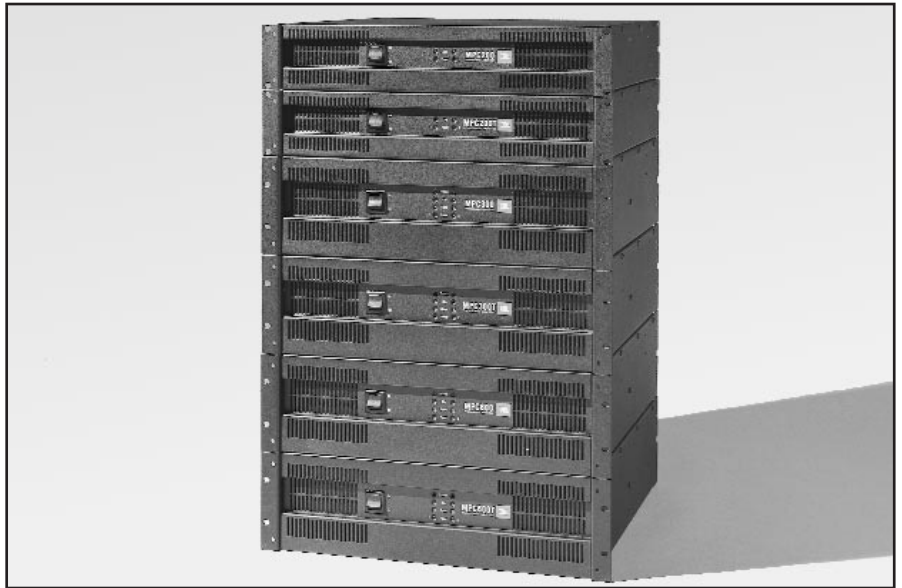


## Electronic Systems Components

### Key Features:

- ▶ T-Versions provide 200V, 140V, 100V, 70V & 25V outputs for “constant voltage” speaker systems
- ▶ Non-T Versions deliver output of 900, 450 and 350 watts per channel into 2 ohm loads
- ▶ Output connection on covered barrier stripes for secure screwdown, touchproof reliability
- ▶ Forced air cooling with back-to-front air flow
- ▶ Stepped input level controls located on back panel to prevent unauthorized tampering
- ▶ Fully short-circuit, temperature and DC offset protected
- ▶ US listed and CE compliant
- ▶ THX approved



The JBL MPC Series of professional contracting power amplifiers produce optimum performance in rugged, affordable packages. Each model contains two independent channels. The MPC Series provides very adaptable tools which satisfy the demands of the system designer and installer for reliability, sonic excellence and versatility.

Each model in the MPC Series power amplifier line is available in a “T” version for driving 200V, 140V 100V, 70V or 25V constant voltage lines and in a “non-T” version for driving loudspeaker systems with impedance as low as 2 ohms.

Models MPC600, 300 and 200 — the non-T versions - are designed to produce high power into low impedance loads, delivering 1800 watts (MPC600), 900 watts (MPC300) and 700 watts (MPC200) in bridged mono mode into a 4 ohms load. In stereo mode, these models deliver 900W (MPC600), 450W (MPC300) and 350W (MPC200) per channel into 2 ohms and 600W, 300W and 225W per channel respectively into 4 ohms loads.

Models MPC600T, 300T and 200T - the T versions - include high quality full-isolation transformers for driving constant voltage distributed lines. Each channel provides output terminals for 100V and 70V speaker lines, delivering 500W (MPC600T), 250W (MPC300T) and 175W (MPC200T) per channel, along with slightly lower power levels for 25V speaker lines. These models are bridgeable for driving especially long speaker lines at 200V and 140V levels, delivering 1000W, 500W and 300W respectively at these higher voltages. Full-isolation transformers give these amplifiers the ability to drive full-fidelity audio down to 45Hz (50Hz for MPC200T) into constant voltage speaker systems.

The T versions allow the installer to mix and match constant voltage output taps as long as the total power capability of the amplifier is not exceeded. In this way, different drive levels can be run into different areas of an installation - for example, some at 100V while others are at 70V or 25V, thus expanding the tap range

of the distributed speakers to best match each location.

In addition to the isolated constant voltage outputs (100V/70V/25V), the T models also provide direct speaker outputs (minimum 2 ohms) which can be connected AT THE SAME TIME as the constant voltage outputs. In some installations it is useful to drive the main PA speakers from the direct output while at the same time using the constant voltage output to drive 70V or 100V speakers in fill areas, lobbies, “cry rooms” or restroom areas, all without requiring a separate amplifier. It is also possible to use the direct output of one of the channels while using the constant voltage output of the other channel.

The MPC Series inputs utilize a Euroblock-style connector for screwdown security with bare wires. Covered barrier strip output connectors provide secure connection with touchproof protection. Active differential input circuitry offers many of the benefits of balanced operation without the use of input transformers.

The level controls are located on the back panel to prevent unauthorized tampering, and are detented for repeatability. The 2-speed cooling fans draw air in at the rear and exhausts it through vents in the front panel for better cooling. This allows multiple amplifiers to be rack-mounted with no clearance necessary in between, providing better support for the upper amplifiers.

Protection is provided for open or short circuits and under-impedance loads, as well as for ultrasonic and RF conditions. The amplifier is protected against over-temperature conditions. To protect loudspeakers, the outputs mute during turn-on and turn-off and also in the event of a DC fault. All protection circuitry automatically resets to normal when conditions allow, assuring safe continuous operation.

## ► MPC Series Two-Channel Contracting Amplifiers

### Specifications:

Electronics:	MPC200	MPC300	MCP600	MPC200T	MPC300T	MPC600T
Direct Power Out						
4 ohm bridge 1k Hz, 1% THD <sup>1</sup> :	700 W	900 W	1800 W	700 W	900 W	1800 W
8 ohm bridge 45-20k Hz, 0.1% THD:	450 W	600 W	1200 W	450 W	600 W	1200 W
2 ohm Load/Channel <sup>2</sup> , 1k Hz, 1% THD <sup>1</sup> :	350 W	450 W	900 W	350 W	450 W	900 W
4 ohm Load/Channel <sup>2</sup> , 45-20k Hz, 0.1% THD:	225 W	300 W	600 W	225 W	300 W	600 W
Isolated Constant Voltage Out						
200V or 140V Bridge:				350 W	500 W	1000 W
100V or 70V/Channel:				175 W	250 W	500 W
25V/Channel:				150 W	200 W	400 W
Frequency Response:	(bandlimited by built-in highpass filter)					
Direct Outputs:	20-20k Hz ±0.2 dB			50-20k Hz, -3 dB	45-20k Hz, -3 dB	
Isolated Outputs:				50-16k Hz, -3 dB	45-16k Hz, -3 dB	
Sensitivity (for full output):	0.96V	1.02V	1.0V	0.96V	1.02V	1.0V
Voltage Gain (direct outputs):	35 (31 dB)	40 (32 dB)	56 (35 dB)	35 (31 dB)	40 (32 dB)	56 (35 dB)
Output Circuit Type:	Class AB complementary linear stage (MPC200, 200T)			Class H complementary linear stage, 2-step high-efficiency circuit (MPC300, 300T, 600, 600T)		
Distortion:	SMPTE-IM less than 0.05%					
Damping Factor:	Greater than 200 (direct outputs)					
Noise:	Less than 100 dB below rated output (20 Hz to 20 kHz)					
Input Impedance:	20k ohm balanced, 10k ohm unbalanced					
Amplifier Protection:	Short circuit protection, open circuit, ultrasonic, RF, thermal muting, over-temperature. Stable into reactive or under-impedance loads.					
Load Protection:	Turn-on/turn-off muting, DC-fault load grounding relay (MPC300, 300T, 600, 600T) with internal fault fuses.					
Power Requirements:	100V, 120V, 220V or 230V AC, 50 - 60 Hz (Not user configurable)					
Physical:						
Controls:	Front Panel: Power Switch Rear Panel: Ch1 & Ch2 level, (11 detents: 0, -2, -6, -8, -10, -12, -14, -18, -24, off) Parallel/Stereo/Bridge switch (except MPC200 & 200T bridged on connector)					
Connectors:	Input: Euro-style detachable header with screw-down terminal for bare wires Output: Covered barrier strip for bare wires or spade terminal					
Cooling:	Two-speed fan with back-to-front airflow					
Net Weight:	14 kg (27 lb)	19 kg (42 lb)	23 kg (50 lb)	18 kg (37 lb)	25 kg (55 lb)	31 kg (67 lb)
Shipping Weight:	17 kg (33 lb)	23 kg (49 lb)	27 kg (58 lb)	21 kg (42 lb)	28 kg (62 lb)	34 kg (75 lb)
Indicators:	MPC200 & 200T: CLIP: Red LED POWER: Green LED			MPC300, 300T, 600, 600T PROTECT: Red LED SIGNAL: Green LED CLIP: Red LED POWER: Green LED		
Dimensions (H x W x D):	89 x 483 x 455 mm (rack depth 450 mm) 3.5 x 19 x 17.9 in (rack depth 17.7 in) 2 Rack Units high			133 x 483 x 455 mm (rack depth 450 mm) 5.25 x 19 x 17.9 in (rack depth 17.7 in) 3 Rack Units high		
Agency Approvals:	UL & cUL approved, CE compliant, and Approved by Lucasfilm for THX® installations					
Optional Accessories:	MP-RRB1: Rear Rack Bracket for 3RU (5.25 in) models (set of 2) MP-RRB2: Rear Rack Bracket for 2RU (3.5 in) models (set of 2)					

<sup>1</sup>Typical

<sup>2</sup>Both channels drive, 120V 60 Hz mains.

JBL continually engages in research related to product improvement. Changes introduced into existing products without notice are an expression of that philosophy.



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

■ A Harman International Company

SS MPC SERIES  
CRP 15M  
4/98