



# 12V BATTERY BOX USER MANUAL

SH-VABB-001A

Prior to installation and operation, it is essential to carefully read the manual and keep it for future reference.

V1.0

## **ABOUT US**

Founded in 2018, the San Hima brand stands for passion and enthusiasm for exploring the spectacular nature of the great outdoors. Since its inception, the trusted solutions and proven designs that San Hima offers to the market have made adventure and travelling flexible and enjoyable!

Headquartered in Australia, San Hima proudly offers an extensive range of overland solutions. Our diverse offerings include cargo systems, towing solutions, caravan and trailer parts as well as car camping equipment. Designed to accompany you on your journeys and enhance your performance when conquering the peaks, our products are crafted for those with a passion for exploration.

At San Hima, we have wild souls and we are committed to providing products that are tough enough to take on any adventures and at the same time, making them safe and easy to use. These values in our conviction are what drive us to make innovations. Because pursuing your passion should never be complicated.

Live the Peak, Conquer the Everest, San Hima is your brand of choice!

## **WARNINGS AND SAFETY INSTRUCTIONS**

- For charging 12V deep cycle batteries only. NEVER attempt to recharge non-rechargeable batteries.
- DO NOT attempt to disassemble, repair, or modify the battery box.
- DO NOT strike or throw the battery box.
- Ensure the strap is tight when moving the battery box.
- NEVER submerge the battery box in liquids. Keep all ports dry. If accidental exposure occurs, turn off the power switch and promptly dry the box.
- Avoid exposing the battery box to extreme temperatures.
- Before installing a battery, read through all relevant product and safety information for that specific battery.
- This battery box is not intended for use by individuals (including children) with reduced physical or mental capabilities, or those under the influence of drugs or alcohol.
- While working on the battery box, wear protective eyeglasses and insulating gloves. Avoid wearing metallic items such as watches, bracelets, rings, etc.
- Prevent metal objects from falling into the battery box or entering any of the ports.
- Ensure correct wire attachment to the battery terminals, tightening them fully. NEVER connect positive (red) and negative (black) terminals together.
- Keep the lid closed at all times during battery charging or device power supply from an outlet.
- During charging, provide adequate ventilation to dissipate heat and battery gases. Keep clear of flames, sparks, or conductive materials during charging.
- Please note that the battery is not included in this purchase.
- This battery box is suitable for batteries with dimensions up to 34 x 19.5 x 22.5cm.
- DO NOT exceed the maximum load capacity of 35kg.

## PARTS LIST

- 1PC(s) SAN HIMA 12V Battery Box
- 1PC(s) Strap
- 2PC(s) Deck Loops
- 4PC(s) Bolts
- 4PC(s) Nuts
- 1PC(s) User Manual

## OVERVIEW

1. Positive and Negative Terminals
2. USB Type-A QC3.0 5V 12W, 9V 18W, 12V 18W
3. USB Type-C PD 5V 15W, 9V 18W, 12V 30W
4. Cigarette Lighter Socket Output (12V / 10A)
5. Resettable Circuit Breaker (10A)
6. ON/OFF Switch
7. LCD Voltmeter
8. Anderson Plug Output/Input (Max. 30A Each)
9. Carry Handles



## INSTALLATION

**Step 1:** Remove the lid of the battery box.

**Step 2:** Carefully lower your battery into the box, positioning it centrally.

**Step 3:** Attach the eyelets from the battery box lid to the corresponding positive and negative terminals on the battery, ensuring secure and tight connections.

**Step 4:** Place the lid onto the battery box, ensuring it is evenly and completely closed.

**Step 5:** Turn the on/off switch ① clockwise to the "on" position, and press the on/off switch ② on the voltmeter to test the capacity and voltage.

**Step 6:** If the voltmeter displays the battery's information, thread the strap around the box, through the two plastic buckles, and securely fasten it on top of the battery box.

**Step 7:** Now, the battery box is ready for powering your devices.



## CONNECTION

### Output:

Confirm that the battery is properly connected to the battery box, and the on/off switch is turned clockwise to the "on" position.

Connect your device to a USB port, cigarette lighter socket, Anderson plug, or positive and negative terminals, and charging will begin.

### Note:

1. If the combined current rating of the USB ports and cigarette lighter socket exceeds 10A, the circuit breaker will be triggered.
2. The positive terminal on the exterior of the battery box is not fused. Ensure proper safety by installing a fuse or circuit breaker (60A recommended) as needed.

### INPUT:

The internal battery within the battery box can be charged in various means with any of the Anderson plugs:

Connecting an AC charger for AC power.

Connecting a solar panel with a controller.

Connecting a DCDC charger / VSR in a vehicle for power from the main battery.

Note: Simultaneous connection of multiple power sources to the battery is not recommended.

# SPECIFICATIONS

Case Material:	PP
Box External Dimensions:	40 x 23.5 x 29.5 cm
Box Internal Dimensions:	34 x 19.5 x 22.5 cm
Box Weight:	1.72 kg
Max. Battery Weight:	35 kg
Suitable Battery Types:	12V Deep Cycle Batteries
Ports:	1 x USB Type-C PD 5V 15W, 9V 18W, 12V 30W 1 x USB Type-A QC3.0 5V 12W, 9V 18W, 12V 18W 1 x Cigarette Lighter Socket Output (12V, 10A) 2 x 50A Anderson Plug Input / Output (Max. 30A Each)
Operating Temperature:	-10°C~50°C
Warranty:	1 Year

# TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
If the voltmeter does not light up or display the battery's capacity and voltage,	<ol style="list-style-type: none"> <li>1. terminals may be reversely connected.</li> <li>2. the battery may have run out of power.</li> </ol>	<ol style="list-style-type: none"> <li>1. Correctly reconnect positive and negative terminals.</li> <li>2. Change the battery.</li> </ol>
If you are not receiving power through the USB ports or cigarette lighter socket,	<ol style="list-style-type: none"> <li>1. terminals may be reversely connected.</li> <li>2. the battery may have run out of power.</li> <li>3. the circuit breaker has been triggered.</li> </ol>	<ol style="list-style-type: none"> <li>1. Correctly reconnect positive and negative terminals.</li> <li>2. Change the battery.</li> <li>3. Remove the cover and press the button to reset.</li> </ol>
If you are not receiving power through the Anderson plugs,	<ol style="list-style-type: none"> <li>1. terminals may be reversely connected.</li> <li>2. the battery may have run out of power.</li> <li>3. the fuse may have blown.</li> </ol>	<ol style="list-style-type: none"> <li>1. Correctly reconnect positive and negative terminals.</li> <li>2. Change the battery.</li> <li>3. Change the fuse.</li> </ol>

## **WARRANTY**

San Hima warrants that each 12V battery box that is purchased while this Warranty is in effect will be free from defects in materials and workmanship for a period of 1 year from the date of receiving the product from San Hima or its authorized distributor/dealer. If it is believable to be defective during the 1-Year Warranty Period, San Hima will, at its option, replace it with the same or similar product, or issue a refund for the defective San Hima product. And San Hima will pay for the cost of shipping or transportation of a defective component. This warranty terminates if a Purchaser transfers the product to any other person. And please retain your purchase receipt for Your records.

Please ensure that the San Hima 12V battery box should be installed and used in accordance with warnings and instructions listed in the user manual, and should be used for the purpose for which it was designed.

Any and all warranty coverage does not cover: normal wear and tear (including, but not limited to, scratches, tears, or natural breakdown of colors and materials over extended time and use), commercial use, accidents, or modifications or repairs not performed or authorized by San Hima. In addition, this warranty does not cover problems resulting from conditions beyond San Hima's control including, but not limited to, theft, misuse, or failure to install the product in accordance with San Hima's written warnings and instructions included with the product or made available to the original purchaser.

If further information or investigation is required or if the claim does not meet the requirements under our warranty, San Hima'll let you know.