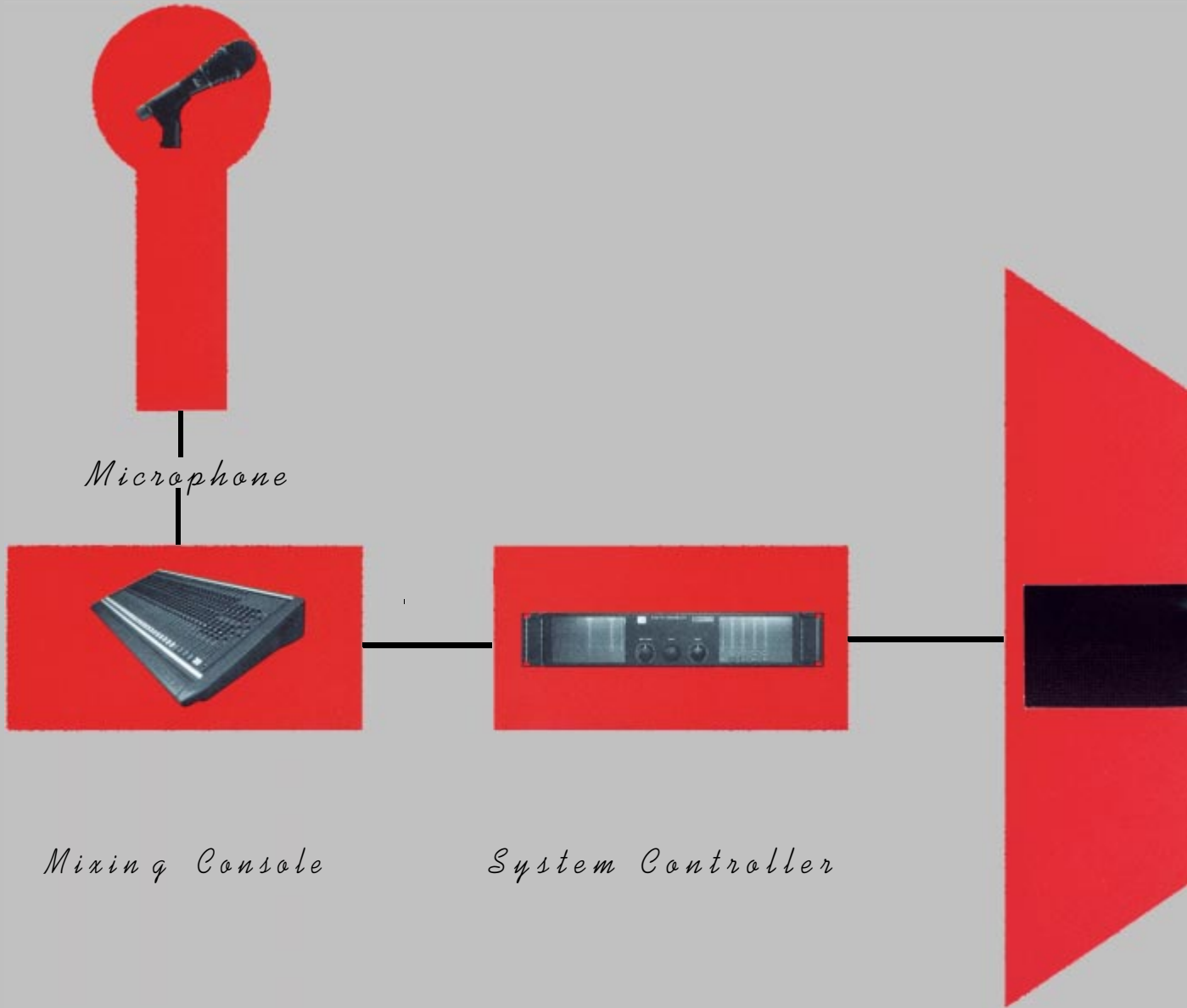
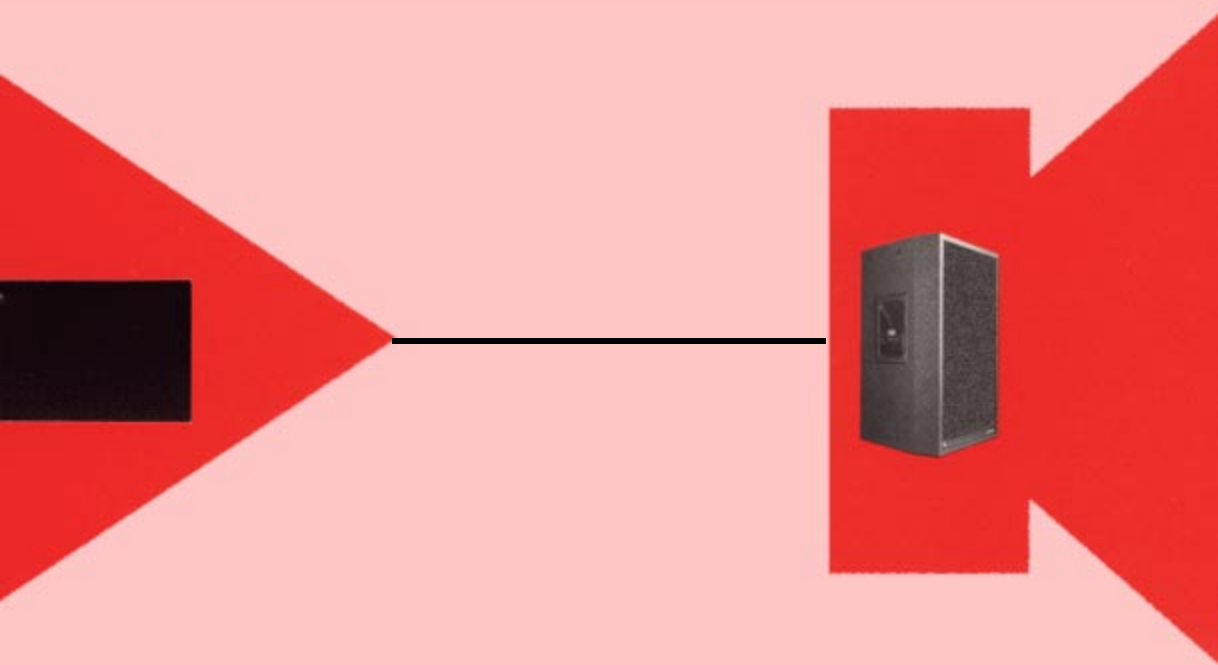


# HOW DO YOU ABSOLUTELY GUARANTEE YOUR AMPLIFIERS MATCH YOUR LOUDSPEAKERS?





**WITH A COMPLETE SYSTEMS  
APPROACH TO PROVIDING OPTIMAL  
SOUND SYSTEM PERFORMANCE**

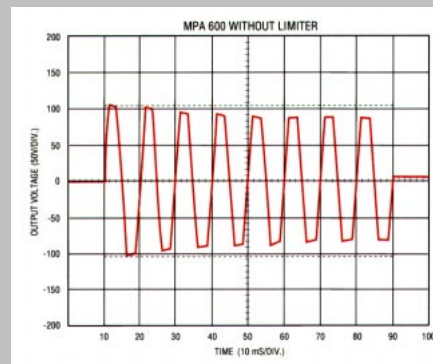
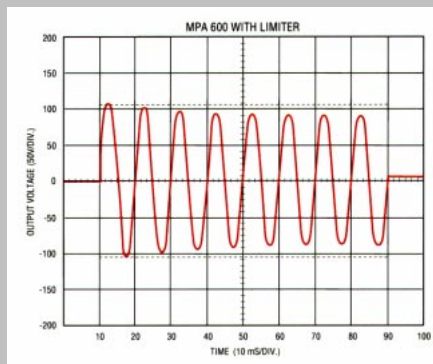
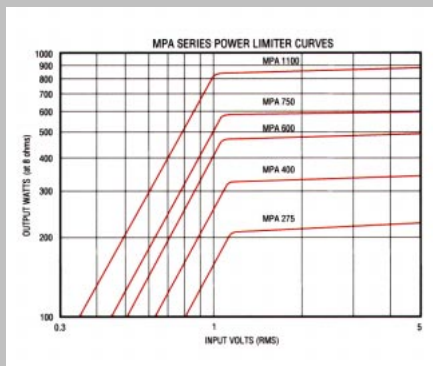
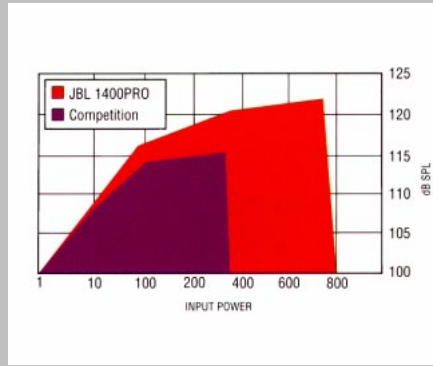


*Loudspeaker*

**THE REQUIREMENT** High-quality, high-performance loudspeakers are the hallmark of JBL. For example, JBL's Vented Gap Cooling (VGC™) loudspeakers are on the cutting edge of transducer technology. These loudspeakers provide important performance advantages including extremely low power compression and higher power capacity. The result is higher acoustic output and better reproduction of musical transients. But these advantages can only be realized if the loudspeakers are powered by amplifiers capable of providing the elements necessary to support these superior performance capabilities.

Many competitive loudspeaker systems, due to their high power compression, perform the same regardless of the power amplifier. With JBL loudspeaker systems, the total output of the sound system is determined by the proper matching of all the elements of the system, so choosing the proper amplifier is far more critical.

**THE SOLUTION** The new MPA Professional Audio Amplifier Series is



specifically matched to the characteristics of JBL speakers.

First, these amplifiers deliver a wide range of output power to accommodate even JBL's most powerful transducers.

Second, they exhibit good peak power capability and excellent dynamic headroom to accurately reproduce musical transients.

Third, each amplifier includes a protective output limiter to protect both the amplifier and the loudspeaker from excessive power. In addition, the limiting action curve is perfectly matched to JBL transducers taking full advantage of their low power compression characteristics.

Moreover, the action of the limiter does not “rob” the system of acoustic power since the total output of a heavily distorted amplifier is the same as the “limited” MPA amplifier, but with extremely clean, non-distorted sound. The resulting system delivers outstanding performance, regardless of the type of program material, including heavily compressed rock ‘n roll.

# INTRODUCING THE MPA PROFESSIONAL



**F**OR YEARS, SOUND ENGINEERS HAVE BEEN FORCED TO PLAY A GUESSING GAME WHEN IT COMES TO PICKING AN AMPLIFIER. THERE ARE LITERALLY HUNDREDS OF UTILITY AMPLIFIERS ON THE MARKET, AND FINDING THE RIGHT ONE FOR A GIVEN SOUND REINFORCEMENT SYSTEM IS ALWAYS A CHALLENGE. MAYBE THE AMPLIFIER MATCHES THE NEEDS OF THE LOUDSPEAKERS, MAYBE IT DOESN'T. WITH GENERIC UTILITY AMPLIFIERS, THERE'S NO WAY TO KNOW FOR SURE. BUT YOU MUST BE ABSOLUTELY CERTAIN IF YOU WANT OPTIMUM SYSTEM PERFORMANCE. THE TOTAL OUTPUT OF THE SOUND SYSTEM IS THE SUMMATION OF ITS PARTS. IF ONE COMPONENT ISN'T JUST RIGHT, THE TOTAL SYSTEM SUFFERS. SINCE THE AMPLIFIER HAS THE SINGLE MOST IMPORTANT IMPACT ON LOUDSPEAKER PERFORMANCE, IT'S CRUCIAL THAT THE AMPLIFIER COMPLEMENT THE LOUDSPEAKERS



# PROFESSIONAL AUDIO AMPLIFIERS

IN EVERY WAY.

Now, JBL TAKES THE GUESS-

WORK OUT OF AMPLIFIER



SELECTION WITH THE INTRODUCTION OF THE MPA PROFESSIONAL AUDIO AMPLIFIER SERIES. THESE AMPLIFIERS HAVE BEEN SPECIALLY DEVELOPED TO WORK IN CONCERT WITH JBL TRANSDUCERS AND

LOUDSPEAKERS SYSTEMS TO PROVIDE A COMPLETE AND PERFECTLY MATCHED SOUND REINFORCEMENT SYSTEM.

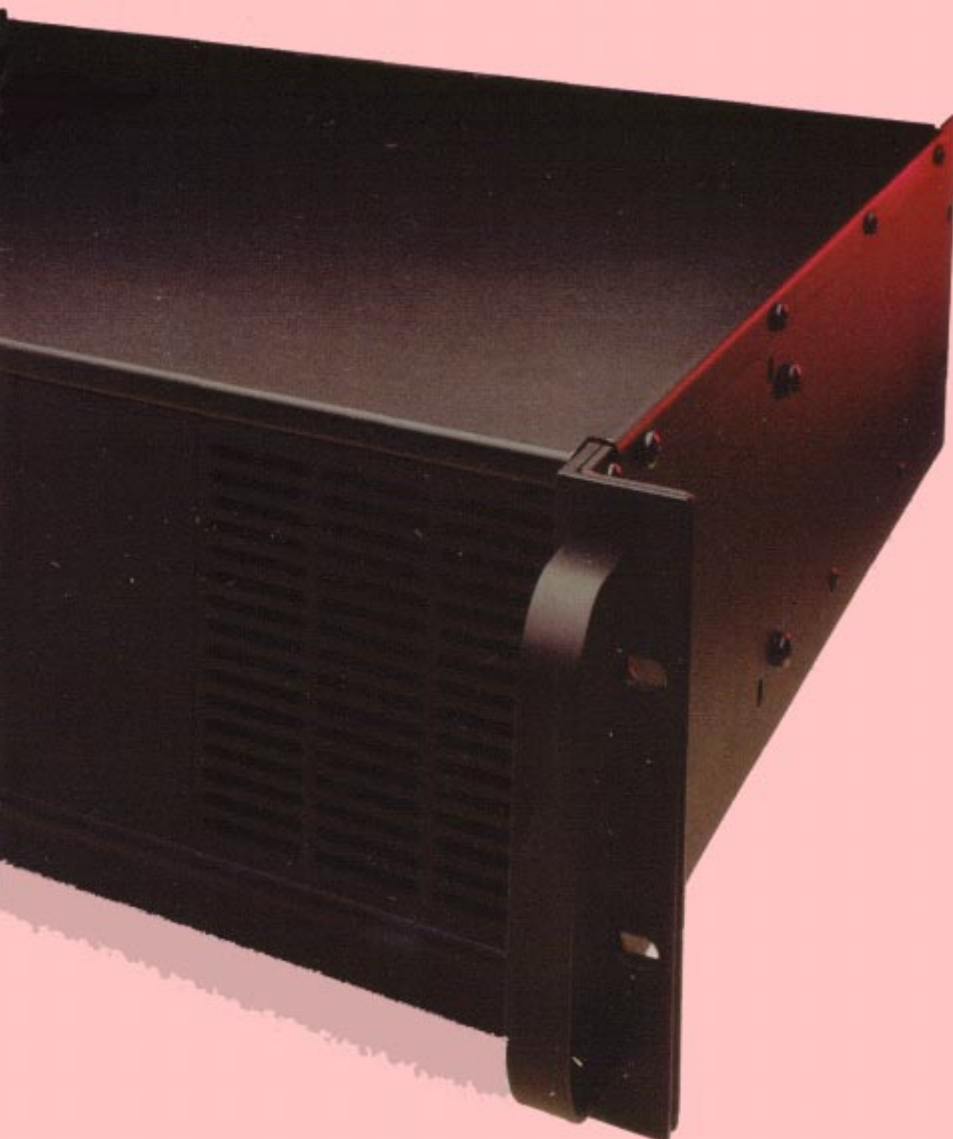
FINALLY, NO MORE GUESSING, NO MORE GENERIC AMPLIFIERS, NO MORE COM-

PROMISES. JUST A SIMPLE

SOLUTION TO ENSURING THE BEST

SOUND REINFORCEMENT SYSTEM

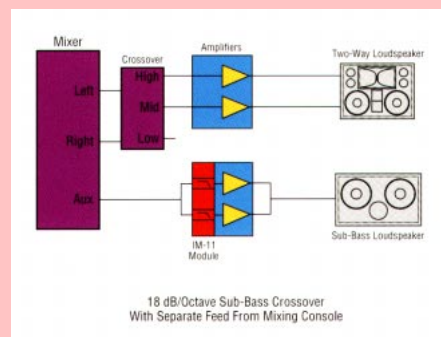
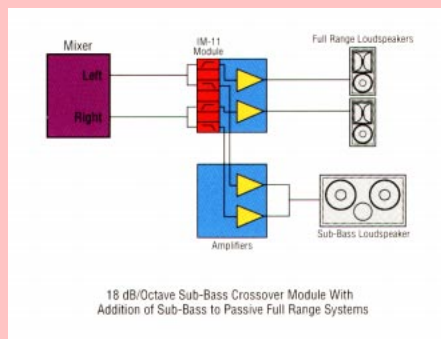
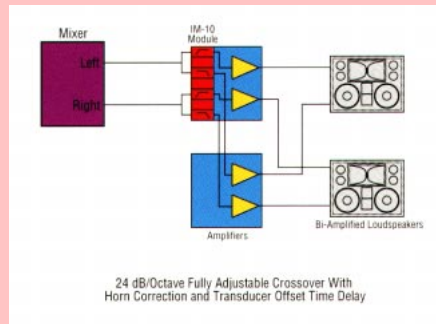
TECHNICALLY POSSIBLE.



**OPEN INPUT ARCHITECTURE™** JBL's systems philosophy also extends to the input stage of the amplifier. Flexible input cards allow these amplifiers to be tailored to a variety of applications, and configurations can be changed easily as new situations arise.

For example, the two-channel, two-way crossover card is a cost-effective way of achieving multi-way active frequency division without giving up any of the benefits of external stand-alone electronic crossovers.

The 18 dB/octave sub-bass crossover card allows implementation of a separate sub-bass mix and feed from the mixing console. This permits the mixing engineer to selectively add inputs to the sub-bass channel at will which cleans up the mix giving the system much more punch and acoustic gain before feedback. Another application could be the addition of sub-bass to a full range system,



again without giving up any of the benefits of a separate stand-alone crossover.

This applications flexibility makes the MPA Professional Amplifier the most cost-effective amplifier solution, since it maintains the original investment in input connectors, while the input configuration can change depending on the application. You simply add input cards to the basic amplifier for each new application.

# SPECIFICATIONS

RATED OUTPUT POWER	MPA1100	MPA750	MPA600	MPA400	MAP275
4 ohm/Ch:	1200 W*	800 W	660 W	400 W	275 W
8 ohm/Ch:	820 W*	550 W	440 W	275 W	175 W
8 ohm Bridge:	2400 W*	1600 W	1320 W	800 W	550 W
MIDBAND OUTPUT POWER	MPA1100	MPA750	MPA600	MPA400	MPA275
2 ohm/Ch:	1520W*	1100 W	960 W	600 W	400 W
4 ohm/Ch:	1320 W*	900 W*	740 W	450 W	325 W
8 ohm/Ch:	880 W*	600 W	480 W	300 W	200 W
RATED POWER	is minimum continuous sine wave output per channel, with both channels driving their rated load over a power bandwidth of 20 Hz to 20 kHz. Maximum total harmonic or intermodulation distortion measured at any power level from 250 milliwatts to rated power is less than 0.1%. Maximum Transient Intermodulation Distortion is less than 0.05%.				
MIDBAND POWER	is maximum output per channel, with both channels driven, at onset of clipping with 1 kHz sine wave, THD 1%. *Amplifier's output protective circuitry prevents full power output above 15 kHz.				
DISTORTION	SMPTE-IM, less than 0.05%				
FREQUENCY RESPONSE	20 Hz to 20 kHz, ±0.1 dB, 8 Hz to 100 kHz, +0/-3 dB				
DAMPING FACTOR	Greater than 200				
DYNAMIC HEADROOM	3 dB at 4 ohms (2 dB for MPA 275)				
NOISE	100 dB below rated output (20 Hz to 20 kHz)				
SENSITIVITY	1 Vrms for rated power (8 ohms)				
VOLTAGE GAIN	MPA1100	MPA750	MPA600	MPA400	MPA275
	80 (38 dB)	63 (36 dB)	56 (35 dB)	45 (33 dB)	35.5 (31 dB)
INPUT IMPEDANCE	10k ohms unbalanced, 20k ohms balanced				
CONTROLS	Front: AC switch, Ch 1 & Ch 2 Gain (2 dB detents). Rear panel switch for parallel inputs or bridged output configuration.				
INDICATORS (each channel)	POWER:	Green LED			
	SIGNAL PRESENT:	Green LED			
	LEVEL -20:	Green LED			
	LEVEL -10:	Yellow LED			
	CLIP:	Red LED			
	PROTECT:	Red LED (flashes for over-temp)			
CONNECTORS (each chan., except one stereo Speakon)	Input:	Barrier strip and XLR			
	Speakers:	5-way binding posts, Speakon connectors, st. Speakon**			
COOLING	Continuously variable speed fan, rear-to-front air flow				
AMPLIFIER PROTECTION	Full short circuit, open circuit, ultrasonic, and RF protection, thermal limiting/muting; stable into reactive or mismatched loads				
LOAD PROTECTION	On/off muting, clip limiting, DC-fault load grounding relay with internal fault fuses				
OUTPUT CIRCUIT TYPE	Complementary linear, high-efficiency outputs: 3-step on MPA1100; 2-step on MPA750, MPA600 and MPA400; 1 step on MPA275				
POWER REQUIREMENTS	100, 120, 230 Vac. 50-60 Hz				
POWER CONSUMPTION (@ 120 Vac)	Normal Operation: 4 ohms per channel- All models: less than 12 A, (1.44 kW) Max. (full power, 2 ohms/channel): MPA1100, 41A (5kW)MPA750, 58A (7kW)MPA600, 32A (3.9kW)MPA400, 24A (2.9 kW)MPA275, 18A (2.2 kW)				
DIMENSIONS	48.3 cm (19 in) rack mounting, 45.5 cm (17.9 in) deep (rear support ears), MPA1100 & MPA750 are 13.3 cm (5 ¼ in) tall (3 spaces); MPA600, MPA400 & MPA275 are 8.9 cm (3 ½ in) tall (2 spaces)				
NET WEIGHT	MPA1100	MPA750	MPA600	MPA400	MPA275
	29 kg (64 lbs)	24.8 kg (55 lbs)	20 kg (44 lbs)	19.1 kg (42 lbs)	18.1 kg (40 lbs)
SHIPPING WEIGHT	31.8 kg (70 lbs)	26.8 kg (59 lbs)	22.2 kg (49 lbs)	21.2 kg (47 lbs)	20.4 kg (45 lbs)

## OPTIONS

IM-10	Input Modules Two-channel, two-way crossover card provides multi-way active selectable frequency division with adjustable time delay for transducer alignment and equalization for both 2360 and 2830 horns.
IM-11	18 dB/octave sub-bass crossover card provides subsonic filter at 30 or 40 Hz, crossover frequencies of 80, 120 or 250 Hz with external highpass outputs.
IM-12	Cinema crossover module features 24 dB/octave filter slopes, crossover frequencies of 500 and 800 Hz, time delay for transducer offset alignment, horn equalization for 2360 and 2380 series horns and screen loss equalization.
IM-30	Input connector expansion module provides parallel XLR and TRS 1/4" phone connector inputs and outputs.

\*\*For mating cable, use Neutrik NL4FC connector. †Output Averaging™ short circuit protection (US Patent 4,321,554).

\*JBL continually engages in research related to product improvement. *Specifications subject to change without notice.*



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H A Harman International Company

Cover Photo: El Capitan Theater  
Hollywood, California

CAT MPA SERIES  
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