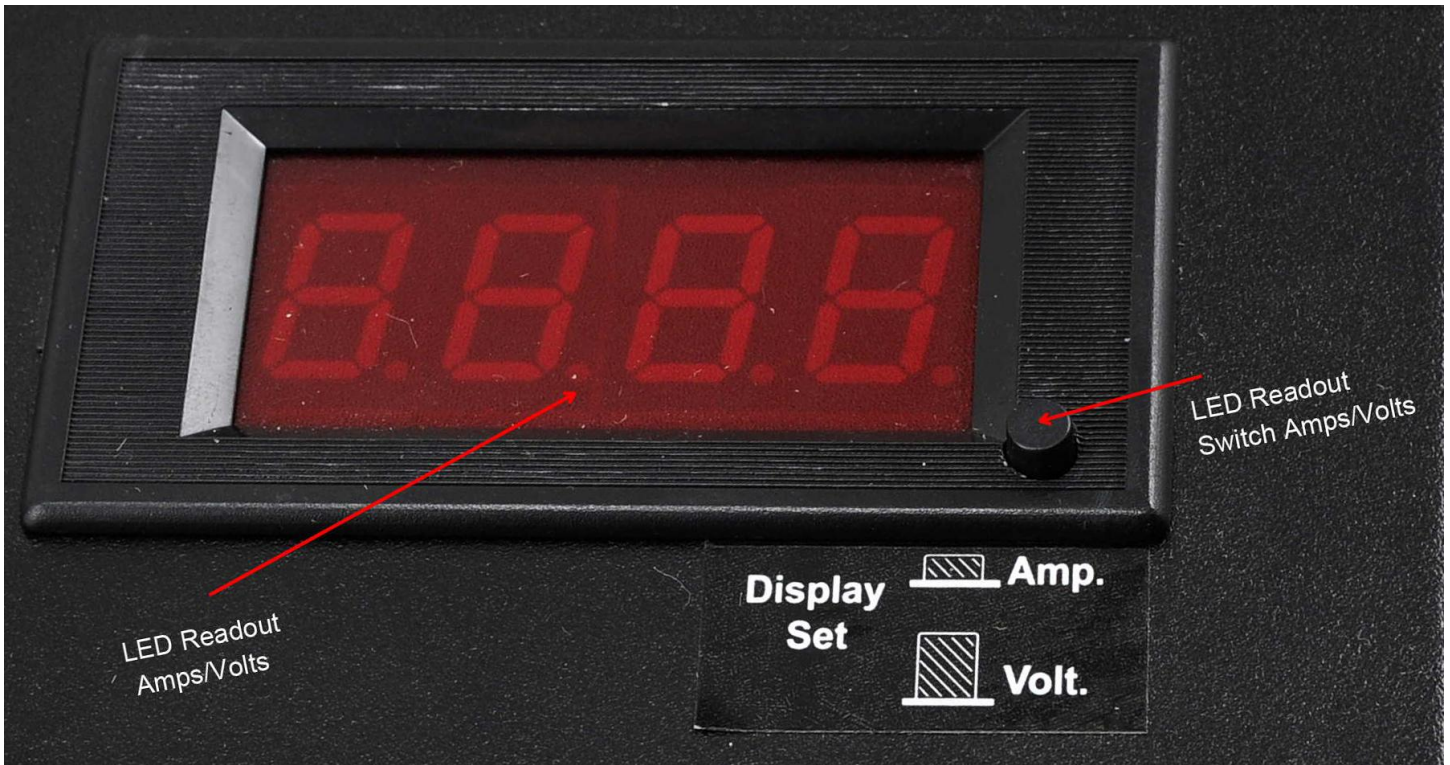


ProTekRC

Thank you for purchasing the ProTek R/C "Super Pro 1000" Power Supply. This is one of the most powerful, easiest to operate, feature-packed power supplies available. With proper care, the Super Pro 1000 power supply will provide years of efficient and reliable operation.



Operating Instructions:

- **IMPORTANT!** Verify that the voltage output adjustment is correct and compatible with the equipment you are going to connect to the power supply.
- For all battery charging applications, the amp rate should be left at full power. This only needs to be adjusted if a specific piece of equipment requires a current rating of less than 37 Amps.
- Ensure that no load is connected to the power supply before connecting to a 110V AC power source.
- Always place on a stable, flat surface.
- Do not overload the power supply (no more than a 37 amp load).
 - Each switched output can deliver a maximum of 16 amps .
- Verify the correct polarity of the output terminals before connecting any device (Red = Positive / Black = Negative) and do not reverse the polarity.
- Verify that the LED is on and that the cooling fan is operating.
- The power supply may become warm during operation or emit a slight buzzing sound; these actions are normal. If the unit becomes hot to the touch, disconnect immediately.
- The power cord can be replaced with any computer power supply cord so that it may be used in different countries

Safety Precautions:

- Do not leave the power supply unsupervised during use.
- Keep the power supply away from heavy vibration, moisture, dust, or excessive heat.
- Do not move the power supply while in use.
- Do not operate near fire or water.
- Use care when transporting to avoid any kind of impact.
- Do not operate with wet hands.
- Do not modify, disassemble, or service the power supply, as this will void the warranty.
- Do not use the power supply to charge a battery, or connect a battery directly to the terminals.
- Do not connect incompatible chargers to the power supply (do not exceed the amperage load).

The most important factor to consider when using any power supply is to ensure that the unit can supply sufficient wattage and amperage to efficiently operate your charger. There is a simple equation that you can use to determine the wattage necessary to supply the charger with the power needed to charge a battery. This equation should be performed before you charge any battery with specifications that differ from the battery you are familiar with.

Step 1: Volts x Charge Rate in Amps = Watts

For an example of this equation, we are going to use a 2S 5000mAh battery charging at a 1C amp rate. A 2S battery is 7.4 volts, and a 1C charging amp rate for a 5000mAh battery is 5 amps. You will need to multiply 7.4V x 5 amps, which equals 37 watts.

Step 2: Watts / Power Supply Output Voltage = Amperage

Start by taking the watt value from part 1 of the equation (in our example, 37 watts), and divide it by the output voltage provided by the power supply. We will be using 13.8V as our baseline number, as the ProTek Super Pro 40 power supply produces 13.8V of output voltage. Because the wattage determined in part one is 37W, we will divide that by 13.8V. When you perform the 37W / 13.8V equation, you get a amp rate of 2.68 Amps. Your power supply would need to be capable of producing 2.68 amps, to charge a 2S, 5000mAh battery, at a 5 Amp Charge Rate (1C).

The complete equation is: Power Supply Amperage = (Battery Volts x Charge Rate) / Power Supply Voltage

Now as a second example we will do the equation with a more powerful battery. Let's say you want to find the necessary Supply Amperage for a 6S, 8000mAh battery at a 2C charging amp rate. $22.2V \times 16A = 355 \text{ Watts}$. Then divide 355W by 13.8V; which equals 25.73 Amps.

Equation:

- **Step 1:** Voltage x Charge Rate in Amps = Watts
- **Step 2:** Watts / Power Supply Output Voltage = Necessary Power Supply Amperage
- **Proper Equation:** Power Supply Amperage = (Battery Volts x Charge Rate) / Power Supply Output Voltage

While this calculation may seem complicated at first, it gets easier the more you do it. With today's high energy Lithium Polymer Cells and evolving battery technology it is important that you learn this math to ensure peak performance and maximum life span from your batteries and support gear. Ensuring "A Higher Level of Performance," ProTek R/C is here to give you the products necessary to move you to the front of the pack, and the brain power to keep you there. Class is dismissed; now go have fun!!!

Super Pro 1000 Specifications:

Input Voltage: 110-240V AC

Output Voltage: 12-30V DC +/- 5%

Wattage: 1000W

Current: 25A @ 30V/ 37A @12V

Frequency: 47 / 64Hz

AC inrush current: Cold start: 60A @ 100%

Output Connections:

- (1) 37 Amp 4mm Banana Plug/Binding Post Output
- (4) 16 Amp 4mm Switched Banana Plug Outputs
- (1) 500mAh USB Plug Output

Size (LxWxH): 305x191x108mm

Weight: 5.9 lb (2.67 kg)

Disclaimer and Warranty

All ProTek RC power supplies are covered by manufacturer warranty against defects in materials and workmanship for one (1) year after original purchase date. Warranty will not cover power supplies that have been modified, disassembled, or otherwise misused according to the included instructions. ProTek R/C is not responsible for bodily injury and/or property damage that may occur from the use of, or caused by, this power supply.