2 Channel Adjustable, Line Output Converter (LOC) with Built-in Amplifier Remote Generator

The LOC is designed to convert (2) channels of speaker level audio into (2) channels of line level audio that can be used by OEM amplifiers. It can also be used with OEM radios to add aftermarket amplifiers. This device will also detect the presence of an audio signal and then generate a +12V output that can be used to turn-on an aftermarket amplifier.

Features and specifications
The LOC is able to handle 40 watts per channel continuous input without overheating. The input circuitry is designed to correct the crossover distortion commonly found on standard LOCS, while providing a high to low level step down of 6:1. Output audio level is adjustable using the onboard, high quality potentiometers. The remote output or amplifier trigger is rated at 500mA (+12V) and will easily handle an outboard relay if additional current is needed. The remote output will trigger instantaneously when the LOC detects a DC voltage on the white, left + audio input wire above 5V or a very low audio signal. It will shut off 60 seconds after no signal is detected.

Installation
The LOC should be installed on a stereo’s speaker output wires, or the output wires on an OEM amplifier of up to 40 watts per channel. These wires can be found behind the stereo in the dash, on the output of an OEM amplifier, or on the input terminals on the OEM speakers. Please refer to the wiring diagram for the input connection details.

(Continued on other side)
Wire color and function
The audio and power input wire colors are an EIA standard for car stereo applications as follows:

The following (2) wires can be connected directly to the amplifier being installed for simplicity:

- **Yellow** = battery +12v input
- **Black** = ground input
- **Blue** = remote +12v output
- **White** = left front (+) input
- **White/Black** = left front (-) input
- **Gray** = right front (+) input
- **Gray/Black** = right front (-) input
- **Black/White** = reference ground (-) (optional if noise is present)

**Note:** Be sure that all audio input connections are in phase (polarized) with each other. Failure to do this will result in poor bass response and low quality audio.

**Adjusting the LOC for maximum performance:** After completing all of the necessary connections, turn the LOC adjustment pots all of the way down by rotating them completely counter-clockwise. Next, turn the stereo system on and adjust the main volume control on the stereo to approximately 3/4 maximum volume. Select one of the adjustment pots on the LOC and turn it slowly clockwise until you notice audio distortion and then stop. Turn the remaining pots to the same position as the previously adjusted pot. The audio set-up of the LOC is now complete and ready to be enjoyed.

**CAUTION!** All accessories, switches, climate controls panels, and especially air bag indicator lights must be connected before cycling the ignition. Also, do not remove the factory radio with the key in the on position, or while the vehicle is running.

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