



## M-Series: Maximum-Performance Subwoofers



### Why do you need a subwoofer in your boat?

Most people expect a subwoofer to give them better and bigger bass, but the biggest benefit is that it will make your whole system sound better. A properly implemented subwoofer system relieves your main speakers from the stress of having to reproduce the lowest frequencies in your music. Free from this burden, they can play louder and cleaner, giving you far better overall audio performance.

JL Audio's maximum-performance marine subwoofers deliver the kind of bass that has made JL Audio famous in the automotive and home theater sound arenas. This is bass that will impress you—not only with its sheer level, but even more with its smoothness, balance and precision.

### Application-specific models:

The M10W5 is optimized for operation in compact enclosures (0.5 to 1.0 cu.ft.) and features extremely long linear excursion capability for outstanding output and low-distortion performance. It is available as a raw driver or pre-loaded in a 100% fiberglass enclosure, precisely tuned to extract optimum performance from the M10W5.

Optimized for high-power, infinite-baffle operation, the 8-inch M81B5, 10-inch M101B5 and colossal 12-inch M121B6 subwoofers can be installed in a variety of locations, without the need for a dedicated enclosure. This is accomplished with an entirely different motor and suspension design than that used in the M10W5.

Whichever model you choose will allow you to create the ultimate sonic foundation for your marine audio system.

### M-Series Features

#### Subwoofer Drivers:

- Very long linear excursion, DMA-optimized motor systems result in superior output with reduced distortion
- Injection-molded mica-filled polypropylene cone bodies with synthetic rubber surrounds, specifically formulated for marine duty
- Marine-grade, synthetic fiber spider with progressive-roll design
- Corrosion and UV-Resistant polymer baskets
- Gold-plated, marine-grade brass connection terminals
- Protective, UV-Resistant speaker grilles and marine-grade stainless-steel mounting hardware are included with all systems.
- Four great looks to choose from: two different grille styles (sport or classic), each available in all-white or black/titanium color scheme.



#### FS110-W5 Enclosed Subwoofer:

100% fiberglass-enclosed subwoofer system featuring our M10W5 Subwoofer Driver.

- 100% Fiberglass enclosure construction for years of reliable performance.
- Sealed enclosure, precisely tuned for the M10W5, delivers outstanding impact and low-frequency extension in open air applications.
- Available in black gel-coat with black/titanium Sport Grille or white gel-coat with white Classic Grille.



M12



M10



M8



Model	Description						Grille Options*	Color Options*	Available Blue LED Option for Sport Grilles	Recommended RMS Amplifier Power***	System Efficiency	System Frequency Response
Marine Cockpit Speaker Systems												
MX650-CCX-	4 ohm, 6.5 in. / 165 mm woofers with grille-mounted 0.75 in. / 19 mm silk dome tweeters. IMPORTANT: These speakers are direct, drop-in replacements for most "marine 6.5-inch" speakers						-CG or -SG	-WH, -TB or -CR	Yes	15 - 100 Watts	89 dB @ 1W/1m	55 Hz - 25 KHz ± 3 dB
MX770-CCX-	4 ohm, 7.7 in. / 196 mm woofers with grille-mounted 0.75 in. / 19 mm silk dome tweeters. Oversize 7.7-inch design delivers higher output and better bass response than 6.5-inch marine speakers.						-CG or -SG	-WH, -TB or -CR	Yes	25 - 150 Watts	90.5 dB @ 1W/1m	45 Hz - 25 KHz ± 3 dB
M650-CCX-	4 ohm, 6.5 in. / 165 mm woofers with grille-mounted 1.0 in. / 25 mm dome tweeters. IMPORTANT: These speakers have a narrower flange and a smaller bolt hole circle than a standard "marine 6.5-inch" speakers.						-CG or -SG	-WH or -TB	No	25 - 150 Watts	89.5 dB @ 1W/1m	55 Hz - 25 KHz ± 3 dB
M770-CCX-	4 ohm, 7.7 in. / 196 mm woofers with grille-mounted 1.0 in. / 25 mm dome tweeters. Oversize 7.7-inch design delivers higher output and better bass response than 6.5-inch marine speakers.						-CG or -SG	-WH or -TB	No	40 - 175 Watts	91.0 dB @ 1W/1m	45 Hz - 25 KHz ± 3 dB
M770-CCS-	4 ohm, 7.7 in. / 196 mm woofers with separate 1.0 in. / 25 mm dome tweeters. Oversize 7.7-inch design delivers higher output and better bass response than 6.5-inch marine speakers.						-CG or -SG	-WH or -TB	No	40 - 175 Watts	91.0 dB @ 1W/1m	45 Hz - 25 KHz ± 3 dB
M880-CCX-	4 ohm, 8.8 in. / 224 mm woofers with grille-mounted 1.2 in. / 30 mm dome tweeters. Twice the cone area of a conventional 6.5 in speaker!						-CG or -SG	-WH or -TB	Yes	50 - 250 Watts	90.5 dB @ 1W/1m	38 Hz - 20 KHz ± 3 dB
Marine Tower Speaker Systems												
M770-TCX-	4 ohm, 7.7 in. / 196 mm woofers with grille-mounted 1.0 in. / 25 mm dome tweeters Oversize 7.7-inch design delivers higher output and better bass response than 6.5-inch marine speakers.						-CG or -SG	-WH or -TB	No	40 - 175 Watts	91.0 dB @ 1W/1m	45 Hz - 25 KHz ± 3 dB Measured in 0.5 cu. ft. / 14.2 liters net enclosure
M770-TCS-	4 ohm, 7.7 in. / 196 mm woofers with separate 1.0 in. / 25 mm dome tweeters. Oversize 7.7-inch design delivers higher output and better bass response than 6.5-inch marine speakers.						-CG or -SG	-WH or -TB	No	40 - 175 Watts	91.0 dB @ 1W/1m	45 Hz - 25 KHz ± 3 dB Measured in 0.5 cu. ft. / 14.2 liters net enclosure
Marine Enclosed Speaker Systems												
PS650-VeX-SG-	4 ohm, 6.5 in. / 165 mm woofers with grille-mounted 0.75 in. / 19 mm silk dome tweeters. Mounting hardware sold separately. See chart on pg 30 for options.						-SG	-WGW or -TMB	Yes	60 - 100 Watts	89.5 dB @ 1W/1m	100 Hz - 25 KHz ± 3 dB Measured in its enclosure
MX770-ETXv3-	4 ohm, 7.7 in. / 196 mm woofers with grille-mounted 0.75 in. / 19 mm silk dome tweeters. Oversize 7.7-inch design delivers higher output and better bass response than 6.5-inch marine speakers. Mounting hardware sold separately. See chart on pg 30 for options.						-CG or -SG	-WH or -TB	Yes	25 - 150 Watts	90.5 dB @ 1W/1m	55 Hz - 25 KHz ± 3 dB Measured in its enclosure
M770-ETXv3-	4 ohm, 7.7 in. / 196 mm woofers with separate 1.0 in. / 25 mm dome tweeters. Oversize 7.7-inch design delivers higher output and better bass response than 6.5-inch marine speakers. Mounting hardware sold separately. See chart on pg 30 for options.						-CG or -SG	-WH or -TB	No	40 - 175 Watts	91.0 dB @ 1W/1m	45 Hz - 25 KHz ± 3 dB Measured in its enclosure
M880-ETXv3-	4 ohm, 8.8 in. / 224 mm woofers with grille-mounted 1.2 in. / 30 mm dome tweeters. Mounting hardware sold separately. See chart on pg 30 for options.						-CG or -SG	-WH or -TB	Yes	125 - 250 Watts	90.5 dB @ 1W/1m	38 Hz - 20 KHz ± 3 dB Measured in its enclosure
Model	Nominal Diameter	Mounting Depth	Grille Options*	Color Options*	One-Way, Linear Excursion (Xmax)	Nominal Impedance (Znom)	Recommended RMS Amplifier Power**	Continuous Power Handling (Pt)	Recommended Sealed Enclosure Range		Recommended Ported Enclosure Range	
Marine Subwoofers												
MX10IB3-	10 in. / 250 mm	5.02 in. / 128 mm	-CG or -SG	-WH, -TB or -CR	0.41 in. / 10.4 mm	4 ohm	55W-175W	175W	Minimum: 1.25 cu. ft. / 35.4 liters Optimum: 2.00 cu. ft. / 56.6 liters or larger		N/A	
M8IB5-	8.0 in. / 200 mm	5.18 in / 132 mm	-CG or -SG	-WH or -TB	0.53 in. / 13.5 mm	4 ohm	50W-200W	200W	1.50 cu. ft. / 42.5 liters		1.50 cu. ft. / 42.5 liters	
M10W5-	10 in. / 250 mm	5.93 in / 151 mm	-CG or -SG	-WH or -TB	0.47 in. / 11.9 mm	4 ohm	75W-250W	250W	0.50-1.00 cu. ft. / 14.2-28.3 liters		0.90-1.40 cu.ft. / 25.5-40.0 liters	
M10IB5-	10 in. / 250 mm	5.93 in. / 151 mm	-CG or -SG	-WH or -TB	0.52 in. / 13.2 mm	4 ohm	75W-250W	250W	Minimum: 1.25 cu. ft. / 35.4 liters Optimum: 2.00 cu. ft. / 56.6 liters or larger		N/A	
M12IB6-	12 in. / 300 mm	8.05 in / 204 mm	-CG or -SG	-WH or -TB	0.73 in. / 18.5 mm	4 ohm	200W-600W	600W	Minimum: 2.0 cu ft / 56.6 liters or larger Optimum: 3.0 cu ft / 70.8 liters		N/A	
Marine Enclosed Subwoofer												
FS110-W5-	10 in. / 250 mm	N/A	-CG -SG	-WH -TB	0.47 in. / 11.9 mm	4 ohm	75W-250W	250W	N/A		N/A	
Model	Description					Grille Options*	Color Options*	Left or Right	Recommended RMS Amplifier Power***	System Efficiency	System Nominal Impedance	System Frequency Response
3-Way Enclosed Speaker Systems												
M103EWS-	Enclosed 3-Way Weatherproof Subwoofer/Satellite Large format enclosed subwoofer/satellite systems for high-output applications requiring a weatherproof solution. Requires bi-amplification.					-CG	-WH	-L or -R	100 Watts 250 Watts	91.0 dB @ 1W/1m	4 ohms	30 Hz - 25 KHz ± 3 dB

\* **Grille & Color Options:** Styles: Classic Grille (-CG) / Sport Grille (-SG) • Colors: White (-WH) / Titanium combination (-TB) • (-CR) **Chrome is available on Sport Grille for MX-Series only.** • VeX™ Colors: White/Gloss White (-WGW); Titanium/Matte Black (-TMB). Refer to illustrated chart on page 29 to see the grille and color options.

\*\* **Recommended RMS Amplifier Power for Subwoofer Drivers:** This is the RMS amplifier power recommended by JL Audio for each driver. Choosing a good quality amplifier in this power range will make use of the woofer's low-distortion performance envelope, without undue risk of failure. Use of less than the recommended power range may not damage the woofer, but may result in unsatisfactory performance. Caution must be exercised when using amplifiers that approach or meet the maximum recommended power. Use of an amplifier that exceeds the driver's "Continuous Power Handling (Pt)" specification voids the warranty.

\*\*\* **Recommended RMS Amplifier Power for Full-Range Speakers (Components and Coaxials):** This is the RMS amplifier power recommended by JL Audio for each speaker system (per channel). A properly set, good quality amplifier in this power range will produce clean, dynamic audio without undue risk of failure when listening to music. Failure to set the amplifier's input sensitivity correctly will compromise reliability. Use of less than the recommended power range will not damage the speakers, but may result in unsatisfactory performance. Use of more power than recommended will compromise reliability with aggressive use and will void the warranty.

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