

Instruction manual

THV 1030



HIGH VOLTAGE

DANGER
Non-isolated charger



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



www.taramps.com.br

Index

01 • Introduction

- Apresentation
- Important Recommendations
- Safety

02 • Getting to know the THV 1030 charger

Introduction

Congratulations on purchasing a Taramps product.

Developed in a modern laboratory, with the latest technology and highly qualified professionals.

This manual explains all the features, operations, and guidelines to address any questions that may arise during installation. Set aside some time to read it carefully to ensure proper installation and to make full use of all the benefits this product offers.

If you still have any questions after reading this manual, please contact our technical support at the phone number **18-3266-4050** or through our website **www.taramps.com.br/es**.

Overview

The **THV1030** charger was developed for recharging battery banks in series, from **10** to **30** batteries. It features automatic electronic control and embedded software that work together to prevent battery overcharging, keeping levels adequate and safe, thus providing longer battery life.

Important recommendations

- The **THV1030** charger is an industrial device and can only be used and installed by qualified professionals. The product operates with high voltage levels and the installation recommendations must be strictly followed.
- The vehicle's electrical system must be completely isolated from the sound system associated with this charger. Do not connect the **NEGATIVE** terminals of the two systems.
- Only connect the product to the AC power supply after all connections and protection devices are installed. Never handle it without the proper PPE for electrical networks: safety shoes, gloves, and protective glasses are essential for your safety.
- This equipment features an automatic dual voltage system that automatically detects the mains voltage and adjusts to it. At 220V, the charging current will be higher, making the recharge cycle faster.
- Install the charger in a firm and ventilated place, preferably without direct sunlight or other sources of heat.
- Never use extension cords with a gauge lower than recommended. Make sure that the outlet and the power supply support the current required to power the charger.
- Do not use with other 12V chargers. Disconnect if there is one in the system.
- The use of a **RESIDUAL CIRCUIT BREAKER** at the **AC** input and 12V and HV protection fuses near the batteries is mandatory. *Check installation diagram.
- The sale and installation of this product by persons under 21 years of age is prohibited.

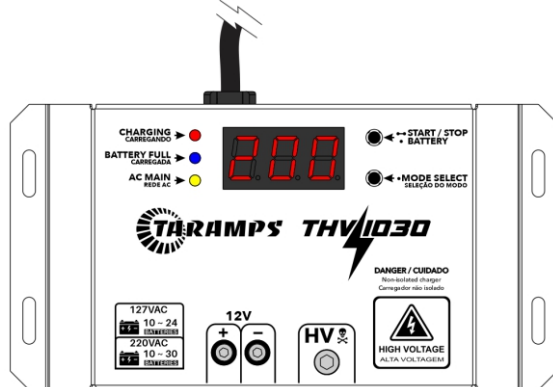
Safety

Throughout this manual, pay attention to the safety symbols.



This symbol as "**CAUTION**" is intended to alert the user to important instructions. Failure to follow the instructions may result in risks to the user or damage to the product.

Getting to know the THV 1030 Charger



RED LED - CHARGING: Indicates that the batteries are being recharged. When flashing fast, it is delivering current to the batteries, and when flashing slowly, it is in resting mode.

BLUE LED - BATTERY FULL: Indicates when lit that the charging process has been completed.

YELLOW LED - AC MAIN: Indicates when the product is connected to the AC power supply (127 or 220).

START/STOP BUTTON [+]

Button used to START and STOP the charging process (whether in CHARGING mode or MAINTENANCE mode). A long click (1sec.) starts or stops the process. Short click (when not in the charging process) adjusts the number of batteries. Each quick click on the START/STOP button(+) increases the number of batteries, or on the MODE SELECT button (-) decreases the number of batteries. It can be set between 10 and 30 batteries.

MODE SELECT BUTTON [-]

Button used to select the charging MODE. A short click (when not charging), switches between TOC (FLOAT) and CAR (CHARGING) modes.

OBS.: After 3 seconds without pressing any button, the battery quantity and operating mode settings are finalized.

If the buttons are pressed while the charging process is in progress, the current configuration is displayed by blinking on the screen.

DISPLAY

Displays the number of batteries, mode, and voltage.

- The display remains on during the charging process. When the charger is not in CHARGING mode and the keys are not being used, the display stays on for 1 minute and then turns off. To turn it back on, simply press any key.

CONNECTOR 12V:

Polarity + : Connect to the positive terminal of a 12V battery.

Polarity - : Connect to the negative terminal of the 12V battery and to the NEGATIVE of the battery bank series.

HV CONNECTOR: Connect to the positive terminal of the battery bank in series.

AC POWER CORD: Connect to the AC mains (127 or 220V).

OBS.: 127V (10 to 24 batteries) / 220V (10 to 30 batteries).

Operation

When the 12V supply is connected, the product turns on the display and shows the HV voltage level. It is possible to adjust the number of batteries and the operating mode.

These settings are saved and stored, and are not lost even when the power supply is disconnected.

The display remains on for 1 minute if no action is taken. To turn the display back on, simply press any button.

After setting the number of batteries and the operating mode, a 1sec. press on **START/STOP** starts the charging process. The display briefly shows the message ON and the configured number of batteries, mode, and target voltage. The flashing CHARGING LED indicates that the unit is in the CHARGING process. During the process, the display remains on, showing the HV voltage.

Charging only starts if the battery bank is connected to the charger.

Modes

Charging (CAR)

In CHARGING mode, when the voltage and charging cycles are reached, the process is automatically completed. The display will show FULL and BATTERY FULL LED will light up. Some cycles are required to consider the batteries fully charged. Note: the display turns off 1 minute after the end of the cycle

Playing (TOC)

In Playing mode, when the voltage is reached, charging enters resting mode. After this period, it resumes charging. This cycles continues until the user cancels it. In other words, it is automatically completed.

Technical information

Power supply:.....Automatic dual voltage (127/220V)

For 24 batteries or more, use 220V. Caution: 127V will not charge.

Minimum number of batteries in series:.....10

Maximum number of batteries in series:.....30

Recommended output gauge 12V.....1,5mm²

Recommended HV output wire gauge.....2,5mm²

Insulated cable >500V.

Maximum AC consumption.....127V=4A / 220V=8A

Maximum DC output current (HV).....4A, 220V

12V Power supply.....11 a 15VDC / 1A

Maximum AC power.....900W

Dimensions (W x H x D):.....175 x 47 x 95mm

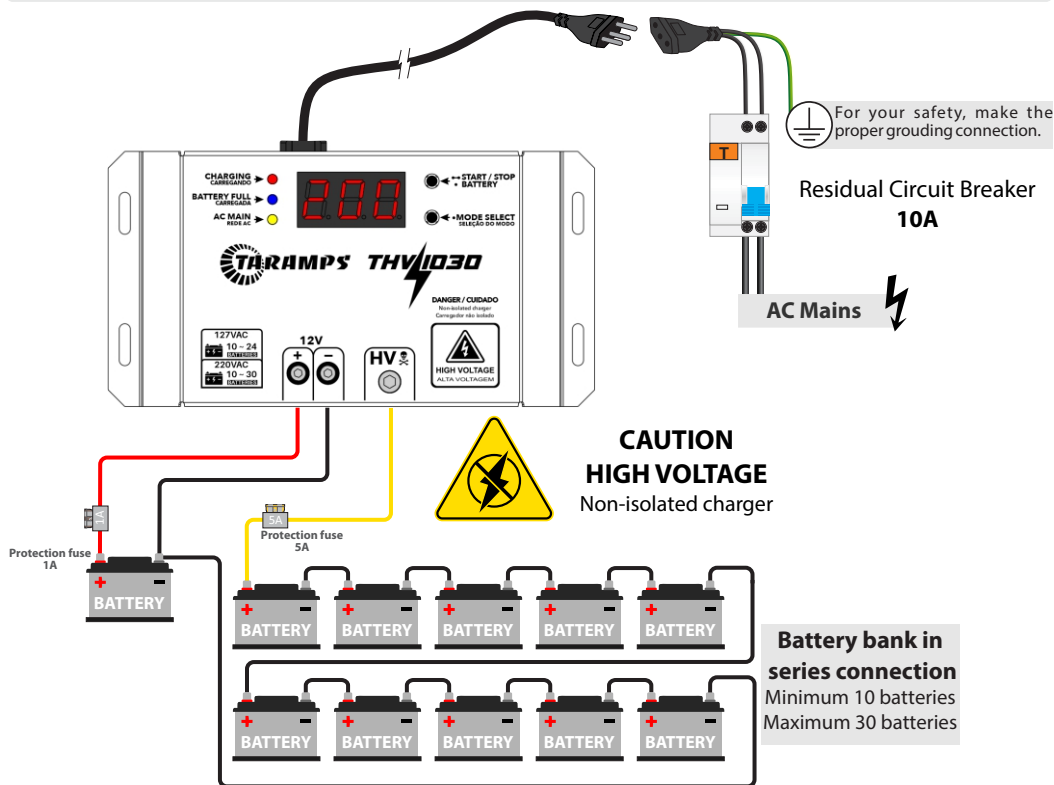
Weight:.....0,635Kg



Taramps reserves the right to modify the contents of this manual without prior notice and without any obligation to apply such modifications to units previously manufactured.

Installation diagram

- 1- Use tools that comply with standards, with insulated cables.
- 2- The cables and circuit breakers must be of good quality and with the appropriate wire gauge.
- 3- Any connection must only be made with the charger turned off.
- 4- Remove the hole covers from the connector openings, make all the connections, and then put the hole covers back in place.
- 5- Before turning on the charger, make sure that all connections are properly insulated.
- 6 - Never touch the output terminals, even with the device turned off. Note that there is high voltage at the terminals even when it is off, due to the internal capacitors.



CAUTION



The installation must be carried out by a qualified professional.

This product will be powered by **High Voltage**. **Danger of death.** ☠️

As with any electronic equipment, maximum care must be taken to avoid any incident during installation.

+21

The purchase, sale, and instalation of this product by persons under 21 years of age is strictly prohibited.

"Value your life and avoid accidents, as depending on the severity, an electric shock can be fatal".

Warranty terms

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 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 support

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

Declaration of conformity

Declaration of conformity	
	TARAMPS ELECTRONICS LTDA Alfredo Marcondes - SP Brasil
It is hereby declared that the THV 1030 product is in conformity with directive 2014/30/EU, in accordance with the following technical 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 on the product page on the website.	



+55 18 3266-4050

Manufactured por:
TARAMPS ELECTRONICS LTDA
Tax ID: 11.273.485/0001-03
Julio Budisk RD, SN, KM 30
Alfredo Marcondes - SP
Brazilian Industry
www.taramps.com.br