



XTR6US XTR8US XTR1OUS

AMPLIFIED UNDER SEAT SUBWOOFERS





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Thank you for purchasing this Orion product. Orion products are specifically engineered and designed for the mobile audio environment. This manual contains important information about installation, set-up procedures and integrating your new Orion product into your vehicle. With proper care and installation, your new product will provide you with many years of high performance listening enjoyment. We recommend having an Authorized Orion Dealer install your new product for optimal performance. Before installing your new product, please read through the manual to fully understand the application.

Before making any electrical connections, make sure that you disconnect the battery's ground cable to prevent the possibility of short circuits or damage to your electronic equipment. If your vehicle's stereo (head unit) comes with an Anti-theft code, DO NOT disconnect the battery. If you have the access code for the stereo (head unit), please refer to the vehicle's owner's manual.

## **ATTENTION**

# FOR ANY QUESTIONS, ISSUES, RETURNS OR WARRANTY

po NOT contact the retailer, we recommend that you contact our service department for any and all assistance at <a href="mailto:support@orioncaraudio.com">support@orioncaraudio.com</a>.

We will do our best to resolve any problem in a professional and timely manner.

#### WHAT'S IN THE BOX

1 x XTR Under Seat Powered Subwoofer

1 x Owner's Manual

1 x Window Sticker



**WARNING:** This product can expose you to chemicals including DEHP which is known to the State of California to cause cancer, birth defects or other reproduction harm. For more information go to **www.P65warnings.ca.gov.** 

## **SPECIFICATIONS**

## **MOUNTING THE SUBWOOFER**

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Model Number	XTR6US	XTR8US	XTR10US
Size	6" x 8"	8"	10"
Bass Boost	0 - 12 dB	0 - 12 dB	0 - 12 dB
Low Pass Filter	50 - 150 Hz	50 - 150 Hz	50 - 150 Hz
Frequency Response	30 Hz - 150 Hz	30 Hz - 150 Hz	30 Hz - 150 Hz
Signal to Noise Ratio	>90dB	>90dB	>90dB
Phase Switch	0°/180°	0°/180°	0° / 180°
RMS	150W	250W	300W
Max Power	600W	1000W	1200W
Dimensions:	10.24" x 7.64" x 2.95"	11.02" x 8.78" x 2.56"	11.81" x 9.65" x 2.56"

Shared Features		
P.W.M Mosfet Power Supply		
RCA Input / High Level Input		
Remote Contol for Subwoofer Level		
Auto-Start Switch (on or off)		
4 Way Protection System		
Illumination: Blue / Red LED		

#### Introduction

These are slim-profile underseat amplified subwoofer designed to fit easily beneath most vehicle seats. It provides a convenient and effective way to add powerful bass to any car audio system.

This system features an integrated amplifier with a built-in low pass crossover and adjustable input sensitivity ranging from 0.12V to 3.5V.

The XTR under seat subwoofer supports both high-level (speaker level) and low-level (RCA) inputs, making it universally compatible with factory or aftermarket head units and other audio sources.

An external bass level controller is included to help fine-tune the subwoofer output. This controller connects directly to the subwoofer and is typically installed in a location accessible to the driver for easy real-time adjustments.

#### **Mounting the Subwoofer**

- Choose a suitable mounting location inside the vehicle—ideally beneath the driver's or front passenger's seat.
- Ensure the selected area provides adequate air circulation to maintain proper cooling of the subwoofer during operation.
- Securely install the subwoofer using the screws and mounting brackets provided in the packaging. Make sure the unit is firmly fastened and not loosely mounted to prevent movement or damage while driving.

## WIRING CONFIGURATION

## WIRING CONFIGURATION





- 1. Power/Protect LEDs: The 2 LED's located on the side of the amplifier provide indication of the amplifier status. The Power LED will light when the amplifier is receiving proper power, ground and remote voltages. The second LED will light when the amp goes into protection mode.
- 2. Phase Shift: Use this button to help compensate for time alignment problems. Such problems usually result from having the subwoofer positioned at a different distance from the listener than the other speakers in the system.
- 3. Auto Power-on: The auto power-on function is for high level (speaker level) connections. When the switch is in the "ON" position, the subwoofer will turn on when there is a signal input. If there is no signal input, the subwoofer will automatically turn off. If you prefer to use the remote turn-on function, leave the switch in the "OFF" position.
- 4. Low Pass Filter: This control permits you to define the frequency range you want the subwoofer amplifier to receive. The subwoofer will reproduce all sound below the frequency you set.
- 5. Bass Boost: This control will increase the sound level of the bass frequencies.
- 6. Input Gain Control: After you've installed your system, turn this control to minimum. Turn the head unit on (subwoofer will turn on via the remote connection) and set the volume to 2/3 full level. Slowly turn up the subwoofer input gain control until you hear a small amount of distortion. Now reduce the level until the distortion is completely gone. The input gain control is now set.
- 7. Remote Level Control Port: Plug in the included remote level control to adjust the volume level of the subwoofer independently.
- 8. Low Level RCA Inputs: Low level inputs are the recommended way to introduce an audio signal to the subwoofer if RCA outputs are present on your head unit or other signal source (such as a sound processor).
- 9. High Level Input: These inputs, also referred to as speaker level inputs, allow you to connect to the factory speaker wires. They are called High Level inputs because they convert the high voltage running through factory speaker wires to one the amplifier can handle. These inputs will provide the end user with clean, well-defined sound for optimal musical enjoyment. Use the supplied cable and wire harness and connect the outputs properly as shown in the connection diagram in this manual.
- 10. Power Input Terminal

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11. Fuse: Do not use a fuse with a different value than the one provided.



#### **Low Level Input**

Low-level (RCA) input wiring is preferred for best audio performance. Most trunk and underseat installations will require a 6 – 12 foot RCA cable. Always use a high-quality cable.

#### Wiring

- 1. Connect the ground cable of the harness to the closest point on the chassis of the vehicle. Use 8 gauge (or heavier) wire to connect the ground cable.
- 2. Connect the remote cable of the harness to the remote output of the head unit using 16 gauge (or heavier) wire. Unit will not turn on if this cable is not connected.
- 3. Connect the +12V cables from the harness, using 8 gauge wire or heavier, to the positive (+) terminal of the vehicle's battery.

#### **High Level Input**

The high level input should only be used when your receiver lacks RCA outputs. Splice the high level input leads from the hardness directly to your head unit's speakers-level outputs. Be sure to observe polarity to avoid audio phase problems.

#### **Bass Remote**

Using the included bass knob cable, install the remote control securely under the dash or in a similar location where using it will not distract the driver.



## **TROUBLESHOOTING**



Investigate the layout of your vehicle thoroughly before drilling or cutting. Take care when you work near the gas tank, gas lines, hydraulic lines, electrical components and electrical wiring. Do not use the equipment unmounted. Attach this system securely to prevent damage, particularly in the event of an accident or aggressive driving. Do not mount the system so that wire connections are unprotected or are subjected to pinching or damage from nearby objects. Before connecting or disconnecting power connections at the system power terminals, disconnect the +12V DC wire at the battery end. Confirm that your source unit and other equipment are turned off while connecting the input terminals. If you need to replace the power fuse, replace it only with a fuse identical to the amperage recommended. Using a fuse of different type or rating may result in damage to the system, which is not covered by the manufacturer's warranty. Do not install any product where it may be subjected to excessive heat, moisture and dust or where it may be repeatedly kicked, brushed or bumped. Make absolutely sure that the terminals for the products are connected to the proper inputs and outputs from the music source. Never run the wiring on the outside of the vehicle or under it where it can be damaged by road hazards or any moving parts of the vehicle. Use existing wire channels, sills, panels and molding strips inside the vehicle to hide the wiring for safety and a neat appearance.

#### **DISCLAIMER**

IMPORTANT: Never cut any metal that is an integral part of the vehicle's safety or structural support system. If you are unsure, it is best to have the product professionally installed by an Authorized ORION Dealer. Never sacrifice your safety for sound.

Symptom	Check Point	Remedy	
No Soud	Is the amplifier power LED illuminated?	1. Check fuses in amplifier 2. Check turn-on lead 3. Check signal lead 4. Check gain control 5. Check source unit volume 6. Clean contacts on fuse holders	
	Is the amplifier overload LED illuminated?	Check speaker for short or amplifier for overheating	
	Check impedance with Ohm meter	If no reading, replace speaker	
	Check that the speaker moves freely	If speaker won't move, replace speaker	
Speaker is making a rattling noise	Check that speaker is secured properly and tightened with screws	Tighten mounting screws	
	Check enclosure construction	Check that the enclosure is debris free	
	Check speaker polarity	Correct polarity	
No sound from one coil	Check speaker leads	Inspect for short circuits     Check for open connections  Reverse left and right speaker leads to determine if it is	
Speaker is distorting at high volume levels	Check speaker load impedance capabilities for the amplifier	Confirm that the speaker load impedance recommendations are followed. Check the wiring configuration of the speaker. (To verify proper load impedance, use an OHM meter to measure the total load for each channel of the amplifier.	
	Verify that amplifier and/or crossover settings are correct	Select low-pass setting	

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### WARRANTY

## WARRANTY

Orion, warrants this product against all defects in material and workmanship for a period of one (1) year from the date of original purchase provided it was purchased from an Authorized Orion Dealer.

The conditions of this warranty and the extent of the responsibility of Orion, under this warranty are as follows:

- DATED PROOF OF PURCHASE IS REQUIRED FOR WARRANTY SERVICE OF THIS PRODUCT. Information about Orion authorized warranty service may also be obtained at <a href="https://www.orioncaraudio.com">www.orioncaraudio.com</a> or by emailing Orion at <a href="mailto:support@orioncaraudio.com">support@orioncaraudio.com</a>.
- 2. This warranty will become void if service is performed by anyone other than an approved Orion Warranty Service Center.
- 3. This warranty does not apply to any product which has been subjected to misuse, neglect or accident, or which has had the warranty seal broken, serial number altered, defaced or removed, or which has been connected, installed adjusted or repaired other than in accordance with the instructions furnished by Orion.
- 4. This warranty does not cover car static, electrical interference, adjustments or labor costs for the removal or reinstallation of the unit for repair.
- 5. The sole responsibility of Orion under this warranty shall be limited to the repair or replacement thereof, at the sole discretion of Orion.
- 6. If it becomes necessary to send the product or any defective part to Orion or an authorized service station, the product must be shipped in its original or equivalent carton, fully insured, with shipping charges prepaid. Orion will not assume any responsibility for any loss or damage incurred in shipping.

- 7. This warranty is not transferable and protects the original purchaser provided they reside and made their purchase in the United States. International consumers may contact their local retailer or distributor for warranty information.
- 8. ALL IMPLIED WARRANTIES, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, SHALL HAVE NO GREATER DURATION THAN THE WARRANTY PERIOD SET FORTH ABOVE. UNDER NO CIRCUMSTANCES SHALL ORION BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECT OR CONSEQUENTIAL, ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT BECAUSE SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR EXCLUSIONS OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.
- 9. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE.
- 10. Should you have any difficulties with the performance of this product during warranty or with any Orion authorized service center, you may contact Orion by emailing us at support@orioncaraudio.com.

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