# Instruction manual



HD 3000 AMPLIFIER - 3000W RMS - 0,5 OHM 1 OHM 2 OHMS 4 OHMS



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

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### **Term of warranty**

TARAMPS, located at Júlio Budisk RD S/N - KM 30 - Alfredo Marcondes - SP, ZIP- 19.180-000, warrants this product in case of defects in design, manufacture, assembly or issues resulting from design defects that make it inappropriate or inadequate for the use for which it is intended, for a period of 12 months from the date of purchase. In the event of a defect within the warranty period, TARAMPS' liability is limited to repairing or replacing the device manufactured by TARAMPS.

#### This warranty does not include:

- •Products damaged by improper installation, water infiltration, violation by non-certified technicians:
- Torn warranty seal;
- •Cases in which the product is not used in proper conditions;
- Defects caused by accessories, modifications or features attached to the product;
- •Product damaged by falling, crashes or problems related to nature (floods, lightning, etc.);
- •The warranty card is not properly filled in or torn;
- Costs involving uninstallation, reinstallation of equipment, as well as transport to the factory;
- Damages of any nature, resulting from problems with the product, as well as problems caused by the discontinued use of the product.

#### **Technical assistance**

For international support, check on our website:

 $\underline{www.taramps.com.br/en/rede-de-assistencias-tecnicas} \ or \ contact \ direct \ the factory \ support:$ 

Phones: +55 18 3266-4050 / +55 18 99749-3391

E-mail: service@taramps.com.br

#### Introduction

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



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

## Declaration of Conformity

TARAMPS ELECTRONICS LTDA Alfredo Marcondes - SP Brazil

Hereby, Taramps Electronics Ltda declares that the product HD 3000 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 that you use this product properly, please read this manual carefully. It is especially important that you are aware of the **WARNINGS** and **CAUTIONS** contained here.

- -The installation of this amplifier should be done by a qualified professional.
- Wear safety glasses, insulated gloves and correct tools for installing this product.
- This amplifier is intended for use with 12V batteries. Always check the voltage before installing.
- -This amplifier must be installed in a firm location with at least 1" of space around the heatsink for proper heat dissipation.
- Never install the amplifier in places exposed to dust, humidity and water. Pay attention to install it far from the fuel tank, fuel lines, heat sources and other parts of your vehicle.
- -Be sure to install a fuse or circuit breaker near the battery. Follow the amperage rating as indicated here in this manual. Use of improper fuses or circuit breakers could result in overheating, smoke, product damage, injury or burns.
- Avoid running wires over or through sharp edges. Use rubber or plastic grommets to protect the wires routed through car's body.
- Before connecting anything to the amplifier, disconnect the battery negative terminal.
- When turned on, the surface of the amplifier may become hot. Avoid touching the heatsink area and keep children away from the amplifier.
- This amplifier can produce high sound pressure levels. Avoid continuous exposure to levels over 85dB to prevent permanent hearing loss.
- Speaker outputs may have voltage levels when the amplifier is operating. Make sure the amplifier is OFF before handling these terminals.
- If you want to discard this amplifier, don't throw it in regular domestic waste. It must be collected by an electronic product disposal service for proper recycling.

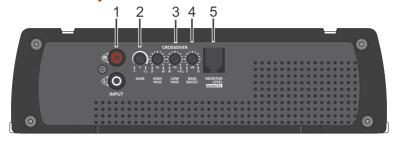
# **△** Safety

When reading this manual, pay attention to the safety signs.



The "CAUTION" sign is intended to alert the user to the presence of important instructions. Failure to follow instructions could result in risk of injury to the user or damage to the product.

## **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**



Steady blue LED on:

Indicates that the amplifier is on.



**Flashing yellow LED:** The Amplifier is overheating (May be caused by obstructed internal fans, improper installation or poorly ventilated location).

When the amplifier reaches a temperature of approximately 85°C (185°F), the amp goes into thermal protectionn, the audio ceases, and the yellow LED starts flashing. The fan will keep working to cool the components quickly. Only when the amplifier reaches a safe temperature level is the audio will be back on again and the amplifier will be operational again.

We recommend that the amplifier is not switched off, so that the fan continues to work, making the cooling time shorter.

**Flashing yellow LED according to music:** Indicates that the amplifier is operating at the limit of distortion. If the red LED also flashes it indicates excessive distortion.



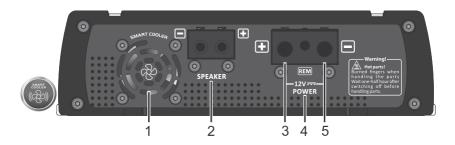
Steady red LED on:

Indicates Short circuit or impedance lower than the output can handle..

RED LED flashes 2x: Battery voltage under 9V.

**RED LED flashes 3x:** Battery voltage over 16V. (17V on 0.5 Ohm model).

# **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

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<sup>2</sup>) 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<sup>2</sup> (18 AWG) cable.
- 5 NEGATIVE POWER SUPPLY TERMINAL: A 4 AWG (21mm<sup>2</sup>) 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.



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

#### Installation

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

# Recommended wire gauge & fuse

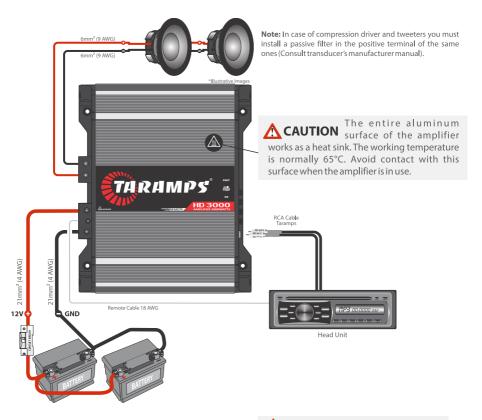
Positive / negative power supply cable	4 AWG
Output cables wire gauge	9 AWG
Remote cable	18 AWG
Protection fuse or circuit breaker	150A

The calculation was made considering a maximum length of 4m. Distance greater than this, it will be necessary to increase the cable sizes.



Using wire gauges below the recommendation will result in power loss and **CAUTION** 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.



Examples of connections at the power supply input.Note: Required battery bank capacity:At least 150Amps

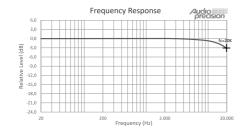
CAUTION This equipment is not suitable for use in places where children may be present.

## **Technical features**

Minimum Output Impedance:	0.5 Ohm	1 Ohm	2 Ohms	4 Ohms	
Number of Channels:	·	01			
Output Power @12.6 VDC 0.5 OHM: 1 OHM: 2 OHMS: 4 OHMS: 8 OHMS: Input Sensitivity:	3000 W RMS 2025 W RMS 	3000 W RMS 2025 W RMS	3000 W RMS 2025 W RMS	3000 W RMS 2025 W RMS	
Signal- to-noise Ratio:		>89 dB			
Frequency Response (Full Range):		10 Hz ~ 20 KHz (-3 dB)**			
Crossover HPF (High Pass Filter):		10 Hz ~ 80 Hz (-12 dB/8 <sup>a</sup> ) Variable			
LPF (Low Pass Filter):		80 Hz ~ Full (-12 dB/8°) Variable			
Bass Boost:		0 ~10 dB (50 Hz)			
Input Impedance:		10 K Ohms			
Protection System:		Output short-circuit, output short-circuit to GND, low impedance protection, low/high voltage protection and thermal protection.			
Minimum Supply Voltage:	_	9 VDC			
Maximum Supply Voltage:	17 VDC	16 VDC			
Idle Consumption:	1.50 A	1.50 A	1.60 A	1.90 A	
Musical Consumption @12.6 VDC:	145 A	153 A	152 A	149 A	
Rated Power Consumption:	290 A	306 A	304 A	298 A	
Dimensions (W x H x L):	229	229 x 65 x 186 mm (9.02" x 2.56 x 7.32)			
Weigth:	2.05 Kg (4.51lb)	2.25 Kg (4.95lb)			

<sup>\*</sup>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.

 $For further informations \, or \, questions, visit \, our \, website \, or \, contact \, TARAMPS \, support.$ 



<sup>\*\*</sup>Frequency response measured at twice the minimum impedance.

The values as above are typical and may vary, due to electronic components tolerance or manufacturing process.





Manufactured by: TARAMPS ELECTRONICS LTDA TAX ID: 11.273.485/0001-03 Address: Júlio Budisk RD S/N - KM30 Alfredo Marcondes - SP Made in Brazil www.taramps.com.br