Instruction manual







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

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Term of warranty

TARAMPS, located at Julio 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 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:
- $\hbox{-} Damage of any kind, due to problems in the product, as well as losses caused by discontinued use of the product. \\$

Technical assistance

For international support, check on our website:

 $\underline{www.taramps.com.br/en/rede-de-assistencias-tecnicas} \ or \ contact \ direct \ the \ factory \ support:$

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 TARAMPS ELECTRONICS LTDA

TARAMPS ELECTRONICS
Alfredo Marcondes - SP
Brazil

Hereby, Taramps Electronics Ltda declares that the product MD 1200.1 complies with the Directive 2014/30/EU, according with the following harmonized standard:

Electromagnetic compatibility (EMC) --EN 50498:2010 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.
- $\hbox{-Before make any connection to amplifier, disconnect the battery negative terminal.}$
- -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.

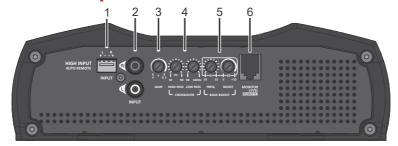
△ Safety

Pay attention to the safety symbols.



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



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:** 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 4 Vrms at the RCA input.

4-CROSSOVER: Set the operating mode of amplifier:

 $\textbf{SUBSONIC:} \ Variable \ adjustment from 10\ Hz to 90\ Hz, which determines the beginning of the amplifier operating frequency.$

LOW PASS: Variable adjustment from 90 Hz to 18 KHz, which determines the end of the amplifier operating frequency.

5-BASSBOOST:

BOSST: Boost for bass signals with variable range of 0 to + 10 dB.

FREQ: Set the Bass Boost center frequency, from $35\,\text{Hz}$ to $55\,\text{Hz}$.

6 - MONITOR LEVEL REMOTE: Connection to an accessory, which function is to control the gain and monitor the amplifier where all information from the indicator LEDs, such as distortion (CLIP/TEMP) and protection actuation (PROT), will be displayed simultaneously. **(Accessory not included).**

LEDS Indicator

12001

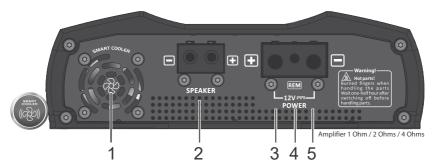
ON: Indicates that the amplifier is turned on.

CLIP: Indicates that the amplifier is operating at the threshold of the distortion.

PROT: Indicates that a short circuit or lower than supported impedance was detected at the output.

Output & power supply connector





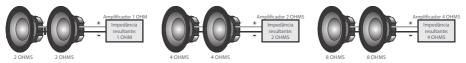
1 - FAN: The MD 1200.1, has one internal fan, and cannot be blocked. This fan is controlled by an intelligent system (Smart Cooler). The fan only runs at maximum speed after the product reach a certain temperature level. This function ensures long fan life and silent operation of your amplifier.



CAUTION The fan and ventilation openings are responsible for cooling the amplifier when it is in use. Do not obstruct them.

2 - SPEAKER: Output (positive and negative) to loudspeakers connection. Follow the polarity described and the minimum impedance recommended.

To combine loudspeakers, the resulting impedance must be taken into consideration.



- 3 POSITIVE POWER SUPPLY TERMINAL: Use a 16 mm² (5 AWG) cable directly from the positive battery terminal with fuse (65 A), as close as possible from the battery.
- 4 REMOTE TERMINAL: The remote CD/DVD Player output must be connected by a 1.5 mm² (15 AWG) cable.
- 5 NEGATIVE POWER SUPPLY TERMINAL: A 16 mm² (5 AWG) 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 and all power inputs must be used.



Before making any connections to the power terminals, make sure that the negative (-) CAUTION 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.

LOW VOLTAGE PROTECTION: Shutdown the amplifier if the battery voltage is below 9V.

HIGH VOLTAGE PROTECTION: Shutdown the amplifier if the battery voltage is above 17 V.

Installation **ENGLISH**

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

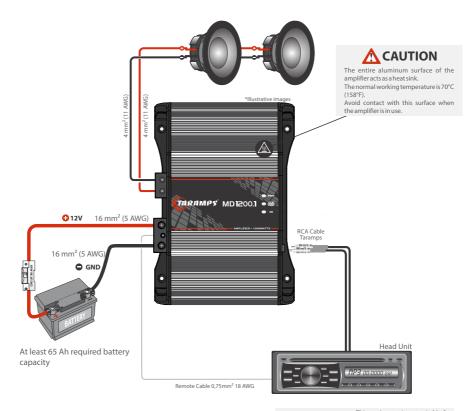
Recommended wire* gauge & fuse

Positive / negative power supply cable	16 mm ² (5 AWG)
Output cables wire gauge	4 mm ² (11 AWG)
Remote cable	0,75mm² (18 AWG)
Protection fuse or circuit breaker	65 A

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

Using wire gauges below the recommendation will result in power loss and **CAUTION** 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.



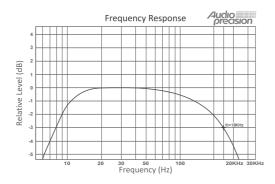
Technical features



Minimum output impedance:	1 OHM	2 OHMS	4 OHMS	
Number of channels:		1		
Output power @12.6VDC - 1 OHM:	1200W RMS*	1200W RMS*		
Output power @12.6VDC - 2 OHMS:	1000W RMS	1200W RMS*	-	
Output power @12.6VDC - 4 OHMS:	_	900W RMS	1200W RMS*	
Output power @12.6VDC - 8 OHMS:	_	_	800W RMS	
Input sensitivity (RCA):	4V (min.) / 250mV (máx.)			
Input sensitivity (WIRE):	>10V (min.) / 3V (máx.)			
Signal- to-noise ratio:	>90dB			
Frequency response (Full range):	10Hz ~ 18KHz (-3dB)**			
Crossover HPF (High pass filter):	10Hz ~ 90Hz (-12dB/8³) Variable			
LPF (Low pass filter):	90Hz ~18KHz (-12dB/8ª) Variable			
Bass boost:	Param	Parametric (35 ~ 55Hz) 0 ~ +10dB		
Input impedance:		10K Ohms		
Protection system:	Output overload, lo	Output overload, low and high power voltage, and thermal protection		
Minimum supply voltage:		9VDC		
Maximum supply voltage:		17VDC		
Idle consumption:	1.5A	1.6A	1.8A	
Musical consumption @12.6VDC:	62A	60A	58A	
Rated power consumption:	124A	120A	116A	
Dimensions (W x H x L):	228 x 70 x 157mm (8.98" x 2.76" x 6.18")			

Weigth: 1.80Kg (3.96lb)

*Rated power with 40 Hz sinusoidal signal, THD <= 1%, with resistive loads, measured with SMD/AD-1 audio power analyzer or equivalent and the product at lower than 50°C case temperature and 12.6 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 TARAMPS support.







Manufactured by:
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