

M3/M6-VEX<sup>™</sup> - Enclosed Speaker Systems with Integrated RGB LED Lighting (optional)



Thank you for choosing JL Audio VEX™ Enclosed Speaker Systems. With proper installation, your new speakers will deliver years of listening pleasure.

We strongly recommend that you have your Enclosed Speaker Systems installed by your authorized JL Audio dealer. The installation professionals employed by your dealer have the necessary tools and experience to properly install this product. If you prefer to perform your own installation, please read this and the instructions included with your Mounting Fixtures (sold separately) completely before beginning the process.

# **WARNING**

Installation of this product requires use of JL Audio® Mounting Fixtures (sold separately). No other method of installation should be attempted. To avoid injury, installation instructions included with the JL Audio®. Mounting Fixtures MUST be followed precisely.

Do not attempt to remove the LEDs from from the speakers. The LEDs are permanently fixed and attempting to remove them will cause damage and this damage will not be covered under warranty.

### LED EQUIPPED MODELS

Illuminated speaker models are outfitted with multi-color RGB LEDs to produce vibrant accent lighting. Refer to the Wiring Harness Info tables below for individual wire connection info.

Note: Wiring connections for each speaker are required for LED functionality.

Adjustable control of RGB lighting may be achieved with the use of an RGB lighting controller (sold separately). Note: When selecting an RGB lighting controller, make sure that the total amperage demands of all LED circuits does not exceed the output capacity of the controller. Refer to the RGB LED Specifications table for the individual current draw amounts and sum (add) the total. For optimal performance, we recommend using the JL Audio marine lighting controller (MLC-RW).

## Wiring Harness Info

Models Without LEDs			
Wire Size Wire Label		Use	
16 1146	"+"	Speaker Positive (+)	
16 AWG	N/A	Speaker Negative (–)	

Models With LEDs			
Wire Size	Wire Color	Use	
16 AWG	Red/Stripe	Speaker Positive (+)	
16 AWG	Black/Stripe	Speaker Negative (–)	
20 AWG	Red	Red RGB LED Negative (–)	
	Green	Green RGB LED Negative (-)	
	Blue	Blue RGB LED Negative (–)	
	Yellow	Main RGB LED Positive (+12V)	

# NOTE: Illustration may not be to scale. M6 Sport Grille shown.

Physical Specifications	M3-650VEX	M6-650VEX
Enclosure Diameter (A)	7.03 in / 179 mm	7.03 in / 179 mm
Enclosure Depth (B)	6.16 in / 156 mm	6.17 in / 157 mm
Height including Mounting Fixture Receiver* (C)	7.27 in / 185 mm	7.27 in / 185 mm
Mounting Fixture Receiver / Enclosure Offset (D)	.20 in / 5 mm	.20 in / 5 mm

<sup>\*</sup>Mounting Fixtures Required (sold separately)

General Specifications	M3-650VEX	M6-650VEX
System Nominal Impedance	4 Ω	4Ω
System Frequency Response	100 Hz - 25 KHz ± 3 dB	100 Hz - 25 KHz ± 3 dB
System Efficiency	89.5 dB @ 1 W / 1 m	89.5 dB @ 1 W / 1 m
Continuous RMS Power Handling (per Ch.)	60 W	75 W
Recommended RMS Amplifier Power (per Ch.)	20 - 120 W	25 - 150 W

## **DIRECT LED WIRING**

Alternatively, you may hard wire individual leads or a combination of leads to achieve up to seven different LED color assortments. Refer to the table below for the wire colors used to achieve specific LED colors.

LED Color	Wire Color(s)	Connection
Red	Red	
Green	Green	Combine selected
Blue	Blue	wires from all
Yellow	Red and Green	speakers and connect to negative ground
Pink	Red and Blue	or to the negative (–)
Aqua	Green and Blue	battery post.
White	Red, Green and Blue	

Combine all YELLOW (+12V) leads together (parallel) and connect to a switched +12V supply. See below for additional info.

**RGB LED Specifications** 

Specification	M3-650VEX	M6-650VEX
LED Current Draw at 12V DC	108 mA	324 mA
Recommended Fuse Value	150 mA	500 mA
LED Voltage Range	10 - 14.4V DC	10 - 14.4V DC

## LED WIRING CONSIDERATIONS

- Do not connect to 24V electrical systems.
- Do not connect the speakers' LED lights to the vessel's navigational lighting circuits.
- For short-circuit protection, we recommend installing a fuse (not included) at <u>EACH</u> speaker's YELLOW (+12V) LED power connection lead. Refer to the RGB LED Specifications table for recommended fuse ratings.
- We recommend a minimum of 16AWG wire size for each speaker's LED connection circuits.
- In addition to the above, we recommend
   activating the speakers' LEDs thru a cabin/
   interior lighting circuit that supplies +12V via an
   existing switch. If an existing switched circuit
   is not available, you may install a dedicated
   toggle/rocker style switch that will supply
   positive (+12V) power. Fuse this main +12V
   connection according to the total amperage
   demands of all LED circuits. Refer to the RGB
   LED Specifications table for individual current
   draw amounts and recommended fuse ratings.

## **INCLUDED PARTS**

- M3-650VEX
  Two Lexan Logo Appliqués
- M6-650VEX
   Two Aluminum Logo Caps
   One Tube of Silicone Adhesive