Product Manual

1. Connection and Installation

A. Please wear insulating gloves and use insulating tools for connection and installation. The product is heavy and needs to be carried by two peoples, and should avoid being severely dropped. The battery is dormant during shipping and the voltage may be below 8V. The battery will wake up after 1 minute charging. During this time, the battery will suspend charging for 20 seconds for self-test.

B. The product needs to be installed away from flames, high temperatures, severe cold, pools, and corrosive gases. If the product needs to be installed on vehicles such as RVs, yachts, etc., it must be securely fixed. The product is IP65 rated professional waterproof, please avoid prolonged water immersion.

C. Wires and terminals that meet the battery charging and discharging current and power requirements should be used and firmly connected. If multiple batteries need to be connected in series or in parallel to form a group, please use cables of the same specification and length to connect them to avoid unbalanced internal resistance and battery pack efficiency reduction. See the attached table.

D. This type of battery supports 2~4 batteries in series, 2~8 batteries in parallel, and 4 batteries in series to form a set of x 4 groups in parallel. The batteries used for connection should be products of the same model purchased at the same time. Each battery must be fully charged separately prior to connection, with the voltage difference between the batteries less than 0.5V. See the attached figure for connection method.

2. Charging

E. The operating temperature for charging of this battery is 32~140℉. If it exceeds the temperature range, the built-in temperature protector of the battery will automatically stop charging. When the temperature returns to within the range, it will automatically resume charging. Note: The temperature mentioned here refers to the temperature inside the battery, which is slightly higher than the ambient temperature due to the heat generated during battery operation. Batteries that are already in a temperature-protected state can be restored by standing for a period of time in an environment of 40~120℉, which may take up to 24 hours.

F. The charging voltage of a single battery ranges is DC 14.4~14.6V, with the Max. Charging Current and the Max. Charging Power of the attached table for a single battery charge. When the voltage, current or power exceeds the safe range during charging, the battery will activate the protection function and suspend charging. In this case, the battery needs to change to discharging mode to automatically release the protection state. Connect multiple batteries in series or in parallel, and the charging parameters are shown in the attached table.

G. Charging with a certified charger with a DC voltage of 14.4V, a current of less than the Max. Charging Current, or a power of less than the Max. Charging Power of the attached table is recommended to improve battery life.

3. Discharging

H. The operating temperature for discharging of this battery is -4~140℉. Note: The temperature mentioned here refers to the temperature inside the battery, which is slightly higher than the ambient temperature due to the heat generated during battery operation. Batteries that are already in a temperature-protected state can be restored by standing for a period of time in an environment of 20~120℉, which may take up to 24 hours.

I. The discharging voltage of a single battery ranges from DC 10.8~13.8V, with the Max. Discharging Current and the Max. Discharging Power of the attached table. When the voltage, current or power exceeds the safe range during discharging, the battery will activate the protection function and suspend charging. In this case, the battery needs to change to charging mode to automatically release the protection state. Connect multiple batteries in series or in parallel, and the discharging parameters are shown in the attached table.

J. Discharging with a certified inverter with a DC voltage of 12.8V and a current of less than the Max. Discharging Current, or a power of less than the Max. Discharging Power of the attached table is recommended to improve battery life.

4. Maintenance

K. No special maintenance is usually required for our batteries, but a dry indoor working environment of 60~95℉ will effectively increase the service life of the battery.

L. The battery has a working life of 2500~4500 deep charge/discharge cycles. Avoiding frequent use of maximum charge/discharge power can effectively prolong the service life of the battery. Avoiding frequent exhaustion of battery power can effectively prolong the service life of the battery.

M. Some models of the battery use a patented self-healing technology. If the efficiency of the battery pack is reduced due to the inability to balance after long-term use, each battery can be individually charged with a small current and slowly fully charged and then reconnected and combined, so that the battery will automatically be restored to the best state at this time.

5. Monitoring APP

N. The battery has built in Bluetooth module. You can use VESTWOODS in Apple APP Store or POW Bank in Google Play Store to monitor the battery parameters.

O. When the battery capacity is lower than 20%, the battery will suspend the work of the Bluetooth module. At this time, the APP will not be able to connect to the battery.

P. When exiting the APP, please disconnect the Bluetooth connection with the battery at first.

Hangzhou Vestwoods Technology LLC.
Website: www.vestwoods.store

Please contact us for more technical support and after-sales service.
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FCC WARNING

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception,

which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.

-- Increase the separation between the equipment and receiver.

-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-- Consult the dealer or an experienced radio/TV technician for help.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum 20cm distance between the radiator and your body: Use only the supplied antenna.