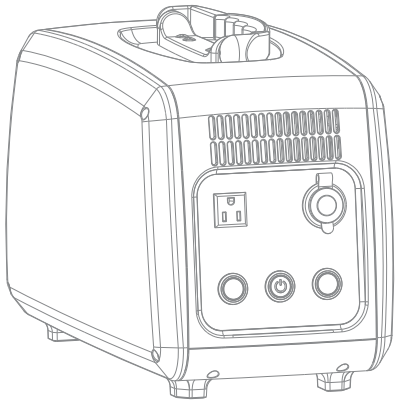
LARSON ELECTRONICS

Operating Manual

Portable Power Station

BPLI-1.5K



Many thanks for buying this Portable Power Station. In order to use this product safely, please read this manual carefully; and please safekeep this manual so that you can read it any time you need. Please also keep the receipt for your order as proof of purchase.

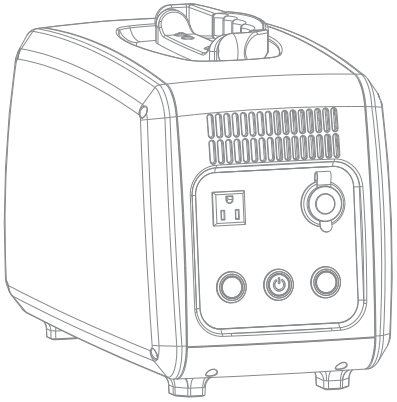
Note:	Disobeying safety considerations may cause human injury such as fire hazard or electric shock, etc.

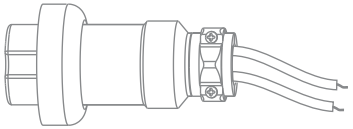
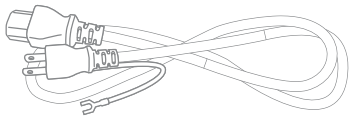
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Questions, please contact:
Larson Electronics LLC
Phone: 800-369-6671 or 903-498-3363
Email: sales@larsonelectronics.com
Website: LarsonElectronics.com

1. Packed Items



	Solar Input Plug	× 1
	AC input Plug	× 1
Operating Manual		× 1

2.Preface

Please pay attention to the following content when reading the operating instructions.

- Changes to this manual will not be mentioned in the future.
- Product appearance changes or specifications will not be mentioned to users in the future.
- We have tried our best to make this manual. Please contact us for elaboration, mistakes or omissions.

Disclaimer

- Our company is not liable for the damage caused by fires, earthquakes, third party use or other accidents, customer's willful misconduct, misuse and other abnormal conditions.
- Please do not repair the connector if it fails, when using the product.
- See separate warranty document for warranty information.
- Our company refuses to take responsibility for damages caused by operation for disobeying operation manual.

3. Safety Considerations

Please follow the instructions for safe use.

Display Description

Danger indicates that	Incorrect operation will very likely to result in death or serious injury.
Warning indicates that	Incorrect operation will lead to the possibility of death or serious injury.
Notice indicates that	Incorrect operation may result in injury or property damage.

Serious injury: refers to blindness, injury, burns, electric shock, fractures, poisoning, etc that may lead to complications, hospitalization or regular treatment.

Harm: refers to injuries, burns, electric shock,etc that does not need hospitalization or regular treatment.

Property damage: refers to damage to houses, family property, pet, etc.

Symbol Indicator

△	Triangle means attention to fire, fracture, high temperatures, etc. The picture describes the specific attention content.
⊘	Means the behavior is prohibited during operation of the product. The specific prohibited behavior is illustrated or described in the picture.
●	Circle means behavior that is required during the operation of the product. The specific required behavior is illustrated or described in the picture.

- For safe use of BPLI-1.5K, we pasted a notice label. Please use the product with reference to the manual content and label.

⚠ WARNING

Do not disassemble or repair this product.
It may cause electric shock or fire.

Do not put this product close to a fire or in a fire or near a heat source.
It may cause fire or burn injury.

Do not charge, use and store this product in the rain or other damp areas.
It may cause an electric shock or fire.

⚠ WARNING

Do not touch this product and connector socket when your hands are wet.
It may cause an electric shock.

Do not connect the metal to AC input and output.
It may cause an electric shock or fire.

Do not dispose this product as normal waste.
This may cause an electric shock or fire.

Do not use the un-specified AC connector wire.
It may cause an electric shock, fire, etc.

Do not exceed the rated voltage, current, or power specifications.
It may cause an electric shock, fire, etc.

Do not drop this product.
It may cause electric shock, fire, product damage, etc.

Please do not move the product when it is being charged or used.
It may case fire or electric shock and other injuries or product damage.

⚠ WARNING



Please keep the place clean where you use or store the product.



Please check the product before using.
If there is any damage, ruptures, cracks, please stop using it and contact customer service.



Please watch the AC cord is damaged.



Do not let children use this product.



Do not use it if the plug is loose or deformed.



When then there is a thunderstorm, please pull out the AC cable from wall outlet.



Please do not charge the device beyond AC100-240V.



When using or storing, please do not put the product up-side-down or sidewards.

⚠ CAUTION



If you notice any over-heating, please stop using the product immediately and contact customer service.



This product is very heavy, please mind when operation.



For transportation, the product conforms with all the legal requests about batteries.



Please make the product stable when shipping it by automobile.



Product must connect to AC ground wire when charging .



Do not expose to water or other liquids.



Please charge, use and store at these temperatures: 32F to 104F (0C to 40C).
It will cause low efficiency or heating if product is used beyond this temperature range.



Please read carefully the instructions of the electrical device to connect to this product.

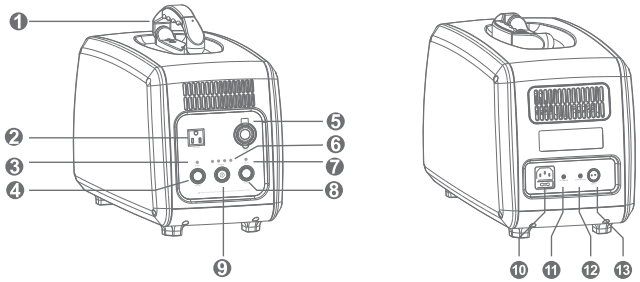


Please ensure that the device is turned off before connecting.



When the protection function starts and the product shuts down the output, please disconnect electrical appliances from the AC output outlet.

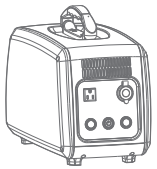
4. Name of Parts



❶ Handle	❽ DC Output On/Off
❷ AC Output Outlet	❾ Power On/Off Button
❸ AC Output Indicator	❿ AC Input Socket
❹ AC Output On/Off	⓫ AC Input Indicator
❺ DC12V Output Outlet	⓬ Solar Input Indicator
❻ Capacity Indicator	⓭ Solar Input Socket
❼ DC Output Indicator	

5.Lifting & Handing

1. Pull the handle up



⚠ Notice

Keep the product away from anything moving.

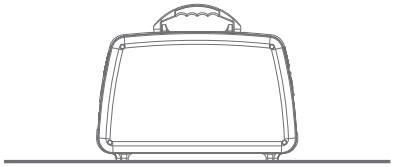
2. Moving by carry handle



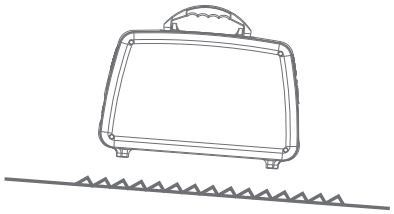
⚠ Notice

Hold the handle steady.

3. Place in a stationary place



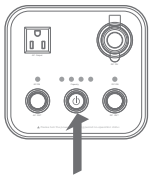
4.Do not place it where it is unsteady



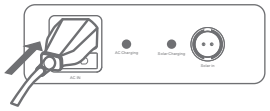
6.AC Charging

1.Press the power on/off button

Power indicator lights up, also the capacity indicators show battery capacity.

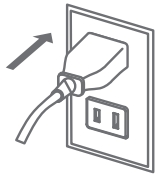


2.Connect AC cable



> **⚠ Notice**
>
> Make sure the AC cable plug is inserted into the AC input socket

3.Connect AC cable to wall AC outlet



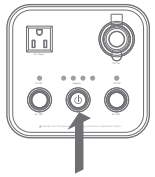
Please make sure AC cable plug is inserted into standard AC outlet. (BPLI-1.5K-120V:100V/110V/120V;BPLI-1.5K-240V:220V/230V/240V) Capacity indicator flash every 2 seconds, AC input indicator lights up.

4.After fully charged: 4 green indicators lights up.



> **⚠ Notice**
>
> Charging time alters based on ambient temperature or charger internal state.

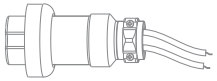
5.Press Power on/off button to stop charging



Power off, stop charging and disconnect the AC input cable from wall AC outlet.

7.Solar Charging

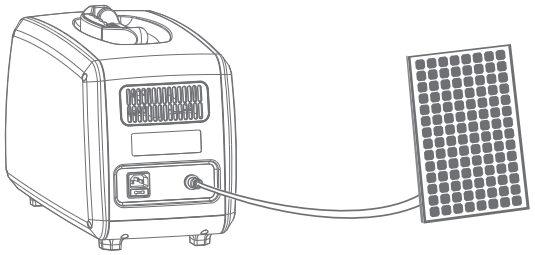
1.Special solar input connector



2.Connect the solar panel to solar input connector
Red wire connects to positive of solar panel and black wire connects to negative of solar panel. (attention: Open circuit solar panel voltage should be between DC18V ~ DC54V)

3.Press power on/off button: solar charging indicator lights up and also battery capacity indicators

4.Plug the solar input connector into solar charging input socket
Capacity indicator flashes once per second and also solar input indicator lights up. It's normal that if the product heats up (charging ambient temperature requires 0~40 °C)



5. Fully charged by solar panel: 4 green indicators light up (PV max input power 210 watts)

> **⚠ Notice**
>
> Charging time may be different because of environment temperature or solar charger internal factors

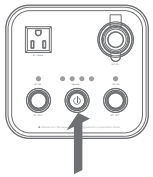
6. Power off to stop charging
Press the power on/off button, unplug solar input connector from solar input socket

6. Capacity Indicator

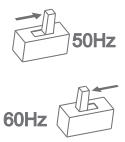
	Indicator State		Indication
Normal	25 50 75 100	4 indicators off	Power off or no electric inside
	25 50 75 100	1 green on	Flashing every second, charging, SOC 0%~25%
	25 50 75 100	2 green on	Flashing every second, charging, SOC 25%~50%
	25 50 75 100	3 green on	Flashing every second, charging, SOC 50%~75%
	25 50 75 100	4 green on	Flashing every second, charging, SOC 75%~100% 4 lights means it's charged fully and charging stops
Need confirmation	AC input indicator	Green on	Normal AC Input
		Light off	Abnormal AC Input or no input
		Red on	AC charging short-circuit protection
		Red flashing	AC charging over temperature protection
		Orange on	Fan failure
		Orange flashing	Battery failure
	Solar input indicator	Green on	Normal solar input
		Light off	Abnormal solar input or no input
		Red on	Solar charging short-circuit protection
		Red flashing	Solar charging over temp protection
		Orange on	Fan failure
		Orange flashing	Battery failure

8.AC Output

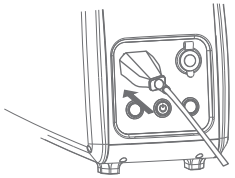
1.Press the on/off button



2.Match the frequency of the electronic appliance (50Hz or 60Hz)

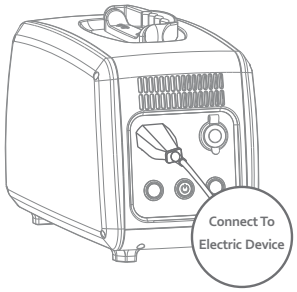
⚠ Note	
	Standard frequency: 60Hz. Different frequency may lead to abnormal operation of electronic product, it may also lead to breakdown of electronic appliance. Switch method: Power it off, open the cover on the left side, and move the dial switch on the inverter to corresponding frequency.

3.Connect other electronic devices input plug to the AC output outlet.
Make sure the input plug of other electronic device is inserted into the AC output outlet.



⚠ Note
Connect electric appliance to AC output outlet and check whether well connected. Please make sure the electric appliance is powered off before connecting.

4.Use of electrical appliances



Make sure electric appliances are powered off before using.

Confirm the battery capacity according to indicator 1-4 lights during processing.

Usage time is varied due to the ambient temperature or change of the built-in Li-ion battery.

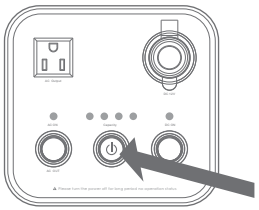
It's normal if the product heats up during output.

⚠ Note

Please make sure the electric appliance works well before using the product.
The max AC load of power consumption for electric appliance is 500 Watts.

5.Stop using the appliance

Power off: pull out the connector of electric appliance, press power on/off button.



⚠ Note

When the product operates more than 12 hours without load, AC output will cut down automatically to avoid self-consuming. Please restart the product when you use it.

6. Discharging SOC Indicators

	Indicator State		Indication
Normal	● 25 ● 50 ● 75 ● 100	4 green on	Discharging, SOC 75~100%
	● 25 ● 50 ● 75 ○ 100	3 green on	Discharging, SOC 50~75%
	● 25 ● 50 ○ 75 ○ 100	2 green on	Discharging, SOC25~50%
	● 25 ○ 50 ○ 75 ○ 100	1 green on	Discharging, SOC 0~25%
	AC output indicator	Green	Output 50Hz
		Red	Output 60Hz
Abnormal	AC output indicator	Flashing between green and red	Inverter over load, over temp; battery low voltage, over voltage; fan failure. These are general alarms if inverter can still output.
		Red Flashing	Inverter misoperation, no output from inverter: bad alarm Cut off load, check if there is over load, short-circuit.
	○ DC output indicator	Light off	Abnormal DC12V output.

●···Light on ●···Twinkle ○··· Light off

9. Estimated Backup Time (based on **BPLI-1.5K 1500Wh** model)

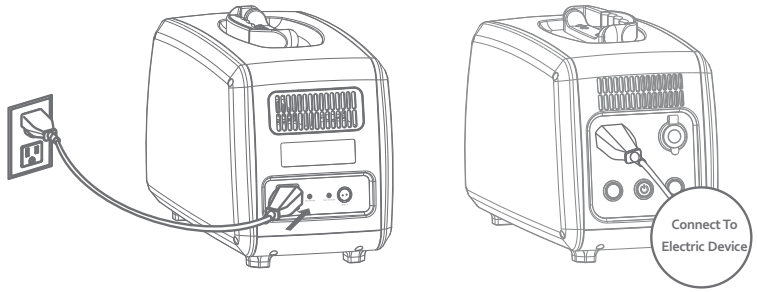
Please ensure the load for power station is no more than 500 watt, matching electrical appliances with standard AC input.(BPLI-1.5K-120V:100V/110V/120V;BPLI-1.5K-240V:220V/230V/240V).

● **Estimated Backup Time**

Power consumption	Estimated back up time
20W	~70hours
50W	~28 hours
100W	~14 hours
200W	~7 hours
300W	~4.5 hours
400W	~3.5 hours

10. Function of Charging & Discharging Simultaneously

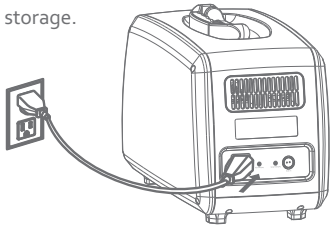
BPLI-1.5K power station can be discharged while charging.
In the condition of charging, it can supply power to electric appliance at the same time.



11.Storage

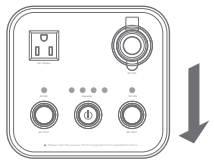
1.Full charge

Fully charge the power station before long term storage.
Fully charge the power bank 4 times a year.



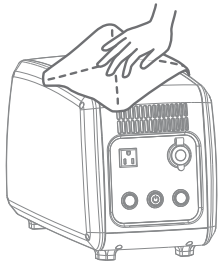
2.Shut down all the buttons

After fully charged, pull out AC input connector from AC input socket, shut down on/off buttons



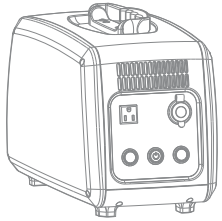
3.Clean

Keep the unit clean.



4.Storage

Try to store the power station in a dry and low dust environment.
Suitable storage temperature: 0~40℃, avoid direct sunshine.
Please store the product at stable place.



12. Use Life of the Li-ion Battery

- **Charge, discharge and storage at 0~40°C**
  Using battery with too low or high temperatures may shorten battery cycle life.

- **Don't connect loads with more than 500W**
  Over load makes BPLI-1.5K stop discharging automatically and may shorten battery cycle life.
- **Don't charge battery after it's fully charged**
  Pay attention to the SOC indicators, don't charge battery after fully charged or finishing fully charged. Otherwise, it shortens cycle life of Li-ion battery.

- **Don't discharge battery when SOC is 0**

- **Fully charge the product for storage**
  For long-time no-use state, please keep the product fully charged for storage, and recharge it at least once a year.

13.Recycling Lithium Ion Battery

After use, complete lithium-ion batteries can be recycled.
Please take to your local recycling facility.



14. Malfunctions & Maintenance

Phenomenon	Status	Main reason	Resolution
Unit is not charging	Cannot start charging	Not enough power	AC wire is not connected or not connected well
		No solar input	Check whether wiring is normal
	Charging more than two hours of battery shows no increase	Internal Temperature Problems	Place the product at a lower temperature 0~40°C.
			I
Output does not work	Electrical output does not work correctly	No power supply	Confirm electrical plug is inserted into ac socket
	"/"	No matching frequency	Confirm the matching frequency
	Electrical output starts but stops after a minute	Overload protection function start, output stop	Restart AC output button, make sure load is < 500 Watts
		Electric power is less than 10W	Restart AC output button, confirm the total power (when the power is less than10W for more than 12 hours, the unit presumes no load and shuts off)
Electric work but short time			
	Remaining capacity quickly reduce	Electric overload	Lower total power of electricity
		Battery cycle life	Please stop charging immediately and contact customer support

15.Specification

Model	BPLI-1.5K-120V			PS10B-240V		
Battery Capacity	700Wh	1200Wh	1500Wh	700Wh	1200Wh	1500Wh
	Output					
Rated Output Power	500VA					
Peak Output	750VA 10s					
Output Voltage	100V/110V/120Vac			200V/230V/240Vac		
Output Frequency	50Hz/60Hz					
Overload Ability	120%<load<130% @10min; 130%<load<150% @10s					
Max Efficiency	90% (>70% load)					
Car Plug Output	DC12V6A					
	AC Charge					
Input Voltage	88～264Vac					
Power Factor	≥0.94(full load)					
Input Frequency	50Hz/60Hz					
Max Charge Power	327W					
	Solar Charge					
Max Input Power	210W					
Start - up Voltage	18Vdc					
MPPT Input Voltage	18~50Vdc					
Max Input Voltage	54Vdc					
	General					
Working Condition	Relative Humidity: 5%~90%					
	Temperature: 0~40℃					
Dimension(mm)	L405×215×261(Product)					
	L485×296×390(Packing)					
Weight	7.8/10/12Kg (Net Weight)					
	9.4/11.4/13.6Kg (Gross Weight)					

16.Warranty & After-sale Service

■ **Warranty**

See separate warranty document.