

AUDIO SPECIFICATION GUIDE (2024 Specifications)



The Seminole Hard Rock Winterfest Boat Parade is the premier spectator event in South Florida. Quality audio is crucial for the spectators because it significantly enhances their overall experience and engagement. A clear, well-balanced sound ensures that attendees can fully appreciate and follow the parade's content.

To create the highest quality event and maintain the standards, the audio that is projected by each participating entry is essential to the Parade. When audio is crisp and free from distortion or interference, spectators can hear announcements, commentary, and ambient sounds as intended, which contributes to a more immersive and enjoyable experience.

To achieve the goal of uniform high quality for the Winterfest parade, the sound which is projected must be clearly perceived by spectators in the reviewing stands and on the shore. High-quality audio also reduces the likelihood of misunderstandings or missed information, allowing the audience to stay connected and invested in the event. The music must be presented at an adequate volume and cannot be distorted.

Therefore, high quality sound systems must be used on board the parade boats. The following specifications are recommended for the music systems employed on parade boats.

BEST OPTION (2024 Technology) Battery Powered "Weatherized" Loudspeakers:

Powered loudspeakers such as those in professional venue sound systems are the easiest and simplest components to use on a parade boat. Signal cables with XLR connectors provide the most reliable connections between the musical sound source and the loudspeakers. These cables may be strung in daisy chain fashion between multiple loudspeakers via the output or "Thru" plug from one speaker to input plug of the next speaker to provide a uniform sound.

In 2024, we now have access to new technology that has 2 very substantial improvements over previous equipment used for the parade boats. **These 2 models are brand and model specific** as they are designed for professional level performance.



8" and 12" powered speakers now feature rechargeable, removable and fast replaceable Lithium-ion battery packs with 6+ hours of constant music playback at maximum output levels, or 12+ hours at 100 dB SP average. This means no additional electrical "wires" and no additional power draw. (Yes, you can have a spare speaker battery ready to go in the event you are concerned you might "parade" a little too long...)

These speakers are also weatherized with an IP43 speaker cabinet rating (splash and light rain resistant). An accessory rain cover is available that allows for additional weather resistance and protection. No need to panic should a little rain be spotted on the radar.

2024 Technology Weatherized Speakers are as follows: Electro-Voice Everse 8" Two-Way Loudspeaker Electro-Voice Everse 12" Two-Way Loudspeaker

Second Option Alternative to Battery Powered Loudspeakers:

This second option is also a simple way to connect multiple powered loudspeakers that meet the parade requirements. It utilizes the same style of XLR cables and connections with the addition of having to provide electric on board for the speakers.

Each loudspeaker used on a vessel in the parade is required to produce sound levels of at least 95 to 100 dBA, at a distance of 3 meters, without audible distortion. The recommended loudspeakers in this manual satisfy this requirement.

Alternative Powered Speakers are as follows:

Electro-Voice ZLX-8P 8" Two-Way Loudspeaker
Electro-Voice ZLX-12P 12" Two-Way Loudspeaker / JBL Eon 612
Electro-Voice ZLX-15P 15" Two-Way Powered Loudspeaker / JBL Eon 615
**note JBL models do not have Bluetooth music streaming capabilities **

Third Option and Alternative to Powered Loudspeakers:

As an alternate, passive (non-powered) loudspeakers with the same sound level output may be used. These require a separate audio power amplifier capable of driving the loudspeaker set without audible distortion at the distance mentioned.

Larger, more powerful loudspeakers may be acceptable if sufficient AC power can be supplied by the boat's electrical system. The total power requirement of the loudspeakers may be calculated by adding up their individual peak power requirements which can be found in the specification sheets or supplied by contacting Jay at Sound & Lighting Solutions here locally at the number or email address in this manual.

It is the responsibility of each Captain to determine the electrical power capabilities of their vessel. An auxiliary generator may be needed for vessels with smaller electrical power systems.



Speaker Placement and Simple Wiring Examples

For boats under 40 feet:

 Use a minimum of 2 loudspeakers, one (1) on each side mounted at the amidships (center) of the vessel, to point outward toward the shoreline for the spectators on land. Battery powered speakers will not require any additional electricity, however when using the powered loudspeakers in option 2 there will be a minimum AC power (120 vac) draw of roughly 10 amps.

For boats between 40 and 80 feet:

Use a minimum of 4 loudspeakers, two (2) at the bow on each side and two (2) at the stern on each side, mounted to point outward toward the shoreline for the spectators on land. Battery powered speakers will not require any additional electricity, however when using the powered loudspeakers in option 2 there will be a minimum AC power (120 vac) draw of roughly 20 amps.

For boats over 80 feet:

 Use a minimum of 6 powered loudspeakers, two (2) at the bow on each side, two (2) at the amidships (center) on each side, and two (2) at the stern on each side, mounted to point outward toward the shoreline. Battery powered speakers will not require any additional electricity, however when using the powered loudspeakers in option 2 there will be a minimum AC power (120 vac) draw of roughly 30 amps.

ADDITIONAL Sound Improvement for Larger Vessels:

- The addition of a single or 2 (two) single powered subwoofers would be a valuable addition to the systems mentioned above. The subwoofers are non-directional so placement isn't as big of a deal [amidship should be sufficient], these significantly enhance the experience by delivering low-frequency sounds that enrich the overall experience. These subs can be linked together with the above speaker systems with a simple XLR connection cable.
- The subs would require a dedicated 20-amp circuit on each ship, so ample power needs to be provided.

Loudspeaker Locations

The following diagrams indicate the recommended loudspeaker locations and possible wiring layouts for each size boat.



2024 Battery Powered Weatherized Speaker Wiring Diagram





WIRELESS CONTROL & MONITORING



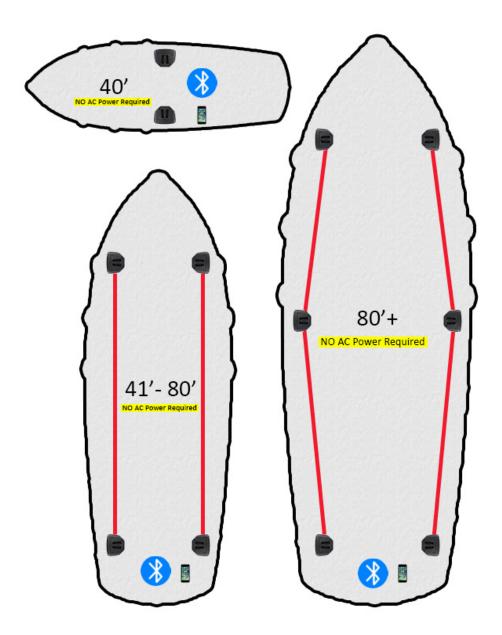
BATTERY-POWERED CONVENIENCE



TRUE WIRELESS STERFO



IP43-RATED Weatherized Design



Red lines delineate XLR cable connections between speakers after the first 2 units receive Bluetooth signal.



2024 Battery Powered Weatherized Speaker Information

- True wireless STEREO Bluetooth
- Battery Powered Convenience up to 12 Hours run time
- IP43 Weatherized Design (splash & light rain resistant)

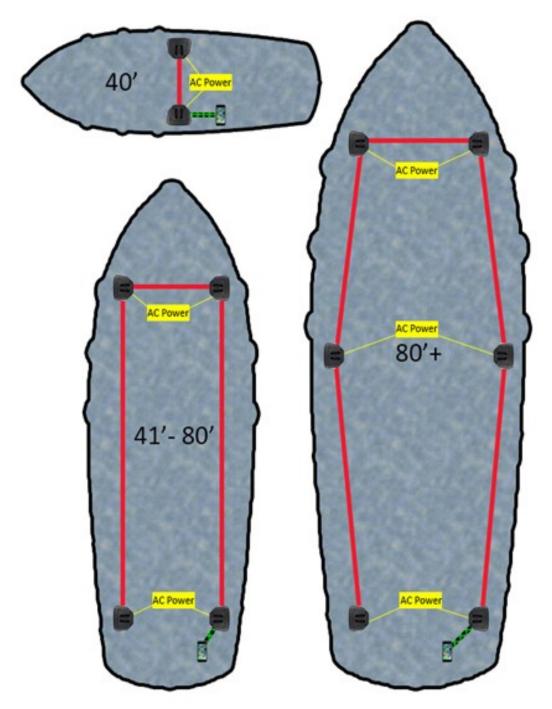


• Wireless Control & Monitoring





Alternative Powered Weatherized Speaker Placement & Wiring Diagram



Red lines delineate XLR cable connections between speakers after the first unit receives signal.



Powered Speaker Connections



Powered Loudspeaker Connections

The connections above are typical for powered speaker setups. Please contact SLS if you have any questions regarding wiring.

Suppliers

A local supplier of audio equipment which meets these specifications is

Sound & Lighting Solutions – 1377 S.W. 12th Avenue, Pompano Beach, Florida 33069 954-761-8585 or 954-884-0442

Ask about the special Seminole Hard Rock Winterfest Boat Parade equipment sale and rental promotions. Should you have any wiring and/or technical questions they will be able to assist.

Sound & Lighting Solutions offers all the above equipment with discounts for Seminole Hard Rock Winterfest Boat Parade participants.

Please contact the supplier for information on other sound systems, lighting supplies and rental prices.



Questions

If you have questions concerning the audio equipment or set-up specifications, please contact:

Jay Krause – Technical Support / Procurement Sound & Lighting Solutions Inc. 954-884-0442 jay@slsstore.com

Kathy Keleher – Marketing and Parade Director Winterfest, Inc. 954-767-0686 kathy@winterfestparade.com

Britt Lanier – Boat Parade Chairman TWO MEN AND A TRUCK boats@winterfestparade.com

