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› KeenPower 6000A Super Capacitor Jump Starter User Manual

KeenPower SC6000G PRO

KeenPower 6000A Super Capacitor Jump Starter User Manual

Model: SC6000G PRO

1. INTRODUCTION

This user manual provides essential information for the safe and effective operation, maintenance, and troubleshooting of your KeenPower 6000A Super Capacitor Jump Starter. This device utilizes advanced supercapacitor technology, offering a reliable and long-lasting solution for jump-starting 12V vehicles without the need for a traditional internal battery. Unlike conventional battery-based jump starters, this unit does not require pre-charging at home. It charges rapidly from your vehicle's weak battery or other power sources, making it ready for immediate use. Its design ensures reliable performance across extreme temperatures, from -45°F to 158°F, and boasts an extended lifespan of over 1,000,000 cycles.



Figure 1.1: KeenPower 6000A Super Capacitor Jump Starter. This image shows the main unit with its robust casing, integrated handle, and attached red and black jumper clamps, ready for use.

MADE OF 6*3000F SUPER CAPACITOR

EXTREMELY SAFE & SUPER POWERFUL
NO BATTERY, NO SPARK & EXPLODE



Figure 1.2: Internal structure of the KeenPower jump starter. This image highlights the six 3000F supercapacitors that power the device, emphasizing its battery-less and spark-free design for enhanced safety.



Figure 1.3: The KeenPower jump starter's ability to operate in extreme environments. The image depicts the unit functioning reliably in both high temperature (desert) and low temperature (snowy) conditions, illustrating its robust performance from -45°F to 158°F.

2. SETUP

2.1 Unboxing and Initial Inspection

Upon receiving your KeenPower 6000A Super Capacitor Jump Starter, carefully open the packaging and remove all components. Verify that the following items are included:

- KeenPower 6000A Super Capacitor Jump Starter Unit
- Heavy-duty jumper clamps (integrated)
- User Manual (this document)
- USB charging cable (for auxiliary charging, if needed)

Inspect the unit for any visible damage that may have occurred during shipping. Ensure the clamps are securely attached and the display screen is intact.

2.2 Understanding the Components

Familiarize yourself with the main parts of the jump starter:

- **Main Unit:** Houses the supercapacitors, control circuitry, and display screen.
- **Display Screen:** Shows real-time voltage, charging progress, and operational status.
- **Jumper Clamps:** Heavy-duty red (positive) and black (negative) clamps for connecting to the vehicle battery.
- **Power Button:** Used to activate the unit and initiate the jump-start sequence.
- **USB-C Port:** For alternative charging methods (e.g., from a power bank or another vehicle's 12V outlet).

3. OPERATING INSTRUCTIONS

Follow these steps to safely and effectively jump-start your 12V vehicle:

3.1 Standard Jump Start Procedure

1. **Prepare the Vehicle:** Ensure the vehicle's ignition is off and all accessories (lights, radio, etc.) are turned off. Engage the parking brake.
2. **Connect the Clamps:**
 - Connect the **red (positive, +)** clamp to the positive terminal of the vehicle's dead battery.
 - Connect the **black (negative, -)** clamp to a clean, unpainted metal part of the vehicle's engine block or chassis, away from the battery and moving parts. Do not connect the black clamp directly to the negative terminal of the dead battery unless absolutely necessary and specified by the vehicle manufacturer.

WITH VOLTAGE DETECTION FUNCTION



Figure 3.1: Voltage detection function. After connecting the clamps, the unit automatically detects the car battery voltage, displayed on the screen.

- 3. Automatic Charging:** Once connected, the jump starter will automatically begin to draw a small charge from the vehicle's weak battery. The display screen will show "Charging" along with the current voltage and charge percentage. The unit charges very quickly, typically within 3 minutes, even from a very low battery.

NO PRE-CHARGE NEED INSTANT CHARGE & USAGE

Simply Attach the Clamps to Your 12V Car's Weak Battery for an Instant Boost Charge



Figure 3.2: Instant charge and usage. This image illustrates the jump starter connected to a vehicle battery, displaying "Charging" and the current voltage and percentage, indicating its rapid charging capability from a weak battery.



Figure 3.3: 3-minute full charge. The image shows the jump starter connected and ready, highlighting its ability to fully charge within 3 minutes by boosting charge from a dead battery, ensuring it's always ready without pre-charging.

4. **Initiate Jump Start:** Once the display shows "Finished" and 100% charge, press the Power Start button on the unit. This will activate the jump-start sequence.
5. **Start the Vehicle:** Attempt to start your vehicle's engine. If it doesn't start on the first try, wait a few minutes and repeat step 4.
6. **Disconnect Clamps:** Once the vehicle has started, disconnect the black (negative) clamp first, followed by the red (positive) clamp. Store the unit safely.



Figure 3.4: Easy-to-use four-step process. This graphic illustrates the simple steps: 1) Attach Clamps, 2) Auto Boost Charge to 100%, 3) Press Power Start Button, and 4) Jump Start, demonstrating the user-friendly nature of the device.

3.2 Force Start Function

For vehicles with a completely dead 12V battery (where the unit cannot draw enough initial charge), use the Force Start function:

1. Connect the clamps as described in step 2 of the Standard Jump Start Procedure.
2. Long press the POWER button for 3 seconds. The unit will enter Force Start mode.
3. Immediately attempt to start your vehicle.
4. Once the vehicle has started, disconnect the clamps as described in step 6 of the Standard Jump Start Procedure.

4. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your KeenPower jump starter.

4.1 Cleaning

- Wipe the unit's exterior with a soft, dry cloth.
- Ensure the clamps are clean and free of dirt, corrosion, or debris. Clean them with a wire brush if necessary.
- Do not use abrasive cleaners or solvents.

4.2 Storage

- Store the jump starter in a cool, dry place.
- Unlike traditional battery jump starters, this supercapacitor unit does not require regular recharging during storage. It can be stored for extended periods without losing its ability to charge from a weak battery.
- The unit is designed to withstand extreme temperatures, making it safe to store in your vehicle even in hot summer or cold winter conditions.

5. TROUBLESHOOTING

If you encounter issues with your KeenPower jump starter, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Unit does not display anything when connected to battery.	Poor connection to battery terminals; battery is completely dead (0V).	Ensure clamps are securely connected to clean battery terminals. If battery is completely dead, use the Force Start function (Section 3.2).
Unit charges but vehicle does not start.	Vehicle issue not related to battery (e.g., starter motor, fuel system); insufficient charge.	Ensure the unit reached 100% charge. Attempt to start the vehicle again. If the problem persists, consult a professional mechanic.
Unit shows "Error" message.	Reverse polarity connection; short circuit; internal fault.	Immediately disconnect clamps. Reconnect ensuring correct polarity (red to positive, black to chassis). If error persists, contact customer support.
Unit charges slowly or not at all from USB-C.	Low power USB source; faulty cable.	Ensure USB power source provides sufficient output (e.g., 5V/2A or higher). Try a different USB-C cable. Note that USB charging is primarily for auxiliary power, not primary charging for jump-starting.

Important Note: This supercapacitor jump starter is designed to draw power from a weak battery to charge itself for a powerful discharge. It does not store a residual charge like a traditional battery. Therefore, it will not hold a charge for extended periods when disconnected from a power source. This is normal operation and not a defect.

6. SPECIFICATIONS

Feature	Detail
Model	SC6000G PRO (Item model number: SC6000 PRO, Manufacturer Part Number: SC6G-Pro)
Brand	KeenPower
Peak Amperage	6000A (delivers a maximum current of 6285A)

Feature	Detail
Capacitor Type	6 x 3000F Supercapacitors
Vehicle Compatibility	All 12V cars, trucks, tractors, motorcycles, RVs (up to 16.0L Gas/Diesel)
Operating Temperature	-45°F to 158°F (-43°C to 70°C)
Lifespan	Over 1,000,000 cycles
Item Weight	10.5 pounds (approx. 4.76 kg)
Package Dimensions	12.95 x 10.79 x 7.91 inches (approx. 32.9 x 27.4 x 20.1 cm)
UPC	712110987903

6000A PEAK
 BATTERY-LESS 6 * 3000F SUPER CAPACITOR
 JUMP STARTER FOR ALL 12V CARS

$$I_{\max} = \frac{C \cdot U}{2(t + ESR_{DC} \cdot C)}$$

= 6285.7A

Figure 6.1: 6000A Peak performance. This image illustrates the peak current output of the jump starter, showing the calculation for 6285.7A, demonstrating its powerful capability for jump-starting vehicles.



Figure 6.2: Wide vehicle compatibility. This image displays various vehicle types, from motorcycles to large trucks, indicating that the 6000A supercapacitor jump starter is suitable for all 12V vehicles up to 16.0L gas/diesel engines.

7. WARRANTY AND SUPPORT

7.1 Warranty Information

Specific warranty details for the KeenPower 6000A Super Capacitor Jump Starter are typically provided at the point of purchase or by the manufacturer. Please refer to your purchase documentation or contact the seller for precise warranty terms and conditions. Protection plans may also be available for extended coverage.

7.2 Customer Support

For technical assistance, product inquiries, or support, please contact KeenPower customer service. You can often find contact information on the product packaging, the manufacturer's official website, or through the retailer where you purchased the product.

Visit the official KeenPower Store for more information and support: [KeenPower Store](#)

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This manual is for informational purposes only. Specifications are subject to change without notice.