

Instruction manual



BASS 400

AMPLIFIER 400WATTS RMS - 1 OHM
4 OHMS



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

Index

- 01 • Term of warranty
 - Technical assistance
- 02 • Introduction
 - Safety requirements
 - Safety
- 03 • Functions & inputs
 - LED indicator
- 04 • Output & power supply connector
 - Protection system
- 05 • Installation
 - Recommended wire gauge & fuse
- 06 • Technical features

Term of warranty

TARAMPS, located at Júlio Budisk highway, SN, KM 30 – Alfredo Marcondes, SP - Brazil, ZIP CODE 19180-000, warrants this product against any defects on terms of project, making, assembling, and/or with solidarity, due to project vices which cause in it improper or inadequacy as to the purpose for which it was produced 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 directly 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 Bass 400 complies with the Directive 2014/30/EU, in accordance with the following harmonized standard: | |
| <i>Electromagnetic compatibility (EMC) -</i> | |
| -EN 50498:2010 <i>Product family standard for aftermarket electronic equipment in vehicles</i> | |
| 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 must be used 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 a protection fuse or a circuit breaker near the battery. Follow the amperes as indicated here in this manual. Use of improper fuse or circuit breaker could result in overheating, 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 making connection to amplifier, disconnect the battery's negative terminal.
- When in use, the external surface of the amplifier becomes hot. Avoid touching the heatsink area and keep children 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 proceeding any connection or disconnection in this terminal.
- If you want to dispose this amplifier, don't throw it on domestic waste. It must be collected by a disposal service for wasted electronic products proper recycling.

Safety

Pay attention to the safety symbols.

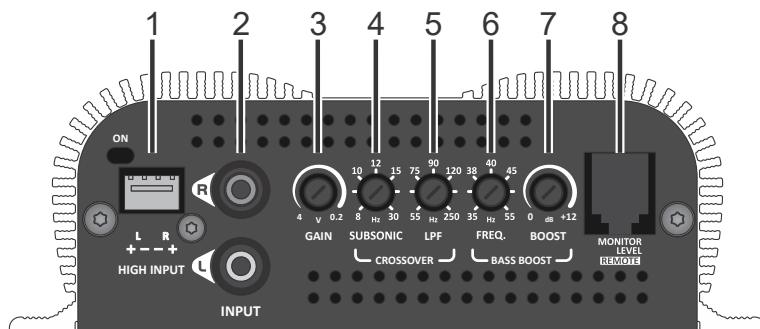


This symbol with **"CAUTION"** is intended to alert the user about the presence of important instructions. Failure to heed the instructions will result in risk of injury to user or product damage.



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 - HIGH LEVEL INPUT: Input two 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.

2 - INPUT (RCA): Inputs of signals to be amplified. Connect these signals to RCA outputs of CD/DVD Player, using good quality shielded cables to avoid noise interference.

3 - GAIN: 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.

Note: With this setting in the MIN position, the amplifier accepts signals of up to 4Vrms at the RCA input.

4 - SUBSONIC: Variable adjustment from 8Hz to 30Hz, which determines the beginning of the amplifier operating frequency.

5 - LPF (LOW PASS FILTER): Variable adjustment from 55Hz to 250Hz, which determines the end of the amplifier operating frequency.

6 - FREQ.: Set the Bass Boost center frequency, from 35Hz to 55Hz.

7 - BASS BOOST: Boost the bass signals with variable range of 0 to + 12dB.

8 - MONITOR LEVEL REMOTE: The Monitor Level Remote accessory (sold separately) has three indicator LEDs: On, Clip and Protection.

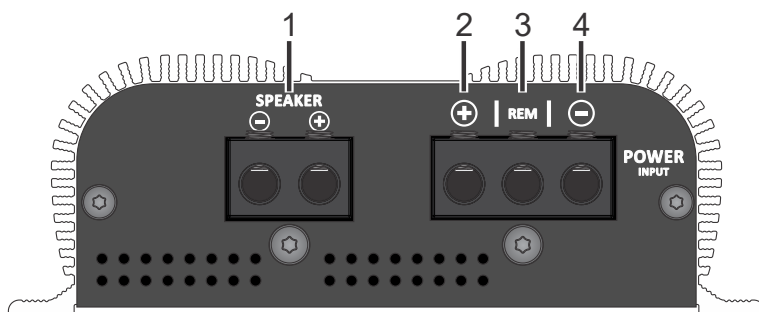
When used with the BASS 400 amplifier, only the On LED (blue) will be activated, as the amplifier does not have Clip and Protection indicators.

LED indicator



ON: Indicates that amplifier is on.

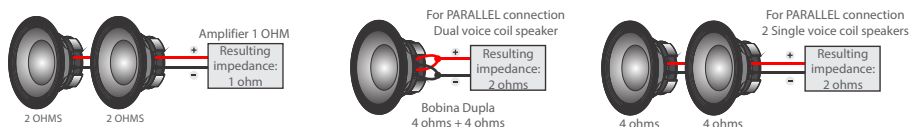
Output & power supply connector



1 - SPEAKER: Output (positive and negative) for connecting transducers (speakers). Follow the indicated polarity.

For speaker's associations, the impedance to consider is the resulting impedance:

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.

2 - POSITIVE POWER SUPPLY TERMINAL: Use a 6mm² (9 AWG) cable directly from the positive battery's terminal with fuse (40 A), as close as possible from the battery.

3 - TERMINAL REMOTE: It must be connected to the remote output of the head unit using an 0,75mm² (18 AWG) cable.

4 - NEGATIVE POWER SUPPLY TERMINAL: Use 6mm² (9 AWG) cable as short as possible must be used, connected to the negative battery's pole.

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

Protection system

SHORT CIRCUIT PROTECTION: Cuts off the audio signal if a short circuit or impedance lower than that supported at the output is detected.

THERMAL PROTECTION: If the heatsink temperature reaches high levels, the audio signal is turned off. (This will not occur if the amplifier is installed in a ventilated location and correctly).

Installation

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

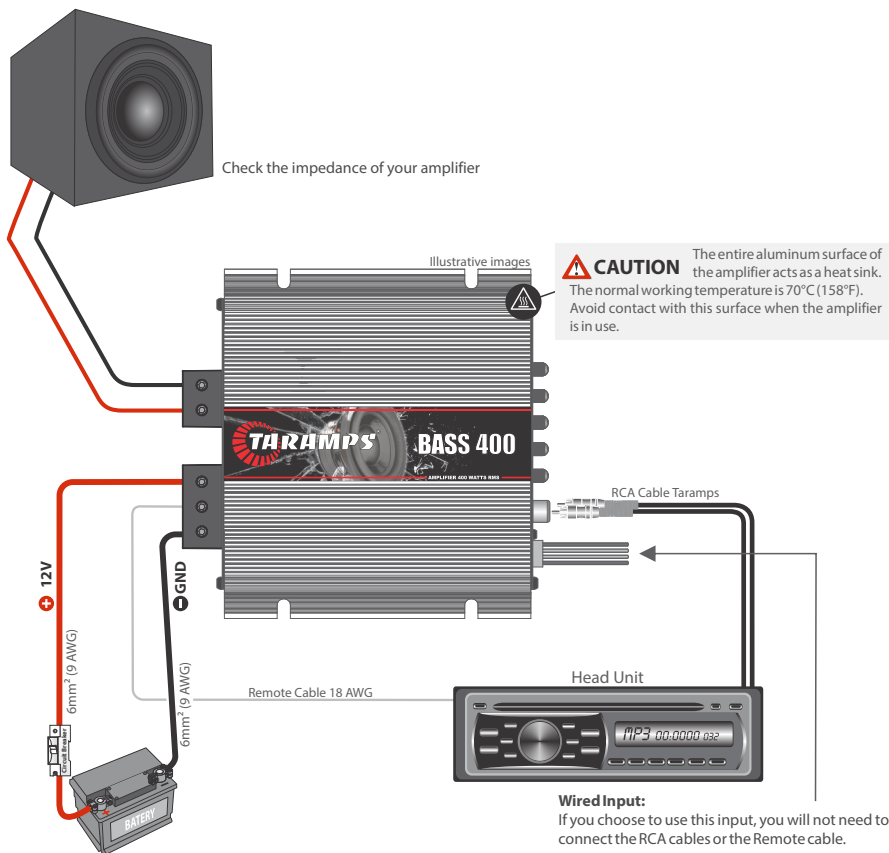
Recommended wire* gauge & fuse

Positive / negative power supply cable _____ **6mm² (9 AWG)**
 Output cables wire gauge _____ **2,5mm² (13 AWG)**
 Remote cable _____ **0,75mm² (18 AWG)**
 Protection fuse or circuit breaker _____ **40 A**

*Calculated considering a maximum length of 4m. To reach a 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 fuse or circuit breakers as close as possible from batteries.



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

Technical features

ENGLISH

| | |
|----------------------------------|---|
| Minimum output impedance: | 1 Ohm / 2 Ohms / 4 Ohms |
| Number of channels: | 01 |
| Output power @14,4VDC: | 400W RMS* |
| Input sensitivity: (Level 100%): | 320mV (RCA) / 6V (WIRE) |
| Signal- to-noise ratio: | >90dB |
| Frequency response: | 8Hz ~ 250Hz (-3dB) |
| Crossover Subsonic: | 8Hz ~ 30Hz (-12dB/8 ^a) Variable |
| LPF (Low pass filter): | 55Hz ~ 250Hz (-12dB/8 ^a) Variable |
| Bass Boost: | 35 ~ 55Hz (0 ~ +12dB) Paramétric |
| Efficiency: | 82% |
| Input impedance: | 10K Ohms (RCA) 1K Ohms (WIRE) |
| Protection system: | Output short circuit / thermal protection |
| Minimum supply voltage: | 8VDC |
| Maximum supply voltage: | 16VDC |
| Idle consumption: | 0.5A |
| Musical consumption @14.4VDC: | 17.5A |
| Rated power consumption: | 35A |
| Dimensions (W x H x L): | 134 x 40 x 138mm (5.28" x 1.57" x 5.43") |
| Weigth: | 0.57Kg (1.25lb) |

*Rated power with 60 Hz sinusoidal signal, THD <= 1%, with resistive loads, measured with Audio Precision APx525 or equivalent and the product at lower than 50°C case temperature and 14.4 V supply voltage.

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 TARAMP'S support.



+55 18 3266-4050

Manufactured by:
TARAMPS ELECTRONICS LTDA
TAX ID: 11.273.485/0001-03
Highway: Júlio Budisk, SN, KM 30
Alfredo Marcondes - SP
Made in Brazil
www.taramps.com.br