Instruction manual

TARAMPS®

HD 3000

AMPLIFIER - 3000W RMS - 1 OHM
2 OHMS
4 OHMS

RGB EDITION

The installation of this product must be made by a qualified professional.

www.taramps.com.br

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Term of warranty

TARAMPS, located on Abilio Daguano Street 274, Res. Manoel Martins – Alfredo Marcondes, SP - Brazil, ZIP CODE 19180-000, guarantees this product against any defects on terms of project, making, assembling, and/or with solidarity, due to project vices which cause it improper or inadequate to its original use within 12 months from the date of purchase. In case of defect during the warranty period, TARAMPS responsibility is limited to the repairing or substitution of the device of its own making.

This warranty excludes:

•Damaged products by improper installation, water infiltration, violation by unauthorized individuals;
•Tamper or torn warranty seal;
•Cases in which the product is not used in adequate conditions;
•Defects caused by accessories, modifications or features attached to the product;
•The product with damage from falling, bumps or nature related problems (flooding, lightning, etc.);
•Warranty card is not properly filled or torn;
•Costs involving uninstallation, reinstallation of equipment as well as shipment to the factory;
•Damage of any kind, due to problems in the product, as well as losses caused by discontinued use of the product.

Technical assistance

For international support, check on our website:
www.taramps.com.br/en/rede-de-assistencias-tecnicas or contact direct the factory support:
Phones: +55 18 3266-4050 / +55 18 99749-3391
E-mail: service@taramps.com.br

Introduction

Read this manual before preparing the product. In case of doubt, contact our technical support: (**18) 3266-4050** or **www.taramps.com.br.**

At the end of its useful life, this product must not be disposed of in household waste. Look for an electronic equipment collection or recycling center for proper disposal.

Declaration of Conformity

CE

TARAMPS ELECTRONICS LTDA
Alfredo Marcondes - SP
Brazil

Hereby, Taramps Electronics Ltda declares that the product HD 3000 RGB complies with the Directive 2014/30/EU, according with the following harmonized standard:

-EN 50498:2010 *Electromagnetic compatibility (EMC) - Product family standard for aftermarket electronic equipment in vehicles*

The full text of the EU Declaration of Conformity is available at the following Product Page on Internet.

Safety requirements

To ensure proper use, please read through this manual before using the amplifier. It is specially important that you know the **CAUTIONS** contained here.

- The installation of this amplifier must be done by a qualified professional.
- Wear safety glasses, insulated gloves and correct tools for installing this product.
- This amplifier is for use with 12V batteries. Always check the voltage before installing.
- This amplifier must be installed in a firm place with at least 1" space around the heatsink for proper heat spreading.
- Never install the amplifier in places exposed to dust, humidity and water. Pay attention to install it far from fuel tank, fuel lines, heat sources and other parts of vehicle.
- Be sure to install protection fuse or a circuit braker near to battery. Follow the ampere rating as indicated here in this manual. Use of improper fuse or circuit breaker could result in overheat, smoke, damage to product, injury or burns.
- Avoid running wires over or through sharp edges. Use rubber or plastic grommets to protect any wires routed through car's body.
- Before make any connection to amplifier, disconnect the battery negative terminal.
- When in use, the external surface of may amplifier becomes hot. Avoid touching the heatsink area and keep childrens far from the amplifier.
- This amplifier may produce high sound pressure levels. Avoid continuous exposure to levels over 85dB to prevent permanent hearing loss.
- Output connections for speakers may have voltage levels when the amplifier is operating. Make sure that the amplifier is turned OFF before proceed any connection or disconnection in this terminals.
- If you want to dispose this amplifier, don't throw it on domestic waste. It must be collected by an used electronic product disposal service for proper recycling.

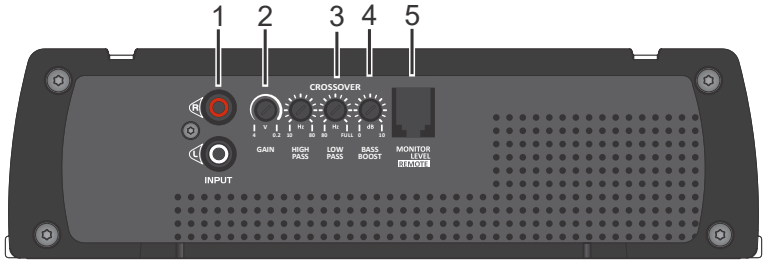
⚠ Safety

As you read this manual, pay attention to the safety symbols.

⚠ CAUTION This symbol with **"CAUTION"** is intended to alert the user to the presence of important instructions. Failure to heed the instructions will result in risk of injury to user or product damage.

Taramps reserves the right to modify the contents of this document at any time without prior notice and does not have the obligation to apply the changes in units which were previously produced.

Functions & inputs



1 - INPUT (R and L): Signal inputs. Connect these signals to the head unit's RCA outputs. Give preference to good quality shielded cables to avoid noise interference.

2 - GAIN: Adjusts the input sensitivity of the amplifier, allowing a perfect adjustment to the output signal levels of various head units models on the market. It is possible to adjust from 4V (minimum sensitivity) to 0.2V (maximum sensitivity).

3 - CROSSOVER

HIGH PASS: Variable setting from 10Hz to 80Hz, which sets the beginning of the amplifier's frequency response.

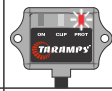
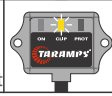
LOW PASS: Variable setting from 80Hz to Full, which sets the end of the amplifier operating frequency.

4 - BASS BOOST

BOOST: An extra 50Hz boost for the bass with variable gain from 0 to +10dB.

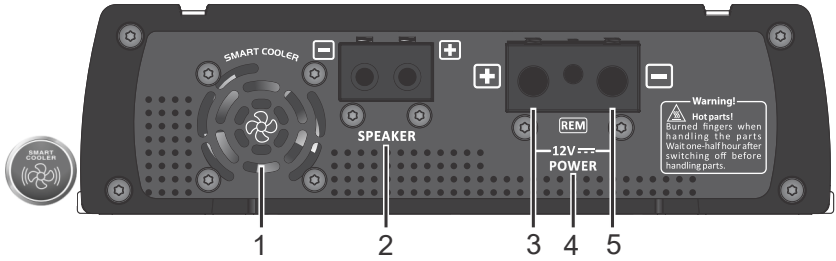
5 - MONITOR LEVEL REMOTE: Connection to an accessory, which function is to control the gain and monitor the amplifier where all information from the indicator LEDs, such as distortion (CLIP/TEMP) and protection actuation (PROT), will be displayed simultaneously. **(Accessory not included).**

LEDS indicators & protection system

RGB LEDs	LED of Monitor	Conditions
 Effect bars with the last schedule	 Blue LED on	Working amplifier
 Effect bars blink 2x in red	 Red LED flashes 2x	Battery with voltage below 9V
 Effect bars flash 3x in red	 Red LED flashes 3x	Battery with voltage above 16V
 Effect bars red continuously on	 Red LED continuously on	Short circuit on output or between output terminal to GND
 Effect bars flashing yellow 1sec. lit 1 sec. wiped out	 Yellow LED flashing 1 sec. on 1 sec. off	Temperature above operating limit (> 85 ° C)

The thermal protection waits for cooling before restarting.

Output & power supply connector

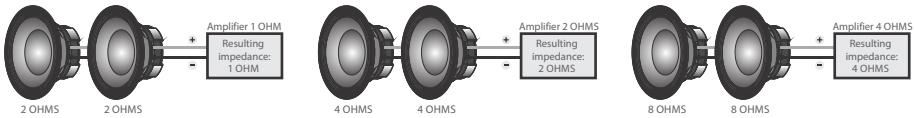


1 - FAN: This amplifier has an internal fan. For optimal operation, the amplifier should be installed in a dry and ventilated place, with at least 1" (25mm) free space on each side. The normal working temperature of this amplifier is 65° C.

⚠ CAUTION The fan and ventilation openings are responsible for cooling the amplifier when it is in use. Do not obstruct them.

2 - SPEAKER: Output (positive and negative) to transducers connection (speakers). Follow the polarity described and the minimum impedance recommended.
To combine speakers, the resulting impedance has be taken into consideration.
Check out the models below:

⚠ CAUTION Due to the presence of voltage at the output terminals when the product is turned on, avoid contact with them. Risk of electric shock.



3 - POSITIVE POWER SUPPLY TERMINAL: Use a 4 AWG (21mm^2) cable directly from the positive terminal of the fused battery (150A), as close to the battery as possible.

4 - REMOTE TERMINAL: The remote wire has to be connected to the remote terminal with a 0,75mm^2 (18 AWG) cable.

5 - NEGATIVE POWER SUPPLY TERMINAL: A 4 AWG (21mm^2) cable as short as possible should be used, connected to the negative battery pole.

It is recommended that all cables have tinned ends to improve electrical contact.

⚠ CAUTION Before making any connections to the power terminals, make sure the vehicle battery negative (-) is disconnected.

Color palette (Configurable)

Changing effects*

- Quick click: Toggles the type of effect.
- Long click: Toggles the color palette of the selected effect, when configurable.

Types of effects

VU-meter 1	Configurable
VU-meter 2	Configurable
VU-meter 3	Configurable
VU-meter 4	Configurable
Effects 1	
Effects 2	
Effects 3	
Effects 4	Configurable
Effects 5	Configurable
Effects 6	
Effects 7	Configurable
Effects 8	Configurable
Effects 9	
Effects 10	
Effects 11	
Effects 12	
Effects 13	
Flag 1	
Flag 2	
Flag 3	
Flag 4	

*The visual effects together with the color palette settings allow you to achieve **108 possible** combinations.

Installation

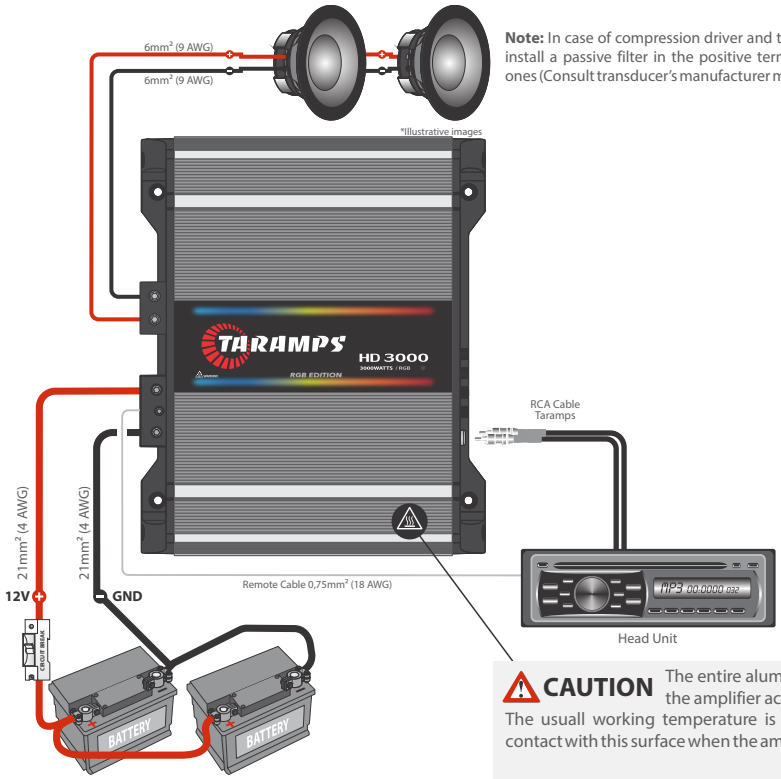
CAUTION CAUTION: All connections to power supply, input and output connectors must be carried out only with amplifier off.

Recommended wire gauge & fuse

Positive / negative power supply cable_____ **4 AWG**
Output cables wire gauge_____ **9 AWG**
Remote cable_____ **18 AWG**
Protection fuse or circuit breaker_____ **150A**

Calculated considering a maximum length of 4m. Distance greater than this, you will need to increase the cable gauges.

CAUTION Using wire gauges below the recommendation will result in power loss and overheating of wiring.
Check polarity and never reverse power supply cables due to the risk of damage to the amplifier.
It is compulsory to install a protection fuses or circuit breakers as close as possible from batteries.



Note: In case of compression driver and tweeters you must install a passive filter in the positive terminal of the same ones (Consult transducer's manufacturer manual).

CAUTION The entire aluminum surface of the amplifier acts as a heat sink. The usuall working temperature is 65°C. So, avoid contact with this surface when the amplifier is in use.

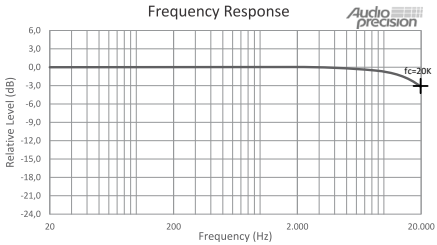
Required battery bank capacity: At least 150Ah

CAUTION This equipment is not suitable for use in places where children may be present.

Technical features

Output Impedance Range:	1 Ohm	2 Ohms	4 Ohms
Number of Channels:		01	
Output Power @12.6 VDC*			
1 OHM:	3000 W RMS	----------	----------
2 OHMS:	2025 W RMS	3000 W RMS	----------
4 OHMS:	----------	2025 W RMS	3000 W RMS
8 OHMS:	----------	----------	2025 W RMS
Input Sensitivity:		0.22 V ~ 4 V	
Signal- to-noise Ratio:		>89 dB	
Frequency Response:		10 Hz ~ 20 KHz (-3 dB)**	
Crossover HPF (High Pass Filter):		10 Hz ~ 80 Hz (-12 dB/8ª) Variable	
LPF (Low Pass Filter):		80 Hz ~ Full (-12 dB/8ª) Variable	
Bass Boost:		0 ~10 dB (50 Hz)	
Input Impedance:		10 K Ohms	
Protection System:		Short-circuit between speaker output, short-circuit between GND and any speaker output, low impedance at output, low/high battery supply voltage and thermal protection.	
Minimum Supply Voltage:		9 VDC	
Maximum Supply Voltage:		16 VDC	
Idle Consumption***:	1.50 A	1.60 A	1.90 A
Musical Consumption @12.6 VDC:	153 A	152 A	149 A
Rated Power Consumption:	306 A	304 A	298 A
Dimensions (W x H x L):		229 x 65 x 186 mm (9.01" x 2.56" x 7.32")	
Weigth:		2.40 Kg (5,28 lb)	

*Rated power with 1KHz sinusoidal signal and THD <= 10%, with resistive loads, measured with Audio Precision APx525 audio analyzer or equivalent and the product at lower than 50°C case temperature and 12.6V supply voltage.
**Frequency response measured at twice the minimum impedance.
***Amplifier consumption may vary depending on the effect used in the RGB LED. The value mentioned above is with the RGB LEDs turned off.
The values as above are typical and may vary, due to electronic components tolerance or manufacturing process.
For further informations or questions, visit our website or contact TARAMPS support.



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