



OLC2

**2 CHANNEL LINE OUTPUT
CONVERTOR WITH BASS PROCESSOR**

proud to be LOUD!

Power Requirement:

- Ensure that the OLC2 unit is always supplied with a constant +12V power source.

Selecting a Mounting Location:

- Choose a suitable place for mounting the OLC2 that allows easy access to its controls and connections.
- Ensure the location protects the unit from excessive heat, moisture, and dirt.

Mounting the OLC2:

- Use the integrated mounting brackets provided with the OLC2 to securely mount it in the chosen location.

Pre-Drilling Precautions:

- Before drilling any holes, check to prevent any potential damage to the vehicle's fuel lines, electrical wiring, hydraulic brake lines, and other critical systems that could compromise safety.

Power Connections:

- Connect the +12V input terminal of the OLC2 to the +12V terminal of the vehicle's battery or a distribution block using 16 to 14 AWG wire.

Ground Connections:

- Connect the Ground terminal of the OLC2 to the Ground/Negative terminal of the battery or distribution block using the same gauge wire as used for the +12V power connection.

Remote Turn-On Connection:

- To enable +12V remote turn-on, set the Trigger Mode switch to "Rmt In."
- Connect the Remote In (Rmt In) terminal of the OLC2 to a remote turn-on switch. Alternatively, you can use AST Auto Sense Technology or Audio Sense to automatically trigger the unit without needing a remote wire.

Speaker Level Inputs:

- Connect the Speaker Level Inputs of the OLC2 to the left and right outputs of your factory head unit or amplifier.

Running the Remote Bass Wire:

- Run the remote bass wire to the front of your vehicle for easy access and control.

Adjusting Input Gain:

- Use the Main and Bass Output Level knobs on the OLC2 to adjust the input gain according to your preferences and system requirements.

Connecting Output RCAs:

- Connect the Main and/or Bass Output RCA cables from the OLC2 to your aftermarket amplifier.

Adjusting TRUBASS:

- Fine-tune the TRUBASS settings using the TRUBASS Threshold and Level knobs to achieve the desired bass response.

Enjoying Your System:

- Once everything is connected and adjusted, your installation is complete!

Power: While it's fantastic that the OLC2 offers three different ways to be turned on, it is crucial to remember that the OLC2 must be connected to a constant +12V power source and a ground.

Perhaps in the future, science will discover a method to power devices using the electrifying energy of a Jimi Hendrix guitar solo, but until then, we rely on good old +12V power and ground connections.

Remote Turn-On Options:

- 1. AST** - Audio Sense Technology is a technical term that refers to the OLC2's ability to detect when the head unit is powered on, even if audio isn't actively being sent to the OLC2. When your factory sound system produces a signal upon powering on, you should use the AST Auto Sense Technology mode. This mode leverages the unit to trigger the OLC2, ensuring it powers on in sync with your head unit.
- 2. AUDIO** - When Signal Audio Sense mode is selected, the OLC2 will only turn on when audio is actively being played. This means that whether you are using the radio, CD player, or streaming from a device, the OLC2 will power on only when audio is detected. If you turn on the head unit but do not play any audio, the OLC2 will remain off.
- 3. RMT-IN** - Using the traditional remote turn-on method for the OLC2 provides precise control over when the unit powers on. Common places to connect the remote input include the vehicle's ignition, fuse box, or any other +12V source. This method ensures the OLC2 turns on only when you want it to, giving you greater control over your system.

Ground Configuration Switch: The OLC2 features a convenient switch that allows you to change how the unit is grounded. This is particularly useful for eliminating unwanted noise such as "ground buzz" or "alternator whine" that can interfere with your listening experience. The switch has three positions: GND, ISO, and 200 ohms.

GND: Direct grounding.

ISO: Isolated grounding, which is the factory default setting.

200 ohms: Provides a 200-ohm resistance for grounding.

The unit ships from the factory in the ISO position to help mitigate common ground loop issues. Adjusting this switch can help optimize your system's performance and eliminate noise.

Load Selector Switch: The OLC2 is engineered to present no load to the output of the factory amplifier. However, this can cause some factory amplifiers to stop passing audio. The Load Selection feature of the OLC2 addresses this issue by mimicking a speaker load, ensuring that the factory amplifier continues to function correctly.

20 Ω : Ideal for late-model Dodge/Chrysler/Jeep/Ram/Fiat vehicles equipped with the OEM base sound system (without a separate factory amplifier).

60 Ω : Suitable for late-model Dodge/Chrysler/Jeep/Ram/Fiat vehicles with a separately amplified OEM “premium” sound system.

20 k Ω : Best suited for all other applications.

This feature ensures compatibility with various factory sound systems, preventing audio cutoffs and maintaining seamless operation.

Settings Level:

Main Output - The OLC2 provides a fixed full range output, which is perfect for connecting to multi-channel amplifiers intended for door speakers. You can adjust the output level using the Main Output Level knob to achieve the desired audio performance for your system. This allows for precise control over the volume and quality of sound being sent to your door speakers.

Bass Output - The OLC2 also offers a variable low-passed output with a 1000 Hz low pass filter, making it ideal for connecting to a subwoofer amplifier. You can adjust the output level using the Bass Output Level knob. Once the Bass Output level is optimized for the best signal, you can conveniently adjust the level on the fly using the included Bass Controller level control. This ensures your subwoofer delivers the desired bass response tailored to your listening preferences.

Maximized LED: The OLC2 is equipped with a Maximized Light to help you achieve the optimal output level and prevent clipping. To use it, start by setting your factory sound system to its maximum undistorted volume. Then, adjust the output level of the OLC2 to match the input maximum of your aftermarket amplifier. Keep an eye on the Maximized Light: if it turns on, it indicates that the OLC2 output is distorting. In this case, lower the output level until the light turns off. If the Maximized Light never turns on, don't panic—this simply means the output of the OLC2 is not clipping or distorting. This process ensures that your OLC2 delivers the best possible signal without compromising the quality and integrity of your audio system.

Remote Bass Controller: The Bass Controller is an excellent tool for managing the Bass Output level sent to your subwoofer amplifier. It exclusively controls the Bass Output level and functions strictly as an attenuator knob. This means it will never increase the Bass Output level beyond the setting of the Bass Output Level knob, allowing for precise control without the risk of overpowering your subwoofer.

Setting TruBASS: TruBASS is a feature designed to restore bass frequencies on factory systems that roll off the bass as the volume increases. If you notice that the bass does not increase as you turn up the volume on the head unit, your factory system is likely rolling off the bass. During the initial setup, you can use two TruBASS controls and a status LED. The TruBASS Threshold determines when TruBASS activates, while the TruBASS Level adjusts the amount of bass restored. The status LED will illuminate when TruBASS is active, indicating that the feature is working to enhance your bass response.

1. Turn Down TruBASS Threshold: Rotate the TruBASS Threshold knob all the way down (counterclockwise).
2. Set TruBASS Level: Position the TruBASS Level knob at the 12 o'clock position.
3. Play Familiar Music: Play some bass-heavy music that you are familiar with.
4. Increase Volume: Gradually increase the volume of the head unit until you notice the bass starting to drop out (roll off). Stop increasing the volume at this point.
5. Adjust TruBASS Threshold: Slowly turn the TruBASS Threshold knob to the right (clockwise) until the status LED illuminates and you hear the bass being restored. Stop adjusting the TruBASS Threshold.
6. Fine-Tune TruBASS Level: With the TruBASS Threshold set, you can now adjust the TruBASS Level knob to your liking.

Following these steps will ensure that TruBASS is correctly set up to restore the bass frequencies that may be lost at higher volumes, providing an optimal listening experience.

If the sound system in your vehicle does not reduce bass output at higher volumes, TruBASS can either be defeated or used continuously without the threshold setting.

To defeat (turn off) TruBASS, turn the TruBASS Threshold knob all the way down (counterclockwise) and the TruBASS Level knob all the way down (counterclockwise).

If you prefer to keep TruBASS on all the time, so it doesn't turn on or off at a set threshold, turn the TruBASS Threshold knob all the way up (clockwise). With this setting, TruBASS will remain active regardless of the head unit volume. You can then adjust the TruBASS Level knob to your liking for continuous bass enhancement.

Remote Output - Utilize the Remote Output (Rmt Out) on the OLC2 to trigger your aftermarket amplifier. The Remote Output will be active whenever the OLC2 is turned on, regardless of the method used to activate it.

Important Note: Do not connect more than two amplifiers to the OLC2 Remote Output. Exceeding this limit may cause damage to the OLC2.



SPECIFICATIONS

1. Speaker Level Inputs (40V /400W Max Input)
2. Remote Control Input
3. Power Connector (Requires Constant +12V)
4. Power Status LED
5. Load Selector Switch
6. Trigger Selector Switch
7. Ground Isolation Switch
8. TruBASS Level Knob
9. TruBASS Status LED
10. TruBASS Threshold Knob
11. Main Output Level Knob
12. Bass Output Level Knob
13. Bass Outputs (variable with included Bass Contoller)
14. Maximzed LED
15. Main Outputs

MAXIMUM INPUT HANDLING (400W MAX INPUT)
 MAXIMUM OUTPUT LEVEL: 9.5Vrms
 OUTPUT GAIN +/- 12dB
 VARIABLE INPUT SELECTOR: 20Ω, 60Ω, 20kΩ
 VARIABLE OUTPUT LEVEL: +/- 12dB
 FREQUENCY RESPONSE: 20Hz - 50kHz
 TOTAL HARMONIC DISTORTION: 0.01%
 SIGNAL TO NOISE: >110 dB
 POWER CONSUMPTION: 200mA
 RECOMMENDED FUSE RATING: 1 AMP
 DIMENSIONS: 6.9 x 3 x 1" | 175 x 76 x 25mm

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:

1. DATED PROOF OF PURCHASE IS REQUIRED FOR WARRANTY SERVICE OF THIS PRODUCT. Information about Orion authorized warranty service may also be obtained at www.orioncaraudio.com or by emailing Orion at support@orioncaraudio.com.
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.
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