

V4000 HD

Heavy Duty Jump Starter

User Manual



TOPDON®

PREFACE

Welcome

Thank you for purchasing the TOPDON V4000 HD. Please read and understand this manual carefully before using this product. If any issues arise from the operation of this product, contact us via support@topdon.com for official technical support.

About This Manual

The illustrations and images in this user manual are for reference only. As products are periodically updated, the actual product you receive may vary slightly. Please refer to the actual product.

All information in this manual is based on the latest information available at the time of publication and no warranty can be made for its accuracy or completeness. TOPDON reserves the right to make changes at any time without notice.

The official version of these instructions is the English version. If there are any translation discrepancies, refer to the English version.

Revision History

Version	Date	Description
1.0	2025-12	Initial release

SAFETY IS ALWAYS THE FIRST PRIORITY!

Read All Instructions Before Use

- For your safety, the safety of others, and to avoid any damage to the product and your vehicle, **CAREFULLY READ AND MAKE SURE YOU FULLY UNDERSTAND ALL THE SAFETY INSTRUCTIONS AND MESSAGES IN THIS MANUAL BEFORE OPERATING.** You must also read the vehicle's service manual, and observe the stated precautions or instructions before and during any test or service procedure.
- **ALWAYS WEAR approved SAFETY GOGGLES** to prevent damage from sharp objects and caustic liquids.
- **ONLY** use the battery clamps that come with this product.
- **DO NOT** use this product if the cable or the jump starter has any damage.
- **DO NOT** put the product under direct sunlight or in high-temperature areas.
- **DO NOT SMOKE NEAR THE VEHICLE** when testing. Fuel and battery vapors are highly flammable.
- **DO NOT** use the product as a car battery or crush or disassemble the product. Doing so may result in an accident or injury.
- **DO NOT CUT THE PRODUCT'S CORDS OR SUBMERGE THEM IN WATER.** The product is an electrical device, and doing so may cause shock or severe burns.
- **DO NOT** charge the device immediately after jump starting, and never use it while it is charging.
- Supervision is required when this device is used by children or by individuals with reduced physical, sensory, or mental abilities, or limited experience or knowledge.
- Battery acid is extremely corrosive. If acid gets into your eyes, **RINSE THEM THOROUGHLY WITH COLD AND RUNNING WATER FOR AT LEAST 20 MINUTES AND SEEK MEDICAL ATTENTION IMMEDIATELY.** If battery acid contacts your skin or clothing, **WASH IT IMMEDIATELY WITH A SOLUTION OF WATER AND BAKING SODA.**
- Always keep the red and black clamps apart. Connect the red clamp to the battery's positive terminal and the black clamp to the negative terminal only. Wrong connections may trigger short-circuit or reverse-polarity protection.
- If the vehicle fails to start, disconnect clamps, wait 30 seconds, and try again. Do not attempt more than three jump-starts within two minutes.

SECTION 1 WHAT'S IN THE BOX?

· V4000 HD

· USB Cable (USB-C to USB-C)

· USB Cable (USB-A to USB-C)

· Power Adapter

· User Manual

SECTION 2 PRODUCT OVERVIEW

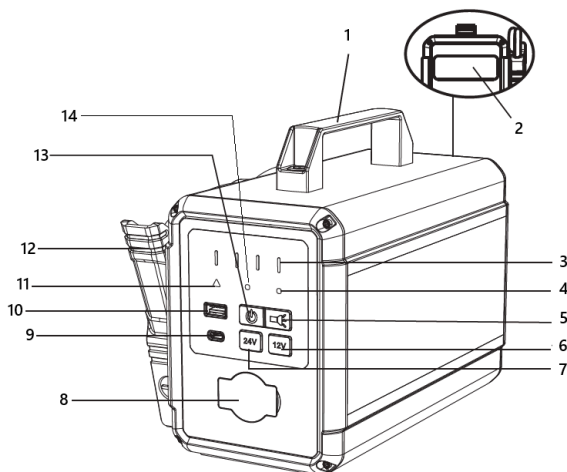


Figure 2-1

1	Handle	
2	LED Flashlight	Features three illumination modes: solid, strobe, and SOS.
3	Battery Level Indicators	After the device is turned on, the corresponding battery level indicator lights up based on the actual remaining battery capacity. If the 25% indicator blinks, the battery level is low and the device needs to be charged.
4	Reverse Polarity Indicator	Illuminates solid orange when the clamps are connected to the wrong battery terminals.

5	Flashlight Button	Press briefly to cycle through the three illumination modes or to turn off the LED flashlight.
6	12 V Button	• Blinks when the detected voltage is 2 V to 9 V. • Illuminates solid green when the detected voltage is 9 V to 15 V. • Press and hold for about 2 seconds to get the device into the 12 V jump-start mode. *Press with caution. For detailed instructions, refer to Section 4.1.2.
7	24 V Button	• Illuminates solid green when the detected voltage is 15 V to 30 V. • Press and hold for about 2 seconds to get the device into the 24 V jump-start mode. *Press with caution. For detailed instructions, refer to Section 4.1.2.
8	DC Output Port	Provides power for 12 V on-board devices such as navigators and fridges.
9	USB-C Port	Used to charge the jump starter.
10	USB-A Port	Supplies power for electronic devices such as mobile phones or tablets.
11	Abnormal Indicator	Illuminates solid red when an abnormality occurs, such as a short circuit or overcurrent.
12	Battery Clamps	Attaches to vehicle battery terminals for jump starting.
13	Power Button	Toggles device between On and Off modes, and wakes the device from Sleep mode. Hold for 5 seconds to force the device to shut down.
14	Normal Indicator	Illuminates solid green when the device works properly.

SECTION 3 GETTING STARTED

3.1 Charging the V4000 HD

Note: The V4000 HD needs to be fully charged before use. For optimal jump-start performance, please charge the unit when you first receive it.

Charge the jump starter via its USB-C port. During charging, the corresponding battery level indicator blinks. When the device is fully charged, all of the four indicators turn solid blue. Unplug the power adapter, and the unit is ready for use.

Warning: Do not use the device while it is charging to avoid potential damage.

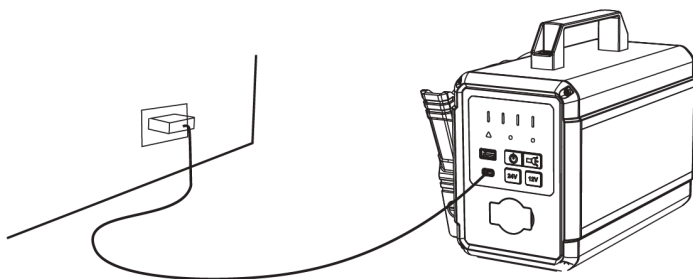


Figure 3-1

3.2 Powering on the V4000 HD

Press the power button to turn on the jump starter.

Note: The device will automatically shut down after 30 seconds if no load is connected and no operation is performed.

SECTION 4 USING YOUR V4000 HD

4.1 Jump Starting a Vehicle

Before jump starting a vehicle, connect the jump starter to the battery, identify the battery's rated voltage, and select the correct jump-start mode.

4.1.1 Establishing a Connection

1. Inspect the jump-start clamps and cables for corrosion or other visible damage. Use only cables and clamps that are in good condition.
2. Attach the red clamp to the positive (+) terminal, and the black clamp to the negative (-).

Warning:

- Always keep the red and black clamps separated. Contact between the clamps may cause a short circuit.
 - Do not connect the red clamp to the negative terminal or the black clamp to the positive terminal. Incorrect connections will trigger reverse polarity protection, and the reverse indicator will light up solid orange.
3. Once the clamps are properly connected, the corresponding jump-start mode will be triggered.

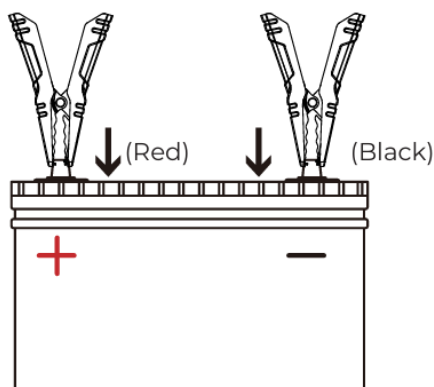


Figure 4-1

4.1.2 Checking the Jump-Start Mode

This device is capable of jump starting both 12 V and 24 V vehicles. Therefore, it has two jump-start modes: 12 V and 24 V.

Jump-Start Mode Introduction

After powering on the jump starter and connecting the clamps to the vehicle battery terminals, the device automatically detects the battery voltage. Based on the voltage reading, the corresponding button (12 V button or 24 V button) will illuminate or blink to indicate which jump-start mode is currently active.

The 12 V or 24 V button lights up on the following conditions:

Voltage Readings	Button Status	Responsive Measures
0 V to 2 V	Neither the 12 V nor the 24 V button lights up.	Press and hold the 12 V or 24 V button to activate the mode that matches the vehicle's rated battery voltage before jump starting.
2 V to 9 V	The 12 V button blinks green.	* For detailed instructions, see the section <i>Ensuring the Correct Jump-Start Mode is Selected</i> .
9 V to 15 V	The 12 V button illuminates solid green.	• For 12 V engines: jump start directly. • For 24 V engines: press and hold the 24 V button to switch to the correct mode before jump starting.
15 V to 30 V	The 24 V button illuminates solid green.	Jump start the 24 V engine.

Warning: Do not use this jump starter on any batteries with a voltage exceeding 30 V.

Using an incorrect mode may cause battery damage, a device malfunction, or personal injury. You must verify the battery's rated voltage before use and ensure the correct mode is selected before jump starting the vehicle.

Identifying Your Vehicle's Battery Voltage

The specific battery voltage is usually listed on the battery label. The following example below shows a 12 V battery.

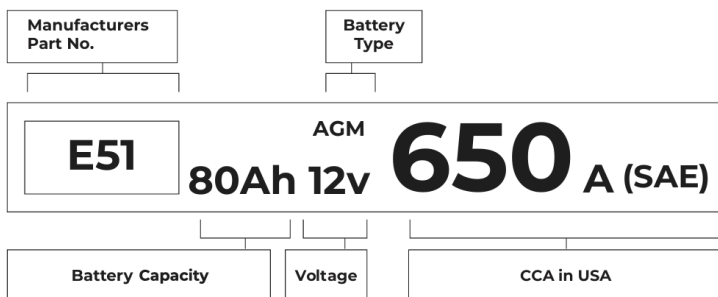


Figure 4-2

Ensuring the Correct Jump-Start Mode is Selected

After confirming the rated voltage of the vehicle battery, compare it with the jump-start mode (12 V or 24 V) enabled by the device. If the voltage and mode do not match, manually switch to the correct mode before attempting to start the engine.

For a 12 V Vehicle Battery

- If the 12 V button illuminates after the jump starter is powered on and connected, you can start the engine directly as instructed in Section 4.1.3.
- If neither button lights up, or if the 12-V button blinks, press and hold the 12 V button to switch modes. Once the 12 V button illuminates, proceed to start the engine.

For a 24 V Vehicle Battery

- If the 24 V button illuminates after the jump starter is powered on and connected, you can start the engine directly as instructed in Section 4.1.3.
- If neither button lights up, or if the 12 V button illuminates or blinks, press and hold the 24 V button for about 2 seconds to switch modes. Once the 24 V button illuminates, proceed to start the engine.

4.1.3 Jump Starting the Engine

1. Verify that the correct jump-start mode is activated.
2. Start the vehicle engine within 30 seconds.
3. After the engine starts successfully, disconnect the jump-start clamps from the vehicle battery.

Note:

- If the vehicle fails to start, disconnect the jump-start clamps and wait 30 seconds before trying again.
- Do not attempt more than three jump-starts within two minutes.

4.2 Using the LED Flashlight

The V4000 HD is equipped with an LED flashlight. After the device is powered on, you can press the flashlight button to turn the flashlight on.

The flashlight features three modes:

- SOS Mode: Blinks in a sequence of three short blinks, three long blinks, and three short blinks again to signal request for help.
- Solid Mode: Emits a steady white light.
- Strobe Mode: Frequently blinks as a warning signal.

After turning on the flashlight, you can short-press the flashlight switch button to cycle through the three modes and to turn it off. In addition, you can choose to press and hold the button to manually turn off the flashlight.

4.3 Using V4000 HD as a Power Bank

The V4000 HD can charge electronics such as mobile phones and tablets. It can also power onboard devices such as navigators and fridges.

4.3.1 Charging Electronics

1. Connect your electronic device to the jump starter through the USB-A port.
2. Press the power button to begin charging.

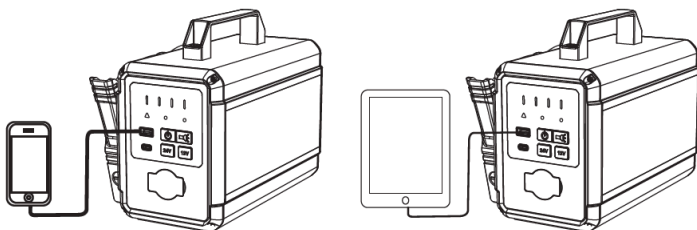


Figure 4-3

4.3.2 Supplying Power to On-board Devices

1. Connect the 12 V automotive device to the V4000 HD through the DC output port.

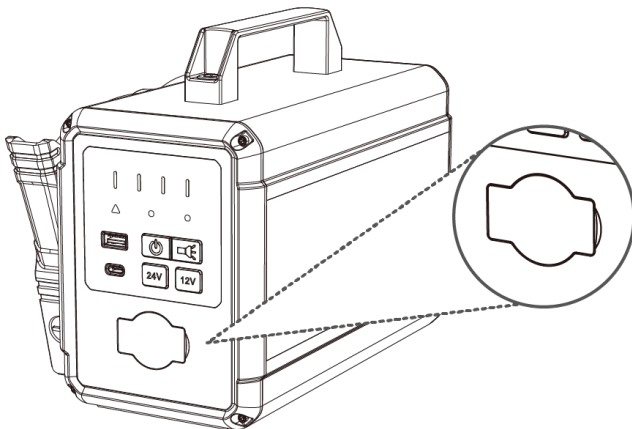


Figure 4-4

2. Press the power button to start supplying power.

Note: The DC output port is rated at 12 V = 10 A, so it can only power 12 V on-board devices. Power supply to 24 V devices is not supported.

4.4 Powering Off

After the jump starter is powered on, it will automatically shut down after 30 seconds if no load is connected and no operation is performed. In addition, you can press and hold the power button for 5 seconds to manually turn off the device.

SECTION 5 SPECIFICATIONS

Model	V4000 HD
Peak Current	12 V/4,000 A, 24 V/3,000 A
Battery Capacity	64,000 mAh, 204.8 Wh
USB-C Input	PD65 W
USB-A Output	5 V = 2.4 A
DC Output	12 V = 10 A
Working Temperature	-10°C to 50°C (14°F to 122°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Dimension (L x W x H)	247 × 146 × 194 mm (9.72 × 5.75 × 7.64 inches)
Net Weight	4.0 kg (8.8 lb)

SECTION 6 FAQ

- Q** How does the jump starter determine whether to enable 12 V or 24 V jump-start mode?
- A** The device automatically detects the battery voltage and activates the corresponding jump-start mode based on the voltage measurement result. For detailed criteria, please refer to the table in Section 4.1.2.
- Q** How can I confirm that the automatically-selected jump-start mode is correct?
- A** First, check the rated voltage of your vehicle battery and compare it with the mode automatically selected by the device. If they do not match, you must manually switch modes by pressing and holding the 12 V or 24 V button for about 2 seconds.
For example, if your vehicle battery is rated at 24 V, but its actual voltage is low and the device reads 14 V, the unit will automatically activate the 12 V jump-start mode. In this case, press and hold the 24 V button to switch to the correct mode.
- Q** What should I do if neither the 12 V nor the 24 V button lights up?
- A** This may occur if the device detects that the vehicle battery voltage is below 2V. To resolve the issue, first confirm your vehicle's rated battery voltage. Then press and hold the corresponding button (12V or 24V) for 2 seconds until it lights up. Once lit, you can proceed to jump start the vehicle. If the problem persists, please contact our official technical support at support@topdon.com or your vehicle manufacturer.
- Q** How many times can this device jump start a vehicle?
- A** On a full charge, the device can jump start a 12V vehicle about 60 times or a 24V vehicle about 30 times.
- Q** How many times can this device charge my cell phone?
- A** It depends on your phone's battery capacity. On a full charge, the jump starter can charge an iPhone 17 about 10 times.
- Q** How long does it take to fully charge the device?
- A** Charging time depends on the cable and adapter used. If you use the supplied adapter and USB cable, it typically takes about 3.5 hours to fully charge the device.

Q

How long does the device battery last after a full charge?

A

The battery can last almost 6 to 12 months. We recommend recharging the device every 3 months for optimal performance.

SECTION 7 WARRANTY

TOPDON's One-Year Limited Warranty

TOPDON warrants to its original purchaser that the company's products will be free from defects in material and workmanship for 12 months from the date of purchase (Warranty Period).

For the defects reported during the Warranty Period, TOPDON will either repair or replace the defective part or product according to its technical support analysis and confirmation.

TOPDON shall not be liable for any incidental or consequential damages arising from the device's use, misuse, or installation.

If there is any conflict between the TOPDON warranty policy and local laws, the local laws shall prevail.

This limited warranty is void under the following conditions:

- Misused, disassembled, altered, or repaired by unauthorized stores or technicians.
- Careless handling and/or improper operation.

Notice: All information in this manual is based on the latest information available at the time of publication and no warranty can be made for its accuracy or completeness. TOPDON reserves the right to make changes at any time without notice.