

Line Output Converter

User’s Manual

CLOC2/4/6 MANUAL

Thank you for purchasing a Ciare line output converter!

We designed the CLOC2/4/6 modules to allow the addition of aftermarket equipment to a factory-installed head unit.

When installed properly they can be expected to give you years of trouble free operation. To ensure ease of use and proper setup please take a moment to thoroughly read through this operation manual.

We hope you enjoy this product, and if you have any questions regarding the setup or installation please contact us at www.ciareusa.com.

CLOC2/4/6 DESIGN FEATURES

- Input summing (CLOC2/4/6)
- Differential balanced inputs
- Independent variable gains
- Selectable ground isolation
- Load Detection
- Selectable signal sense, DC Offset or 12v+ Turn On

TECHNICAL SPECIFICATIONS

	CLOC2	CLOC4	CLOC6
Channels In/Out	2ch	4ch	6ch
Operating Voltage	8-16V	8-16V	8-16V
Current Draw, No Signal	80mA	110mA	120mA
Input Impedance	1kΩ	1kΩ	1kΩ
Max Output Voltage	10V	10V	10V
Channel Separation	≥60dB	≥60dB	≥60dB
Output THD	0.01%	0.01%	0.01%
Sig/Noise	≥100dB	≥100dB	≥100dB
REM OUT Current	12V, >500mA	12V, >500mA	12V, >500mA
Frequency Response	10Hz~50kHz+/-3dB	10Hz~50kHz+/-3dB	10Hz~50kHz+/-3dB
Input Voltage	<40V	<40V	<40V
Dimension mm	83.4x80x25	98.4x90x25	116.4x90x25
Dimensions Inches	3.3x3.1x1	3.9x3.5x1	4.6x3.5x1

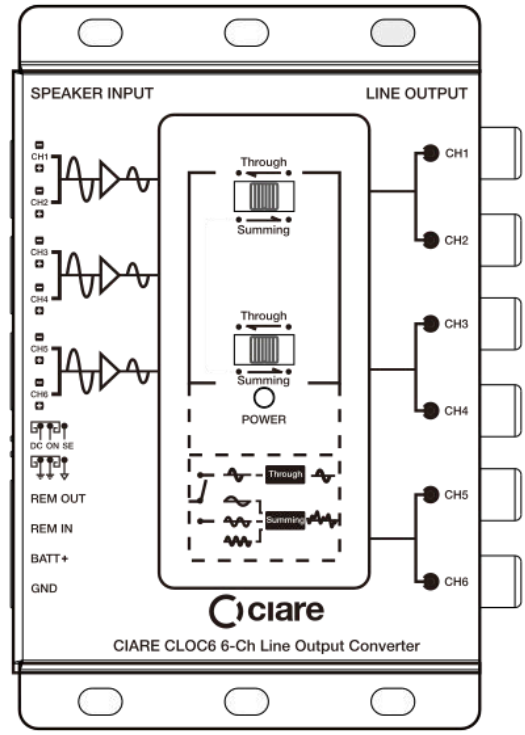
INPUT/OUTPUT CONNECTIONS

SPEAKER INPUT:
Connect to high-level (speaker-level) output from your factory audio system. Typically, users should install the line output converter as close to the head unit as possible, connecting it directly to the head unit speaker outputs.

TURN ON JUMPER:
- **DC-ON:** Use this jumper position for DC Offset detect turn-on (recommended).
- **ON-SE:** Use this jumper position for Signal Sense turn-on.
- **12V +REM IN**
  Remove Jumper for remote turn on from a switched 12V circuit
- **GROUND JUMPER:** The bottom jumper position is the default chassis ground setting and should be proper for most installations.

  If signal noise is present move the jumper to the top position. This will isolate the ground from the RCA shield.

NOTE: Only insert the jumpers vertically. **DO NOT** insert them horizontally.



REM OUT:
Provides a 500mA 12-volt switched turn-on signal for your aftermarket devices.

NOTE: The REMOTE OUT is not to be used as the main power for these devices. An additional relay may be required for multi-device turn-on if remote current is exceeded.

REM IN:
Connect this terminal to a switched 12-volt wire from your source unit to remotely turn the CLOC on and off. Remove the Turn On jumper for this mode.

BATT+:
Connect this terminal to a constant 10-16V source, such as your battery.

GND:
Connect this terminal to a verified chassis ground.

DO NOT connect to a factory ground wire. Factory ground wires usually have multiple devices connected to them and can lead to ground loop issues.

POWER LED: When illuminated, this indicates the CLOC is powered on.

THROUGH/SUMMING SWITCH: When set to **THROUGH** the inputs will pass through to the corresponding outputs.

When set to **SUMMING** the CLOC-2/4/6 will internally sum together input channels. This feature is used to achieve a full range signal when integrating with a factory system that has multiple, actively crossed-over signals from the OEM source unit.

If you only have signal connected to CH1-CH2 you can use the summing feature to send signal to all outputs.

MIN/MAX OUTPUT LEVEL CONTROLS:
Your CLOC has level-matching controls for each pair of output channels. These controls allow you to adjust the OUTPUT signal levels from your CLOC to match your aftermarket equipment.

LINE OUTPUT: Connect the CLOC LINE OUTPUT to your aftermarket equipment's low-level RCA inputs.