Instruction manual

TARAMPS®

TS 800X4

AMPLIFIER - 800WATTS - 1 OHM
2 OHMS
4 x 200W RMS

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

www.taramps.com.br

Index

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 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.**

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 TS 800X4 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.

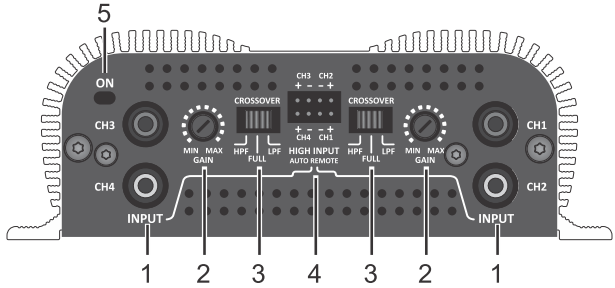
⚠ Safety

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.

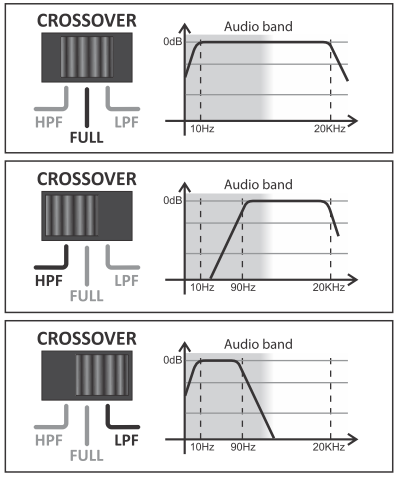
Functions & inputs



1 - INPUT: Inputs of signals to be amplified. Connect these signals to RCA outputs of Head Unit, using good quality shielded cables to avoid noise interference.

2 - GAIN: It sets the amplifier input sensitivity, which allows an optimal adjustment to the output signals levels of nearly all models of Head Units found in the market. The MIN position of this control allows to receive up to 4V RMS signals into RCA inputs.

3 - CROSSOVER: Set the operating mode of amplifier :



SELECTOR POSITION - FULL
Amplifies the whole audio range, responding from 10Hz to 20KHz. This function is normally used when there is an external crossover in the system.

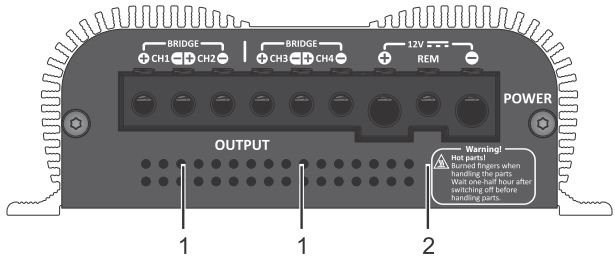
SELECTOR POSITION - HPF - (HIGH PASS)
Amplifies signals with more intensity above 90Hz. This type of function is used mid-bass, mid-range speakers or tweeters.

SELECTOR POSITION - LPF - (LOW PASS)
Amplifies only bass signal, the response is limited to 90Hz (-12dB/8ª), an optimal frequency cutoff for sub-woofers.

4 - HIGH LEVEL INPUT: Input for high level / low impedance signals (from the speaker output of the head unit), it features function auto turn on by the input signal, compatible with head units with speaker diagnosis (A.S.S. Advanced Speaker Simulation OEM HU) so it eliminates the need of the REMOTE IN wire from the power connector when using this input.
Note: *The system is designed for use in virtually all head units on the market. However, on some you may not get the auto turn on function due to the type of audio output circuit. In this case, use the REMOTE wire.*

5 - ON: Indicates that amplifier is on.

Output & power supply connector

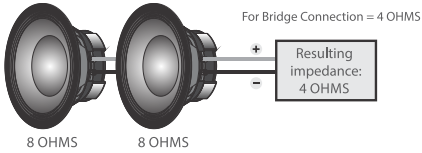


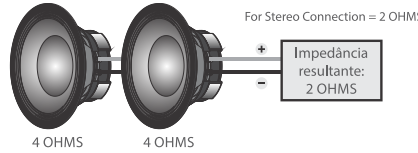
1 - OUTPUT: To connect the speakers. Follow the polarity and the minimum impedance recommended.

For STEREO connections, the minimum impedance is 2 ohms at each channel; for BRIGDE connections is 4 ohms.

To combine speakers, the resulting impedance must be taken in consideration.

See the examples below:





2 - POWER (Power Supply Connector): The connector terminal (+) must be connected to the battery's positive pole with a 10mm^2 / 7 AWG (minimum) wire gauge. The connector terminal (-) must be properly connect to the battery's negative pole with a same wire gauge. The remote terminal must be connected to the Head Unit REMOTE output with a 0.75mm^2 / 18 AWG wire. (Except when using the HIGH INPUT).

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

Protection system

Short-circuit Protection: Shutdown the amplifier when detect a short- circuit or impedance lower than the supported at the output. The amplifier will back to normal operation as soon as short-circuit or overload condition is removed.

Installation

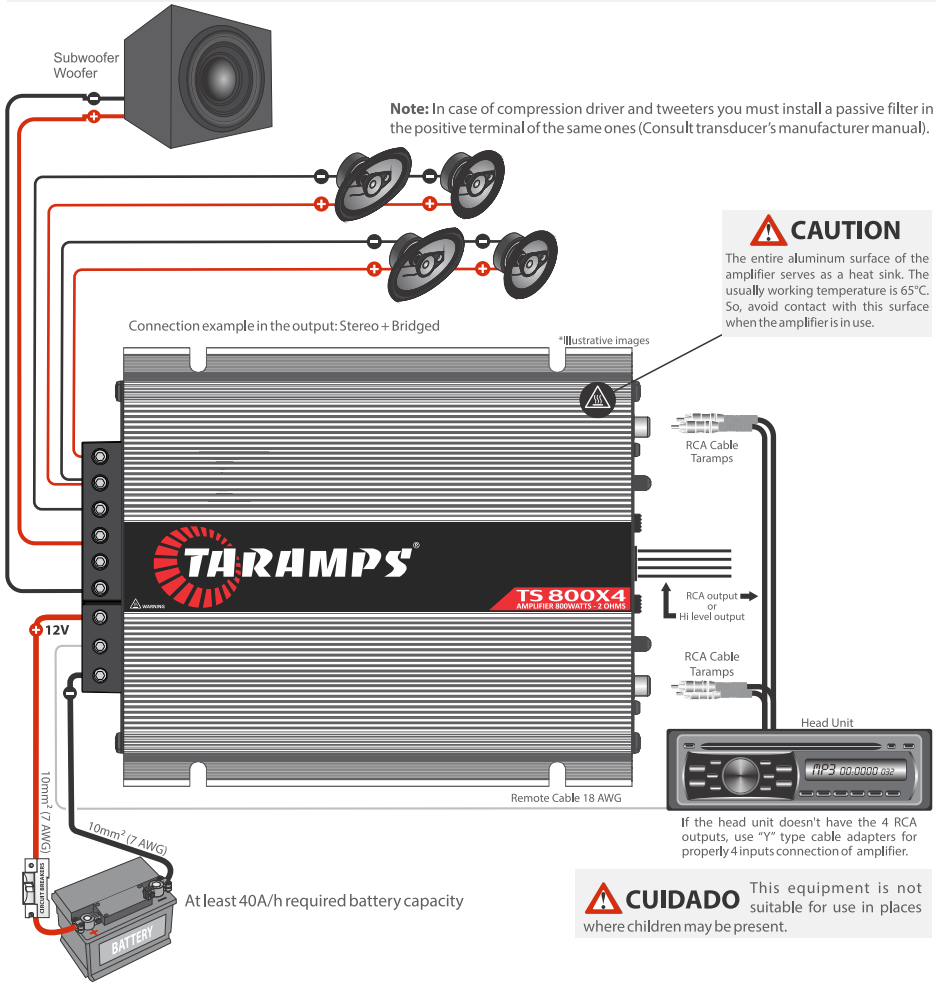
CAUTION CAUTION: All connections to power supply, input and output connectors must be carried out only with amplifier off.

Recommended wire* gauge & fuse

Positive / negative power supply cable _____ **7 AWG**
Output cables wire gauge _____ **15 AWG**
Remote cable _____ **18 AWG**
Protection fuse or circuit breaker _____ **40A**

*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.



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

Technical features

Minimum Output Impedance:	1 OHM	2 OHMS
Number of Channels:	4	
Potência Nominal @14,4VDC		
1 OHM:	800W RMS (4 x 200W RMS)*	----------
2 OHMS:	544W RMS (4 x 136W RMS)	800W RMS (4 x 200W RMS)*
4 OHMS:	----------	544W RMS (4 x 136W RMS)
2 Bridged Channels 4 OHMS:	2 x 400W RMS	2 x 400W RMS
Input Sensitivity (RCA):	4V (min.) / 250mV (max.)	
Input Sensitivity (WIRE):	>10V (min.) / 3V (max.)	
Signal- to-noise Ratio:	>90dB	
Frequency Response (Full Range):	10Hz ~ 20KHz (-3dB)**	
Crossover HPF (High Pass Filter):	90Hz (-12dB/8ª) Fixed	
LPF (Low Pass Filter):	90Hz (-12dB/8ª) Fixed	
Input Impedance:	10K Ohms (RCA)	
Protection System:	Output Short Circuit	
Minimum Supply Voltage:	9 VDC	
Maximum Supply Voltage:	16 VDC	
Idle Consumption:	0,9A	
Musical Consumption @14.4VDC:	42A	38A
Rated Power Consumption:	85A	76A
Dimensions (W x H x L):	138 x 48 x 175mm / 5.43" x 1.89" x 6.89"	
Weigth:	0.87Kg / 1.91lb	

*Rated power with 60Hz sinusoidal signal and THD <= 10%, with resistive loads (2 ohms) in each channel, measured with Audio Precision APx525 audio analyzer or equivalent, product at lower than 50°C case temperature and 14.4v supply voltage.
**Frequency response measured at 2 times the minimum impedance, in 4 channel mode.
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.

TARAMPS®

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MN_TS 800X4_R01