Instruction manual

TARAMPS®

MD3000.1

AMPLIFIER - 3000WATTS - 1 OHM
2 OHMS
4 OHMS

The installation of this product must be made by a qualified professional. 4

www.taramps.com.br

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Term of warranty

TARAMPS, located at Júlio Budisk highway, SN, KM 30 – Alfredo Marcondes, SP - Brazil, ZIP CODE 19180-120, warrants 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 replacement 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 the 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/es**

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 MD 3000.1 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.

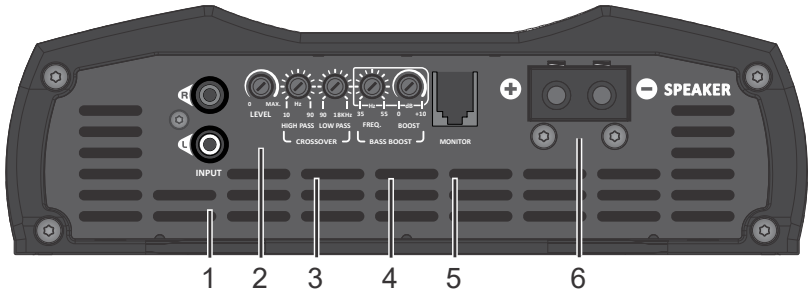
⚠ Safety

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 & outputs



1 - INPUT (R and L): Inputs of signals to be amplified. Connect these signals to RCA outputs of Head Unit , using good quality shielded cables to avoid noise influence.

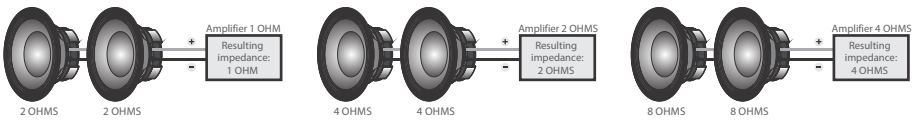
2 - LEVEL: It sets the amplifier input sensitivity, which allows an optimal adjustment to the output signals levels of nearly all models of Head Unit found in the market.

3 - CROSSOVER
HIGH PASS: Variable adjustment from 10Hz to 90Hz, which determines the beginning of the amplifier operating frequency.
LOW PASS: Variable adjustment from 90Hz to 18KHz, which determines the end of the amplifier operating frequency.

4 - BASS BOOST
FREQ.: Set the Bass Boost center frequency, from 35Hz up to 55Hz.
BOOST: Boost for bass levels in 50Hz, with variable gain up 0 to +10dB.

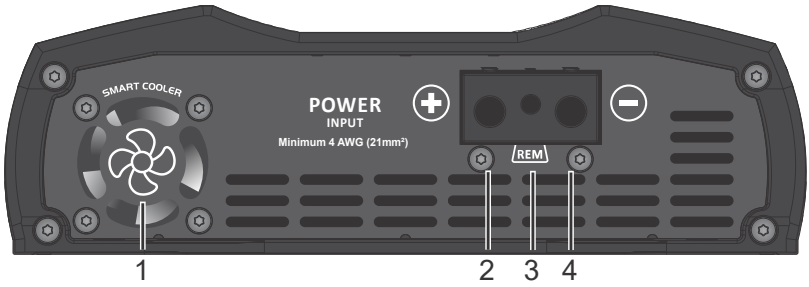
5 - MONITOR: Connection to an accessory, which function is to monitor the amplifier and it is where all information from the indicator LEDs, such as distortion (CLIP/TEMP) and protection actuation (PROT), will be displayed simultaneously.

6 - SPEAKER: Output (positive and negative) 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:



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.

Power supply connector



1 - FAN: This amplifier has one internal ventilation fan. For perfect functioning, the amplifier must be installed in a cool and aired place with at least 1" (25mm) space around the heatsink for proper heat spreading. The usually working temperature of amplifier is 65°C.

⚠ CAUTION The fan and ventilation openings are responsible for cooling the amplifier when it is in use, so it cannot be obstructed.

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

3 - REMOTE TERMINAL: The remote Head Unit output must be connected by a 0,75mm^2 (18 AWG) cable.

4 - NEGATIVE POWER SUPPLY TERMINAL: A 4 AWG (21mm^2) 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.

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

LEDS indicators & protection systems

ON

Blue LED steady on:

Indicates that the amplifier is turned on.

CLIP TEMP

Flashing yellow LED: Excessive temperature (May be caused by obstruction of the internal fans, improper installation or poorly ventilated location).

When the amplifier reaches the temperature of approximately 80°C (176°F), the thermal protection starts working, the audio is interrupted and the yellow LED will start flashing. The fans will be functioning, in order to cool down the components quickly. Only when the amplifier reaches a safe temperature level, the audio is released and the amplifier gets back to its normal functioning.

We recommend don't turn off the amplifier, so that the cooling time will be shorter, through the ventilation of fans.

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:

PROT

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.

Installation

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

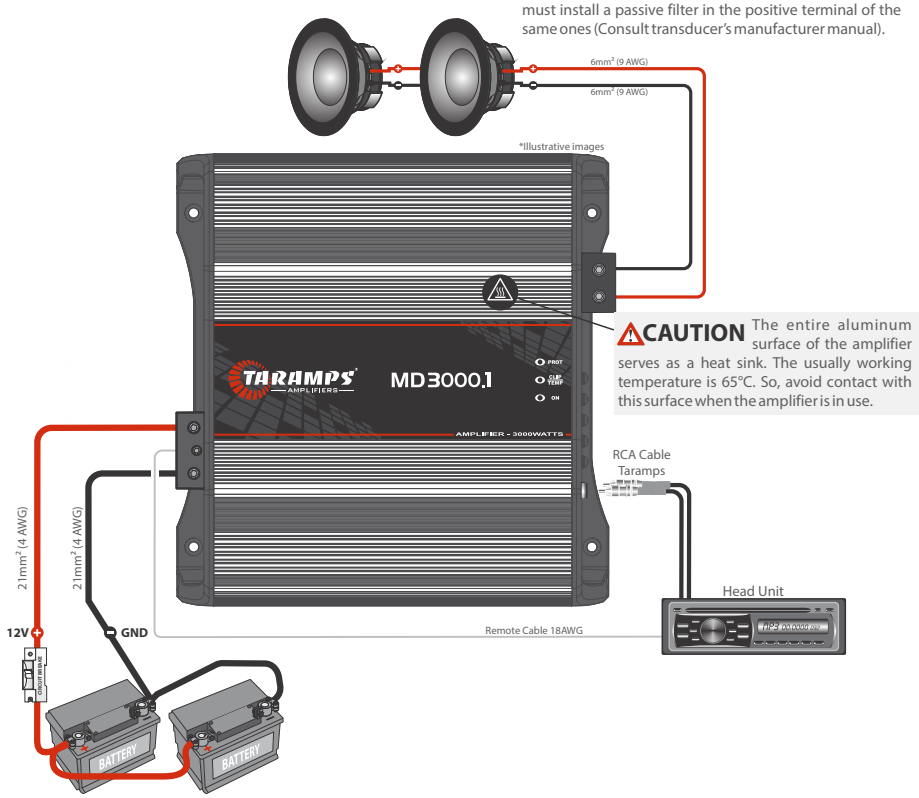
Recommended wire gauge & fuse

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).



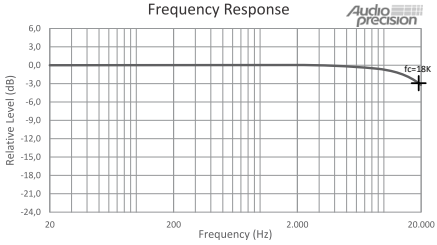
Examples of connections in the power supply input.
Note: Required battery bank capacity:
At least 150A

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

Technical features

Minimum Output Impedance:	1 Ohm	2 Ohms	4 Ohms
Number of Channels:		01	
Output Power @12.6VDC			
1 OHM:	3000W RMS	----------	----------
2 OHMS:	1920W RMS	3000W RMS	----------
4 OHMS:	----------	1920W RMS	3000W RMS
8 OHMS:	----------	----------	1920W RMS
Input Sensitivity (Level 100%):		220mV	
Signal- to-noise Ratio:		>90dB	
Frequency Response (Full Range):		10Hz ~ 18KHz (-3dB)**	
Crossover HPF (High Pass Filter):		10Hz ~ 90Hz (-12dB/8ª) Variable	
LPF (Low Pass Filter):		90Hz ~ 18KHz (-12dB/8ª) Variable	
Bass Boost: Freq.: Boost:		35Hz ~ 55Hz 0 ~10dB (50Hz)	
Efficiency:	79%	82%	85%
Input Impedance:		15K Ohms	
Protection System:		Short-Circuit to Output, Short on output compared to GND, Low impedance at output, low/high supply voltage and Thermal protection	
Minimum Supply Voltage:		9VDC	
Maximum Supply Voltage:		16VDC	
Idle Consumption:	1A	1.5A	1.2A
Musical Consumption @12.6VDC:	150A	145A	138.8A
Rated Power Consumption:	300A	290A	277.7A
Dimensions (W x H x L):		228 x 70 x 218mm (8.98" x 2.76" x 8.58")	
Weigth:		2.5Kg (5.5lb)	

*Rated power with 60Hz to 1KHz sinusoidal signal and THD <= 1%, 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 2 times the minimum impedance.
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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