

Instruction manual



DS 800X2
AMPLIFIER - 800WATTS - 2 OHMS
2 x 400W RMS



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 on Júlio Budisk Highway, SN, KM 30 – Alfredo Marcondes, SP - Brazil, ZIP CODE 19180-120, 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 substitution 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 as 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 DS 800X2 complies with the Directive 2014/30/EU, according with the following harmonized standard:	
-EN 50498:2010 <i>Electromagnetic compatibility (EMC) - 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 **WARNINGS** and **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 breaker 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.

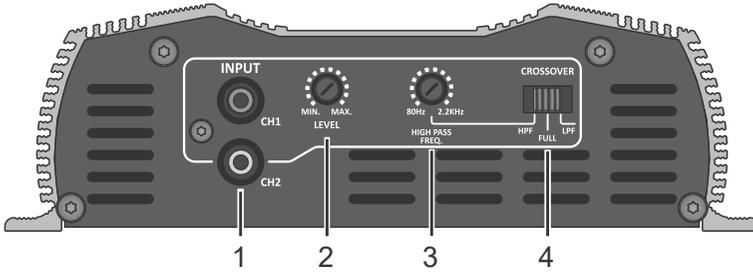
Safety

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.
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 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

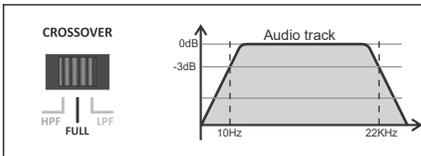


1 - INPUT: Inputs of signals to be amplified. Connect these signals to RCA outputs of CD/DVD Player, using good quality shielded cables to avoid noise interference.

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.

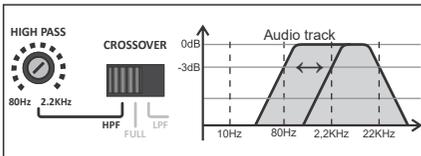
3 - HPF - (HIGH PASS): Variable adjustment from 80Hz to 2.2KHz, which determines the beginning of the amplifier operating frequency.

4 - CROSSOVER: Set the operating mode of amplifier :



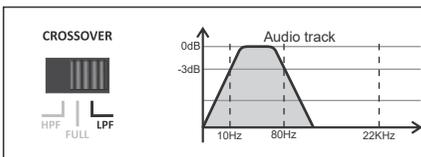
SELECTOR POSITION - FULL

Amplifies the whole audio range, responding from 10Hz to 22KHz. This function is normally used when there is an external crossover in the system.



SELECTOR POSITION - HPF - (HIGH PASS)

Amplifies signals with more intensity from the selected frequency ranging from 80Hz to 2.2KHz (-6dB / 8°). This type of function is used for playback of mid-bass, mid-range speakers, drivers or tweeters.



SELECTOR POSITION - LPF - (LOW PASS)

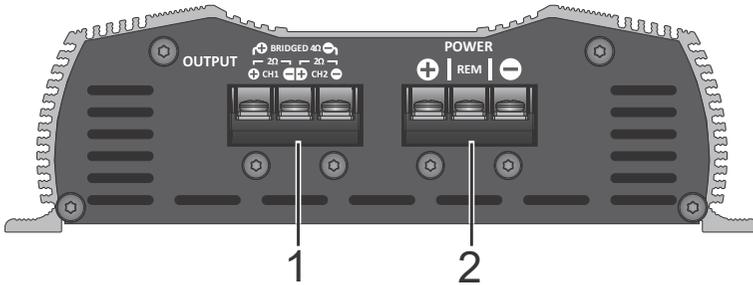
Amplifies only sub bass and bass, since the response is limited to 80Hz (-12dB/8°), the optimal frequency for sub-woofers.

LED indicator



ON: Indicates that amplifier is on.

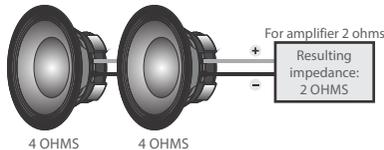
Output & power supply connector



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 BRIGDED connections is 4 ohms.

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

2 - POWER (Power Supply Connector): The connector terminal (+) must be connected to the battery's positive pole with a 7 AWG 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 CD/DVD Player REMOTE output with a 18 AWG wire.

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.

Installation

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

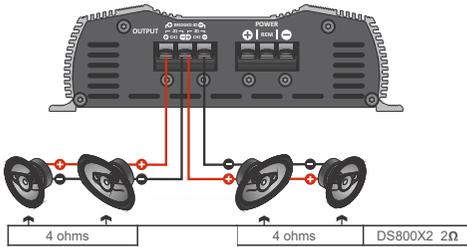
Recommended wire gauge & fuse

Positive / negative power supply cable _____ **7 AWG**
 Output cables wire gauge _____ **15 AWG**
 Remote cable _____ **18 AWG**
 Protection fuse or circuit breaker _____ **60A**

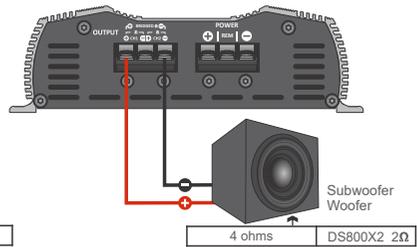
Calculated considering a maximum length of 4m. Distance greater than this, you will need to increase the cable gauges.

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.

Connection example 01

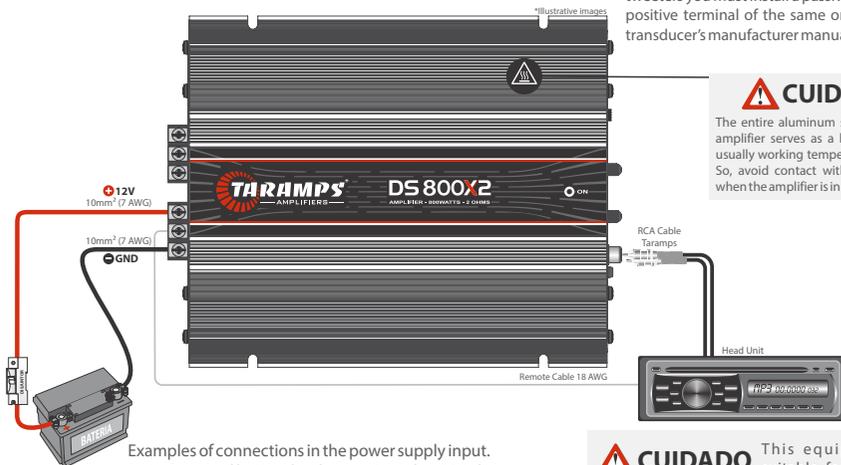


Connection example 02



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).

CAUIDADO
 The entire aluminum surface of the amplifier serves as a heat sink. The usually working temperature is 65°C. So, avoid contact with this surface when the amplifier is in use.



Examples of connections in the power supply input.
 Note: Required battery bank capacity: At least 60Ah

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

Technical features

Minimum Output Impedance:	2 OHMS
Number of Channels:	2
Output Power / @12.6VDC - 1 OHMS:	–
Output Power / @12.6VDC - 2 OHMS:	800W RMS (2 x 400W RMS)*
Output Power / @12.6VDC - 4 OHMS:	500W RMS (2 x 250W RMS)
1 Bridged Channel:	1 x 800W RMS
Input Sensitivity (Level 100%):	250mV
Signal- to-noise Ratio:	>96dB
Frequency Response (Full Range):	10Hz ~ 22KHz (-3dB)**
Crossover HPF (High Pass Filter):	80Hz ~ 2.2KHz (-6dB/8°) Variable
LPF (Low Pass Filter):	80Hz (-12dB/8°) Fixed
Input Impedance:	18K Ohms
Protection System:	Output overload
Minimum Supply Voltage:	9VDC
Maximum Supply Voltage:	16VDC
Idle Consumption:	0.85A
Musical Consumption / @12.6VDC:	38A
Rated Power Consumption:	77A
Dimensions (W x H x L):	173 x 52 x 227mm (6.81" x 2.05" x 8.94")
Weighth:	1.43Kg (3.15lb)

*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 4 ohms load.

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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