

# Extreme 6.5 inch LEDCast™ Speakers

Model: SEI-SESPKR65



## User Guide

- 2** Wired Speakers
- 4** Black Grills + White Grills

# Important

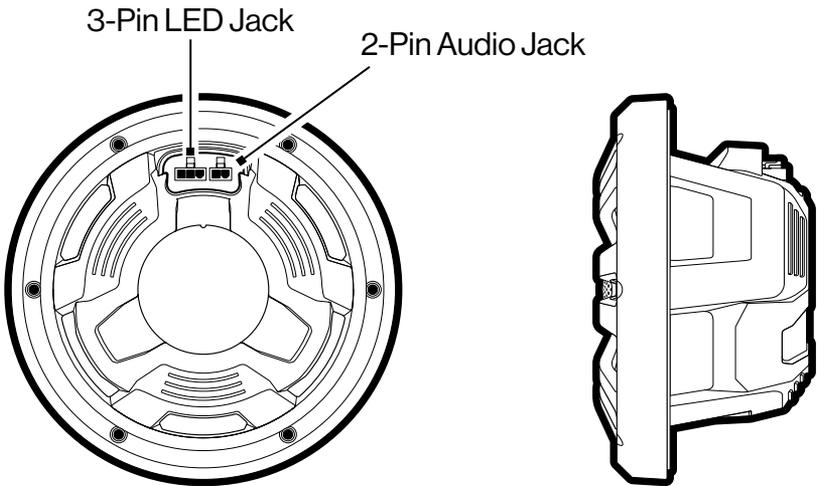
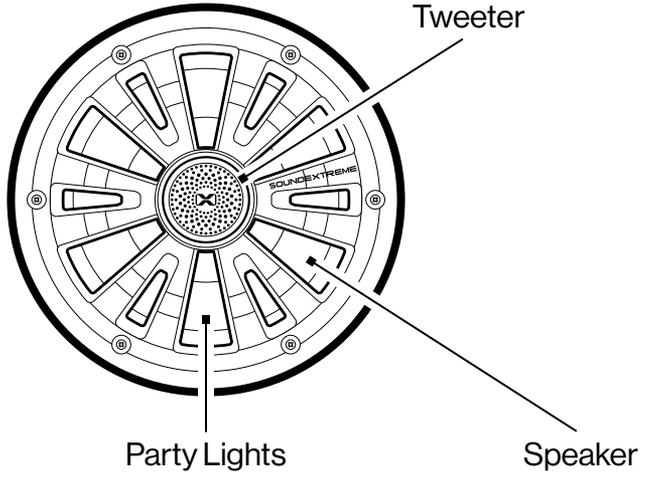
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- Please read the User Guide before installation and use.
- SoundExtreme Speakers have integrated addressable LEDs. The LEDs must be controlled by a SoundExtreme, LEDCast-enabled controller or radio (ExtremeControllers and Marine Radios sold separately).
- **Important:** Do **NOT** make modifications to the speaker LED cable connectors. Do **NOT** connect this product to any other manufacturers' LED controller. Connecting this product to any other manufacturer's product may cause permanent damage to the product and shall **VOID THE PRODUCT WARRANTY**.
- **BEFORE** installation, disconnect any and all negative leads from the battery's negative (-) terminal. Disconnect the stereo's lead to prevent damage to the unit, fire, and/or possible injury.
- **BEFORE** wiring and completing connections, you **MUST** turn off the Audio System and the LED Lighting Controller **BEFORE** making any connections to the source units. Failure to do so could result in permanent damage to the Audio System, the controller, or the 6.5" Wired Speakers.
- When using the Extension Cable and/or connecting two wires, make sure to seal the connection either by using electrical tape or heat shrink tubing (not included). Failing to do this may result in long-term corrosion on the connection and cause a premature malfunction.

**CAUTION:** After taking the product out of the polyethylene bag, be sure to dispose of the polyethylene bag out of the reach of children. Children may play with the bag, which could result in the child's suffocation.

# 6.5" Wired Speakers Overview

## Extreme 6.5 inch LEDCast Speakers Layout



# 6.5" Wired Speakers Overview

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## Audio and LED Control Connectors and Cables

### Speaker Audio and LED Lighting Control Connection Jacks

The 6.5" Wired Speaker has 2 input Connection Jacks on the back.

1. 2-pin Audio Input (Positive + and Negative -) to connect to an external Audio Source (audio power amplifier or radio).
2. 3-pin LED Lighting Control Input to connect to an external LED Lighting Controller.

### Cables

Your package includes two connector cables and LED extension cables.

1. Audio Connector Cable
  - A 2-pin connector is on one end, and on the other end are two bare wires for speaker audio input (Positive + and Negative -).
2. LED Lighting Control Connector Cable
  - A 3-pin, round Aviation Connector is on one end, and on the other end is a 3-pin LED connector.
3. LED Extension Cables — Depending on the distances between your speakers and the LED Lighting Controller, you may need to use the provided LED Extension Cables.

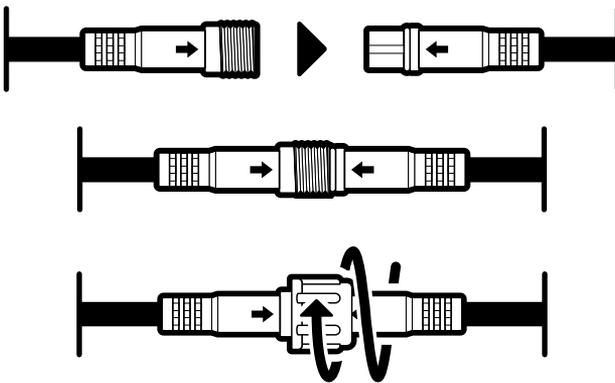
**Note:** Speaker audio extension cables are **NOT** included in the package. Obtain high-quality, marine speaker cables with your required length to minimize signal or power loss. 16 AWG speaker cable is recommended. When you connect the cables, make sure the connections are sealed (e.g., with electrical tape or heat-shrink tubing) to prevent potential wire corrosion due to water or moisture penetration.

- Two LED Extension Cables and one Y Splitter Cable are included. The two LED Extension Cables are used to extend the

## 6.5" Wired Speakers Overview

connection from your speakers' LED inputs to an LED Lighting Controller (such as the ExtremeController, sold separately). You have two wiring options:

- i. Connect each speaker's LED Cable directly to an output jack on the ExtremeController with an Extension Cable. This will allow you to change the Light Modes on the two speakers independently.
- ii. Connect each speaker's LED Cable to an Extension Cable, then connect the two extension cables to the Y Splitter and then connect the Splitter to **ONE** control output jack on the ExtremeController. This will allow you to change the Light Modes on both speakers simultaneously.



- For the LED Extension Cable, connect the 3-pin male connector on the LED Lighting Control Connector Cable to the 3-pin female connector on the included LED Extension Cable. Align the arrow on both connectors, push-in, and screw the nut cap on the female connector.
- Make sure the cable does **NOT** touch any moving parts on the vehicle. If the cable is longer than required, do **NOT** cut the cable and reconnect. Instead, wrap the extra length on your vehicle and fasten the cable with zip ties. Please ensure the cable does **NOT** touch or drag on the ground **AND** is safely secured to prevent it from coming into contact with any moving parts.

# Installation and Wiring

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## Before Installation

### 1. Speaker Grill Color Selection

- Your package includes 2 sets of grill covers: one white set and one black set. Choose your favorite set for the installation.

### 2. Mounting considerations

- When you plan the speaker installation, please ensure that the mounting surface is flat for best sealing and has sufficient depth and air space behind the speaker.
- Refer to the speaker dimensions in the Specifications to determine the proper diameter hole to cut out and ensure that the correct and appropriate opening is provided for the speakers.
- A mounting template for each speaker is included with the packaging.

**CAUTION:** Be sure to use the stainless-steel screws that are provided. The stainless-steel screws are intended to assist in preventing corrosion.

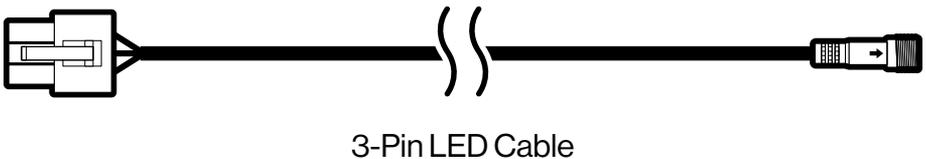
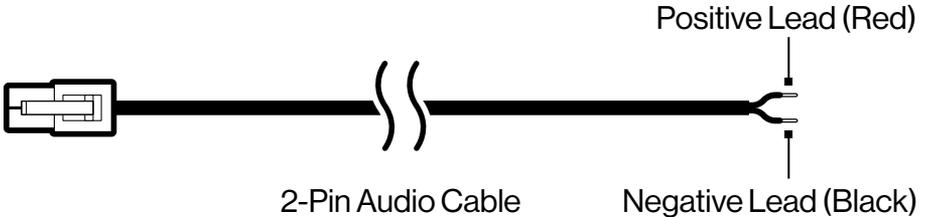
### 3. Wiring considerations

- For safety, disconnect any and all negative leads from the battery prior to beginning the installation.

**RECOMMENDATION:** It is recommended that you run all wires prior to putting your speakers in place.

## Mounting and Wirings

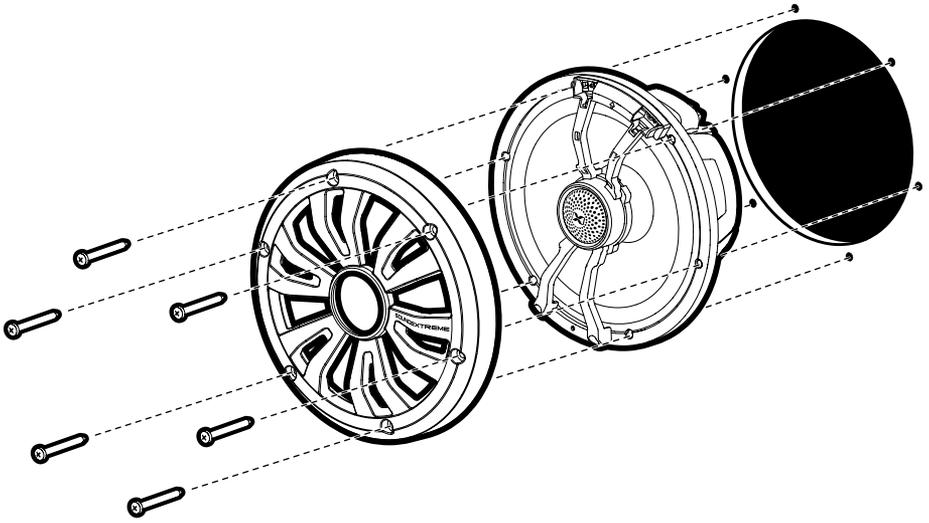
1. When cutting a mounting hole for your speaker, you may use the included template. Secure it to the selected location. When placing the template on the mounting surface, orient the template so the “Top” mark on the template is on the top. This is to ensure that the SoundExtreme logo on the front of the speaker is orientated properly.
2. Draw the cutting line along the inner circle of the template. Mark the screw hole locations.
3. Drill a pilot hole in each of the 6-screw-hole locations and cut the hole for mounting the speaker.
4. Run the audio and LED cables from the Audio Source and the LED Lighting Controller to the hole opening.



5. Plug in the Audio Cable into the 2-pin Audio Jack and the LED Cable into the 3-pin LED Jack on the speaker.

# Installation and Wiring

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6. Fit the selected grill over the speaker.
7. While holding the speaker firmly in its mounting location, mount the speaker with the included 6 screws.
8. Tighten the screws until the speaker is snugly in place to prevent rattling. Do **NOT** over tighten the screws.

## Connecting your Speakers to an Audio Source and LED Light Controller

You **MUST** turn off the Audio System and LED Lighting Controller before making any connections to these Source Units. Failure to do so could result in permanent damage to the Audio System, the controller, or the wired speakers.

### Speaker Audio Connections

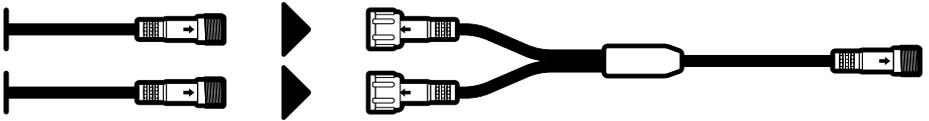
1. For stereo sound output, connect the speaker on your left to the left channel audio output, and the speaker on your right to the right channel audio output on your audio power amplifier.
2. For each speaker, connect the Speaker + (positive) and Speaker – (negative) leads on your audio extension cable to the corresponding terminals on your audio power amplifier.

# Installation and Wiring

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## LED Lighting Control Connections

1. Connect the 3-pin male connector on your LED Extension Cable to the 3-pin female connector on the LEDCast enabled controller. Align the arrow on both connectors, push-in, and screw the nut cap on the female connector.
2. Make sure the cable does **NOT** touch any moving parts on the vehicle. If the cable is longer than required, do **NOT** cut the cable and reconnect. Instead, wrap the extra length on your vehicle and fasten the cable with zip ties. Please ensure the cable does **NOT** touch or drag on the ground **AND** is safely secured to prevent it from coming into contact with any moving parts.



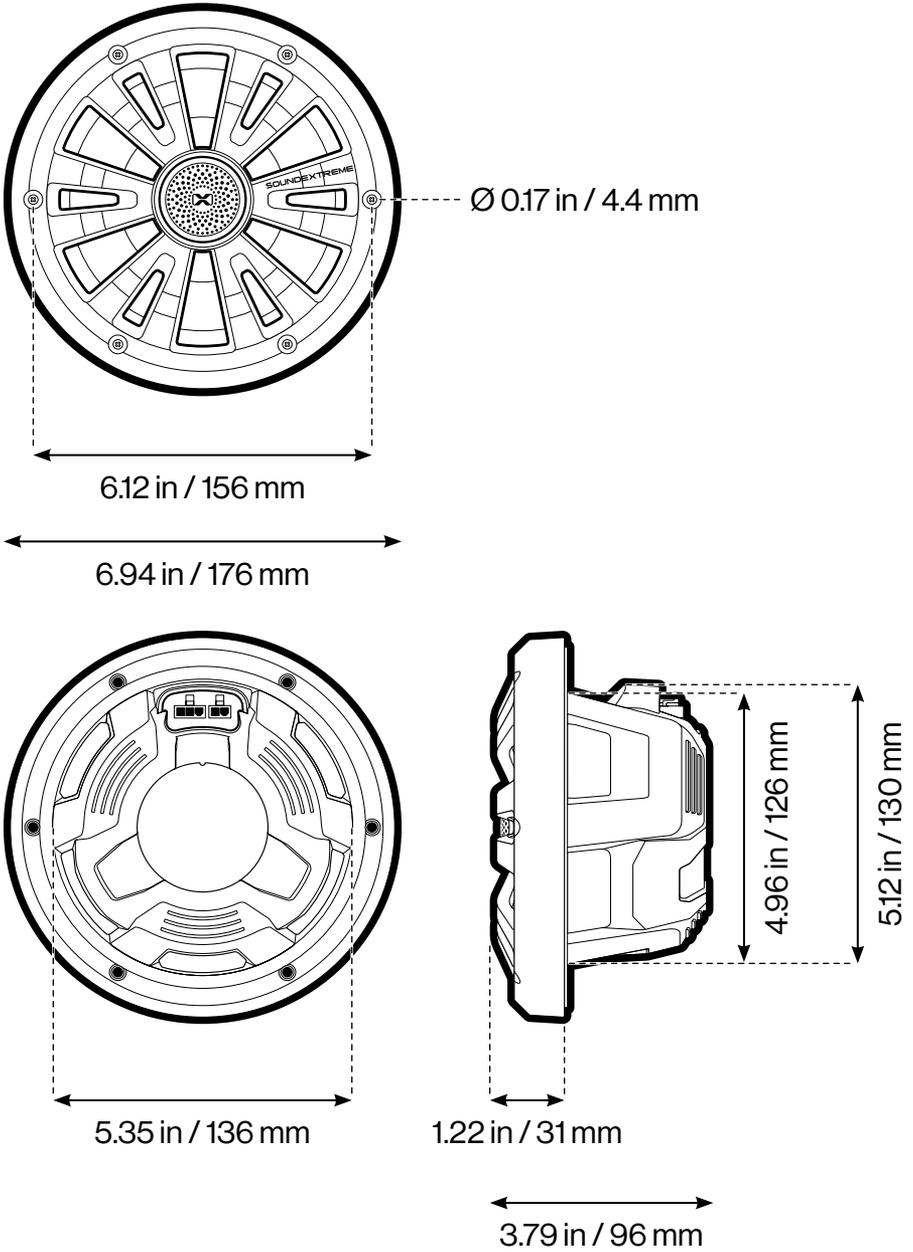
**Optional:** If you want the LED Party Lights on both Wired Speakers controlled by one ExtremeController LED lighting output, you can attach the LED Extension Cables to each speaker and connect both cables to the LED Extension Cable Splitter. Then connect the Splitter to one ExtremeController LED lighting output.

## **Turn ON Your Audio Power Amplifier and LED Lighting Controller**

1. When you turn on your audio power amplifier, it is highly recommended that you set your amplifier gain properly. For example, set your receiver volume to 80% of the maximum setting and then slowly turn up the volume. When you start hearing distortion, turn down the volume control by one step to set the gain.
2. For the LED lighting control, please refer to the user guide of the SoundExtreme LED Lighting Controller that you may have purchased (e.g. ExtremeController 4-Zone LED Controller or Marine Radio).

# Specifications

## Dimensions



## **Weight**

2.29 lbs / 1.04 kg

## **Power Output**

200 Watt peak (65 Watt RMS)

## **Tweeter**

1.5" (38 mm) tweeter, 4 ohms

- **Frequency Response**

2.2KHz~20KHz

- **Sensitivity**

92dB  $\pm$  3dB @ /1W/1m

## **Woofers**

6.5" (165 mm) low and mid-range  
woofer, 4 ohms

- **Frequency Response**

75Hz – 5KHz

- **Sensitivity**

89dB  $\pm$  3dB @ /1W/1m

## **Built-in two-way crossover network**

## **Speaker LEDs**

Addressable RGB LEDs

## **Storage Temperature**

-40°F to 122°F / -40°C to 50°C

## **Operating Temperature**

23°F to 95°F / -5°C to 35°C

# Important Legal Information

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## FCC STATEMENT:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1.) This device may not cause harmful interference, and
- 2.) This device must accept any interference received, including interference that may cause undesired operation.

**WARNING:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** To maintain compliance with FCC's RF Exposure guidelines, this equipment should be installed and operated with minimum distance between 20cm the radiator to your body.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: reorient or relocate the receiving antenna, increase the separation between the equipment and receiver, connect the equipment into an outlet on a circuit different from that to which the receiver is connected, consult the dealer or an experienced radio/TV technician for help.

## RF WARNING STATEMENT:

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

## IC STATEMENT:

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- 1.) This device may not cause interference, and
- 2.) This device must accept any interference, including interference that may cause undesired operation of the device.

## PRODUCT USE AND PROTECTION:

**Read and follow all instructions. Use only as intended.**

The Extreme 6.5" Wired Speakers are intended to be used indoors or outdoors and in land or water environments. The speakers have been tested to IP66 waterproofing standards, which means the speakers can be exposed to dust and water, but should not be submerged underwater. The speakers are **NOT** intended for underwater use.

Always make sure the cap(s) / cover(s) are clean, free from sand or debris, and correctly fitted. The speaker will only meet IP66 ratings if all rubber seals, gasket(s) and cover(s) / cap(s) are in place. If you notice a muffling of audio after submersion, gently shake the unit to clear excess water. If your speaker is exposed to salt water, clean it thoroughly after use with fresh water.

To prevent fire or shock, do **NOT** attempt to power this unit if it is wet or you suspect water has entered the unit. In this situation, please return the unit to Grace Digital for a free assessment. If we have found that the unit has carried water, we will repair or replace the unit free of charge.

## SAFETY ADVISORY & WARNING:

**Read and follow all instructions. Use only as intended.**

**CAUTION:** Do **NOT** open to repair. A qualified technician must carry out repair work.

**ATTENTION:** Make sure all connections are dry **BEFORE** connecting to a power source. Failure to do so may result in electrical damage to the unit and may void the warranty.

**⚠️WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**WARNING:** Danger of explosion if battery is incorrectly replaced.

**ATTENTION:** Do **NOT** dispose of in a landfill. Contact SoundExtreme at [www.gracesupport.com](http://www.gracesupport.com) or a certified recycling agent to dispose of the unit.

## SAFETY:

This product has a limited life span of use and should be replaced when it shows obvious signs of wear.

Do not modify or remove any original component parts of the speaker. Doing so could cause damage to the unit, allowing water to ingress. A unit with water ingress should not be charged due to potential risk of fire or shock.

# Important Legal Information

Please exercise care and good judgment when using your Extreme 6.5" Wired Speakers. Audio levels should be appropriate to your environment, comply with all local regulations, and always ensure that you can hear and be aware of any potential hazards around you.

## You should always

- 1.) Use the Extreme 6.5" Wired Speakers in accordance with any music or noise rules and regulations.
- 2.) Properly seal the Extreme 6.5" Wired Speakers prior and after each use when in humid or water environments to avoid water damage to the internal components. Salt water / air is particularly corrosive. Always make sure that the gaskets are sealed when in a salt water environment and that the unit is properly rinsed off after use.
- 3.) Properly clean the Extreme 6.5" Wired Speakers and ensure the gaskets have no sand, dirt, or water on them prior to storage.
- 4.) Store your unit with all caps properly sealed to avoid long term internal moisture damage inside your unit.
- 5.) Return the unit to SoundExtreme if you suspect water ingress into the unit or if the unit has experienced a severe impact that may have affected the integrity of the unit to take on water.

## You should never

- 1.) Never power your Extreme 6.5" Wired Speakers if you suspect water has entered the device. Powering a device with water inside could be potentially hazardous and cause fire or a spark.
- 2.) Never use your Extreme 6.5" Wired Speakers if you have dropped it on a hard surface which may have destroyed the integrity of the speaker, housing, or gaskets. In the event of a severe impact to your unit, please return the unit to SoundExtreme to review for potential damage.
- 3.) Never open the jacks in a water environment. This could cause water to ingress into the unit which could potentially be hazardous and cause a fire or a spark.
- 4.) Never attempt to fix, repair your Extreme 6.5" Wired Speakers. Please send it back to Grace Digital for any assessments and repairs.

## CARE, MAINTENANCE & PRECAUTIONS:

- 1.) The unit is waterproof only when the caps and door are properly closed.
- 2.) Close the caps and door properly before use. If the unit is placed in a water environment without the caps or door properly closed, water may enter into the unit and void your warranty.
- 3.) Dry unit completely before opening the caps. Do **NOT** open the caps if wet or in a wet environment.
- 4.) Do **NOT** apply excessive force to any surfaces of the unit when wet or in a wet environment.
- 5.) Do **NOT** use or store the unit in places with high temperature.
- 6.) **AVOID** prolonged exposure to ultraviolet radiation (UV sunlight) and strong magnetic fields.
- 7.) Periodically check the rubber seal on the caps and door for premature wear.
- 8.) Periodically clean the rubber with a soft moist cloth and ensure no objects such as dirt, hair, sand are on the rubber seal ring. Do **NOT** use any oily solvent or chemicals for cleaning.
- 9.) Rinse off the unit with tap water after use in salt water.

## LIMITED MANUFACTURER'S WARRANTY:

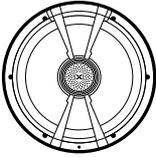
The Extreme 6.5" Wired Speakers are covered by a 1-year limited warranty that covers defects in workmanship and / or materials for a period of 1 year from original purchase date. This warranty does not apply to any products which have been abused, neglected, modified or used for a purpose other than the one for which they were manufactured. Please refer to the above care and maintenance instructions for suggested care details. The warranty is valid only for the original owner who purchases the unit from an authorized dealer. Transfers do not qualify for warranty protection. SoundExtreme reserves the right to replace any out-of-stock or discontinued product with a comparable product. Discontinued products may not be available for warranty replacement. Any contents are **NOT** covered by the limited manufacturer's warranty. Warranty terms may be revised without notification at the discretion of the manufacturer. Please visit [www.soundextreme.us](http://www.soundextreme.us) for additional product & warranty information.



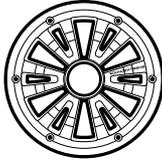
Extreme 6.5" Wired Speakers by SoundExtreme Inc., Houston, Texas.  
Designed in Texas. Made in China.

This product is protected under patent US 9,307,307 B2 and several patents pending.

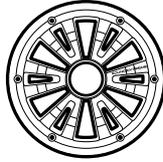
# What's in the Box



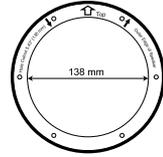
(2 pcs) 6.5"  
Speakers



(2 pcs)  
Black Grills



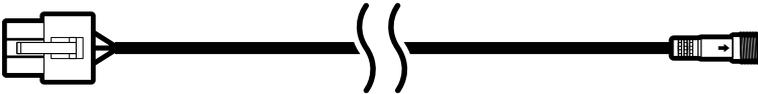
(2 pcs)  
White Grills



(2 pcs) Mounting  
Templates



(2 pcs) 2-Pin Audio Cables (11.81 in / 300 mm)



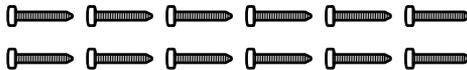
(2 pcs) 3-Pin LED Cables (11.81 in / 300 mm)



(2 pcs) 3-Pin LED  
Extension Cables



(1 pc) 3-Pin  
Y Cable Splitter



(12 pcs) PA 4x28mm Phillips-Head Stainless-Steel Screws

V06.23