

CAR AUDIO AMPLIFIER

TPT-12000

USER MANUAL

Timpano is a PRV Audio Group Company.





Introduction

Thank you so much for choosing a TIMPANO product! The chosen amplifier has been developed with the most advanced technology for those who are looking for high performance audio systems with one or more speakers and "pro car audio" system.

Before installing

Please read this manual carefully.

- All product connections must be made with the product turned **OFF**.
- A fuse must be installed between the amplifier and the battery is required to protect against overcharging. The fuse has to be installed as close to the battery as possible. Check the proper fuse for the amplifier according to its consumption.
- Use gauges recommended in this manual to avoid the overheating of the cables to obtain maximum power.
- Keep the cables as short as possible to increase sound fidelity and avoid potential power losses.
- Route the installation cables as far away as possible from the original vehicle wiring as it may cause interference and noise in your audio system.
- Perform the installation in a firm, ventilated and dry place.
- Installation must be done by a qualified professional.

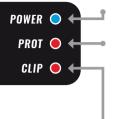
If you have questions, contact the store where the purchase or installation was made. For more information please contact our Customer Service: (954) 859-5529



Any updates made in this manual will be available for customers to consult without any charge on the brand's site. It is recommended that the updated manual be consulted whenever needed.

Images contained in this manual are merely illustrative and may differ from the actual product.

Indicators LED



POWER (blue LED): Indicates amplifier operation when it is on.

PROT (top red LED): Indicates that the amplifier encountered malfunctions and entered protection mode, forcing it to shut down. Verify in the **protection** table below the possible problem and turn on the amplifier again.

CLIP (lower red LED): Indicates signal distortion at the amplifier output.

Smart protection system

When the protection system detects a failure, the amplifier will turn off and the **PROT LED** will blink. For each type of failure, the LED will flash a certain number of times indicating the cause, as shown in the table below:



Diagnostic: Short circuit or output overload.



Solution: Check that the speaker cables are well insulated and that the output impedance does not exceed that supported by the amplifier.



Diagnostic: Excessive temperature. When the amplifier reaches approximately 194°F, audio is stopped and the coolers run at maximum speed to speed up the cooling process of the internal components.



Solution: Check if the amplifier is in a ventilated place or if the coolers are not obstructed. Keep the amplifier turned on for a few minutes for the coolers to assist in the cooling process.



Diagnostic: Supply voltage less than 9V.



Solution: Check voltage of battery or power supply.



Diagnostic: Supply voltage greater than 16V.



Solution: Check voltage of battery or power supply.

TPT-12000 OVERVIEW



- **1. COOLER:** It cools the amplifier. Install in a cool place being careful to not obstruct the air vents.
- **2. RCA JACK INPUT:** Input of the signal to be amplified. Connect to the radio/player using high quality shielded RCA cables to prevent unwanted noise.
- **3. LEVEL:** Level control for the signal at the amplifier's input.

4. CROSSOVER:

- **HIGH PASS FILTER (H.P.F.):** This variable control allows you to select the initial frequency from **5Hz** ~ **90Hz** that will be reproduced by the amplifier.
- LOW PASS FILTER (L.P.F.): This variable control allows you to select the final frequency from 90Hz ~ 7KHz that will be reproduced by the amplifier.

5. BASS BOOST:

- BASS: Variable control for bass boost from 0dB ~ + 10dB.
- FREQ: Variable control for bass boost frequency from 30Hz ~ 70Hz.
- **6. FLAT KEY:** This switch allows you to turn the **FLAT** mode on or off. Settings made on the **CROSSOVER** and **BOOST** controls will be turned off when using this mode.
- **7. OUTPUT CONNECTOR (SPEAKERS):** MONO output of amplified signal for speakers connection. Check the minimum impedance and polarities before performing the installation.

TPT-12000 OVERVIEW

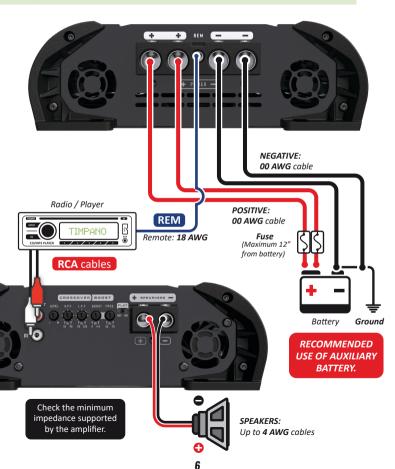


- **8. POSITIVE POWER SUPPLY CONNECTOR:** Connect to the positive battery terminal of the battery using a minimum **00 AWG** cable with a fuse/circuit breaker installed as close to the battery as possible.
- **9. REMOTE CONNECTOR (REM):** Allows automatic activation of the amplifier when turning on the radio/player. Connect to the remote output of the radio/player using a cable a minimum of **18 AWG**.
- **10. NEGATIVE POWER SUPPLY CONNECTOR:** Connect to the negative terminal of the battery using a cable with a minimum of **00 AWG**.

POWER CONNECTORS (POSITIVE/NEGATIVE)	00 AWG
REMOTE CONNECTOR (REM)	18 AWG
OUTPUT AUDIO CONNECTORS (SPEAKERS)	4 AWG
TPT-12000: FUSE / CIRCUIT BREAKER	700A

TPT-12000 INSTALLATION

Installation should only be done by qualified professionals with the product turned **OFF**.



TPT-12000 SPECIFICATIONS

TPT-12000

Minimum Output Impedance:	1 OHM	2 OHM	
Number of Channels	1		
Power Output @ 14.4V:	12800W RMS at 1 Ohm 8500W RMS at 2 Ohm	13000W RMS at 2 Ohm 7000W RMS at 4 Ohm	
Power Output @ 12.6V:	12000W RMS at 1 Ohm 7000W RMS at 2 Ohm	12000W RMS at 2 Ohm 6700W RMS at 4 Ohm	
Minimum Input Sensitivity:	200mV		
Signal to Noise Ratio:	>90dB		
Frequency Response (-3dB)	5Hz ~ 7KHz		
Crossover Low Pass:	90Hz ~ 7KHz		
Crossover High Pass:	5Hz ~ 90Hz		
Frequency Boost:	30Hz ~ 70Hz 0 - + 10dB		
Input Impedance:	19K Ohm		
Supply Voltage:	9V ~ 16V DC		
Musical Consumption:	1180A 1130A		
Dimensions (L x W x H):	9.36" x 22.50" x 3.05"		
Weight:	19 lbs 20 lbs		



The data measured are based on PRV Group laboratory equipment. Test reference in frequency from 60hz to 1khz with THD + N at \leq 1% in impedances as indicated in each measurement. The electronic components and the manufacturing process may present manufacturing variations, thus leading to a variation in the measurements made.

Troubleshooting

AMPLIFIER DOES NOT TURN ON:

- Verify that the cables are connected correctly. Make sure all connections have electrical and mechanical contact.
- Fuses or circuit breakers may be defective or blown. Check the condition of the circuit breakers and if it is compatible with the equipment consumption.
- Verify that the battery charge is sufficient for the operation of the product.

NO SOUND:

- The cables of the speakers or RCA plugs may not be connected correctly or are defective.
- Verify that the **LEVEL** control is not at a minimum.

PROT LED FLASHING:

- Verify that the product vents are not blocked or the product is overheated.
- Speakers or cables shorted, check speakers, cables and connections.

SOUND DISTORTIONS:

- The speakers may be overloaded or defective, lower the level and remake the level adjustment. This setting can be adjusted as follows:
- **A)** On the radio/player, place any musical signal and set the volume to 80% of the maximum (if the maximum volume of the radio /player is 45 (100%), set to 36 (80%).
- **B)** On the amplifier, with LEVEL control at minimum, increase gradually until the LED CLIP starts to flash. Slowly return the LEVEL until the led goes out completely.

LACK OF BASS:

- Cables of the speakers may be reversed \bigcirc and \bigcirc (out-of-phase speakers).

NOISE AND FAILURE IN SOUND:

- Verify that the installation is not close to the original vehicle wiring as they may cause interference and noise in the audio signal.
- Make a separate power connection to the sound system. Use a fuse/circuit breaker as close to the battery as possible for protection.
- Make a good grounding of the amplifier. To do this, remove the paint from the vehicle chassis at the desired point. Screw the wire using a ground terminal. To protect from oxidation, isolate with paint.
- Do not loop the ground. Avoid using multiple grounds. If possible, use a star connection, in which all the grounds run from a single point.