



## MHD: Marine Amplifiers

Maximum marine audio performance requires ample clean power, and our MHD amplifiers are built to deliver it.

The MHD's central technology, Single-Cycle Control™, allows us to pack a huge amount of clean power into the compact MHD chassis, while delivering stellar installation flexibility. But, that is only half the story: Single Cycle Control™ and our famous R.I.P.S power supply technology enable world-class sonic performance that equals the finest amplifiers, of any size, while operating reliably in the tough marine environment. These are unique JL Audio technologies that cannot be found on any other marine amplifier.

*When only the best will do, MHD is your amplifier.*



- Stackable chassis design (via optional HD Stack Kit, sold separately)
- Security cover for controls
- Removable power and speaker plugs
- RealSink™ thermal management



### How small and how powerful?

All MHD amplifier models share the same tiny dimensions, making them far easier to place than conventional marine amplifiers.



Security cover hides and protects controls



Lateral mounting feet create additional mounting flexibility.



Removable power and speaker plugs



### Remote Level Control (HD-RLC)

With the addition of an HD-RLC to any of our marine amplifiers, you can control the overall level of the subwoofer channel or the whole amplifier, depending on the model.

## MHD-Series Features & Specifications

### MHD Models

**MHD750/1:** Class D, Wide-Range Monoblock Marine Amplifier  
1 x 750W @ 1.5 - 4 ohms

**MHD600/4:** Class D, 4-Channel Full-Range Marine Amplifier  
4 x 150W @ 1.5 - 4 ohms per ch.  
2 x 300W @ 3 - 8 ohms per ch. bridged (24V version also available)

**MHD900/5:** Class D, 5-Channel Marine System Amplifier  
4 x 100W + 1 x 500W @ 4 ohms per ch.  
4 x 75W + 1 x 500W @ 2 ohms per ch. (24V version also available)

Power rated at 11.0 - 14.5V supply voltage, with less than 0.05% THD+N (RMS Method)

### Groundbreaking Switching Amplifier Technology: Single Cycle Control™

- Full-range operation with reference-grade sonic capabilities.
- Patented Single Cycle Control™ technology corrects output in each and every switching cycle (over 400,000 times per second). This dramatically reduces distortion at high frequencies compared to other full-range switching amplifiers.
- Exceptional efficiency reduces current draw and heat, permitting reliable high power output within a very small, easy to install design.

### R.I.P.S. (Regulated, Intelligent Power Supply)

- All the power, all the time... tightly regulated, intelligent power supply maintains full power at any impedance from 1.5 - 4 ohms per channel and at any supply voltage from 11V - 14.5V.
- MHD600/4 and MHD900/5 offer independent R.I.P.S. optimization for each channel section.

### Studio-Grade Signal Processing

- Select shallow (12dB/octave) or steep (24dB/octave) high or low-pass filters to best integrate with subwoofers or component systems.
- Fully-variable frequency selection from 50-500 Hz with detented, calibrated potentiometer(s)
- Remote level control with HD-RLC controller (sold separately)
- Preamp outputs (except MHD900/5)
- Infrasonic filter and Output Polarity Switch (MHD750/1 only)

### Differential-Balanced Inputs

- NO NOISE! Outstanding noise rejection prevents alternator whine and other noises.

### Advanced Rollback Protection and RealSink™

- Amplifier will never shut down due to thermal overload.
- Restores full power operation when it has cooled down to safe temperature.
- Real finned heat sink is extremely effective and requires no fans.
- Multiple units can be stacked without compromising cooling effectiveness. Stacking kit is sold separately.

\* Patented technology used under exclusive license for marine audio from PowerPhysics, Inc. - Newport Beach, CA

Model	Description	Continuous Power (RMS Method)	THD+N at Rated Power	S/N Ratio	Frequency Response	Damping Factor	Dimensions H x W x D
<b>MHD Amplifiers</b>							
MHD600/4*	Class D, 4-Channel Full-Range Marine Amplifier	150W x 4 @ 1.5 - 4 ohms Bridged: 300W x 2 @ 3 - 8 ohms (Ratings at 11V-14.5V supply voltage)	<0.03%	>110 dBA referred to rated power	6 Hz - 30 kHz (+0, -1dB)	>300 @ 4 ohm per ch. / 50 Hz >150 @ 2 ohm per ch. / 50 Hz	1.93 in. x 10.74 in. x 8.29 in. 49 mm x 273 mm x 211 mm
MHD750/1	Class D, Monoblock Wide-Range Marine Amplifier	750W x 1 @ 1.5 - 4 ohms (Rating at 11V-14.5V supply voltage)	<0.03%	>110 dBA referred to rated power	6 Hz - 8 kHz (+0, -1dB)	>300 @ 4 ohm / 50 Hz >150 @ 2 ohm / 50 Hz	1.93 in. x 10.74 in. x 8.29 in. 49 mm x 273 mm x 211 mm
MHD900/5*	Class D, 5-Channel Marine System Amplifier	<b>Five-Channel Mode:</b> 100W x 4 + 500W x 1 @ 4 ohms per ch. 75W x 4 + 500W x 1 @ 2 ohms per ch. <b>Three-Channel Mode:</b> 150W x 2 + 500W x 1 @ 4 ohms per ch. (Ratings at 11V-14.5V supply voltage)	<0.03%	>110 dBA referred to rated power	6 Hz - 30 kHz (+0, -1dB)	Subwoofer Channel: >500 @ 4 ohm / 50 Hz >250 @ 2 ohm / 50 Hz	1.93 in. x 10.74 in. x 8.29 in. 49 mm x 273 mm x 211 mm
<b>M-Series Amplifiers</b>							
M600/1	Class D, Monoblock Marine Subwoofer Amplifier	400W RMS x 1 @ 4 ohms 600W RMS x 1 @ 2 ohms (Ratings at 14.4V supply voltage)	1%	>87 dB referred to rated power	7 Hz - 500 Hz (+0, -1dB)	>1000 @ 4 ohms / 50 Hz >500 @ 2 ohms / 50 Hz	2.05 in. x 8.52 in. x 7.09 in. 52 mm x 217 mm x 180 mm
M1000/1v2	Class D, Monoblock Marine Subwoofer Amplifier	600W RMS x 1 @ 4 ohms 1000W RMS x 1 @ 2 ohms (Ratings at 14.4V supply voltage)	<1%	>53 dB referred to rated power	7 Hz - 500 Hz (+0, -1dB)	>1000 @ 4 ohms / 50 Hz >500 @ 2 ohms / 50 Hz	2.05 in. x 14.73 in. x 7.09 in. 52 mm x 374 mm x 180 mm
M200/2	Class D, Full-Range 2-Channel Marine Amplifier	75W RMS x 2 @ 4 ohms 100W RMS x 2 @ 2 ohms Bridged: 200W RMS x 1 @ 4 ohms (Ratings at 14.4V supply voltage)	<1%	>104 dB referred to rated power	12 Hz - 22 kHz (+0, -1dB)	>150 @ 4 ohms per ch. / 50 Hz >75 @ 2 ohms per ch. / 50 Hz	2.05 in. x 6.85 in. x 7.09 in. 52 mm x 174 mm x 180 mm
M400/4*	Class D, Full-Range 4-Channel Marine Amplifier	75W RMS x 4 @ 4 ohms 100W RMS x 4 @ 2 ohms Bridged: 150W RMS x 2 @ 8 ohms Bridged: 200W RMS x 2 @ 4 ohms (Ratings at 14.4V supply voltage)	<1%	>104 dB referred to rated power	12 Hz - 22 kHz (+0, -1dB)	>150 @ 4 ohms per ch. / 50 Hz >75 @ 2 ohms per ch. / 50 Hz	2.05 in. x 8.52 in. x 7.09 in. 52 mm x 217 mm x 180 mm
M600/6*	Class D, Full-Range 6-Channel Marine Amplifier	75W RMS x 6 @ 4 ohms 100W RMS x 6 @ 2 ohms Bridged: 150W RMS x 3 @ 8 ohms Bridged: 200W RMS x 3 @ 4 ohms (Ratings at 14.4V supply voltage)	<1%	>104 dB referred to rated power	12 Hz - 22 kHz (+0, -1dB)	>150 @ 4 ohms per ch. / 50 Hz >75 @ 2 ohm per ch. / 50 Hz	2.05 in. x 10.23 in. x 7.09 in. 52 mm x 260 mm x 180 mm
M800/8v2*	Class D, Full-Range 8-Channel Marine Amplifier	75W RMS x 8 @ 4 ohms 100W RMS x 8 @ 2 ohms Bridged: 150W RMS x 4 @ 8 ohms Bridged: 200W RMS x 4 @ 4 ohms (Ratings at 14.4V supply voltage)	<1%	>104 dBA referred to rated power	12 Hz - 22 kHz (+0, -1dB)	>150 @ 4 ohms per ch. / 50 Hz >75 @ 2 ohms per ch. / 50 Hz	2.05 in. x 14.73 in. x 7.09 in. 52 mm x 374 mm x 180 mm
M500/3	Class D, Full-Range 3-Channel Marine Amplifier	75W RMS x 2 + 180W RMS x 1 @ 4 ohms per ch. 100W RMS x 2 + 300W RMS x 1 @ 2 ohms per ch. (Ratings at 14.4V supply voltage)	<1%	>104 dBA referred to rated power (main channels); >87 dBA referred to rated power (sub channel)	Main Channels: 12 Hz - 22 kHz; Sub Channel: 7 - 500 Hz (+0, -1dB)	Subwoofer Channel: >120 @ 4 ohm / 50 Hz >60 @ 2 ohm / 50 Hz	2.05 in. x 8.52 in. x 7.09 in. 52 mm x 217 mm x 180 mm
M700/5	Class D, Full-Range 5-Channel Marine Amplifier with 2-Way / 3-Way Crossover	75W RMS x 4 + 180W RMS x 1 @ 4 ohms per ch. 100W RMS x 4 + 300W RMS x 1 @ 2 ohms per ch. (Ratings at 14.4V supply voltage)	<1%	>104 dB referred to rated power	12 Hz - 22 kHz (+0, -1dB)	>150 @ 4 ohms per ch. / 50 Hz >75 @ 2 ohms per ch. / 50 Hz	2.05 in. x 10.23 in. x 7.09 in. 52 mm x 260 mm x 180 mm
M1000/5v2	Class D, Full-Range 5-Channel Marine Amplifier with 2-Way / 3-Way Crossover	<b>Main Channels, Stereo, all ch. driven:</b> 75W x 4 @ 4 ohms, 100W x 4 @ 2 ohms <b>Main Channels, Bridged, all ch. driven:</b> 150W x 2 @ 8 ohms, 200W x 2 @ 4 ohms <b>Subwoofer Ch., Mono, all ch. driven:</b> 400W x 1 @ 4 ohms, 500W x 1 @ 3 ohms, 600W x 1 @ 2 ohms (Ratings at 14.4V supply voltage)	<1%	>104 dBA referred to rated power (main channels); >100 dBA referred to rated power (sub channel)	Main Channels: 12 Hz - 22 kHz Sub Channel: 10 Hz - 1 kHz (+0, -1dB)	Subwoofer Channel: >150 @ 4 ohm / 50 Hz >75 @ 2 ohm / 50 Hz	2.05 in. x 14.73 in. x 7.09 in. 52 mm x 374 mm x 180 mm
<b>MX-Series Amplifiers</b>							
MX300/1	Monoblock Class D Wide-Range Amplifier	160W RMS x 1 @ 4 ohms 300W RMS x 1 @ 2 ohms (Ratings at 14.4V supply voltage)	<1%	>85 dB referred to rated power	20 Hz - 12 kHz (+0, -1dB)	>150 @ 4 ohms / 50 Hz >75 @ 2 ohms / 50 Hz	1.77 in. x 8.66 in. x 3.09 in. 45 mm x 220 mm x 78.5 mm
MX500/1	Monoblock Class D Wide-Range Amplifier	300W RMS x 1 @ 4 ohms 500W RMS x 1 @ 2 ohms (Ratings at 14.4V supply voltage)	<1%	>97 dB referred to rated power	20 Hz - 12 kHz (+0, -1dB)	>115 @ 4 ohms / 50 Hz >54 @ 2 ohms / 50 Hz	1.77 in. x 9.33 in. x 4.50 in. 45 mm x 237 mm x 114.5 mm
MX280/4	4-Channel Class D Full-Range Amplifier	50W RMS x 4 @ 4 ohms 70W RMS x 4 @ 2 ohms Bridged: 140W RMS x 2 @ 4 ohms (Ratings at 14.4V supply voltage)	<1%	>89.5 dB referred to rated power	20 Hz - 20 kHz (+0, -1dB)	>60 @ 4 ohms per ch. / 50 Hz >75 @ 2 ohms 30 ch. / 50 Hz	1.77 in. x 8.66 in. x 3.09 in. 45 mm x 220 mm x 78.5 mm
MX500/4	4-Channel Class D Full-Range Amplifier	70W RMS x 4 @ 4 ohms 125W RMS x 4 @ 2 ohms Bridged: 250W RMS x 2 @ 4 ohms (Ratings at 14.4V supply voltage)	<1%	>88 dB referred to rated power	20 Hz - 20 kHz (+0, -1dB)	>92 @ 4 ohms per ch. / 50 Hz >43 @ 2 ohms per ch. / 50 Hz	1.77 in. x 9.33 in. x 4.50 in. 45 mm x 237 mm x 114.5 mm

\* 24V Versions Also Available: MHD600/4-24V, MHD900/5-24V, M400/4-24V, M600/6-24V and M800/8-24V