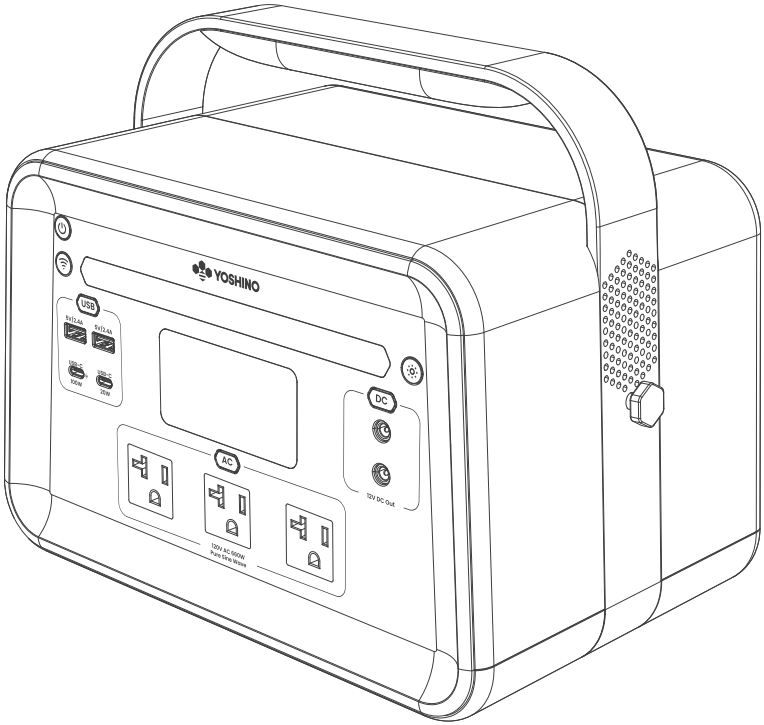
YOSHINO
SOLID-STATE POWER

SST
SOLID STATE
TECHNOLOGY

User Manual

B660 SST

Solid-State Portable Power Station



DISCLAIMER

The information contained in this manual is subject to change without notice.
Read all safety tips, warning messages, terms of use, and disclaimers carefully. This user manual contains instructions and notes on the operation and use of this unit. Users take full responsibility for all usage and operations. You are solely responsible for being aware of all relevant regulations and using Yoshino products in a way that is compliant.
Yoshino recommends that you use genuine Yoshino accessories. Yoshino shall not be responsible for any damage or expense that might result from the use of parts other than genuine Yoshino parts.
If you are not going to use the unit for an extended period of time, power off the unit and disconnect AC adapter from the outlet. Recommended storage temperature: 32-104°F / 0-40°C, storage humidity: 90% Max. To protect the battery, charge the unit to 80% every 3-6 months during long-term storage.
For your safety, please read this manual carefully before using and keep handy for future reference.
Please note that there will be no further notice if the product packaging changes.

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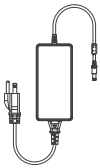
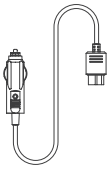
1. What's in the Box

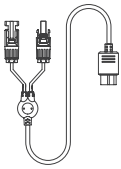
B660 SST
Portable Power Station



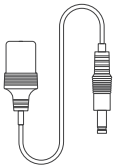
AC to DC Recharge Adapter
(Two Parts)



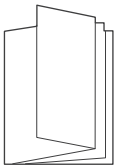
Cigarette Car
Charging Cable



XT60 Input Cable
MC4 to XT60



DC5521 to Cigarette Car
Female Output Cable



User Manual, QSG,
Thank You Card,
Warranty Registration Card

2. Safety Instructions

Important Safety Instructions

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

a) Read all the instructions before using the product.

b) To reduce the risk of injury, close supervision is necessary when the product is used near children.

c) **Do not** put fingers or hands into the product.

d) Use of an attachment not recommended or sold by Yoshino Technology may result in a risk of fire, electric shock, or injury to persons.

e) To reduce risk of damage to the electric plug and cord, pull the plug rather than the cord when disconnecting the portable power station.

f) **Do not** use a portable power station or appliance that is damaged or modified. A damaged or modified portable power station may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.

g) **Do not** operate the portable power station with a damaged cord or plug, or a damaged output cable.

h) **Do not** disassemble the portable power station, contact Yoshino customer service when service is required. Incorrect disassembly or reassembly may result in a risk of fire or electric shock.

i) To reduce the risk of electric shock, unplug the power pack from the outlet before attempting any instructed servicing.

j) When charging the internal battery, work in a well ventilated area and do not restrict ventilation in any way.

k) **Do not** expose a portable power station to fire or excessive temperature. Exposure to fire or temperature above 130°C (265°F) may cause explosion.

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

m) **Do not** get the product wet or immerse it in water. If water is found inside the product, it must not be turned on or used again. Take all precautions against shock before touching the product. Move the product to a safe open area. Once the product is safley moved, contact Yoshino customer service immediately.

n) **Do not** use the product in an environment with strong static electricity/magnetic fields.

o) **Do not** drop or allow the product to fall. If the product has any kind of severe external impact, turn the power off immediately and stop using the product. Dispose of the product properly.

p) **Do not** put heavy objects on top of the product.

q) **Do not** block the fan during use.

r) This product is not recommended for powering medical emergency equipment such as medical grade ventilators and artificial lungs. Please consult with your doctor and the manufacturer for instructions on the safe use of portable power station with medical equipment.

s) Please keep a safe distance between medical implants and this product while the product is in use. This portable power station will generate electromagnetic fields which can affect the normal operation of pacemakers, hearing aids, cochlear implants and other medical equipment. Please contact the manufacturer for information on the safe use of this product around these devices.

Grounding Instructions

This external AC/DC power supply must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord having an equipment grounding conductor and a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes ordinances.

WARNING – Improper connection of the equipment grounding conductor is able to result in a risk of electric shock. Check with a qualified electrician if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product – if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

Storage and Maintenance Instructions

1. Keep this product out of reach of children and pets.

2. Only use a clean dry cloth to remove dirt from the product ports.

3. If the portable power station is not going to be used for extended periods of time, power off the unit and disconnect the AC to DC recharge adapter from the outlet.

4. Store the product at 32-104ºF / 0-40ºC. Every 3-6 months charge the product to 80% to protect battery life.

5. Store the product in a dry and well ventilated place.

Disposal Guide

1. If possible, fully discharge the battery before disposal in a designated battery recycling bin. It is strictly prohibited to dispose of this product in regular trash bins. Batteries contain chemicals that could be dangerous if not disposed of properly. Please consult your local laws and regulations on battery recycling and disposal.

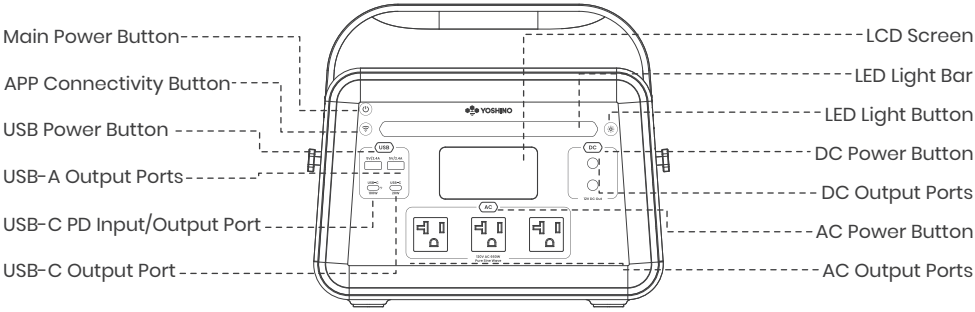
2. Do not dispose of the battery in a battery recycling box if the battery cannot be fully discharged. Please contact a professional battery recycling company for help in disposing of the battery.

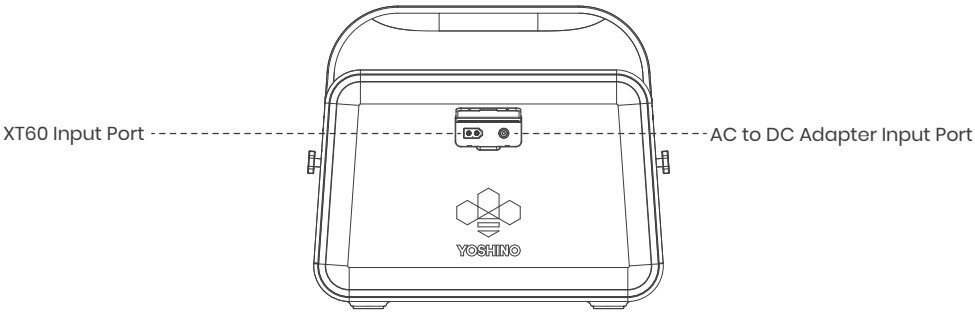
3. Batteries that cannot be recharged should be disposed of properly.

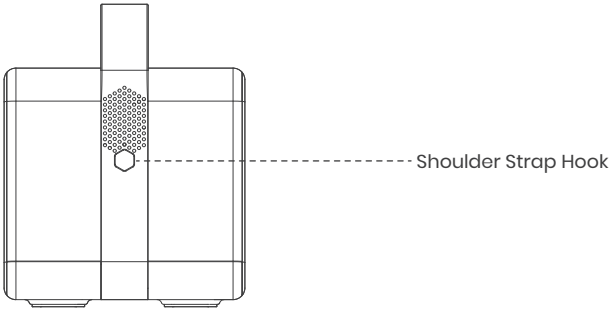
Collection/Recycling Service

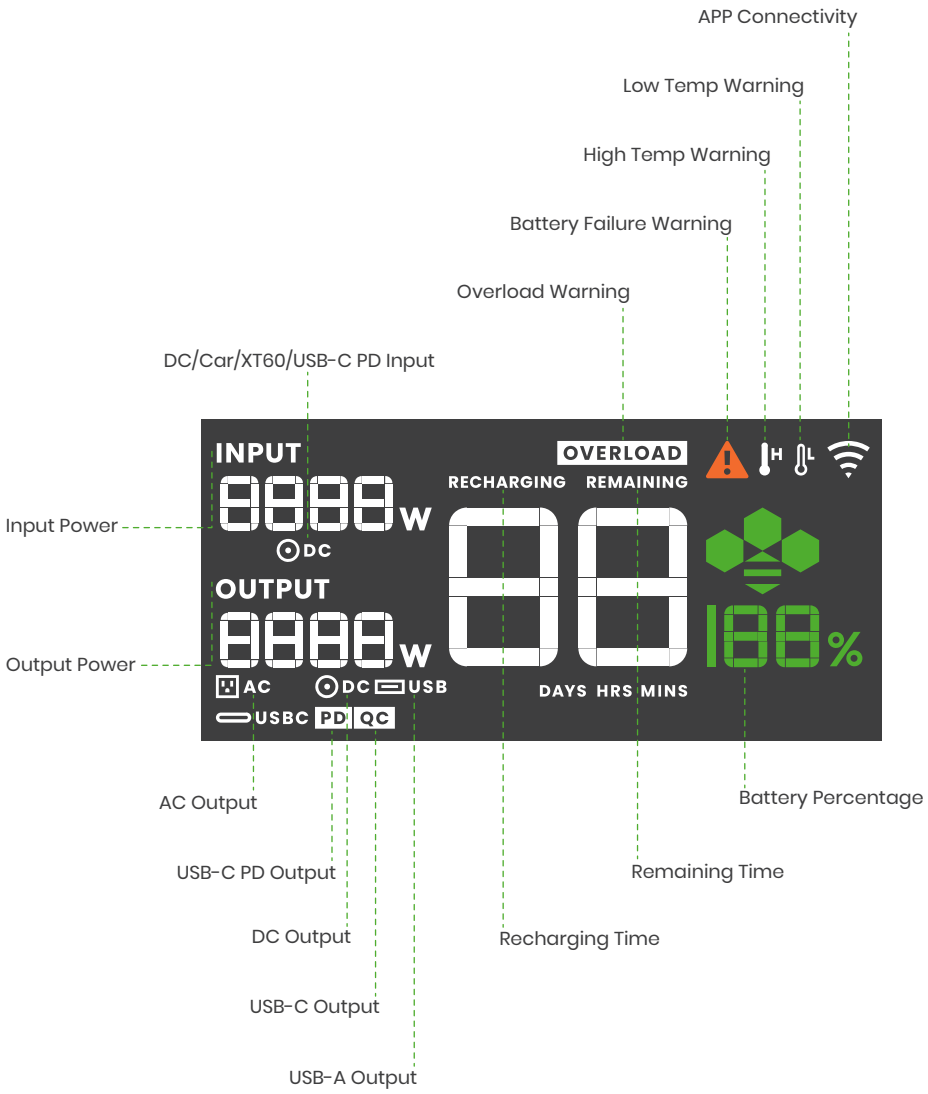
Yoshino Technology Inc provides collection and recycling services for portable power station. You can recycle your used products in an environmentally friendly manner by packaging and sending them to our designated collection point. For more information, please contact us by phone or email.

3. Overview


Main Power Button
APP Connectivity Button
USB Power Button
USB-A Output Ports
USB-C PD Input/Output Port
USB-C Output Port
LCD Screen
LED Light Bar
LED Light Button
DC Power Button
DC Output Ports
AC Power Button
AC Output Ports
YOSHINO
USB
DC
AC


XT60 Input Port
AC to DC Adapter Input Port
YOSHINO


Shoulder Strap Hook



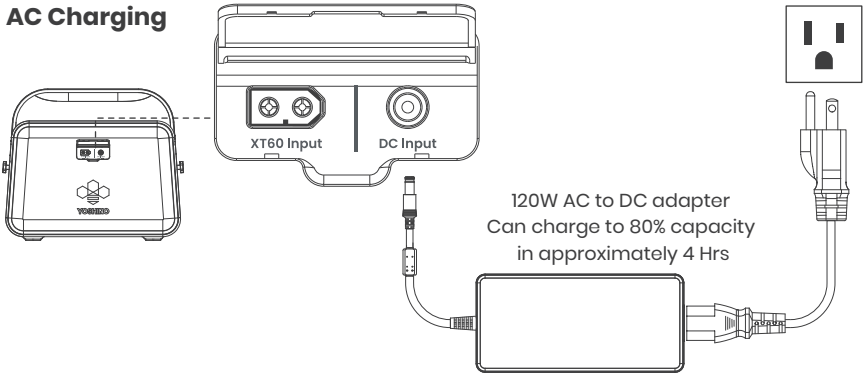
LCD Screen Guide

4. Recharging Your Portable Power Station

Note

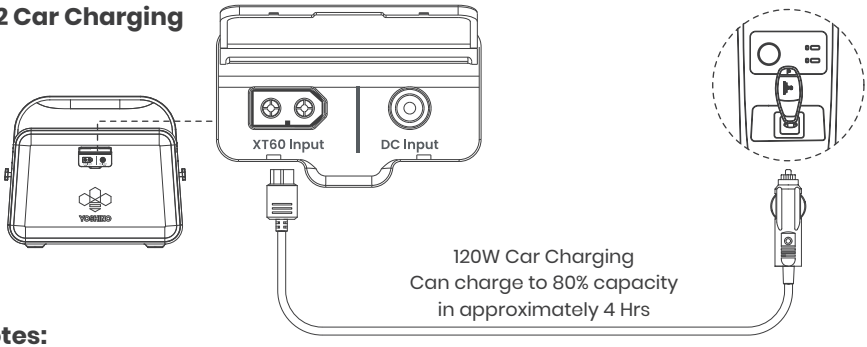
Before use or storage, recharge your portable power station to full charge. If the LCD screen indicates less than 20% charge, recharge using available power input methods as soon as possible.

4.1 AC Charging



Please use the AC to DC recharge adapter cable included in the package, plug directly into an AC wall outlet and make sure that output voltage of the wall outlet is 110-125V.
Yoshino takes no responsibilities for any consequences caused by failures to follow instructions, including but not limited to charging with other AC to DC recharge adapter cable.

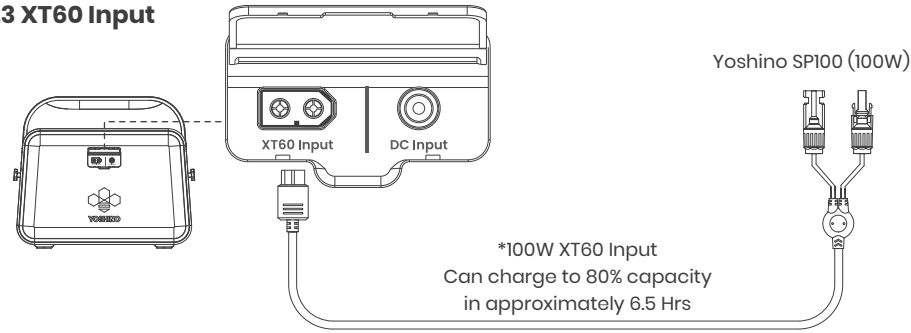
4.2 Car Charging



Notes:

1. Users can recharge the product through a 12V/10A car charger.
2. Before use, check to see that the car charging cable is well connected.
3. Please make sure the car is started before using car charging. Yoshino takes no responsibility for any losses or damages caused by failure to follow instructions.

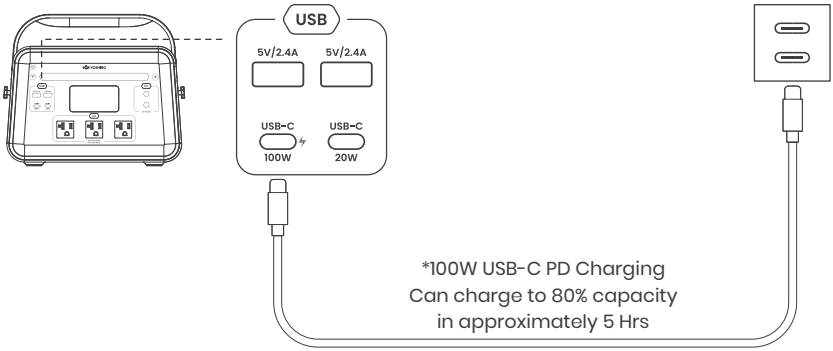
4.3 XT60 Input



*Notes:

1. Using Yoshino SP100 (100W) (not included) can charge the device to 80% in around 6.5 hours.
2. When using a Yoshino SP100 (100W) to charge the product, please follow the instructions that come with the Yoshino SP100 (100W).
3. Before connecting the Yoshino SP100 (100W), please ensure that the Yoshino SP100 (100W)'s output voltage is within 30V to avoid product damage.

4.4 USB-C PD Charging



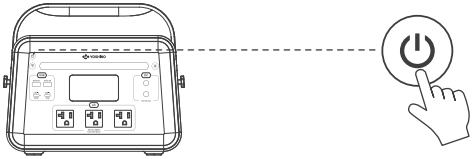
*Notes:

1. There is no need to press USB power button when you want to charge your device by USB-C PD port.
2. Please note that there is only 60W for USB-C PD port input. It can charge the device to 80% in around 5 hours.

5. Operation

5.1 Power Button

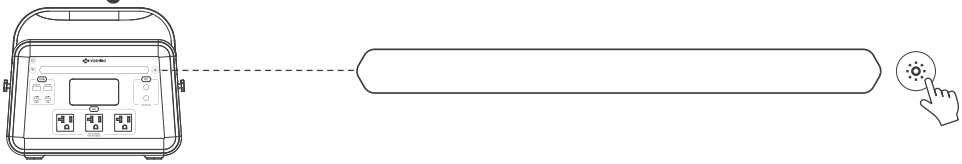
Press and hold the Main Power Button for around 2 seconds to turn on the product. The LCD screen will light up and the main power indicator will turn pulse white. Press and hold the Main Power Button again for around 2 seconds to turn the device off. The word “OFF” will appear on the screen, then the power indicator light and LCD screen will turn off.



***Notes:**

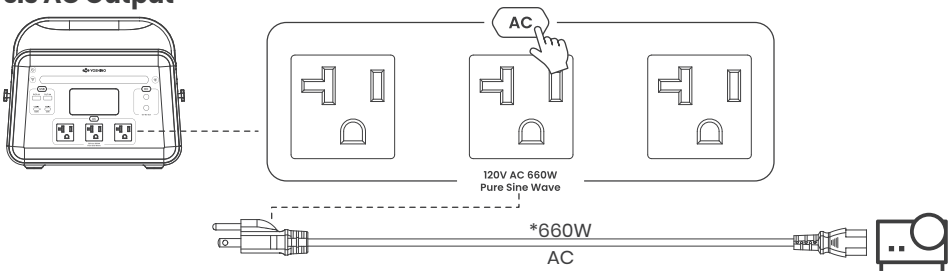
1. If the device is not operated for 30 seconds (primary settings, you can adjust the screen time through the Yoshino app), the LCD screen will turn off. When you start to use the product again, the LCD screen will turn on automatically.
2. When there is no usage after the DC button, AC button or USB button is turned on, it will turn off automatically within 1 hour.
3. When the power station is not in use, it will turn off automatically within 30 minutes.

5.2 LED Light



Press the LED Light Button to turn on the LED light. Press the button again to turn the LED light off.

5.3 AC Output

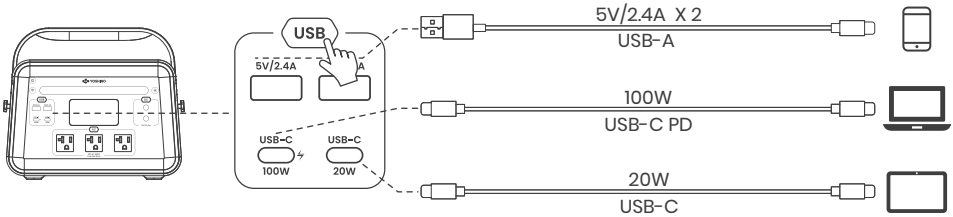


Press the AC Power Button until the button lights to turn on the AC power. Press the button again to turn off the power.

***Note:**

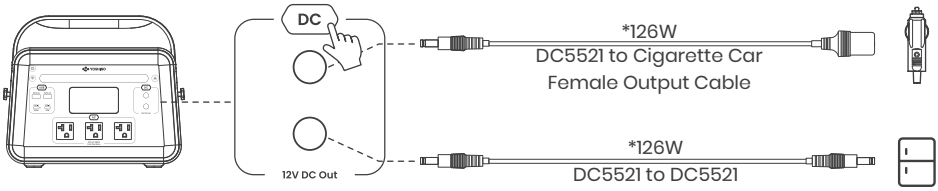
When the portable power station is connected to a refrigerator or other device that needs to have a continuous power supply, set the AC output to “Always on” in the app. If the portable power station is set to normal mode, the portable power station may automatically shut down due to power fluctuations.

5.4 USB Output



Press the USB Power Button until the button lights to turn on the power. Press the button again to turn off the power.

5.5 DC Output

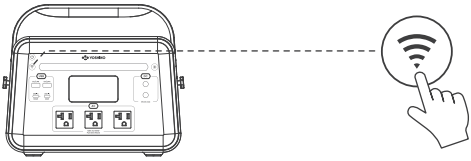


Press the DC Power Button until the button lights to turn on the power. Press the button again to turn off the power.

***Output power total is 126W**

5.6 App Connectivity

Remote control and various functions are available by using the Yoshino app.



Press and hold the App Connectivity Button for around 3 seconds until you hear a beep, then the icon will flash until it connects successfully. If the app fails to connect, the icon will go off.

YOSHINO APP

Download the APP

Option 1:

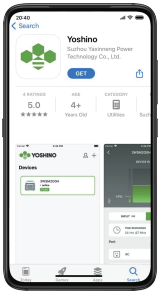
Search "Yoshino" in the App Store (for iOS) or Google Play (for Android) and download the Yoshino app.

Option 2:

You can download the app on the App Store and Google Play by scanning the QR code below.

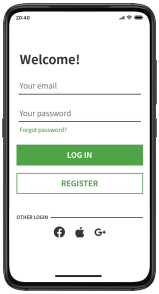
Google Play

App Store

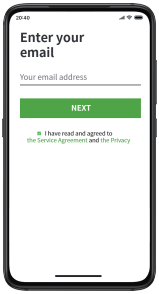


Registration

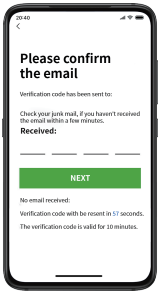
1 Launch the “Yoshino” app, and tap "REGISTER".



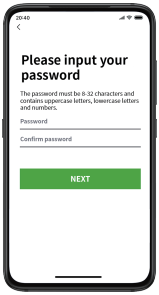
2 Please enter your e-mail address. After confirming the required information, check the Agree button and tap "NEXT".



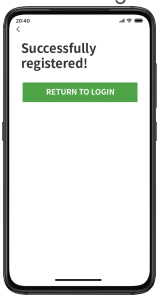
3 After checking the email containing the verification code, please enter the verification code.



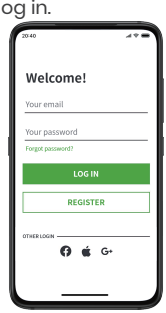
4 Please set a password, and tap "NEXT".



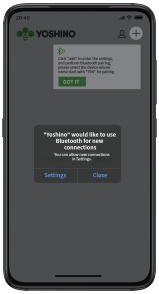
5 After successfully registered, tap "RETURN TO LOGIN" and you'll be returned to the login interface.



6 Please enter your registration information and log in.

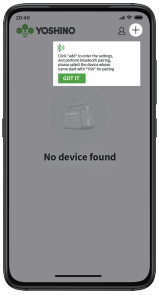


7 Turn on "Wi-Fi" and "Bluetooth" from your smartphone's settings. Please note that if either is off, the connection is unavailable.



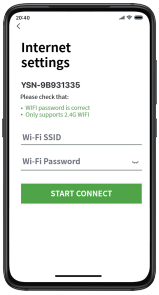
APP Connection

1 Turn on the power button on the portable power station. Press the APP Connectivity button below the power button for about 3 seconds. Once you see the icon flashing on the top right of the LCD screen, go to the home page of the app and tap the "+" button on the top right of the app.



2 Select your device. Bluetooth and Wi-Fi connection are both available if your app has been upgraded to the latest version. Select Bluetooth connection or Wi-Fi connection as needed.

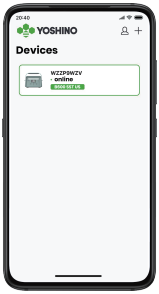
3 When you select the Bluetooth connection, please confirm whether you have turned on Bluetooth on your phone. If you select a Wi-Fi connection, please enter your home Wi-Fi SSID and password, then tap "START CONNECT". *Only 2.4G Wi-Fi is supported. Please note that 5G Wi-Fi cannot be connected.



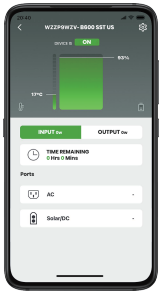
4 Please do not turn off the portable power station while it is connected. *During the connection, the LCD screen may turn off after 30 seconds. Please wait for the connection.

5 Once the connection is complete, tap "OK".

6 Select your connected device from the home page of the app.

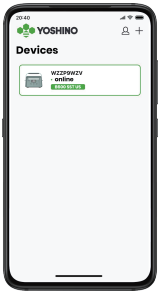


7 You can control your power station from this page in the app.

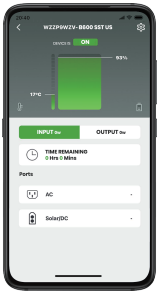


Firmware Update

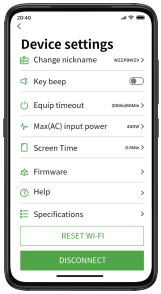
1 Select the device you want to update from the home page.



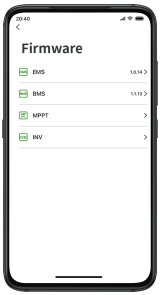
2 Tap the settings button on the top right corner in the app.



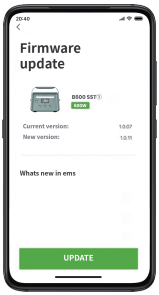
3 Select "Firmware" from your device settings.



4 Select "EMS/BMS/MPPT/INV" from the four firmware options.



5 Tap "UPDATE".
*Please confirm that "UP" is displayed on the LCD screen of the portable power station. After the update is complete, restart the app and try connecting the app again.



6. Specifications

GENERAL

Capacity
602Wh,
18.6V, 32.4Ah

Battery Type
Solid State
Li-NCM 16.2Ah

Cycle Life
4000 Cycles to
80%+ Capacity

AC Output (Rated)
660W

AC Output (Max)
900W

Warranty
5 Years

Net Weight
16.9 lbs
7.7 kg

Dimension
11.7 x 8 x 10 inches
296 x 204 x 256 mm

INPUT

DC Input
24VDC/5A,
120W

XT60 Input
12-30VDC/5A Max,
100W Max

Car Input
12VDC/10A,
120W Max

USB-C PD Input
5-20VDC/3A, 20VDC/5A
100W Max

OUTPUT

AC Output
3 Outlets,
120VAC, 60Hz,
660W Total

12V DC Output
2 Ports,
12.6VDC/10A,
126W Total

USB-C PD Output
5-15VDC/3A,
20VDC/5A,
100W Max

USB-A Output
2 Ports,
5VDC/2.4A,
12W Each Port

USB-C Output
5VDC/3A, 9VDC/2.22A,
12VDC/1.66A,
20W Max

CERTIFICATIONS

UN38.3

FEATURES

APP

BT / Wi-Fi

LED Light

Shoulder Strap *

TEMPERATURE / HUMIDITY

Discharging Temperature
14 to 104°F / -10 to 40°C

Charging Temperature
32 to 104°F / 0 to 40°C

Working Humidity
Maximum 90%

PROTECTION

Thermal Protection

Short Circuit Protection

Over Current Protection

Over Voltage Protection

Over Charging Protection

Over Discharging Protection

Tech support based in the USA!
1 (800) 513-2797 customersupport@YoshinoPower.com
Operating hours are 8:00 am - 4:30 pm PST (M-F).

7. Warranty

Yoshino Return & Refund Policy

We are proud to have you join the Yoshino Solid-State Evolution and appreciate your support! Just in case things don't work out, our return policy is made simple and applies to those who purchased directly from our website, YoshinoPower.com within the USA.

However, this policy applies only to purchases from our website; for orders made outside of YoshinoPower.com, please contact your other merchant or retailer for further information about their return/refund policies. Note that our return/refund policy is subject to change based on local laws and regulations.

Cancellation

All customers who made a purchase directly on YoshinoPower.com may request a full refund within 24 hours after placing that order; however, if you wait more than 24 hours before delivery, transaction fees will be applied depending on your payment method (3% for credit card users, 3.5% for PayPal users, etc.). Please note that orders cannot be canceled after being shipped out 30 days or fewer before such a request.

Return

At Yoshino, we strive to ensure every customer has the best shopping experience. For that reason, customers in the USA can return any unused items for a full refund or exchange within 30 days of receiving their order. Furthermore, should there be an issue with purchased items – related to quality - our team will grant you a one-time free replacement within 30 working days from the delivery date. Please note that a Return Authorization Number (RAN) given to you by a Yoshino customer support team member is required for any return (see "Return Process" below). On returned US orders, there will be an additional charge for return shipping plus a transaction fee - 3% for credit card users, 3.5% for PayPal or Affirm customers, and 3.3% if Klarna is used as your payment method. If you decline your shipment, the original payment may still be subject to a double shipping fee.

Return Process

Contact Yoshino Support via customersupport@YoshinoPower.com to initiate the return process and provide you with a Return Authorization Number (RAN). Please provide proof of purchase, such as a receipt or order confirmation. We will then provide instructions on properly packing the product(s) when returning them to us. Please ensure all original components are included in the package and have not been tampered with.

If you wish to return something that already has been shipped but not yet delivered, please first get in touch with our Support Team at customersupport@YoshinoPower and follow their instructions!

Refund

Yoshino will endeavor to process refunds within 14 business days after our receipt of the returned item. You will be notified when the order has been processed, and your funds are on their way back to you! If it's taking longer than expected, feel free to reach out through our customer support at customersupport@YoshinoPower.com - we're here for you every step of the way!

Limited Product Warranty

Yoshino Technology, Inc. proudly stands behind its products by offering a five (5) year limited warranty to the original consumer of any Yoshino product purchased directly from YoshinoPower.com or an authorized reseller in North America that any such Yoshino product will be free from defects in materials and workmanship, except for the exclusions listed below. The warranty period becomes effective from the date of delivery or pickup. Upon proper proof of purchase, Yoshino will replace or repair any product found to be defective within the applicable warranty period.

To obtain warranty service, please follow the procedures outlined in "Return Process" above. Yoshino will reimburse customers for the return shipping cost based on the original instructions provided by customer service for all items found to be defective. No return will be accepted without this Return Authorization Number (RAN).

Once the return has been received, a reply will be sent within 48 hours confirming receipt and updating the ticket status.

Exclusions

Yoshino's warranty covers the product as long as it is used in its intended manner, and will not cover any of the following:

- Product that has been abused, misused, or otherwise not operated within the parameters of the literature provided with the product.
- Product with evidence of water damage or from use in bad weather (i.e., rain, dust/sandstorms).
- Product that has been modified or had a repair attempted by anyone other than Yoshino.
- Any product not purchased directly from Yoshino or an authorized reseller such as auction sites or unauthorized online third-party sellers.

Limitation of Liability

When receiving service, Yoshino Technology, Inc. is responsible for loss or damage to your product only when it is in Yoshino's possession. It is not responsible for any loss or damage that may occur in transit. Under no circumstances, and notwithstanding the failure of essential purpose of any remedy set forth herein, shall Yoshino, its affiliates, suppliers, resellers, or service providers be liable for any of the following even if informed of their possibility and regardless of whether the claim is based in warranty, negligence, strict liability or other theory of liability: 1) Third party claims against you for damages; 2) Special, incidental, punitive, indirect or consequential damages, including but not limited to lost profits, business revenue, goodwill or anticipated savings. In no case shall the total liability of Yoshino, its affiliates, suppliers, resellers, or service providers for damages from any cause exceed the amount of actual direct damages, not to exceed the amount paid for the product.

As some states or jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, the above limitation or exclusion may not apply to you. This limited warranty gives you specific legal rights, and you may also have other rights which vary from jurisdiction to jurisdiction.

For any questions about the warranty, please contact customer service

Email: customersupport@YoshinoPower.com

Phone: +1 (800) 513-2797

Yoshino Technology, Inc. 18529 East Gale Avenue, City of Industry, CA 91748.

8. Troubleshooting

Symbol	Problem	Solution
DC ⚠ H	Battery charging high temperature protection	Charging can be resumed automatically after the battery cools down.
DC ⚠ L	Battery charging low temperature protection	Charging can be resumed automatically after battery temperature rises above 0°C (32°F).
DC H	DC Adaptor/USB-C PD /Car/XT60 charging high temperature protection	After the product cools down, it will resume normal operation automatically. PD charging need re-press the USB power button.
AC Flashing ⚠ H	Battery discharged high temperature protection	The product will shut down after warning. Discharging can be resumed automatically after the battery cools down.
AC Flashing ⚠ L	Battery discharged low temperature protection	The product will shut down after warning. Discharging can be resumed automatically after battery temperature rises above 0°C (32°F).
AC Flashing H USBC PD Flashing H DC Flashing H	AC/USB-C PD/DC output high temperature protection	After the product cools down, re-press the AC/USB/DC power button, it will resume normal operation automatically.
USB Flashing	USB output overload protection	Remove the device connected to the USB-A port. Re-press the USB power button, it will resume normal operation automatically.
AC Flashing OVERLOAD QC Flashing OVERLOAD USBC PD Flashing OVERLOAD DC Flashing OVERLOAD	AC/USB-C/USB-C PD/DC output overload protection	Remove the overloaded device and re-press the AC/USB/DC power button, it will resume normal operation automatically. Electrical appliances should be used within rated power.
⚠	Battery Failure	If the prompt appears on the screen and does not disappear after restarting, stop using immediately and contact Yoshino customer service.

If the alarm prompt appears on the product LCD screen during use and remains on the screen after a restart, please stop using the product immediately. Please contact Yoshino Customer Service for further assistance.

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9. FAQ

1. What battery does the product use?

The product uses a solid state Li-NCM 16.2A battery.

2. What devices can the product's AC output port power?

The portable power station's AC output ports can power most household appliances. Before connecting an appliance, confirm the power of the appliance to ensure that the sum power of all loaded appliances is lower than that of the rated power (660W rated/900W max).

3. How long can the product power my devices?

Multiply the capacity of the portable power station x 0.95 x 0.9 / device rated power, to calculate the runtime of the product. The 0.95 and 0.9 are DOD (depth of discharge) and inverter efficiency values. Let's use the B660 SST and a 60W CPAP machine as an example. The calculation would be 602wh x 0.95 x 0.9 / 60W = 8.5 hours.

4. Can the B660 SST charge and discharge at the same time?

Yes, the B660 SST can charge and discharge at the same time. Please keep the equipment on a level surface during use, charging, and discharging.

5. Does the B660 SST have cooling fan(s)?

Yes, the B660 SST has fan(s) that will automatically activate to keep the unit from overheating.

6. How long can the product charge my devices?

Check the charging time shown on the product's LCD Screen. This can help you estimate the charging time of most appliances.

7. How do I know if the product is charging?

When the product is charging, the charging indicator icon begins to flash and the remaining time will be shown on the LCD screen.

8. How do I clean the product?

Use a soft dry towel to wipe gently across all surfaces.

9. How do I store the product?

If you're not going to use your portable power station for extended periods of time, power off the unit and disconnect the AC adapter from the outlet. Store product in a safe dry place with a temperature of 32-104°F / 0-40°C and a humidity within 90%. Charge the product to 80% every 3-6 months to protect battery life.

10. How to set the "AC power button" and "DC power button" to "always on"?

1. Select your portable power station from the home page of the app.
2. Tap the "Settings" icon in the upper right corner.
3. When you tap "Equip Timeout", the "Device Standby Time" will appear and you can set the standby time for AC power button and DC power button. Select "Always On" and tap "Confirm", then you'll keep them always on.

* If set to "Always On", power will be consumed even if the power station is not connected to any devices.

11. How many watts of solar input is recommended?

This product is compatible with 10-30VDC/5A 100W (for B330 SST/B660 SST) and 12-60VDC/10A 600W (for B2000 SST/B4000 SST) solar panels. We recommend using Yoshino solar panels (SP100 100W / SP200 200W). Please note that malfunctions caused by connecting solar panels of other brands are not covered by the warranty.

10. 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 warranty 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 and your body.

For FAQs and more information, please Visit:

YoshinoPower.com

Yoshino Technology Inc.

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