

Litheli

OPERATING MANUAL

PowerHUB-B600

WELCOME TO A BATTERY POWERED LIFE



Model No.: B600

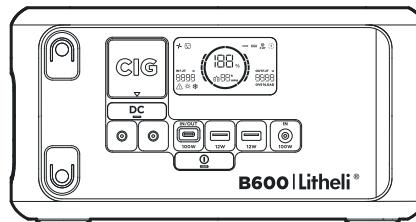
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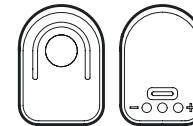
WHAT'S IN THE BOX

Please kindly check all accessories are complete (U-BATTERY, 100W Adapter, Type-C Charging Cable, Vehicle Charging Cable, Solar Charging Cable, Operating Manual).

If any accessories missing, please feel free to contact us at: service@litheli.com



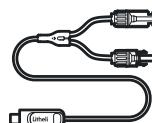
PowerHUB B600 x1



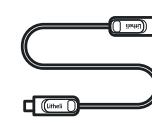
U-BATTERY x2



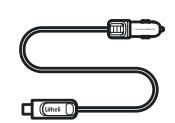
100W Adapter x1



Solar Charging Cable x1
(MC4 to D7909)



Type-C Charging Cable x1
(Type-C to Type-C)



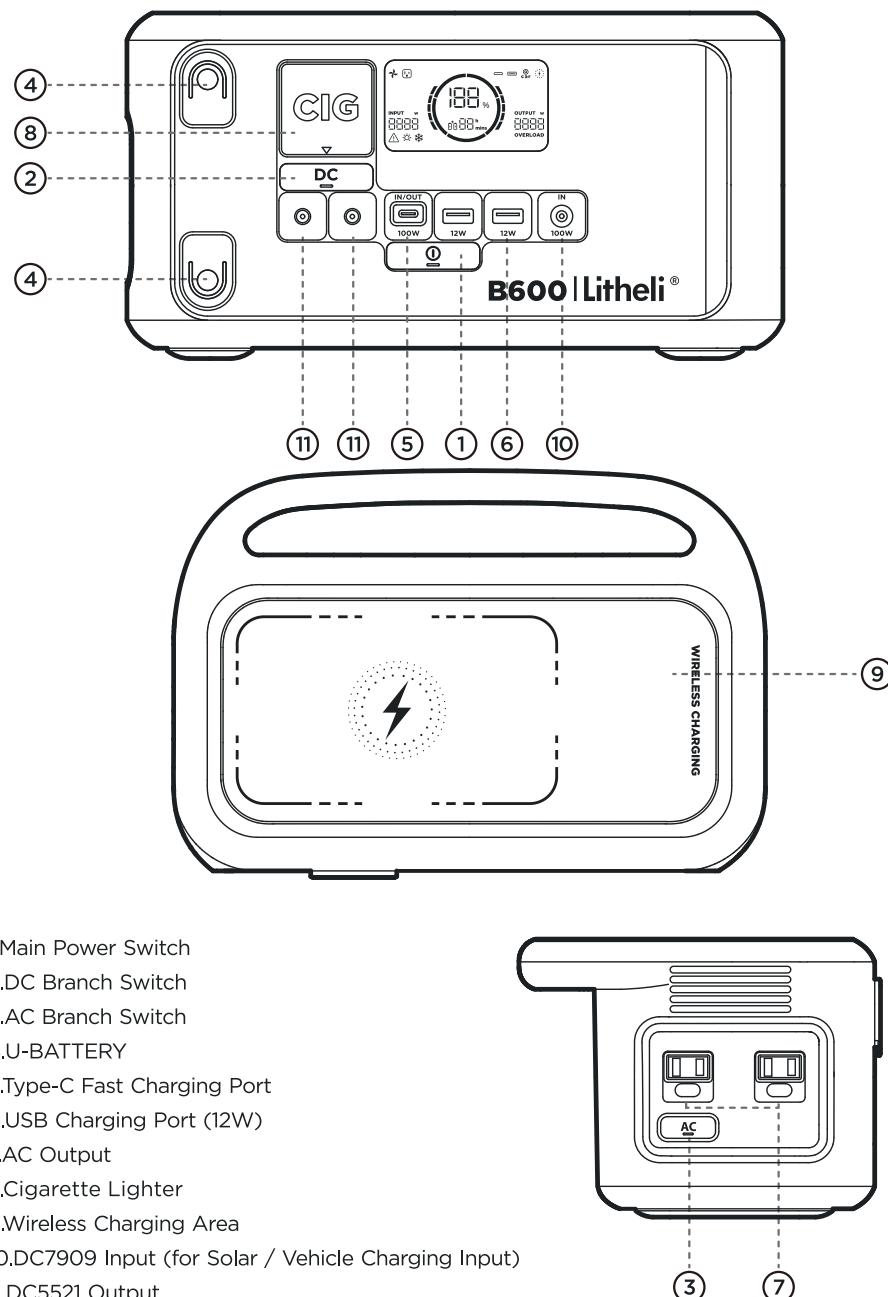
Vehicle Charging Cable x1

UNPACKING

- This product requires no assembly.
- Take out all items. Make sure that all items listed in the parts list are included.
- Inspect the product carefully to make sure that no breakage or damage has occurred during shipping.
- If any parts are damaged or missing, please return the product to the place of purchase.

***Note:** Please charge your new Litheli PowerHUB B600 before first use: plug it into a suitable power outlet until it is fully charged.

KNOW YOUR B600



1. Main Power Switch
2. DC Branch Switch
3. AC Branch Switch
4. U-BATTERY
5. Type-C Fast Charging Port
6. USB Charging Port (12W)
7. AC Output
8. Cigarette Lighter
9. Wireless Charging Area
10. DC7909 Input (for Solar / Vehicle Charging Input)
11. DC5521 Output

No.	Parts	Description
1	Main Power Switch	Controlling the main power of the device, Type-C port, USB port, and wireless charging. Press and hold the button for about 3 seconds to switch on/off the device. The button indicator light will then turn on/off.
2	DC Branch Switch	Controlling the vehicle charging port and DC5521 output. Press the DC branch switch to start or stop DC output. The button indicator light will then turn on/off. NOTICE: Before DC output starts, press the DC branch switch and hold it for about 3 seconds, then the "DC Normally Open" mode will start. The corresponding icon will appear on the LCD screen. You can now charge your DC electrical appliances. To stop this mode, remove your DC electrical appliances, and then press the DC branch switch and hold it for about 3 seconds. The corresponding icon will disappear from the LCD screen.
3	AC Branch Switch	Controlling the AC port. Press the AC branch switch to start or stop the AC output, and the button indicator light will then turn on/off. When AC output starts, while no electrical appliance is connected, then the AC output will automatically turn off in 12 hours.
4	U-BATTERY	When the B600 is turned on, you can insert the attached U-BATTERY (x2) into the B600 for charging (5V⎓3A, 2-3A). The fully charged U-BATTERY can be taken out and you can charge your electrical appliances.
5	Type-C Fast Charging Port	Two-way 100W (MAX) Power Delivery Specification 5V⎓3A / 9V⎓3A / 12V⎓3A / 15V⎓3A / 20V⎓5A
6	USB Charging Port (12W)	12W (MAX) / 5V⎓2.4A
7	AC Output	110V (Rated Power 600W; Peak Power 1200W / 0.2S)

8	Cigarette Lighter	136W (MAX) /13.6V=10A
		5W/7.5W/10W/15W
9	Wireless Charging Area	<p>NOTICE:</p> <ol style="list-style-type: none"> 1. The placement of wireless charging coils in different mobile phones may differ. To prevent charging failure, you should align the wireless charging coil of your mobile phone exactly with the wireless charging area of B600. 2. Do not put any metal objects onto the wireless charging area while wireless charging is in progress.
10	DC7909 Input (for Solar / Vehicle Charging Input)	100W MAX
11	DC5521 Output	136W (MAX) Sharing the output with vehicle charging port.

CHARGING YOUR B600

B600 has two DC input ports to charge itself: a Type-C fast charging port and a DC7909 input. You can charge the B600 by using a vehicle's 12V DC charging outlet or by connecting it to solar panels.

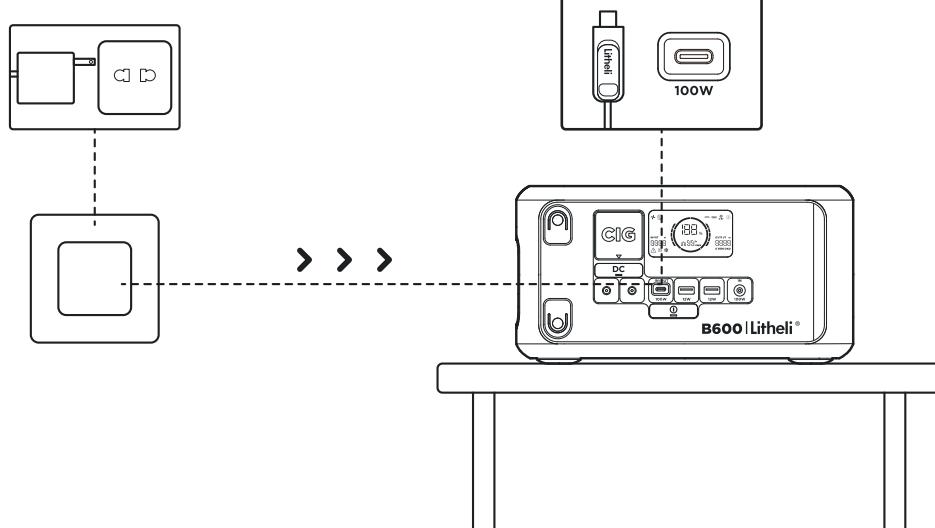
NOTICE:

- Fully charge your B600 before using it.
- The B600 can charge other electrical appliances while charging itself.

CHARGING VIA TYPE-C FAST CHARGING PORT (FIG. 1)

- a. A Type-C to Type-C charging cable and an adapter are attached to the B600 for charging it. Insert one end of this cable into the attached adapter, then plug the adapter into the wall socket outlet. Insert the other end of this cable into the Type-C fast charging port of the B600. The B600 will start Type-C fast charging.
- b. Icons of battery percentage, annular battery indicator, charging time, Type-C charging on and power input will show up on the LCD screen. The 5 indicator lights of the annular battery indicator will illuminate successively to indicate charging is ongoing.
- c. After charging is complete, disconnect the charging cable. Only icons of battery percentage, annular battery indicator (illuminate and stay on), and remaining battery time are displayed on the LCD screen. The power input resets to zero and the icon representing Type-C charging on disappears.

FIG. 1



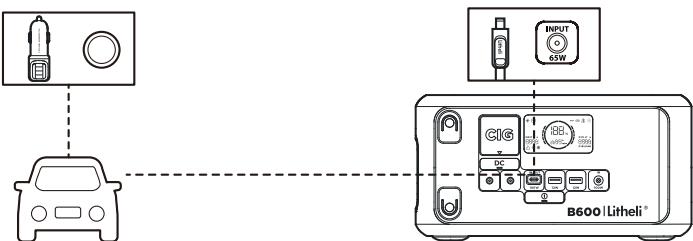
CHARGING VIA DC7909 INPUT (VEHICLE CHARGING INPUT) (FIG. 2)

NOTICE: The power input via the DC7909 input port of the B600 must not exceed 100W. The DC7909 input port supports automotive batteries of 12V and 24V, with an electric current of 8A at most.

WARNING: While using the DC7909 input port (vehicle charging input) to charge the B600, make sure the car engine is running, otherwise the automotive battery may be depleted.

- a. A vehicle charging cable is attached to the B600 for charging it. Connect the vehicle charging end of this cable to your car. Insert the other end of this cable into the DC7909 input port of the B600 to initiate charging.
- b. Icons of battery percentage, annular battery indicator, charging time, vehicle charging on, and power input will show up on the LCD screen. The 5 indicator lights of the annular battery indicator will illuminate successively to indicate charging is ongoing.
- c. After charging is complete, disconnect the charging cable. Only icons of battery percentage, annular battery indicator (illuminate and stays on), and remaining battery time still show up on the LCD screen. The power input resets to zero and the icon representing vehicle charging on disappears.

FIG. 2



CHARGING VIA DC7909 INPUT (CONNECTING TO SOLAR PANELS)

Please refer to the operation manual for Solar Panels for details on using them to charge the B600. The solar panels should be purchased separately. A solar charging cable is attached to the B600 to initiate charging. Please see the steps below for reference to connect one or two solar panels to the B600.

WARNING: The DC7909 input port of the B600 only supports an input DC voltage between 10V and 25V. It will initiate over-voltage protection when the input voltage is greater than 25V because the high voltage can damage the B600. Please follow the above instructions. If your B600 is damaged because the quantity of solar panels connected is greater than 2, or because you do not follow the instructions in the manual, you will not be eligible for free maintenance even if your B600 is still within the warranty period.

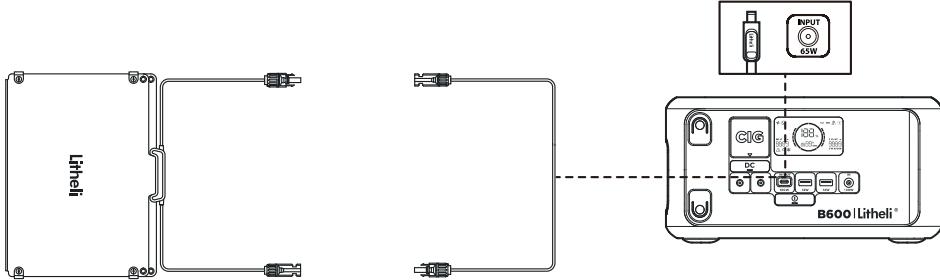
NOTICE: Do not connect the solar panels in series while charging.

RECOMMENDED SCHEME (WITH LITHELI SOLAR PANELS) (FIG. 3)

Case 1 (Using 1 solar panel)

- a. A solar charging cable is attached to the B600 for charging it. Insert the MC4 connector on one end of this cable into the MC4 port of the solar panel. Insert the DC7909 connector on the other end of this cable into the DC7909 input port of the B600 to initiate charging.
- b. Icons of battery percentage, annular battery indicator, charging time, solar charging on, and power input will show up on the LCD screen. The 5 indicator lights of the annular battery indicator will illuminate successively to indicate charging is ongoing.
- c. After charging is complete, disconnect the charging cable. Only icons of battery percentage, annular battery indicator (illuminate and stays on), and remaining battery time still show up on the LCD screen. The power input resets to zero and the icon representing solar charging on disappears.

FIG. 3



Case 2 (Using 2 Litheli solar panels) (Fig. 4)

NOTICE:

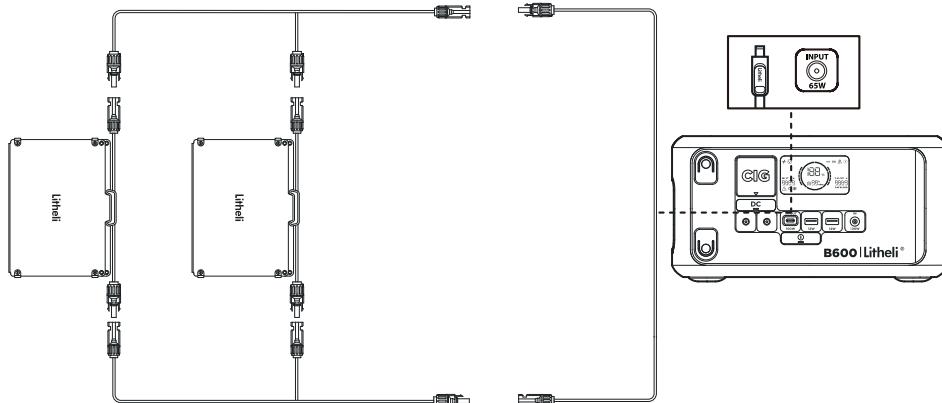
- 2 solar panels with a power output of 100W at most are allowed to be connected in parallel for charging.
- The cable used for connecting solar panels in parallel is not included with the B600. It should be purchased by yourself.

- a. Connect the two solar panels in parallel.
- b. A solar charging cable is attached to the B600 for charging it. Connect the two paralleled solar panels via MC4 ports with the MC4 connector of the solar charging cable provided with the B600. Then insert the DC7909 connector on the other end of this cable into the DC7909 input port of the B600 to initiate charging.
- c. Icons of battery percentage, annular battery indicator, charging time, solar charging on,

and power input will show up on the LCD screen. The 5 indicator lights of the annular battery indicator will illuminate successively to indicate charging is ongoing.

d. After charging is complete, disconnect the charging cable. Only icons of battery percentage, annular battery indicator (illuminate and stays on), and remaining battery time still show up on the LCD screen. The power input resets to zero and the icon representing solar charging on disappears.

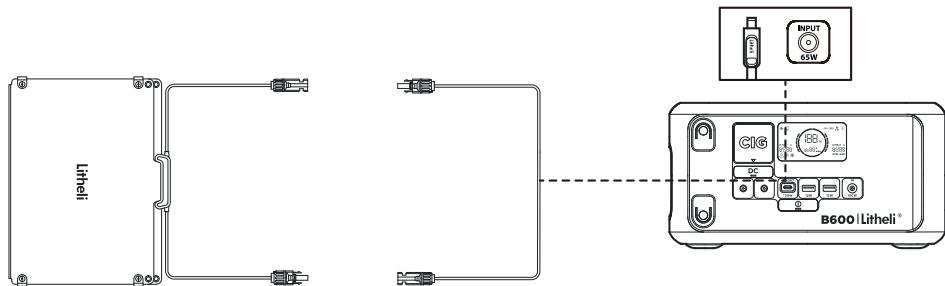
FIG. 4



d. Icons of battery percentage, annular battery indicator, charging time, solar charging on, and power input will show up on the LCD screen. The 5 indicator lights of the annular battery indicator will illuminate successively to indicate charging is ongoing.

c. After charging is complete, disconnect the charging cable. Only icons of battery percentage, annular battery indicator (illuminate and stays on), and remaining battery time still show up on the LCD screen. The power input resets to zero and the icon representing solar charging on disappears.

FIG. 5



DIY Scheme (with the solar panels provided by a third party) (Fig. 5)

The B600 supports all universal solar panels on the market with a standard MC4 port. You can purchase the solar panels provided by a third party that meet the below specifications to charge the B600.

NOTICE: Please use solar panels that meet the below specifications:

Voltage	10V~ 25V~
Electrical current	8A at most

⚠WARNING: Pay attention to the connecting sequence of the positive and negative pole of the solar panel. The wrong connecting sequence can damage the solar panel and also the B600. When you are using the solar panel provided by a third party, if your B600 is damaged because of unqualified solar panels, or due to inappropriate operating actions, you will not be eligible for free maintenance even if your B600 is still within the warranty period.

a. A solar charging cable is attached to the B600 for charging it. Insert the MC4 connector on one end of this cable into the MC4 port of the solar panel. Insert the DC7909 connector on the other end of this cable into the DC7909 input port of B600 to initiate charging.

USING YOUR B600

WARNING: Do not attempt to modify this product or create accessories not recommended for use with this product. Any such alteration or modification is deemed misuse and could result in a hazardous condition leading to serious injury.

WARNING: Do not allow familiarity with this product to make you careless. Remember that a careless fraction of a second is sufficient to inflict injury.

WARNING: Do not use any attachments or accessories not recommended by the manufacturer of this product. Use of attachments or accessories not recommended can result in serious personal injury.

SWITCH ON/OFF THE B600

Switching On

- Press the main power switch and hold it for 3 seconds or longer, the LCD screen will light up with a beep, displaying icons of current battery percentage, annular battery indicator, and remaining battery time. At the same time, the button indicator light will illuminate to show that the B600 is now switched on. You can now either charge the B600 or charge your electrical appliances with the B600.
- After switching on, press the main power switch once, then the LCD screen will darken, and the button indicator light of the main power switch will slowly flash to show that the B600 is still working. Any of the action of pressing the main power switch once again, inserting or removing the appliance to or from the B600, or any button pressing will light up the LCD screen again.

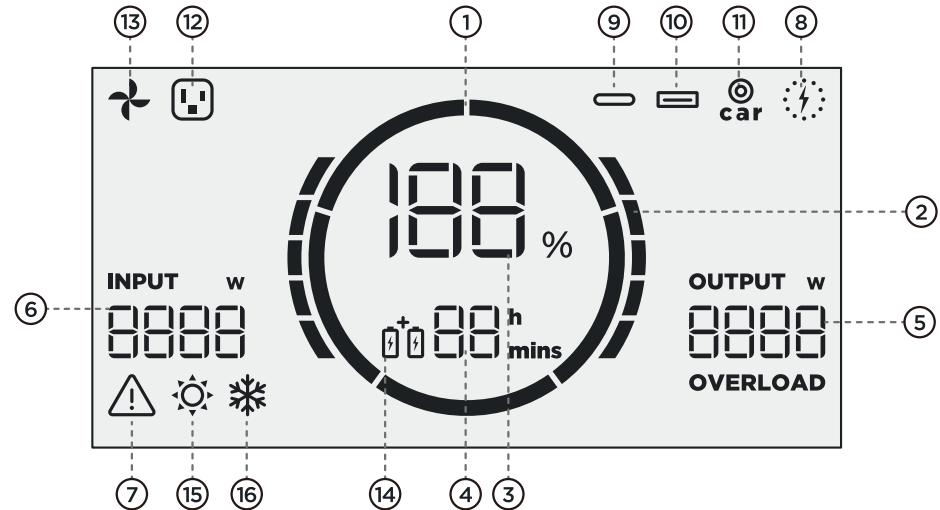
Switching Off

- To switch off the B600, press the main power switch and hold it for 3 seconds or longer, the LCD screen will go off with a beep, also the button indicator light will go off.

NOTICE:

- If the LCD screen is darkened before switching off, after pressing the main power switch, the LCD screen will first light up, then go off.
- If there is no operating action after switching on, then the LCD screen will automatically darken in 3 minutes. Any of the action of pressing the main power switch once again, inserting or removing the appliance to or from the B600, or any button pressing, will light up the LCD screen again. At the same time, the corresponding icons will appear on the screen.
- After switching on, if there is no operating action on the B600, and no electrical appliance is connected, then the B600 will automatically turn off in 6 hours.

ICONS PRESENTATION DISPLAYED ON LCD SCREEN



No.	Icon	Title	Description
1		Battery Indicator	5 indicator lights in total. Each indicates 20% power of the battery. When charging, the 5 indicator lights will illuminate successively. The annular indicator light will illuminate to be a complete circle when fully charged.
2		AC Normally Open	Before AC output starts, press and hold the AC branch switch for about 3 seconds, the B600 will enter "AC Normally Open" mode, with this icon showing up on the LCD screen.
3		Battery Percentage	Displaying current battery power by percentage from 0% to 100%. When the battery power is lower than 10%, the icons of battery percentage and remaining battery time will flash to warn you of low battery. They will not stop flashing until charging starts, or the B600 is turned off.

4		Remaining Battery Time / Charging Time	Real-time update of charging time or remaining battery time. 1. When charging the B600 itself, charging time will be shown on the LCD screen. It will show 99h if the expected charging time exceeds 99h. 2. When discharging (means charging other equipment), remaining battery time will be shown on the LCD screen. 3. When charging and discharging is carried out at the same time, if charging power is greater than discharging power, then it shows charging time. Otherwise, it shows remaining battery time.
5		Power Output	Displaying real discharging power.
6		Power Input	Displaying real charging power.
7		Alarm	Flashing indicates the alarm.
8		Wireless Charging On	Illuminated when an electrical appliance is connected and wireless charging is in progress.
9		Type-C Charging On	Illuminated when an electrical appliance is connected and Type-C charging is in progress.
10		USB Charging On	It shines when electrical appliance is connected and USB charging is in progress.
11		Vehicle Charging On	After DC output starts, it illuminates when an electrical appliance is connected and vehicle charging is in progress. NOTICE: It will illuminate and stay on when the B600 enters "DC Normally Open" mode.
12		AC Output On	After AC output starts, it illuminates when an electrical appliance is connected and AC output is in progress.
13		Fan Working	It starts automatically when AC input starts, or the output power of any port is greater than 100W.
14		U-BATTERY Inserting	Illuminates when U-BATTERY is inserted into B600.

15		High Temperature Alarm	Illuminates to warn of a high temperature.
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16		Low Temperature Alarm	Illuminates to warn of a low temperature.
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NOTICE:

When the B600 is turned on and the LCD screen lights up, press the main power switch twice, then the LCD screen will keep lighting up. If you no longer need this feature, in the state of screen lighting up, press the main power switch twice to restore factory settings.

NOTICE:

- After the B600 is turned on, the annular battery indicator lights will illuminate and stay on to show the current remaining battery. When charging the B600, the 5 indicator lights of the annular battery indicator lights will illuminate successively to indicate the charging process.
- After the B600 is turned on, the LCD screen will show the icons of the annular battery indicator, the battery percentage, and remaining battery time. When different operations are carried out (e.g. USB charging, vehicle charging, DC output, or AC output), the corresponding icons will appear on the LCD screen. They will disappear after the electrical appliance is disconnected.
- When the battery power is lower than 10%, the icons of battery percentage and remaining battery time will flash to warn you of low battery.

CHARGING OTHER ELECTRICAL APPLIANCES WITH THE B600

USB Charging (At Normal Speed)

When the connector of the charging cable of your electrical appliances (mobile phone, tablet PC, GoPro, speaker, etc.) is a USB connector, and your appliances do not support fast charging, you can charge your appliances via the USB charging port (12V output at most).

- a. Switch on the B600 and the USB charging can be used without any other operation. First connect your appliance with its charging cable. Insert the USB connector on the other end of the charging cable into any of the USB charging ports of the B600 to initiate charging.
- b. Icons of battery percentage, annular battery indicator, remaining battery time, USB charging on, and power input will show up on the LCD screen.
- c. After charging is complete, disconnect the charging cable and your appliance. Only icons of battery percentage, annular battery indicator (illuminate and stays on), and remaining battery time still show up on the LCD screen. The power input resets to zero and the icon representing USB charging on disappears.

NOTICE: The B600 is equipped with 2 USB charging ports with a power output of 12V at most. And you can connect 2 appliances for charging at the same time.

Type-C Fast Charging

When the connector of the charging cable of your electrical appliances (mobile phone, tablet PC, laptop, etc.) is a Type-C connector, you can charge your appliances via the Type-C charging port.

a. Switch on the B600 and the Type-C charging can be used without any other operation.

First connect your appliance with its charging cable. Insert the Type-C connector on the other end of the charging cable into the Type-C fast charging port of the B600 to initiate charging.

b. Icons of battery percentage, annular battery indicator, remaining battery time, Type-C charging on, and power input will show up on the LCD screen.

c. After charging is complete, disconnect the charging cable and your appliance. Only icons of battery percentage, annular battery indicator (illuminate and stays on), and remaining battery time still show up on the LCD screen. The power input resets to zero and the icon representing Type-C charging on disappears.

Powering Automotive Electrical Appliances via Cigarette Lighter

Supporting the electrical current of at most 10A, Cigarette Lighter of the B600 can directly power most of your vehicle appliances (refrigerator, vacuum cleaner, etc.). You can easily enjoy your vehicle appliances either during an outing or at home with the B600.

a. Switch on the B600. Press the DC branch switch to start the DC output. Connect your vehicle appliance with its power cable. Insert the other end of the power cable into the Cigarette Lighter of the B600 and now your vehicle appliance can be powered by the B600.

b. Icons of battery percentage, annular battery indicator, remaining battery time, vehicle charging on, and power input will show up on the LCD screen.

c. After finishing using the vehicle appliance, disconnect the appliance from the B600. Press the DC branch switch again to stop DC output. Only icons of battery percentage, annular battery indicator (illuminate and stays on), and remaining battery time still show up on the LCD screen. The power input resets to zero and the icon representing vehicle charging on disappears.

Powering DC Electrical Appliances via DC5521 Output Port

If the connector of the power cable of your DC electrical appliance is a DC5521 connector, then you can power your DC electrical appliances via the DC5521 output port using the B600.

a. Switch on the B600. Press the DC branch switch to start the DC output. Connect your DC electrical appliance with its power cable. Insert the DC5521 connector of the power

cable into any of the DC5521 output ports of the B600. Now your DC electrical appliances can be powered by the B600.

b. Icons of battery percentage, annular battery indicator, remaining battery time, vehicle charging on, and power input will show up on the LCD screen.

c. After finishing using the DC electrical appliance, disconnect the appliance from the B600. Press the DC branch switch again to stop DC output. Only icons of battery percentage, annular battery indicator (illuminate and stays on), and remaining battery time still show up on the LCD screen. The power input resets to zero and the icon representing vehicle charging on disappears.

NOTICE: The B600 is equipped with 2 DC5521 output ports. You can connect 2 DC appliances at the same time.

Wireless Charging (Fig. 6)

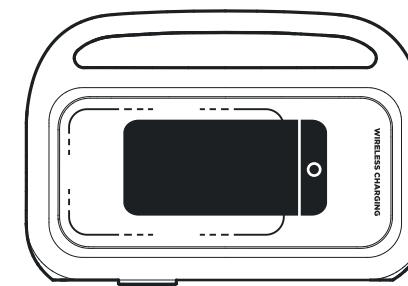
If your mobile appliances support wireless charging, you can charge them without any charging cable by the B600.

a. Switch on the B600 and the wireless charging can be used without any other operation. Place your appliance (e.g. mobile phones) on the wireless charging area directly.

b. Icons of battery percentage, annular battery indicator, remaining battery time, wireless charging on, and power input will show up on the LCD screen.

c. After charging is complete, remove the appliance from the B600. Press the main power switch and hold it for 3 seconds to stop wireless charging. Only icons of battery percentage, annular battery indicator (illuminate and stays on), and remaining battery time still show up on the LCD screen. The power input resets to zero and the icon representing wireless charging on disappears.

FIG. 6



POWERING AC ELECTRICAL APPLIANCES

On the basis that internal batteries are not overloaded, the B600 can be used as an inverter to power your AC electrical appliances (rated power not greater than 600W), such as your laptop, TV, refrigerator, and vacuum cleaner.

NOTICE:

- After finishing using AC power, press the AC branch switch to stop AC output, and remove the power cable from the AC output port.
- a. Switch on the B600. Plug the power cable of your household electrical appliance into any of the AC output ports on the left side of the B600. Press the AC branch switch to start the AC output. Now your AC appliance can be powered by the B600.
- b. Icons of battery percentage, annular battery indicator, remaining battery time, AC output on, and power input will show up on the LCD screen.
- c. After finishing using, remove the appliance from the B600. Press the AC branch switch again to stop AC output. Only icons of battery percentage, annular battery indicator (illuminate and stays on), and remaining battery time still show up on the LCD screen. The power input resets to zero and the icon representing AC output on disappears.

NOTICE:

- After pressing the AC branch switch to start the AC output, if there is no operating action on the B600, and no AC electrical appliance is connected, then the AC output will automatically turn off in 6 hours.

U-BATTERY

2 units of U-BATTERY are attached to the B600. U-BATTERY is suitable for all Litheli U4 RIGEL products, and U-BATTERY can work as a portable power bank individually. The attached U-BATTERY can be inserted into the B600 for charging.

- a. Insert the U-BATTERY into the specially designed compartment on the front side of the B600, in the correct direction and position (the battery power indicator light is facing outwards) making sure the U-BATTERY is locked in place.
- b. The B600 starts to charge the U-BATTERY automatically. After the U-BATTERY is inserted, the Power Output icon on the LCD screen displays real discharging power.
- c. After charging is complete, the battery indicator light of the U-BATTERY turns green. Press the battery release button in the area of the battery indicator light, the U-BATTERY will pop out from the compartment automatically. Hold and remove it from the B600.

NOTICE:

- The 2 U-BATTERY units can be inserted into the B600 and charged at the same time.
- While charging the U-BATTERY, the B600 still can work normally to charge other electrical appliances.

MAINTENANCE AND STORAGE

⚠WARNING: When servicing, use only identical replacement parts. The use of any other parts may create a hazard or cause product damage. To ensure safety and reliability, all repairs should be performed by a qualified service technician.

⚠WARNING: For the user's safety, worn or damaged parts must be replaced. Replace with original replacement parts only.

⚠WARNING: To prevent serious injury from product failure, do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

CLEANING

- a. Do not attempt to repair this product.
- b. Regularly check the B600 and clean it. Keep the B600 clean and free of dust. Wipe the outer covering with a clean, non-abrasive, soft, and dry cloth to keep its appearance clean. Do not use tough cleaning tools such as steel wool to clean.
- c. Never wet or spray water on the B600. Do not use any lubricants, detergents, solvents, or polishing agents as these could cause irreparable damage. Chemicals can destroy the plastic parts.
- d. If deep cleaning is required, we recommend that you use a cleaner designed for screens of mobile phones and computers.

DEVICE STORAGE TIPS

1. Examine this product thoroughly for worn, loose, or damaged parts. Should you need to repair or replace a part, contact Litheli Customer Service for assistance.
2. Remove the U-BATTERY, if any. Allow the B600 to cool down.
3. Before storage, switch off the B600. Store the B600 and its accessories indoors in a locked and dry, well-ventilated place within the recommended temperature range and out of the reach of children to avoid direct contact with water and prevent unauthorized use or damage.
4. To prolong battery life, please charge and discharge the B600 every 3 months if you need to store it for a long period. First discharge the battery of the B600 to 30% power, and then charge the battery of the B600 to 85% power.
5. If the battery is too low after discharging, fully charge the B600 before storage. If the battery is too low and it has been stored for a long period, then the product will enter sleep mode. Charge the B600 to wake it up.
6. Do not store or transport this product together with glasses, watches, metal necklaces, hairpins, or other metal objects.
7. Discharge the battery of the product to be lower than 30% before logistics transportation.
8. Make sure the B600 is fixed well during transportation to avoid vibration and collision.
9. The B600 cannot be carried on the plane.

U-BATTERY STORAGE TIPS

1. Do not expose your battery to water, rain or allow it to get wet in any way. This could permanently damage the battery. Do not use oil or solvents to clean or lubricate your battery as the plastic casing can become brittle and crack, causing a risk of injury.
2. Store the battery at room temperature away from moisture. Do not store in damp locations where corrosion of terminals may occur. As with other battery types, a permanent capacity loss could happen if the battery is stored for long periods at high temperatures (over 120°F / 49°C).

FOR BATTERY-POWERED TOOLS

The ambient temperature range for the use and storage of the tool and the battery is 0°C-45°C (32°F-113°F).

The recommended ambient temperature range for the charging system during charging is 10°C-40°C (50°F-104°F). While charging, the battery and charger should be placed in a cool, dry indoor place with good ventilation.

SAFETY INSTRUCTIONS

⚠WARNING: Only use the accessories that are provided with this product or the accessories approved by Litheli. Using other accessories might increase the risk of injury. Follow the instructions in this manual to properly use the accessories.

⚠WARNING: This product can expose you to chemicals including lead and Di(2-ethylhexyl) phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

⚠WARNING: Before using this product, carefully read all the instructions and cautionary markings in this manual and on the product. Failure to follow the warnings and instructions may result in a risk of fire, electric shock, serious personal injury, or property damage.

⚠WARNING: To reduce the risk of injury, fire, or electric shock, the user must read and understand the operating manual for their USB accessories and AC electrical appliances in addition to this Operating Manual. Ensure compatibility before using this PowerHUB. Do not use this product if any part is damaged or missing.

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

1. Read all supplied instructions before using the product.
2. NEVER leave the PowerHUB on and unattended. Unattended operation of this product could result in personal injury or property damage. Switch off the PowerHUB when not in use.
3. To reduce the risk of injury, close supervision is necessary when the product is used near children.
4. Do not put fingers or hands into any port of the product.
5. Use of an attachment not recommended or sold by the PowerHUB manufacturer may result in a risk of fire, electric shock, or injury to persons.
6. Do not use this product in an environment with strong static electricity or electromagnetic fields. The protection function of the product may not work, which will lead to product malfunction.
7. To reduce the risk of damage to the electric plug and cord, pull the plug rather than the cord when disconnecting the PowerHUB.
8. ALWAYS ensure that the PowerHUB charger-in cord is easily accessible during operation to allow for quick disconnection from the mains.
9. Do not operate the PowerHUB with a damaged cord or plug, or a damaged output cable.
10. Do not use a PowerHUB that is damaged or modified. Damaged or modified products may exhibit unpredictable behavior resulting in fire, explosion, or risk of injury.
11. When using the PowerHUB, work in a well-ventilated area and do not restrict ventilation in any way. Do not use or store the product in a dusty or unventilated environment.
12. ALWAYS operate the PowerHUB in a clean, dry, well-ventilated area. Make sure your hands are dry before touching this product. Do not allow the product to come into contact with

any liquid. Never let this product become wet. Water can conduct electricity! Water that comes in contact with electrically charged components can transmit electricity resulting in electrical shock to anyone contacting them.

13. Do not expose the PowerHUB to rain or wet conditions. Water entering the PowerHUB will increase the risk of electric shock.

14. If this product accidentally falls into water during use, place it in a safe open area after it is picked up. Leave it alone until it is completely dry. Do not use it again. Discard it according to relevant local regulations.

15. If the product catches fire, it is recommended to first cool it down with water or water mist and use fire extinguishing equipment in the following order: sand, fire blanket, dry powder fire extinguishing agent, and carbon dioxide fire extinguisher.

16. Place the PowerHUB on a stable, flat surface where it will not fall or tip over. Do not place heavy objects on the product.

17. Do not use the PowerHUB to power medical or other critical devices.

18. Use PowerHUB only with U-BATTERY. The use of any other battery packs may create a risk of injury and fire.

19. The PowerHUB is not intended for use in a commercial repair facility.

20. Do not disassemble the PowerHUB, take it to a qualified service person when service or repair is required. Incorrect reassembly may result in the risk of fire or electric shock.

21. Have your PowerHUB serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the PowerHUB is maintained.

22. Save these instructions. Refer to them frequently and use them to instruct others who may use this product. If you lend someone this product, lend them these instructions to prevent misuse of the product and possible injury.

23. Use the product at a temperature between 32°F and 113°F (0°C-45°C). Do not use or store it above 113°F (45°C), which may cause the product to explode; or below -20°F (-4°C), which may negatively affect its performance. Ensure the product is at room temperature before operating.

24. Be aware that this Litheli product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or a lack of experience and knowledge unless they have been given supervision or instruction by a responsible person concerning the use of the product to ensure that they can use it safely.

25. Do not allow it to be used as a toy. Close attention is necessary when used by or near children, pets, or plants. Children should be supervised to ensure that they do not play with this product. Cleaning and user maintenance shall not be performed by children.

26. Use only as described in this manual. Use only the manufacturer's recommended attachments. Do not carry out any maintenance other than that is shown in this manual.

27. Contact the service agent when service or repair is required. Do not disassemble the product yourself as incorrect reassembly may result in an electric shock or fire. All repairs should be performed by a qualified service technician. Do not try to alter any part of this product.

28. Do not use near or on the surface of flammable and explosive objects, which may cause fire and explosion.

29. Do not incinerate the product even if it is severely damaged. It can explode in a fire.

30. Do not use the product in an environment full of flammable and explosive gas in order to avoid fire or explosion.

31. Stop using immediately if the product is not working as it should, including but not limited to: it has received a sharp blow, has been dropped to the ground, dropped into water, been damaged, overheating, making unusual noises or vibrations, and producing unusual odours or leaking electricity. Switch off the product and contact the service agent.

32. Check and clean each port of the product with a clean dry cloth. Stains on the port will cause poor contact with the cable, which can lead to energy loss or inability to charge.

33. Regularly check the product for any damaged parts. If yes, do not switch it on, and contact the service agent.

34. Follow all charging instructions and do not charge the product beyond the temperature range specified in the instructions. Charging improperly or at temperatures beyond the specified range may damage the battery and increase the risk of fire.

35. Have servicing performed by a qualified repair person using only identical replacement parts. This will ensure that the safety of the product is maintained.

36. Fully charge this product before each use.

37. Before charging, make sure the product is not too hot (as the same as room temperature).

38. The product will be warm when charging or discharging. That is normal.

39. Fully discharge the product before discarding it. Discard the product in accordance with the local environmental regulations.

40. The normal ambient temperature for using and storage is from -20°C to 45°C. The optimal ambient temperature for using and storage is from 20°C to 25°C.

41. Try to avoid storing the product without using it for a long time. It will lower the performance.

42. Please charge and discharge the B600 every 3 months. Follow the steps below: discharge the battery to 30% power, and then charge it to 85% power. It will keep the product performing well.

SAFETY WARNINGS FOR BATTERY PACK

1. Do not modify or attempt to repair the battery pack. Do not dismantle, open or shred the battery pack.
2. Do not expose a battery pack or appliance to fire or excessive temperature. Exposure to fire or temperature above 265°F (130°C) may cause an explosion.
3. Do not short-circuit a battery pack. Do not store battery packs haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal

objects. When the battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or fire.

4. Do not subject the battery pack to mechanical shock.
5. Observe the plus (+) and minus (-) marks on the battery pack and equipment to ensure correct use.
6. Keep the battery pack out of the reach of children.
7. Always purchase the battery pack recommended by the equipment manufacturer of this equipment.
8. Keep the battery pack clean and dry.
9. Wipe the battery pack terminals with a clean and dry cloth if they become dirty.
10. The battery pack needs to be charged before use. Always use the correct charger and refer to the manufacturer's instructions or equipment manual for proper charging instructions.
11. Do not leave a battery pack on prolonged charge when not in use.
12. After extended periods of storage, it may be necessary to charge and discharge the battery pack several times to obtain maximum performance.
13. The battery pack gives its best performance when it is operated at normal room temperatures ($20^{\circ}\text{C} \pm 5^{\circ}\text{C}$).
14. Use the battery pack only in the applications for which it was intended. 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.
15. Remove the battery pack from the equipment when not in use.
16. Dispose of it properly.
17. Do not handle the charger, including charger plug, or charger terminals with wet hands.
18. Do not charge the battery pack outdoors, in rain, or in wet locations.
19. Recharge only with the charger described in this manual. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
20. Use power tools only with specifically designated battery packs. The use of any other battery packs may create a risk of injury and fire.
21. 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.

Save these instructions. Refer to them frequently and use them to instruct others who may use this tool. If you lend this product to someone else, also lend these instructions to them to prevent misuse of the product and possible injury.

FCC STATEMENT

1. 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.
 2. This device must accept any interference received, including interference that may cause undesired operation.
2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTICE: 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.

SAFETY SYMBOLS

The purpose of safety symbols is to attract your attention to possible danger. The safety symbols and the explanations with them deserve your careful attention and understanding. The warning symbols do not, by themselves, eliminate any danger. The instruction and warnings they give are no substitutes for proper accident prevention measures.

Some of the following symbols may be used on this product. Please study them and learn their meanings. Proper interpretation of these symbols will allow you to operate the product in a safer manner.



To reduce the risk of injury, the user must read the instruction manual.



SAFETY ALERT – indicates a precaution, a warning, or a danger.



Do not burn the battery pack.



Batteries may enter the water cycle if disposed of improperly, which can be hazardous to the ecosystem. Do not dispose of old batteries as unsorted municipal waste.



Li-ion battery. This product has been marked with a symbol relating to "separate collection" for all battery packs and batteries. It will then be recycled or dismantled in order to reduce the impact on the environment. Battery packs can be hazardous for the environment and for human health since they contain hazardous substances.



Class II.



Short-circuit-proof safety isolating transformer.



Do not expose to rain.



Direct current - Type or a characteristic of current.



Alternating current.

FAQs

Q1: Can I recharge the B600 while charging connected devices?

A: Yes, the Litheli PowerHUB B600 supports pass-through charging, so it can power other devices while recharging itself. But we don't suggest using it this way as it may cause damage to battery life.

Q2: How do I know if my Litheli PowerHUB B600 is charged?

A: To check the charge level of the Litheli PowerHUB B600, refer to the LCD Battery Display.

Q3: What's the max power output of the AC output ports?

A: The AC output ports can deliver a maximum of 600W to connected devices.

Q4: Why does the PowerHUB's battery drain even when no devices are connected?

A: When the AC and car charging button is turned on, even if no devices are being charged, there will still be a certain amount of no-load power consumption. To avoid this, make sure the AC and car charging button is off or turn on the power saving mode when you're not using the PowerHUB.

Q5: How to use PowerHUB B600 safely?

A: Please use the B600 in its recommended operating temperature range. Using the B600 out of the recommended operating temperature range may cause the B600 to exceed safe and effective working limits. The B600 is not waterproof, so DO NOT immerse the B600 in water. Otherwise, your warranty will be invalid.

Continuously powering heating electrical appliances with input power of 600W for more than half an hour may lead to over-temperature protection. That is normal. Please wait about 1 hour to allow it to cool down before using it again.

Q6: What devices can the PowerHUB B600 power?

A: Please note that the AC output port can only charge/power devices that operate at less than a total of 600W.

Q7: Can I use it indoors?

A: Yes, the B600 is safe to use indoors.

TECHNICAL SPECIFICATIONS

General Specs

Model No.	B600
Rated Power	600W
Capacity	562Wh (21.6V 26Ah)
Device Weight	5.88kg/12.96Lbs
Production Dimension	313mm x 204mm x 169mm
Discharging Temperature	-20°C to 45°C (±3°C)
Charging Temperature	0-45°C (±3°C)
Storage Temperature	0-60°C
Cycle Life	After 500 + cycle times: 80%
PACK Mode	6S10P
Outputs	
AC Output (x1)	600W(rated), 110V, AC, 60Hz
USB-A Output (x2)	5V-2.4A, 12W(Max)
TYPE-C Output(x1)	5V-3A/9V-3A/12V-3A/15V-3A/20V-5A,100W(Max)
Wireless Charging Output (x1)	15W
Vehicle Charging Output (x1)	13.6V-10A, 136W(Max)
Dc5521 Output (x2)	13.6V-10A, 136W(Max)
Inputs	
Solar Charging Input (DC7909)	100W(Max) 11-30V-7A
Vehicle Charging Input (DC7909)	100W(Max), 7A
Type-C Input	5V-3A/9V-3A/12V-3A/15V-3A/20V-5A,100W(Max)
U-BATTERY	
Battery	4000mAh Lithium-ion battery
Voltage*	4V-MAX*
Type-C Port Output / Input	5V-3A / 9V-2A / 12V-1.5A, 18W MAX
Battery Dimension	82.5*37.5*26.5 (mm)
Weight	119g

*Voltage measured without workload. Initial battery voltage reaches maximum of 4 volts.

TROUBLESHOOTING

The following table gives checks and actions that you can perform if your device does not operate correctly. If these do not identify/remedy the problem, contact your service agent.

⚠WARNING: Switch off the device and remove the batteries before any troubleshooting.

Reminder	Display	Reason	Remedy	Remark
High-Temperature Alarm 1		BMS High Temperature	Remove all the connected appliances. Shut down the B600. Put the B600 to somewhere cool and wait for it to cool down to normal temperature. Then try it again.	Icon flashing.
Low-Temperature Alarm 1		BMS Low Temperature	Remove all the connected appliances. Shut down the B600. Put the B600 somewhere warm and wait for the B600 to warm up to normal temperature. Then try it again.	Icon flashing.
Overload Alarm 1		Inverter Overload	Remove the connected AC equipment. Press the AC branch switch again to start, then the alarm will stop.	Icon flashing.
Overload Alarm 2		Wireless Charging Overload	Remove the connected wireless charging appliance. Press the main power switch again to start, then the alarm will stop.	Icon flashing.
Overload Alarm 3		Type-C Fast Charging Overload	Remove the connected Type-C charging appliance. Press the main power switch again to start, then the alarm will stop.	Icon flashing.

Overload Alarm 4		USB Charging Overload	Remove the connected USB charging appliance. Press the main power switch again to start, then the alarm will stop.	Icon flashing.
Overload Alarm 5		Vehicle Charging Overload	Remove the charging appliances connected to DC5521 output and vehicle charging port. Press the DC branch switch again to start, then the alarm will stop.	Icon flashing.
Low Battery	 	Battery is low	Remove all the other charging appliances. Charge the B600 first.	Icon flashing.
Error Alarm 1		AC Error	Try to restart the B600. If still not working, contact the Litheli service agent.	Icon flashing.
Error Alarm 2		Wireless Charging Error	Try to restart the B600. If still not working, contact the Litheli service agent.	Icon flashing.
Error Alarm 3		Fan Error	Clean up the ventilation slots and make sure there is no blockage around the ventilation slots. If still not working, contact the Litheli service agent.	Icon flashing.
Error Alarm 4		BMS Communication Error	Try to restart the B600. If still not working, contact the Litheli service agent.	Icon flashing.

Tips:

1. Check and operate the product following this manual closely to avoid unnecessary failures.
2. If the product still fails to work, contact the Litheli service agent.

WARRANTY

Litheli WARRANTY POLICY FOR PowerHUB

- For Litheli PowerHUB (battery excluded) used for personal and household purposes, 2-year limited standard warranty + 1-year limited extended warranty available upon product registration;
- For Litheli U4 RIGEL batteries used for personal and household purposes, 1-year limited warranty;

NOTICE: Litheli offers a Warranty Extension Service for PowerHUB (battery excluded). Litheli PowerHUB (battery excluded) Warranty Extension is available only upon product registration. Register your PowerHUB on Litheli OFFICIAL website to activate a 1-year limited extended warranty.

Please contact Litheli customer service at service@litheli.com any time you have questions or warranty claims.

LIMITED WARRANTY SERVICE

FOR THREE (1-year limited extended warranty included) YEARS from the date of original retail purchase, this Litheli product (battery not included) is warranted against defects in material or workmanship. Defective products will receive free repair or will be exchanged. FOR ONE YEAR from the date of original retail purchase, the Litheli battery is warranted against defects in material or workmanship. Defective products will receive free repair or be exchanged.

1. This warranty only covers Litheli products and batteries used for residential purposes.
2. This warranty does not cover the consumables such as, but not limited to, charging cables.
3. This warranty does not cover the damage resulting from modification, alteration or unauthorized repair.
4. This warranty only covers defects arising under normal usage and does not cover any malfunction, failure or defect resulting from misuse, abuse (including overloading of the product beyond capacity and immersion in water or other liquid), accidents, neglect or lack of proper installation, and improper maintenance or storage.
5. This warranty does not cover normal deterioration of the exterior finish including but not limited to scratches, dents, paint chips, or to any corrosion or discoloring by heat, abrasive and chemical cleaners.
6. This warranty applies only to the original purchaser from an authorized Litheli shop and may not be transferred.
7. This warranty does not require Litheli to repair or replace a Litheli lithium-ion battery/ies if the battery/ies present/s shortened runtime/working hours, reduced capacity, and/or weakened performance due to normal chemical age.

PRODUCT REGISTRATION

Please register your Litheli product at [Litheli OFFICIAL website](#).

For better warranty services, we recommend that you register the product within 30 days from the date of the original retail purchase.

WARRANTY CLAIM

For warranty claims, please contact Litheli customer service. You will need to submit a registration document or proof of purchase in the form of a valid receipt that displays date and place of purchase. Replacement tools do not come with a new warranty. The warranty of the products will continue from the date of the original purchase.

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.

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

IC Warning

This device complies with Industry Canada's licence-exempt RSS standard(s). Operation is subject to the following two conditions:

(1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil n'effectue pas de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

IC RF Statement:

When using the product, maintain a distance of 10cm from the body to ensure compliance with RF exposure requirements.