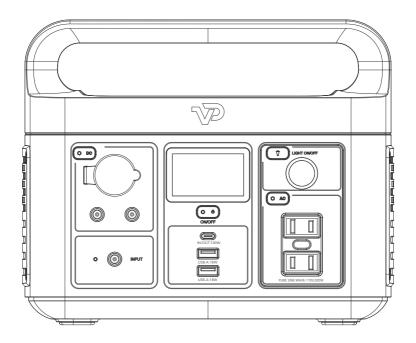


# **LAKE 300**



**USER MANUAL** 

## DISCLAIMER

#### CONGRATULATIONS!

Thank you for purchasing your new VigorPool product. VigorPool is striving to create innovative clean energy products with unique design and excellent performance. VigorPool always try best to make products simple, and easy to use.

#### WARNING

This user manual contains instructions for safety, operation and maintenance. It's important to read the entire user manual carefully prior to setup and use. Failure to read and follow instructions and warnings in this document may result in damage to the product, personal property and cause serious injury.

This document and all other collateral documents are subject to change at the sole discretion of VIGORPOOL INC. For any updates, please visit VIGORPOOL.COM.

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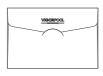
## 1. What's in the Box











VIGORPOOL LAKE 300

AC Cable

AC Adapter

Car Charger to DC Cable

User Manual

## 2. Product Specifications

BATTERY INFO	
Capacity:	320Wh (12.8V, 25Ah)
Cell Chemistry:	LiFePO4
Lifecycle:	2000 cycles to 80%+ capacity
Management System:	Overcharge Protection, Over-Discharge Protection, Overload Protection, Short Circuit Protection, Overcurrent Protection, High-Temperature Protection, Low-Temperature Protection

OUTPUT	
AC Output (×2):	110V~, 50/60Hz Total 300W
USB-A Output (×2):	5V-3A, 9V-2A, 12V-1.5A, Total 36W
USB-C Output:	5V=3A, 9V=3A, 12V=3A, 15V=3A, 20V=5A, 100W Max
Car Output:	12V=10A
DC5521 (×2):	12V=3A Total 72W
Wireless Output:	5V=1A, 9V=1A

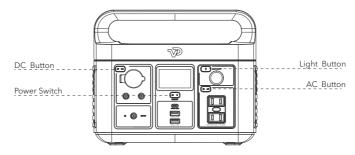
INPUT	
Maximum Input:	190W Max, with DC and USB-C Input Simultaneously
DC Input:	20V=4.5A
USB-C Input:	5V=3A, 9V=3A, 12V=3A, 15V=3A, 20V=5A, 100W Max

GENERAL	
Weight:	About 9.67 lbs (4.3 kg)
Dimensions (LxWxD):	10.03 x 7.1 x 8.26 in (25.5 x 18.2 x 21.0 cm)
Operating Usage Temperature:	14-104°F (-10-40°C)
Certification:	UL, CE, DOE, FCC, ROHS, PSE
Warranty:	24 Months
Optional Accessory:	100W Solar Panel

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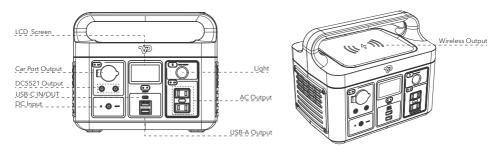
### 3. Start Guides for Users

### 3.1 Using Lake 300

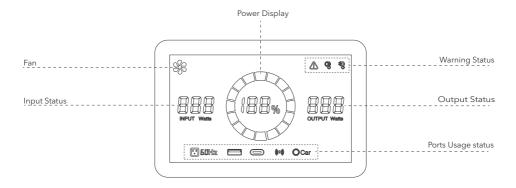


- 1. Long press the power switch button to start or shut down the machine.
- 2. Turn on / off each output by short pressing the DC button / AC button / Light Button. Please note:
- For power saving, the VigorPool Lake 300 will shut off automatically after 12 hours when no load or a light load is drawn. (Load Thresholds: AC port: 10W, Car port: 3W, USB port: 100mA)
- Low battery alert: when the battery's charge state changes from 21% to 20% and 11% to 10%, the screen flashes 10 times.

#### 3.2 Details of Lake 300



#### 3.3 LCD Screen



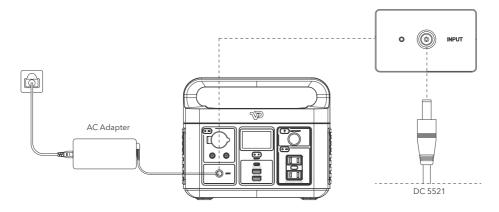
ICON CONTENTS	ICON TYPE
Input Status	Indicates that the Lake 300 is charging. There is a display of the current power input in watts.
Output Status	Indicates that the Lake 300 is charging powering a device. The display shows power output in watts.
Power Display	Shows the current battery capacity.
Fan Run	Indicates that the Lake 300 fan is cooling. At this time, there will be some fan rotation sound.
Ports Usage status	Indicates the usage status of each port.
Warning Status	It appears when the product is over-voltage or over-heat.

## 3.4 Multiple Recharging Methods

Wall Charging	Solar Panel	Car Charging	DC+USB-C
Around 4 Hours	Around 5 Hours	Around 5 Hours	Around 2.5 Hours

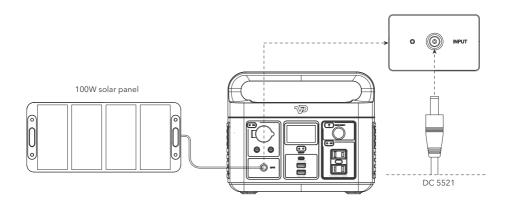
#### WALL CHARGING:

Can be charged up to 80% in 3 hours and fully charged in 4 hours.



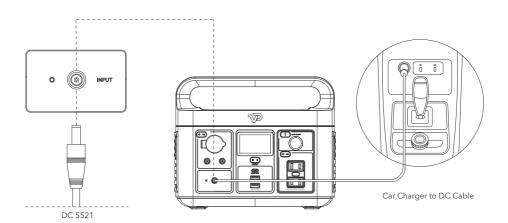
#### **SOLAR PANEL CHARGING:**

Users can choose a VigorPool 100W solar panel to charge the Lake 300. The DC input voltage range is 20V, the maximum current is 4.5A, and the maximum charging power is 90W. You can fully charge the Lake 300 with a 100W solar panel in about 5 hours in full sunlight.



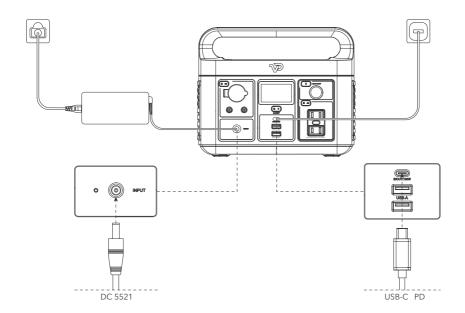
#### **CAR CHARGING:**

The Lake 300 supports 12V car charging and takes about 5 hours to fully charge. Please charge using the car charger after you've started the car to avoid failure to start due to insufficient car battery. In addition, please make sure that the Car Charging Input Port and the Car Charging Cable are in good condition. VigorPool takes no responsibility for any losses or damages caused by failures to follow instructions.



#### **DUAL CHARGING:**

No one likes waiting around for their portable power station to charge up before going on an adventure. The Lake 300 can be fully charged to 80% in about 2 hours using dual charging (a 90W wall charger and 100W USB-C charger simultaneously).



#### 3.5 Safety Guidelines

- 1. DO NOT immerse the product in water or get it wet.
- 2. DO NOT put the product near sources of heat while in use or storing, such as a fire or heater.
- 3. DO NOT pierce the product casing with a nail or other sharp object, use a hammer to break it open, or step on it.
- 4. DO NOT let the product contact strong corrosive objects.
- 5. DO NOT attempt to disassemble this product in any way.
- 6. DO NOT forcibly lock the fan during use or place the product in an unventilated or dusty area.
- 7. DO NOT clean the product with water directly. Gently clean it with a dry cloth.
- 8. DO NOT replace any components of the product without any official VigorPool permissions.
- 9. Please contact the official VigorPool channels to get more information if you want to replace any components.
- 10. DO NOT dispose of the battery directly in a battery recycle box. You should contact a professional recycling company for further processing.
- 11. DO NOT put the product in the area that children or pets can reach.
- 12. If a device is not being used for a long period, please place it in a dry and cool place.

#### 3.6 HOW TO STORE OR USE

- 1. To store the battery for over three months, it is necessary to maintain the battery at 50% of the rated capacity. Charge at least every three months, and place it in a dry and cool place, with a temperature range of  $0^{\circ}\text{C}\sim40^{\circ}\text{C}$  ( $32^{\circ}\text{F}\sim104^{\circ}\text{F}$ ), free from contact with corrosive matter, and away from fire and heating sources.
- 2. In order to extend the lifespan of the product, it's better to recharge the product before the power drops below 15%.
- 3. Optimal usage temperature range is -10°C-40°C (14°F-104°F), and the store temperature is 0°C $\sim$ 40 °C (32°F $\sim$ 104°F).

## 4. Troubleshooting

Icon Indicator	Problem	Solution	Error code
O Car	DC Output Overload Protection	Turn off the DC output and remove the abnormal load. After 10 seconds, the power station should function as usual.	E01
Cons Flash together	DC Output Short Circuit	Turn off the DC output and remove the abnormal load. After 10 seconds, the power station should function as usual.	E02
Icons Flash together	AC Output Overload Protection or Short Circuit	Turn off the AC output and remove the abnormal load. After 10 seconds, the power station should function as usual.	E03
Icons Flash together	USB-C Output Overload Protection or Short Circuit	Remove the abnormal load. After 10 seconds, the power station should function as usual.	E04
lcon Light Up	High-Temperature Protection	The power supply will resume normal function automatically after the battery cools down.	E05
lcon Light Up	Low-Temperature Protection	The power supply will restore normal function after the battery temperature returns to normal.	E06
Icons Flash together	USB-A Output Overload Protection or Short Circuit	Remove the abnormal load. After 10 seconds, the power station should function as usual.	E07
Icon Flash	Charger Overload Protection	Remove the abnormal load. After 10 seconds, the power station should function as usual.	E08
Icon Flash	Wireless Exception	Remove the abnormal load. After 10 seconds, the power station should function as usual.	E14

If you are still having problems, please feel free to contact us at support@vigorpool.com. For additional information, check our official website: VIGORPOOL.COM.

## 5. Frequently Asked Questions

#### 1. What devices can Vigorpool Lake 300 power?

A: VigorPool Lake 300 can power essential devices that require less than 300-Watts or multiple devices with a combined output under 300 watts. Please refer to the specification of appliances you wish to run before purchase.

#### 2. What is the Vigorpool Lake 300 power station lifespan?

A: The VigorPool Lake 300 uses Lithium iron phosphate battery technology. After 2000 charge cycles, the VigorPool Lake 300 power station should retain around 80% of its initial capacity. Lifespan also depends on use, maintenance, etc.

#### 3. Is the Vigorpool Lake 300 waterproof?

A: The VigorPool Lake 300 is not waterproof, please stay away from water sources.

#### 4. Can I use and charge my Vigorpool Lake 300 at the same time?

A: Yes, all of our products support pass-through charging. But we don't suggest using it this way very frequently as it will reduce the battery life..

#### 5. Can I take my Vigorpool Lake 300 on a plane?

A: Unfortunately, you cannot. According to FAA regulations, any battery that you take on board should not exceed 100Wh. External chargers or power banks are also considered to be a battery, and should not surpass a capacity of 27000mAh, or in other words, 100Wh.

#### 6. Is the VigorPool equipped with a MPPT controller?

A: All VigorPool models have a MPPT controller.

#### 7. Can I use third-party solar panels to recharge my Vigorpool Lake 300?

A: We don't suggest using third-party solar panels because VigorPool's warranty does not cover any damage caused by third-party solar panels.

#### 8. Can I jump start a car using my Vigorpool Lake 300?

A: Our lake 300 can't jump start a car.

#### 9. How to determine that the Vigorpool Lake 300 is charging?

A: The LCD display will show the remaining charging time when charging, and the battery percentage power indicator will start to rotate.

#### 10. How to switch the AC voltage frequency?

A: With the AC button off, press and hold the POWER and AC button to switch the frequency.

### 6. FCC Caution

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.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

FCC ID: 2A5SKVP11300

### 7. UL2743 Caution

A photovoltaic panel as an input for charging the internal battery shall be provided with an inverter and/or a charge controller in accordance with UL 1741 or UL 62109-1; The external power supply shall be a power source in accordance with the Standard UL 60950-1 and CAN/CSA C22.2 No. 60950-1, or UL 1310 and No. 1, CAN/CSA C22.2 No. 223, or No.1, CAN/CSA C22.2 No. 223;

A vehicle adapter that complies with the enclosure and input contacts requirements in the Standard for Vehicle Battery Adapters, UL 2089, and Power Supplies, CAN/CSA C22.2 No. 107.1. The connector plug shallincorporate a fuse or other protective device having a current rating not greater than 15 A. INSTRUCTIONS PERTAINING TO RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

#### 7.1 IMPORTANT SAFETY INSTRUCTIONS

WARNING - When using this product, basic precautions should always be followed, including the following:

1. Read all the instructions before using the product.

- 2. To reduce the risk of injury, close supervision is necessary when the product is used near children.
- 3. Do not put fingers or hands into the product.
- 4. Use of an attachment not recommended or sold by power pack manufacturer may result in a risk of fire, electric shock, or injury to persons.
- 5. To reduce risk of damage to the electric plug and cord, pull the plug rather than the cord when disconnecting the power pack.
- 6. Do not use a battery pack or appliance that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.
- 7. Do not operate the power pack with a damaged cord or plug, or a damaged output cable.
- 8. Do not disassemble the power pack, take it to a qualified service person when service or repair is required. Incorrect reassembly may result in a risk of fire or electric shock.
- To reduce the risk of electric shock, unplug the power pack form the outlet before attempting any instructed servicing.
- 10. WARNING RISK OF EXPLOSIVE GASES.

To reduce risk of battery explosion, follow these instructions and those published by battery manufacturer and manufacturer of any equipment you intend to use in vicinity of the battery. Review cautionary marking on these products and on engine.

#### 11. PERSONAL PRECAUTIONS

- (1) Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing, or eyes.
- (2) Wear complete eye protection and clothing protection. Avoid touching eyes while working near battery.
- (3) If battery acid contacts skin or clothing, wash immediately with soap and water. If acid enters eye, immediately flood eye with running cold water for at least 10 minutes and get medical attention immediately.
- (4) NEVER smoke or allow a spark or flame in vicinity of battery or engine.
- (5) Be extra cautious to reduce risk of dropping a metal tool onto battery. It might spark or short-circuit battery or other electrical part that may cause explosion.
- 12. When charging the internal battery, work in a well ventilated area and do not restrict ventilation in any way.
- 13. Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.
- 14. Do not expose a power pack to fire or excessive temperature. Exposure to fire or temperature above 130°C may cause explosion. The temperature of 130°C can be replaced by the temperature of 265°F.
- 15. Have servicing performed by a qualified repair person using only identical replacement parts. This will ensure that the safety of the product is maintained.

#### SAVE THESE INSTRUCTIONS

## **VIGOR**POOL

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