

MANUAL *HD 3000*1 Ohm / 2 Ohms
1 x 3.000 WRMS

Congratulations on your purchase of a Taramps product.

It was developed in a modern laboratory and with the latest technology.

This manual covers all features, operations and instructions to solve any doubt that may arise during the installation. Please take some time to read it carefully in order to ensure the proper installation and the use of all benefits this product can offer.

For questions, please call +55 (18) 3266-4050 or visit www.taramps.com.br.

# **Key Recommendations**

You can find below some key recommendations to get the most out of your amplifier:

1-) Read this instruction manual carefully before carrying out any connection;

# Any connection to the amplifier input or output must be carried out when amplifier is <u>off</u>;

- 2-) Check carefully the polarity of power supply wiring (battery's positive and negative terminals) loudspeakers and the minimum speaker impedance;
- 3-) It is compulsory to install fuses to protect against overloading. The fuse or circuit breaker must be installed as close as possible to the battery and sized up according to the amplifier;
- 4-) The gauge of power supply wiring is extremely important both to reach the desired amplifier output and to the amplifier's safety. Use the wire gauge recommended in this manual (page 5). Using wire gauges below the specified value will result in power loss and overheating of cables. It is important that the power supply cables are the shortest possible;
- 5-) Amplifier must be installed in a firm and ventilated area;
- 6-) In order to avoid interferences, the signal cable (RCA) must be away from the original wiring of vehicle or from any other power supply cable;
- 7-) The amplifier must be installed by a qualified professional.

# Technical features

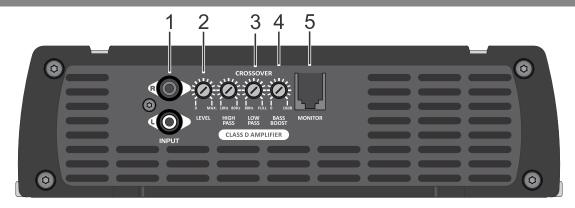


MODEL	1 OHM	2 OHMS
NUMBER OF CHANNELS:	1	1
MAXIMUM OUTPUT POWER @ 12.6VDC - 1 OHM*:	3000W RMS	_
MAXIMUM OUTPUT POWER @ 12.6VDC - 2 OHMS*:	2025W RMS	3000W RMS
MAXIMUM OUTPUT POWER @ 12.6VDC - 4 OHMS*:	1140W RMS	2025W RMS
MAXIMUM OUTPUT POWER @ 12.6VDC - 8 OHMS*:	_	1140W RMS
INPUT SENSITIVITY:	230mV	
SIGNAL-TO-NOISE RATIO:	89dB	
FREQUENCY RESPONSE:	10Hz to 20KHz (-3dB)	
CROSSOVER:		
H.P.F (HIGH-PASS FILTER):	10 to 80Hz (-12dB/8ª) Variable	
L.P.F (LOW-PASS FILTER):	80Hz to Full (-12dB/8ª) Variable	
BASS BOOST:	0 to 10,5dB (50Hz)	
THERMAL MANAGEMENT: Smart Cooler (fan j	powered by temperature	or audio, with 3 speeds)
EFFICIENCY:	79%	83%
INPUT IMPEDANCE:	18K OHMS	
PROTECTION SYSTEM: Output Sho	utput Short / High / Low Supply Voltage / Thermal Protection	
MINIMUM SUPPLY VOLTAGE:	9VDC	
MAXIMUM SUPPLY VOLTAGE:	16VDC	
IDLE CONSUMPTION:	1,8A	1,7A
MAXIMUM MUSICAL CONSUMPTION @ 12.6VDC:	150,5A	143,5A
MAXIMUM CONSUMPTION IN SINUSOIDAL SIGNAL (1 KHz) @ 12.6VD	C: 301A	287A
DIMENSIONS (WxHxD):	229 x 65 x 186mm (9" x 2.56" x 7.32")	
WEIGHT:	2.0Kg	( 4.4lb)

<sup>\*</sup>Power measured at 1KHz, resistive load at nominal impedance, with THD less than 10% and supply voltage = 12.6VDC.

<sup>-</sup> Due to natural tolerances of internal components and manufacturing process, technical features may vary.

#### Functions and inputs



- 1 INPUT (R and L): Inputs of signals to be amplified. Connect these signals to RCA outputs of CD/DVD Player, using good quality shielded cables to avoid noise influence.
- 2 LEVEL: It sets the amplifier input sensitivity, which allows an optimal adjustment to the output signals levels of nearly all models of CD/DVD Players found in the market.

#### 3 - CROSSOVER

HIGH PASS: Variable adjustment from 10Hz to 80Hz, which determines the beginning of the amplifier operating frequency.

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

- 4 BASS BOOST: Boost for bass levels in 50Hz, with amplitude from 0 to 10,5 dB.
- 5 MONITOR: Connection to an accessory, which function is to monitor the amplifier and it is where all information from the indicator LEDs, such as distortion (CLIP/TEMP) and protection actuation (PROT), will be displayed simultaneously.

## LEDS Indicators and Protection Systems



Blue LED steady on:

Indicates that the amplifier is turned on.



Flashing yellow LED continuously: Excessive internal temperature (May be caused by obstruction of the internal cooler, improper installation or poorly ventilated location). Blinking yellow LED according to music: Indicates that the amplifier is operating at the threshold of distortion. If the red led also blinks, it indicates excessive distortion.



Red LED steady on:

Short-circuit or impedance lower than that supported at output.



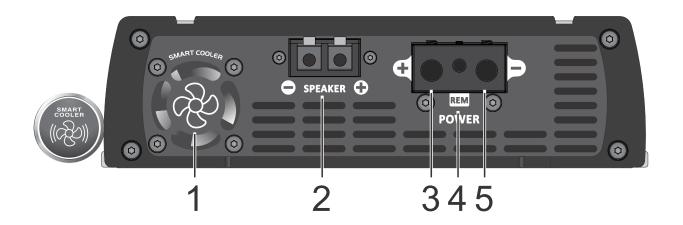
Red LED flashes 2x:

Supply voltage less than 9V.

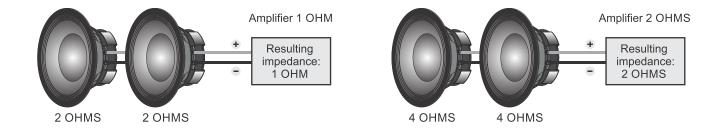
Red LED flashes 3x:

Power supply voltage greater than 16V.

### **Output and Power Connectors**



- 1 FAN: The HD 3000 has an internal ventilation fans, and cannot be blocked. This cooler is controlled by an intelligent system **(Smart Cooler)**. It only operates at full speed from a certain level of audio or temperature. This function ensures extended life of the cooler and a low-noise performance of your amplifier.
- 2 SPEAKER: Output (negative and positive) to transducers' connection (speakers). Follow the polarity described and the minimum impedance recommended. To combine speakers, the resulting impedance must be taken into consideration. See the examples below:



NOTE: Impedance lower than that supported at the output can cause the short-acting protection.

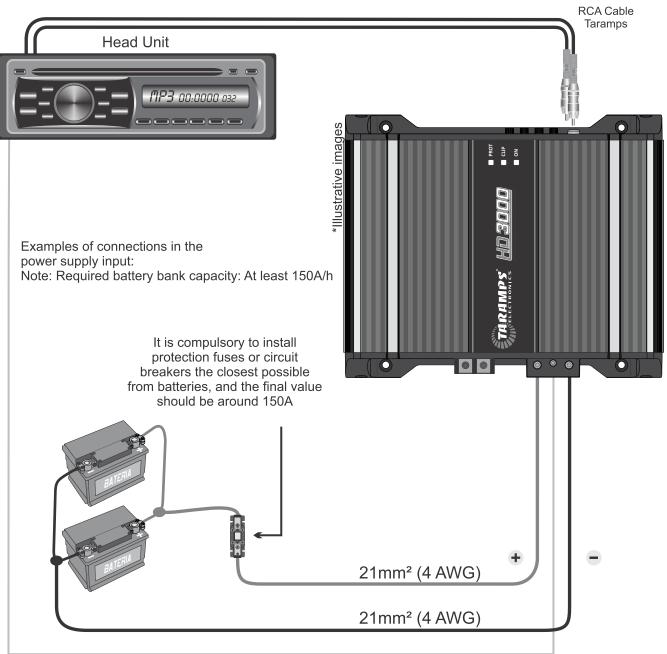
- 3 POSITIVE POWER SUPPLY TERMINAL: Use a 21mm<sup>2</sup> (4 AWG) cable directly from the positive battery terminal with fuse (150A), as close as possible from the battery.
- 4 REMOTE TERMINAL: The remote CD/DVD Player output must be connected by a 1.5 mm<sup>2</sup> (15 AWG) cable.
- 5 NEGATIVE POWER SUPPLY TERMINAL: A 21mm<sup>2</sup> (4 AWG) cable as short as possible must be used, connected to the negative battery pole.

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

## Input and power supply connections



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



Remote Cable 1,5mm² (15 AWG)

# Recommended wire gauge and fuse

Positive / negative power supply cable

21mm<sup>2</sup> (4AWG)

Protection fuse or circuit breaker

150A

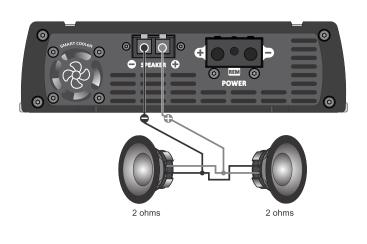
Calculated considering a maximum length of 4m (157,48").

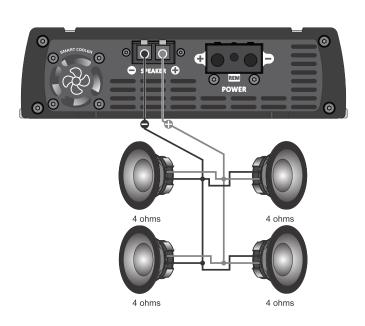
Caution: Using wire gauges below the recommendation will result in power loss and overheating of wiring. Check polarity and never reverse power supply cables due to the risk of damage to the amplifier.

# Output connections examples

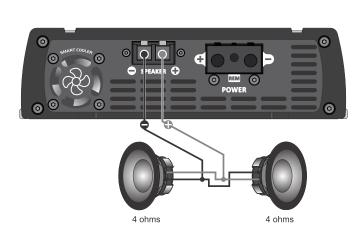
Caution: Observe the minimum impedance when installing. Impedances lower than the recommended can damage the amplifier and void the warranty.

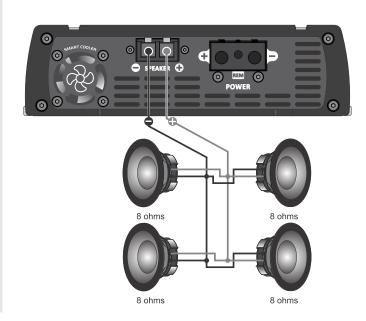
#### **CONNECTION EXAMPLE - 1 OHM**





#### **CONNECTION EXAMPLE - 2 OHMS**





\*Output cables with 4mm² (11 AWG) gauge, calculated considering a maximum length of 2m (78,74"). Note: In case of horns and tweeters you must install a passive filter in the positive terminal of the same ones (Consult transducer's manufacturer manual).



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