# Instruction manual







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

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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

TARAMPS ELECTRONICS LTDA
Alfredo Marcondes - SP
Brazil

Hereby, Taramps Electronics Ltda declares that the product MD 8000.1 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.
- $\hbox{-We ar safety glasses, insulated gloves and correct tools for installing this product.}\\$
- -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  $85 \, \mathrm{dB}$  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.

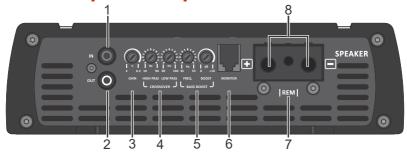
# **△** Safety

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



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.

**Functions, inputs & outputs** 



- 1 IN: Input of signal to be amplified. Connect the to the RCA output of the Head Unit using good shielded cable to avoid noise interference.
- **2 OUT:** Audio signal output. Sends the same input (IN) signal to another amplifier, allowing cascading.
- **3 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).

#### 4-CROSSOVER

**HIGH PASS FILTER (HPF):** Variable setting from 10Hz to 90Hz, which determines the start of the amplifier's operating frequency.

**LOW PASS FILTER (LPF):** Variable setting from 90Hz to 10KHz, which determines the end of the amplifier's operating frequency.

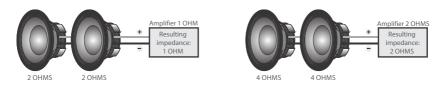
#### 5-BASS BOOST

**FREQ.:** Set the frequency of bass boost from 35Hz to 55Hz.

**BOOST:** Set the boost level from 0 to +10dB at the frequency set in FREQ.

- **6 MONITOR:** Accessory connection that has the function of monitoring the amplifier, displaying clipping and protection status. (**Accessory not Included**).
- **7 TERMINAL REMOTE:** It must be connected to the remote output of the head unit using a 18 AWG cable.
- **8 SPEAKER:** SPEAKER: Output (positive and negative) for connecting transducers (speakers). Follow the indicated polarity.

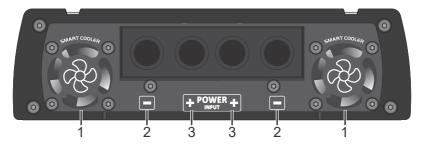
 $For speaker \, associations, the \, impedance \, to \, consider \, is \, the \, resulting \, impedance: \,$ 





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 - FANS: This amplifier has two internal ventilation fans, which cannot be obstructed. For a perfect operation, the amplifier must be installed in a dry and airy place. We recommend not embedding it, in order to ensure adequate ventilation.



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 2 x 2/0 AWG (70mm²) cable directly from the positive battery terminal with fuse (400A), as close as possible from the battery.
- 3 NEGATIVE POWER SUPPLY TERMINAL: A 2 x 2/0 AWG (70mm<sup>2</sup>) cable as short as possible must be used, connected to the negative battery pole.

In order for your amplifier to have the best performance, it is necessary to use all the power inputs. See example on the next page. We recommend that all cables have tinned ends for better electrical contact.

In case of power bus bar using, avoid tightening with extenders on the allen wrench, as excessive torque may break the the terminal.



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

# **LEDS indicators & protection systems**



Blue LED steady on:

Indicates that the amplifier is turned on.



Flashing vellow 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 guickly. 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:

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

RED LED flashes 2x:

Supply voltage less than 9.5V.

**RED LED flashes 3x:** 

Power supply voltage greater than 17V.



### Installation

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

### Recommended wire gauge & fuse

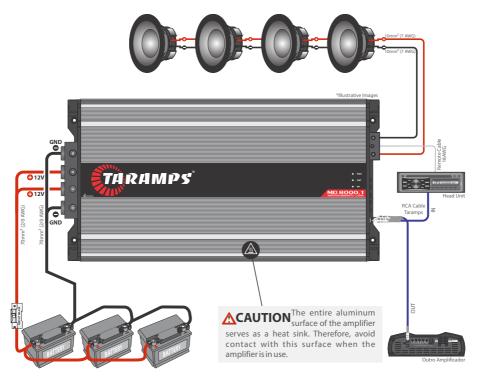
Positive / negative power supply cable	2 x 2/0 AWG
Output cables wire gauge	7 AWG
Remote cable	18 AWG
Protection fuse or circuit breaker	400A

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 drivers 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 400A

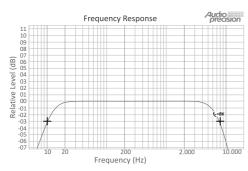
CAUTION This equipment is not suitable for use in places where children may be present.

### **Technical features**

Output Impedance:	1 Ohm   2 Ohms
Number of Channels:	01
Output Power @12.6VDC* 1 OHM 2 OHMS: 4 OHMS: Input Sensitivity:	8000W RMS 4800W RMS 8000W RMS 4800W RMS 0.22V ~ 4V
Signal- to-noise Ratio:	>90dB
Frequency Response:	10Hz ~ 10KHz (-3dB)
Crossover HPF (High Pass Filter):	10Hz ~ 90Hz (-12dB/8ª) Variable
LPF (Low Pass Filter):	90Hz ~ 10KHz (-12dB/8 <sup>a</sup> ) Variable
Bass Boost: Freq.: Boost:	35Hz ~ 55Hz 0 ~ +10dB
Efficiency:	82%   85%
Input Impedance:	10K Ohms
Protection System:	Output short-circuit, low/high supply voltage and Thermal protection
Minimum Supply Voltage:	9.5VDC
Maximum Supply Voltage:	17VDC
Idle Consumption:	2.90A
Musical Consumption @12.6VDC:	387A 374A
Rated Power Consumption:	774A 748A
Dimensions (W x H x L):	8.98" x 2.76" x 17.56"
Weigth:	12.32lb

<sup>\*</sup>Rated power with 40Hz sinusoidal signal, THD <= 1%, with resistive loads, measured with SMD/AD-1 audio power analyzer or equivalent and the product at lower than  $50^{\circ}$ C case temperature and 12.6V supply voltage.

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



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





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