# Manual

# **Polaron SMPS 1500**

1500 Watt power supply for chargers

No. S2024





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#### Introduction

Thank you very much for purchasing the *Graupner* Polaron SMPS **1500**. This power supply is extremely versatile.

Read this manual carefully to achieve the best results with your Polaron SMPS 1500 and first of all to safely control your models. If you experience any trouble during operation, take the instructions to help or ask your dealer or *Graupner* Service Centre.

Due to technical changes, the information may be changed in this manual without prior notice. Be always updated by checking periodically on our website, **www.graupner.de** to be always uptodate with the products and firmwares.

This product complies with national and European legal requirements.

To maintain this condition and to ensure safe operation, you must read and follow this user manual and the safety notes before using the product!



#### NOTE

This manual is part of that product. It contains important information concerning operation and handling. Keep these instructions for future reference and give it to third person in case you gave the product.

#### **Service Centre**

### Graupner Central Service | Servicehotline

Graupner/SJ GmbH Henriettenstraße 96

D-73230 Kirchheim/Teck

**(**+49) (0)7021/722-130

Monday - Thursday: 9:15 am - 4:00 pm

Friday:

9:15 am - 1:00 pm

Graupner USA

3941 Park Dr Suite 20-571

El Dorado Hills, CA 95762

Website: www.graupnerusa.com

Phone: +1 855-572-4746

Email:service@graupnerusa.com

#### **Graupner** in Internet

For the service centers outside Germany please refer to our web site www.graupner.de

# **Declaration of conformity**

#### S2024 Polaron SMPS 1500

**Graupner/SJ** declares that the product is conform to EU norms.

EN 55022: 2010, EN 55024: 2010

EN 6100-3-2: 2014, EN 6100-3-3: 2013

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#### Intended use

The **Polaron SMPS 1500 Power supply** is a microprocessor controlled power supply that provides a balanced voltage from the net voltage.

The **Polaron SMPS 1500** is only suitable for being used as power supply for RC model battery chargers.

Other uses are not allowed. For any improper use no warranty or liability is accepted.

The **Polaron SMPS 1500** power supply should not be used to directly charge any battery. The batteries should be charged only with a proper battery charger.

Read through this entire manual before you attempt to install or use the **Polaron SMPS 1500** power supply.

**Graupner/SJ** constantly works on the development of all products; we reserve the right to change the item, its technology and equipment.

#### **Target group**

The product is not a toy. It is not suitable for children under 14 years. The installation and operation of the **Polaron SMPS 1500** must be performed by experienced modellers. If you do not have sufficient knowledge about dealing with R/C models power supplies, please contact an experienced modeller or a model club.

# Package content

- ◆ Polaron SMPS 1500
- Power cable
- ◆ XT-90 connection cable
- ◆ Manual

#### **Technical Data**

#### **Polaron SMPS 1500**

Input voltage (nominal voltage)	110 - 230 Volt AC / 50/60 Hz
Output voltage	10 - 25 Volt DC
Output current	1 - 60 Ampere
Operating temperature	10 - 45°C
Operating humidity	5 - 95 %
Outputs	3 pairs 4 mm connectors
	1 x XT-90 connector
	2 x USB ports 1 A / 2 A
Dimensions	275 x 170 x 68 mm
Weight	2,46 Kg

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# **Symbols explication**



Always observe the information indicated by this warning sign. Particularly those which are additionally marked with the **CAUTION** or **WARNING**. The signal word **WARNING** indicates the potential for serious injury, the signal word **CAUTION** indicates possibility of lighter injuries.



The signal word **Note** indicates potential malfunctions. **Attention** indicates potential damages to objects.

## Safety notes

#### **CAUTION**



These safety instructions are intended not only to protect the product, but also for your own and other people's safety. Therefore please read this section very carefully before using the product!

- Do not carelessly leave the packaging material lying around, since it might become a dangerous toy for children.
- Persons, including children, with reduced physical, sensory or mental capabilities, or lack of experience or knowledge, or not capable to use safely the power supply must not use the power supply without supervision or instruction by a responsible person.
- Protect the device from dust, dirt, moisture. All equipment must be protected from vibration as well as excessive heat or cold.
- The slots in the housing are used to cool the device and must not be covered or sealed. The device must be positioned so that the air can circulate without restriction.
- The power supply, the charger and the battery to be charged must be placed on a non-combustible, heat-resistant and non-conducting surface during operation. Never place the device on a car seat, carpets or similar surfaces. Combustible or highly flammable objects are to be kept away from the charging area.
- Only use in rooms fitted with a smoke detector.
- Do not connect any battery directly to the power supply, risk of fire!

#### Use

Connect the power supply to the net socket with the proper voltage by using the including connection cable.

The power supply starts with switched off output voltage, in the display will be shown in the highest line "POWER OFF".

In the display will be shown the actually set output voltage, the maximum output current, the actual watt consumption and the internal temperature of the power supply.



The output voltage can be set in this display by pushing the arrow buttons.





#### **CAUTION**

Before you switch the output voltage on:

a too high voltage can lead to fire and can destroy the connected battery charger. Inform yourself about the maximum voltage needed by the battery charger that is connected to the power supply. Set the voltage previously properly through the arrow buttons.



The output voltage is switched on through the Start/Enter button. In the highest line of the display will appear "POWER ON".

# **Settings**



To acceed to the settings menu push and hold the **STOP/SET** button for approx. 2 se.





Through the arrow buttons you can select the menu points. The selected menu point changes to yellow.

If you push the Start/Enter button the menu point blinks, now you can change the value though the arrow buttons.

You have the following setting possibilities in the single menu points:

#### Max. Current

Maximum current given by the power supply, 1 - 60 A

#### Fan on Temp.

Switch-on temperature of the cooling fans in the device, 30 -  $50^{\circ}\text{C}$ 

The fan power will be regulated depending on the load.

### **Shut Down Temp.**

Switch-off temperature, once the set temperature is reached the output will be switched off, 70 - 90°C

#### **Buzzer**

Button tone on or off, ON - OFF

#### **Back Light**

Display illumination time, 1 - 20 min or always on



#### **Note**

If the illumination has switched off, it can be switched on again by pushing each button.

### Temp. Unit

Set the temperature unit, Celsius or Fahrenheit

# Warning messages

Over-voltage	If the output voltage is 2 V higher than the set voltage, the power supply switches off. It is only possible to re-switch the power supply on manually.
	<b>OVER VOLTAGE</b> - Warning will be shown in the highest line of the display.
Over-current	If the output current is 2 A higher than the set value, the power supply switches off. It is only possible to re-switch the power supply on manually.
	<b>OVER CURRENT</b> - Warning will be shown in the highest line of the display.
Over-warming	If the power supply temperature is higher than 90°C for more than 2 sec, the power supply switches off. The power supply switches automatically on again when the temperature gets lower.
	<b>OVER TEMPERATURE</b> - Warning will be shown in the highest line of the display.
Short-circuit at the	If there is a short-circuit in one output, the power supply switches off. It is only possible to re-switch the power supply on manually.
output	<b>SHORT CIRCUIT</b> - Warning will be shown in the highest line of the display.

# Notes on environmental protection



#### **Disposal notes**

This symbol on the product, user manual or packaging indicates that this product must not be disposed of with other household waste at the end of its life. It must be handed over to the applicable collection point for the recycling of electrical and electronic equipment.

The materials are recyclable as marked. By recycling, material reusing or other forms of scrap usage you are making an important contribution to environmental protection.

Batteries and accumulators must be removed from the device and disposed of at an appropriate collection point. Please inquire if necessary from the local authority for the appropriate disposal site.

#### Care and maintenance



#### **Notes on care**

The product does not need any maintenance, it works so as it is without any special care. In your own interests protect it from dust, dirt and moisture.

# Warranty

The Graupner, Henriettenstrassee 96, 73230 Kirchheim/Teck grants from the date of purchase of this product for a period of 24 months. The warranty applies only to the material or operational defects already existing when you purchased the item. Damage due to misuse, wear, overloading, incorrect accessories or improper handling are excluded from the guarantee. The legal rights and claims are not affected by this guarantee. Please check exactly defects before a claim or send the product, because we have to ask you to pay shipping costs if the item is free from defects.

The present construction or user manual is for informational purposes only and may be changed without prior notice. The current version can be found on the Internet at **www.graupner.de** on the relevant product page. In addition, the company **Graupner** has no responsibility or liability for any errors or inaccuracies that may appear in construction or operation manuals.

No liability can be accepted for printing errors.

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