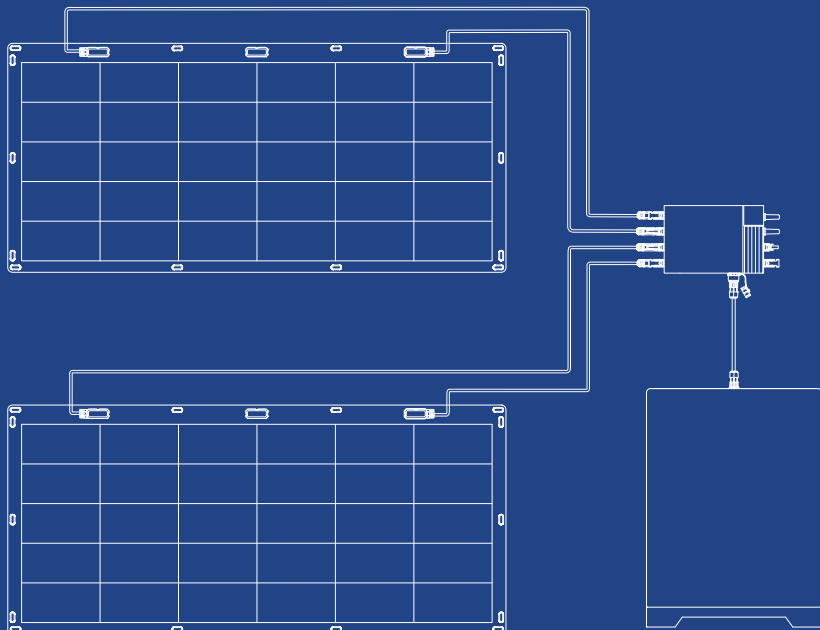


POWAFREE Balcony Solar

Energy Storage System



** The POWAFREE Balcony Solar is shipped by itself without the solar panels. Microinverter is not included.*

User Manual

IMPORTANT SAFETY INSTRUCTION

Product Disclaimer:

Actual product may vary. BigBlue reserves the right to the final interpretation of the contents in this manual and all documents associated with this product. We also reserve the right to update, change or terminate this manual without prior notice. If you have any questions or comments, please contact us at support@ibigblue.com.

Read all the instructions.

Keep these instructions.

Heed all warnings.

Follow all instructions.

Failure to operate the product correctly may result in damage to the product or personal property, and cause serious injury.

BigBlue will not be held liable for damages caused by fire, earthquake, accidents, intentional misconduct on the part of the customer abuse or other abnormal conditions.

BigBlue reserves the right to the final interpretation of the contents of this user manual.

⚠ WARNING: This product can expose you to chemicals such as Di (2-ethylhexyl) phthalate (DEHP), which is 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

Product Installing:

Please check the accessories before installation, some accessories need to be purchased separately.

To prevent product damage and the risk of injury to others, kindly follow the instructions outlined in the user manual during installation.

This product is grid-tied. Please check if it is allowed in your area. Depending on your region, official approval may be required either before or after installation.

Before connecting to the microinverter, please verify its rated power. Ensure that the POWAFREE 's output does not exceed the microinverter's rated power.

Keep a distance of 50mm between POWAFREE PV-Route 800 and other objects.

DO NOT expose this product to water or moisture.

DO NOT place the product near a heat source or under high temperature, such as a fire source, an operating stove, or other product that produces heat. No naked flame sources, such as lighted candles, should be placed on the product.

Ensure that this product and microinverter are installed firmly to avoid accidents and product damage caused by dropping.

Do not move or shake the unit while operating as vibrations and sudden impacts may lead to poor connections to the hardware inside.

IMPORTANT SAFETY INSTRUCTION

Upon installation, there will be an initial 5 minutes communication handshake period before connection to the grid is established. Data synchronization with the BigBlue App is expected to be completed within 20 minutes.

Following the installation, please proceed to download the BigBlue App to configure the operating mode.

Product Charging:

Always use BigBlue-provided charging cables. BigBlue assumes no responsibility for any consequences of product misuse, including but not limited to charging with an unsuitable wall outlet, circuit, or power cable. Doing so will void the warranty.

During the operation of the solar energy system, avoid direct sunlight to prevent the POWAFREE Balcony Solar from overheating. POWAFREE system relies on the shell to dissipate heat.

Do not use around strong static electricity or magnetic fields.

Keep the product out of reach of children and pets.

The POWAFREE Cell-Pack 2500 solar battery has a protection level of IP65, so the product cannot be immersed in liquids. If the product accidentally falls into the water during use. Please place it in a safe and open area and keep it away until it is completely dry. The dried product should not be used again and should be properly disposed of according to the disposal guidelines in this manual.

Clean only with a dry cloth.

DO NOT repair any damage to the power supply on your own.

Unplug the product when unused for a long period of time.

WARNING: To reduce the risk of electric shock, do not remove the cover (or back) as there are no user-serviceable parts inside.

Refer all servicing to qualified service personnel. Servicing is required when the product has been damaged in any way, such as a power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the product, the product has been exposed to rain or moisture, does not operate normally, or has been dropped.

In the event of a fire, please use only a dry powder fire extinguisher for this product.

IMPORTANT SAFETY INSTRUCTION

Product Storage:

Charge the product before storing it. Otherwise, long-term storage may cause damage to the battery cells of the product.

DO NOT place the product near a heat source or under high temperatures, such as inside the car with direct sunlight, a fire source, or an operating stove.

Store the product in a dry environment and at room temperature.

Ensure no objects will fall on or around the product while it is being stored.

Product Disposal:

WARNING: Attention should be drawn to the environmental aspects of battery disposal.

Dispose of the product in specific recycling boxes only after a complete discharge. Strictly follow the local regulations on battery disposal and recycling.

Product



Electronic devices are recyclable waste and must not be disposed of in the household waste. At the end of its service life, dispose of the product according to the relevant statutory regulations. Remove any inserted (rechargeable) batteries and dispose of them separately from the product.

Rechargeable batteries



As the end user, you are required by law (Battery Ordinance) to return all used rechargeable batteries; disposal of them in the household waste is prohibited! Contaminated rechargeable batteries are labeled with this symbol to indicate that disposal in the domestic waste is forbidden. The designations for the heavy metals involved are: Cd = Cadmium, Hg = Mercury, Pb = Lead (name on rechargeable batteries, e.g. below the trash icon on the left). Used rechargeable batteries can be returned to collection points in your municipality, our stores or wherever rechargeable batteries are sold. You thus fulfill your statutory obligations and contribute to the protection of the environment.

IMPORTANT SAFETY INSTRUCTION

Product Maintenance:

PV-Route 800: The optimal operating temperature is -20°C to 45°C (-4°F to 113°F).
The recommended storage temperature is -30°C to 45°C (-22°F to 113°F).

CellPack 2500: The optimal operating temperature is -20°C to 45°C (-4°F to 113°F).
The recommended storage temperature is -20°C to 45°C (-4°F to 113°F).

If the product is not used for a long time, the life cycle of battery cells will reduce.
Please recharge the unit at least every three months.

Product Certifications:



Warranty Conditions:

This product is guaranteed for a period of 10-year from the date of purchase.

No dealer nor distributor may vary the terms of this warranty which is personal to the original purchaser and is not transferable.

Please retain the sales receipt as proof of purchase.

Warranty claims must wherever possible be made through the Dealer from whom the product was purchased.

This warranty excludes:

- Damage caused through neglect, accident, misuse, wear, and tear, or incorrect installation, adjustment, or repair by unauthorized personnel. Any unauthorized servicing will result in loss of warranty.
- Liability for damage or loss occurring in the transit to or from the purchaser.
- Product for attention under warranty should be considered return carriage paid. If equipment is found to comply with the published specification, BigBlue reserves the right to raise a charge.
- The above conditions do not affect your statutory rights as a consumer.

CONTENTS

BigBlue POWAFREE Balcony Solar

INTRODUCTION	6
Introduction of BigBlue POWAFREE Balcony Solar	
Design Principles	
Unpacking The Equipment	
Additional Purchase	
CONTROLS AND FUNCTIONS	8
Product Indications – POWAFREE PV-Route 800	
Product Indications – POWAFREE Cell-Pack 2500	
SYSTEM INSTALLATION	10
Responsibilities As an Installer – preparation	
Retrofitting POWAFREE Balcony Solar - those with existing solar panels installed	
Installing POWAFREE PV-Route 800	
SYSTEM CONNECTION	13
SYSTEM DISASSEMBLE	15
APP OPERATIONS	16
SYSTEM SPECIFICATIONS	23
FREQUENTLY ASKED QUESTIONS	25
WARRANTY CARD	31

INTRODUCTION

Introduction of BigBlue POWAFREE Balcony Solar

Thank you for your investment in the BigBlue POWAFREE Balcony Solar. The POWAFREE Balcony Solar is more than just a power station. You are getting a compact integrated energy storage system - a combo of a PV-Route 800 (PV controller), Cell-Pack 2500 (solar battery), and Bi-Flex 200/100 (solar panel – purchase separately). Affix to your balcony railing or privacy screen, then simply pair it, plug in, and power up! Effortlessly generating power as easily as ABC, starting during the day.

Please read through this manual to obtain the very best performance from your BigBlue POWAFREE Balcony Solar. Scan the QR code below by using your smartphone to download the latest version of the user manual.



Design Principles

Earn and save on electricity bill:

Stores the excess generated power during the day (while you are away at work) and use this stored power at night; allowing you to attain self-generation, self-consumption, and self-sustainability of power.

Plug-N-play and easy removal:

Unlike traditional solar, POWAFREE Balcony Solar offers a hassle-free design and installation process, suitable even for beginners; not only to install on balconies and terraces but to disassemble whenever you are on the move.

Unpacking The Equipment

The carton should contain:

MAIN ITEMS

- The POWAFREE PV-Route 800, PV-controller
- The POWAFREE Cell-Pack 2500, solar battery

CABLES

- One battery cable (150cm)
- Two MC4 Y-connector microinverter cables (60cm)
- Four MC4-to-MC4 solar extension cables (300cm)

ACCESSORIES

- Four mounting screws (K4 x 30mm)
- One wall-mounted board
- One MC4 spanner (to unlock the solar extension cables)
- One user manual
- Drilling sticker

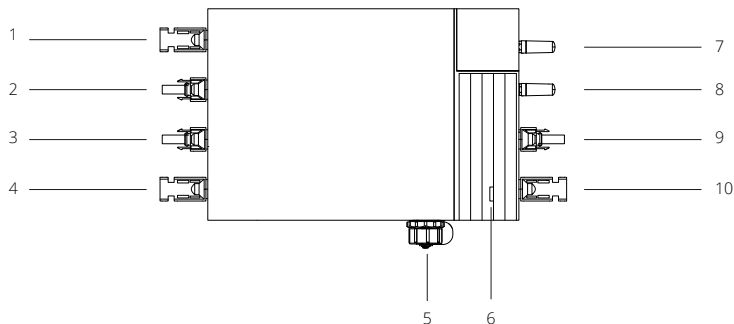
Additional Purchase

The POWAFREE Balcony Solar is shipped by itself without the solar panels. In order to utilize the full features of the system, it is highly recommended to purchase the Bi-Flex Series, flexible solar panels.

Microinverter is not included. This system requires pairing with a microinverter before functioning.

CONTROLS AND FUNCTIONS

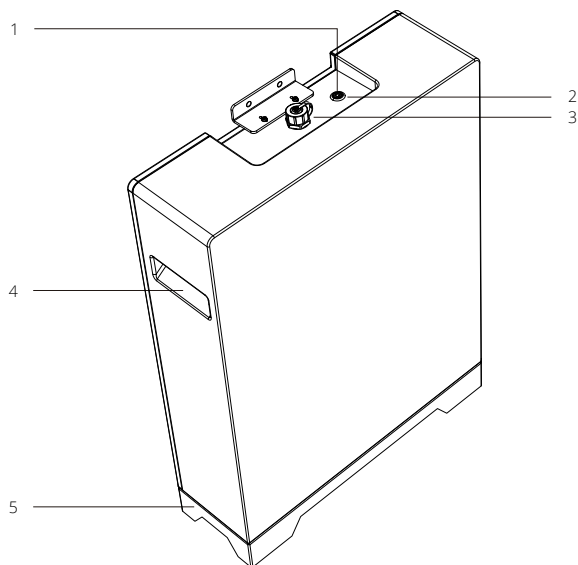
Product Indications - POWAFREE PV-Route 800



- | | |
|--|---|
| 1. Solar Input-1 MC4 Connector (positive port) | 6. Status Indicator Light |
| 2. Solar Input-1 MC4 Connector (negative port) | 7. Bluetooth Antenna Port: works with BigBlue Energy app |
| 3. Solar Input-2 MC4 Connector (negative port) | 8. Wi-Fi Antenna Port: works with BigBlue Energy app |
| 4. Solar Input-2 MC4 Connector (positive port) | 9. Output To Microinverter MC4 Connector (positive port) |
| 5. Battery Port: connect with Cell-Pack 2500 | 10. Output To Microinverter MC4 Connector (negative port) |

CONTROLS AND FUNCTIONS

Product Indications - POWAFREE Cell-Pack 2500



1. Power Button
2. Status Indicator Light
3. Battery Port
4. Handle
5. Heavy-Duty Waterproof Stainless Base

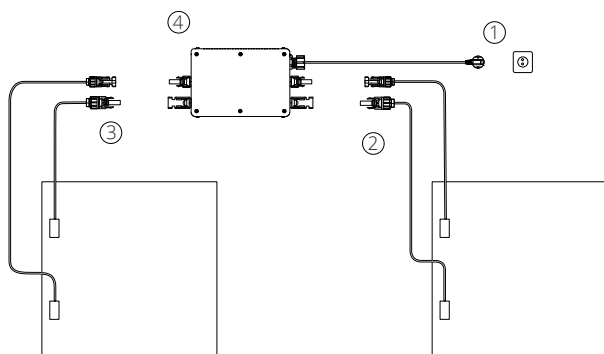
Responsibilities As an Installer - preparation

1. Installers are responsible for the safe and effective installation and operation of the system and for adhering to all applicable local standards and regulations. Prior to installation installers must check all current regulations and permits concerning solar installations and ensure all local directives are observed.
2. Furthermore, installers are responsible for the following:
 - Be sure to follow the safety instructions for all system components.
 - Ensuring the panels are in a suitable condition for use and appropriate for the particular installation and environment.
 - Use only parts that comply with the specifications set out in this manual.
 - Ensuring a safe installation of all aspects of the electrical array.
 - All tools and equipment should be properly maintained and inspected prior to use.
3. To ensure prompt verification and commissioning of your solar system, we recommend completing the installation on a sunny day.
4. As this manual may contain instructions for different product variants, ensure you follow the instructions for the correct product where specified.
5. Product information is subject to change without notice. This user manual will be frequently updated. For further support, questions, or guidance with your installation, please call your distributor or contact your sales office, which can be found at www.bigblue-tech.com.

SYSTEM INSTALLATION

Retrofitting POWAFREE Balcony Solar - those with existing solar panels installed

1. If you have set up the balcony solar system and want to use POWAFREE Balcony Solar for power storage, follow these steps to disconnect it:



- ① Disconnect the microinverter cable from the home grid.
- ② Disconnect the cables of the first solar panel from the microinverter.

NOTE

- The solar panel installation can remain in place unless you wish to relocate it.

- ③ Repeat the same on the next solar panel, if any.
- ④ Remove the microinverter if it is mounted on the solar panel.

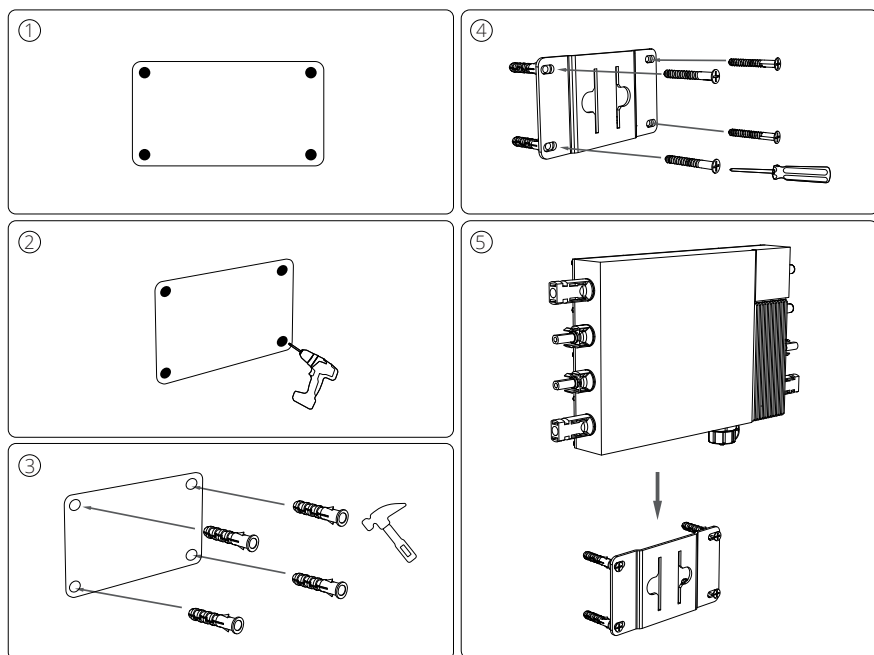
SYSTEM INSTALLATION

Installing POWAFREE PV-Route 800

1. POWAFREE PV-Route 800 incorporates dual MC4 solar inputs, each equipped with its dedicated MPPT system. These channels support an input power range of 100-400W per channel, with a maximum input rating of 65V / 15A.
2. The provided solar cable is 3 meters. Measure the right distance from the solar panel to the PV-Route 800, before finalizing the installation.
3. Keep an ideal distance of 50mm between PV-Route 800 and other objects. Recommended that the microinverter be installed between the PV-Route 800 and the power grid.

NOTE

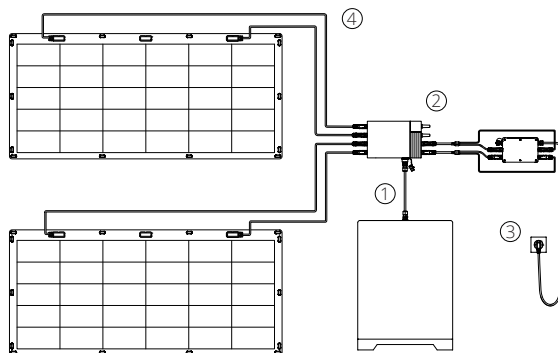
- Place the PV-Route 800 in an area that is not directly exposed to sunlight.



- ① Use the drilling sticker provided to precisely locate the position of PV-Route 800.
- ② Drill four holes about 30mm deep in the wall, according to the marked positions.
- ③ Use a hammer to drive in the expansion plugs.
- ④ Tighten the supplied wall-mounted board with the K4 nuts on it.
- ⑤ Slot the PV-Route 800 into the wall-mounted board.

SYSTEM CONNECTION

1. Follow the sequence accordingly in connecting the system:



① Connect the Cell-Pack 2500 to the PV-Route 800 using the battery cable provided.

NOTES

- At the PV-Route 800 terminal, twist the socket of the battery cable clockwise to lock it.
- At the Cell-Pack 2500 terminal, the battery cable will be locked automatically .

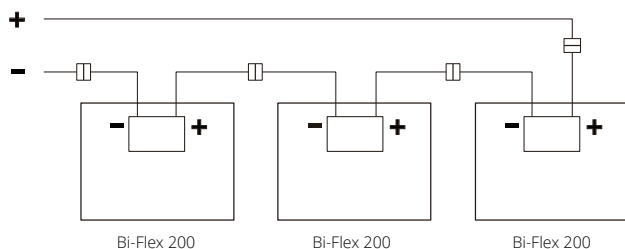
② Connect the PV-Route 800 to the microinverter, with the MC4 microinverter cables provided.

③ Connect the microinverter to the power grid with your original cable.

④ Connect the solar panel to the PV-Route 800, with the solar extension cables provided.

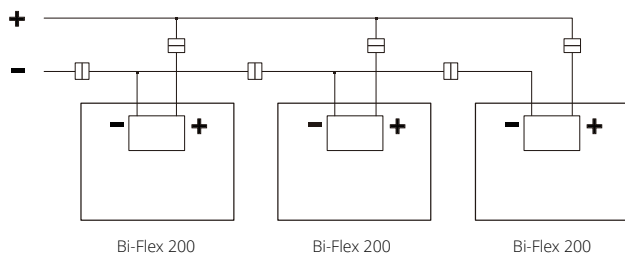
2. Solar panels can be connected in series or parallel to suit your electrical circuit size and power requirements. Verify all cables / accessories before installation; some may need separate purchases.

Connecting in Series: Series connections increase the operating voltage output while maintaining the system current output the same as one panel.



SYSTEM CONNECTION

Connecting in Parallel: In parallel connections, individual panel current output sums up to create the system output current, and the system output voltage remains equivalent to one solar panel's output voltage.



3. After completing the connection, turn on the POWAFREE Balcony Solar by pressing the power button on Cell-Pack 2500.
4. The default factory setting prioritizes battery charging. Once fully charged, the system will then utilize the grid. You have the flexibility to modify the operating mode using the mobile app.

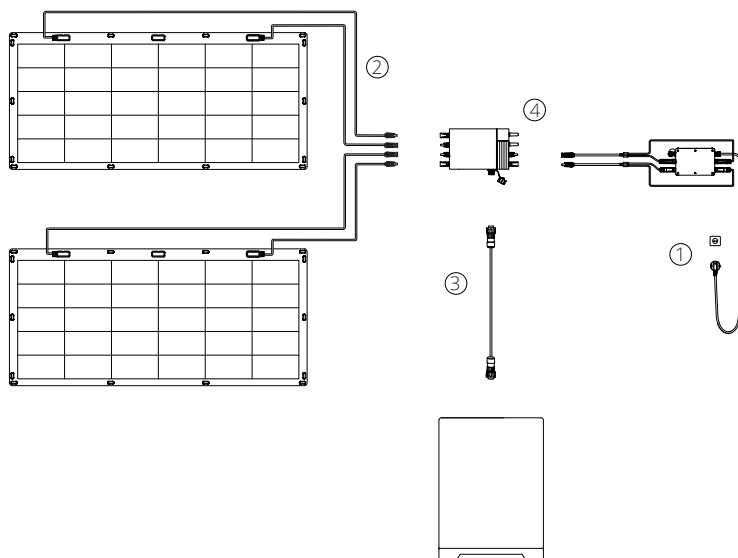
SYSTEM DISASSEMBLE

1. Turn off the POWAFREE Balcony Solar by pressing the power button on the Cell-Pack 2500.

NOTE

- During the disassembly, please pay attention to storing and keeping all the parts for re-installation.

2. Follow the sequence accordingly in disassembling the system:



- ① Disconnect the microinverter cable, from the microinverter to the power grid.
- ② Disconnect the MC4 Y-connector solar cables, from the PV-Route 800.
- ③ Disconnect the battery cable from the Cell-Pack 2500 by twisting the socket counterclockwise to unlock it from the PV-Route 800.
- ④ Disconnect the microinverter cable from the PV-Route 800 using the MC4 spanner provided.

NOTE

- The disassembly process should follow your microinverter's instructions, and be sure to check the microinverter's warranty terms before proceeding.

APP OPERATIONS

BigBlue Energy – The BigBlue APP

BigBlue Energy is BigBlue's custom-specified app designed to control only BigBlue POWAFREE Balcony Solar system, via your smartphone over a Wi-Fi connection.

Download The BigBlue APP

The BigBlue app can be downloaded on your smartphone from the Google Play Store and Apple App Store. Search for 'BigBlue Energy' to download.

You may also download the Android package from the BigBlue official website:
www.bigblue-tech.com/pages/download.

Or, scan the QR code below using your mobile phone to install the BigBlue app.



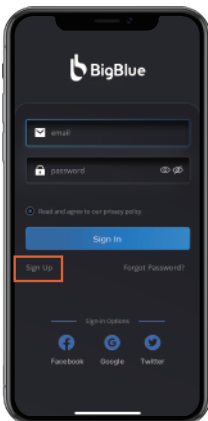
Register For The BigBlue App (for the first-time user)

1. After the app is downloaded and installed, the first-time user, you have to register your account to use the BigBlue app.

Open the BigBlue app.

Select the 'Sign Up' button to start the registration process.

You can have Facebook or Google account as the 'Sign-in Options'.



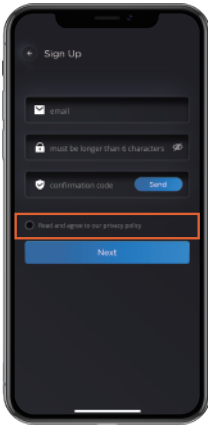
APP OPERATIONS

2. Enter your email address and password.

Receive the confirmation code through your email account, by selecting 'Send'.

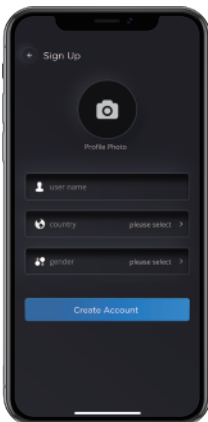
Verify the email account by typing the received confirmation code and selecting 'Next' to proceed.

Remember to tick the checkbox 'Read and agree to our privacy policy.'



3. Enter the general information.

Select 'Create Account' to complete the registration process.



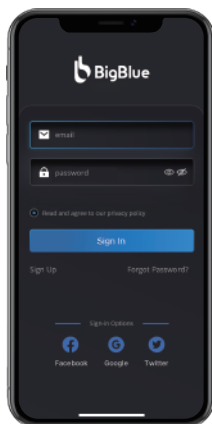
Log In The BigBlue App

1. Open the BigBlue app.

Enter your registered email address and password.

Select 'Sign In' to log in.

You can have Facebook or Google account as the 'Sign-in Options'.



Pair Up The Device Via Bluetooth Connection

**The device has to be paired with the app via Bluetooth, before connecting with Wi-Fi.*

**The frequency of the Wi-Fi should be broad-casted on 2.4GHz.*

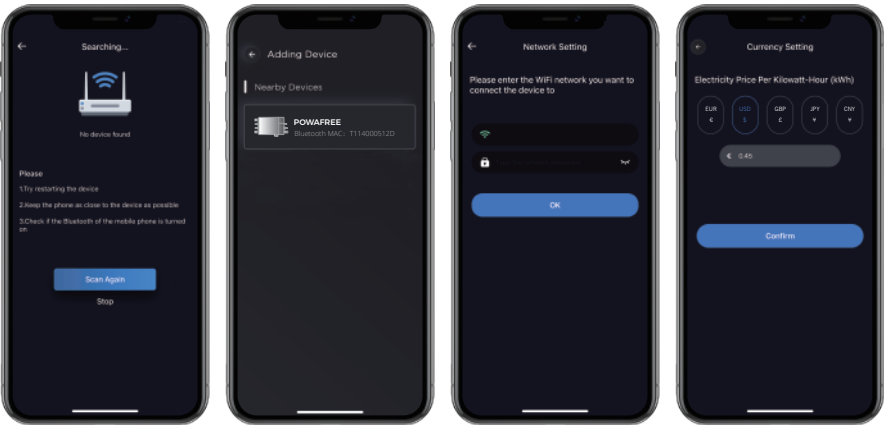
1. Select 'Add Device' to scan for the nearby devices.

Select the icon of the 'Type of Device' to search for the nearby available devices under the same category.

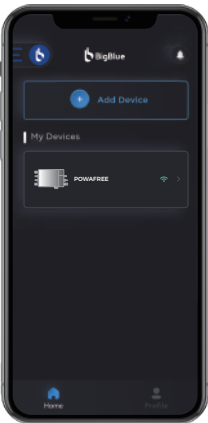


APP OPERATIONS

2. The search process may take a few seconds.
Select the icon of your device with the correct Bluetooth MAC.
You will see the message ‘Connection successfully’ when your pairing is done.



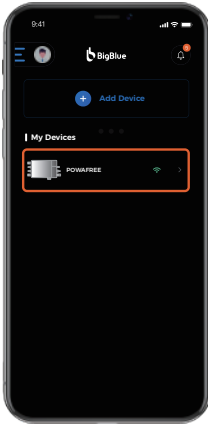
3. Device that is added can be found under ‘My Device’ now.
Repeat the same process if you want to add more BigBlue ’s devices.



APP OPERATIONS

Operating The APP

1. The device that is added can be found under 'My Device' now.
Select the tab/icon of your device to view the current status of the power generation.



2. Monitor real-time status updates for solar input, storage discharging/charging, and grid output.
Track cumulative power generated, the financial value generated, and CO² reduction.



APP OPERATIONS

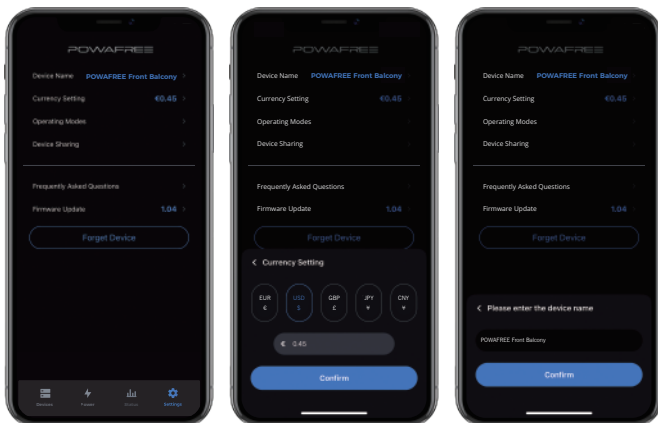
3. Tap the bottom 'Status' shortcut key to access historical analyses of battery storage, solar generated, value generated, and CO² reduction.

Reports can be displayed for 'Hour' (15 hours in the past), 'Day' (15 days in the past), 'Week' (15 weeks in the past), 'Month' (12 months in the past), and 'Year'.



4. Tap the bottom 'Settings' shortcut key to access system management settings, where you can customize the following options:

- Device Name: Rename the device, especially useful if you are managing multiple devices.
- Currency Setting: Set the currency and electricity price per kilowatt-hour. Enter the electricity price numerically within the acceptable range of 0.001 to 100.
- Device Sharing: Share device pairing with another person by entering their registered email address. The recipient must register with the app in advance.
- Firmware Update: Install firmware updates. Ensure you don't exit the app during this process. Your device should have a stable network connection and sufficient battery. Auto system updates are available between 00:00 and 06:00 with a successful network connection.



APP OPERATIONS

5. There are three operating modes available as outlined below.

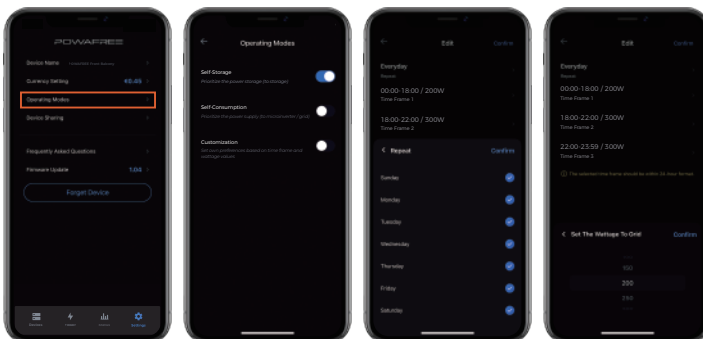
NOTES

- The default factory setting prioritizes battery charging. Once fully charged, the system will then utilize the grid. You have the flexibility to modify the operating mode using the mobile app.
- The system will allocate 20% of battery storage for pre-conditioning charging (during sub-zero temperatures) and basic operation consumption.
- When a battery is connected and its power level is below 20%, the battery is restricted from outputting power in any mode. Once the battery power rises to 25%, the restriction on forced charging is lifted, and the system returns to its previous energy management mode.

- ① Self-Storage: Prioritize power storage (to the battery). Select this option if you want to prioritize charging the Cell-Pack 2500 until it reaches the charging limit. In this mode, the Cell-Pack 2500 will not discharge to the microinverter/grid.
- ② Self-Consumption: Prioritize power supply (to the grid). Select this option if you want to prioritize meeting the power consumption of the home. In this mode, all solar input will be directed to microinverter/grid.
- ③ Customization: Set your preferences based on time frames and wattage values. Seven customized settings can be added.

REMARKS:

- There are three time frames to be set in a day. The 'Starting Time' is preset to be 00:00, whereas the 'Ending Time' is 23:59.
- When solar input is present and the battery is connected:
 - Time Frame 1 & 3: the battery storage WILL NOT discharge in this period.
 - Time Frame 2: if solar input is below the preset value of the 'Wattage to Grid', the battery storage WILL discharge / cover the rest of the consumption.
- In the absence of solar input and with the battery connected, all time frames permit battery discharge.



SYSTEM SPECIFICATIONS

PV-Route 800

MECHANICAL DATA

Protection Level	IP67
Performance Warranty	10 years
Dimension (L x W x H)	326.7 x 199 x 43.4mm
Weight	3.3kg

PV INPUT

Input Power	100 - 400W per channel (total two channels)
Input DC Voltage	12 - 65V
MPPT Voltage	26 - 50V
Input Current	15A
Connector	MC4
Wireless Type	Bluetooth 5.0 & Wi-Fi 2.4GHz

STORAGE INTERFACE

Input Voltage	44 - 58.4V
Input Current	20A (max)
Output Voltage	44 - 58.4V
Output Current	20A (max)
Connector	Waterproof Plug

OUTPUT TO MICROINVERTER

Output Power	800W (max)
Output Voltage	55V (max)
Output Current	18A (max)
Connector	MC4

SYSTEM SPECIFICATIONS

Cell-Pack 2500

MECHANICAL DATA

Capacity	2,560Wh (51.2V / 50Ah)
Battery Type	LiFePO4
Housing Material	Zinc alloy
Protection Level	IP65
Performance Warranty	10 years
Dimensions (L x W x H)	440 x 140 x 565mm
Weight	29.75kg (excl. the heavy-duty waterproof stainless base stand)

INPUT DATA

Input Power	800W
Input Current	20A (max)
Input Voltage	44 - 58.4V

OUTPUT DATA

Output Power	800W
Output Current	20A (max)
Output Voltage	44 - 58.4V

OPERATING CONDITIONS

Operating Temperature	-20°C to 45°C (-4°F to 113°F)
Storage Temperature	-20°C to 45°C (-4°F to 113°F)
Altitude	<2,000m

FREQUENTLY ASKED QUESTIONS

General Information

1. What is BigBlue POWAFREE Balcony Solar?

POWAFREE Balcony Solar is more than just a power station. You are getting a compact energy storage system - a combo of a PV controller, solar battery, and flexible solar panels (purchased separately).

Homes with the **POWAFREE** installed rely less on the grid by capturing free power directly from the sun. Homeowners can take control and offset their power usage with solar panels and reduce their electric bills. Alternatively, you can use **POWAFREE** to store the excess generated power during the day (when you are at work) and use this stored power at night, which would enable you to achieve self-generation, self-consumption, and self-sustainable power.

NOTE

- This product cannot be used during power outages.

2. What is the main principle in designing POWAFREE Balcony Solar?

Nothing more than these two principles:

- Reserve / spare extra power during the day for use at night – to earn & save your electricity bill.
- Plug-N-Play & easy removal - for the benefit of new entrants and tenants.

3. What does POWAFREE Balcony Solar consist of?

POWAFREE Balcony Solar consists of:

- **PV-Route 800**, smart PV controller;
- **Cell-Pack 2500**, LiFePO4 rechargeable home solar battery;
- **Bi-Flex Series**, flexible solar panel (recommended for separate purchase, available in 200W & 100W).

4. What are the basic facts of the POWAFREE Balcony Solar?

The POWAFREE Balcony Solar comes with a 10-year performance warranty and is eligible for an additional 2-year extension when you register online. The system is designed for easy installation and removal, ensuring user-friendliness. Furthermore, it offers the advantage of 0% VAT and various other incentives, although the availability of these incentives may vary by country.

FREQUENTLY ASKED QUESTIONS

- **PV-Route 800:** Smart PV-Controller | 800 watt-peak (Wp) | IoT App | Multi Operating Modes | Maximum Compatibility with Top-Brand Microinverters & Solar Panels | Trio Built-In MPPT | IP67
- **Cell-Pack 2500:** 2,560Wh LiFePO4 | 800W Output | Operation under Freezing Temperatures | 90% Round Trip Efficiency | 90% Depth of Discharge | Approximately 0dB | Dustproof & Waterproof IP65
- **Bi-Flex Series:** Marine-Grade | Maximum Energy 200W 12V | High-Efficiency Grade-A PERC >22.8% | Bi-Facial with Extra 30% | 3mm Thinness & 3.58 kg (BF200) Lightness | Multi Busbar Technology | Potential-Induced Performance (PID) Resistance

5. Who needs POWAFREE Balcony Solar?

Everyone else from balcony tenants (new entrants), retrofitting (already solar-powered houses) to solar-savvy and DIY enthusiasts. Not to mention, all Mother Planet lovers.

Operational Information

1. I am new to solar-powered, how do I configure POWAFREE Balcony Solar as my balcony power storage system?

BigBlue has streamlined the design and installation process to be incredibly easy to install, even for new entrants. No complicated wiring. Just pair it, plug in, and power up!

NOTE

- Check the local regulation on the upper limit allowed for solar system installation (with no permit required). If you are from the Europe region, the standard is 800W whereas the German standard would be 600W (but **POWAFREE** caters both). You don't need to register with an operator as opposed to just the traditional roof- or ground-mounted solar systems.

FREQUENTLY ASKED QUESTIONS

2. During the daytime when I am at work, where does the solar power go if I don't store it in POWAFREE Cell-Pack 2500?

When the sun is shining, the power that is generated by your **POWAFREE Bi-Flex 200/100** solar panels or other installed solar panels will either flow into your home grid or charge your **POWAFREE Cell-Pack 2500**. You can switch between these operating modes from the 'BigBlue Energy' app, with the setting of day in conjunction with the specific times (have to pair with **POWAFREE PV-Route 800**).

3. During the night time when I am at home, how does my home get powered by POWAFREE Balcony Solar?

POWAFREE Balcony Solar is connected to your home grid via a microinverter (not supplied), converting the direct current (DC) to usable electricity for a home that is alternating current (AC).

At night, when there is no sunlight and no solar power is generated, your home will be powered by the home grid. Alternatively, your **POWAFREE Balcony Solar** offers a nice stand-in, supplying the power from **POWAFREE Cell-Pack 2500** – achieving a money-saving on your electricity bill.

NOTE

- This 800W balcony power storage system is intended to remain compact, powering your residential appliances connected to your home's grid throughout the day. This approach ensures the complete utilization of captured solar power - eliminating concerns about selling excess power back to your utility provider and the associated regulations which are cheaper.

FREQUENTLY ASKED QUESTIONS

4. I have had my solar panel system installed and would like to store the extra generated power in a battery system. Can I pair it with POWAFREE Balcony Solar?

Yes, as long as your solar panel system meets the entry requirements to **POWAFREE PV Controller**. The maximum input should be up to 800W, within the voltage range (Voc) and short circuit current (Isc) respectively for:

- Bi-Flex 200: 40.87V / 6.10A
- Bi-Flex 100: 20.38V / 6.13A

The **POWAFREE PV Controller** connects your installed solar panel to **POWAFREE Cell-Pack 2500**, with another end to the microinverter.

NOTE

- Input voltage that exceeds the input range can cause permanent damage to the **POWAFREE PV Controller**.

5. What should I do if my solar panels have become shaded?

Shade on your solar panels will reduce electricity production. Keep trees or other tall plants trimmed to prevent shade on your solar panel system.

6. Can I connect several solar panels to POWAFREE PV-Route 800?

The **POWAFREE PV-Route 800** features two distinct groups of solar inputs. Each with 100-400W per channel, with an open circuit voltage spanning from 12V to 65V. It's important not to surpass this voltage range.

FREQUENTLY ASKED QUESTIONS

App Information

1. Where can I download the app to monitor the POWAFREE Balcony Solar?

The **BigBlue** app can be downloaded on your smartphone from the Google Play Store and Apple App Store. Search for '**BigBlue** Energy' to download.

You may also download the Android package from the **BigBlue** official website: www.bigblue-tech.com/pages/download.

Or, scan the QR code below using your mobile phone to install the **BigBlue** app.



2. Without the app installed, can I use this system? What are the operating modes?

When there is solar power generated, the default factory setting will firstly charge the battery. After fully charged then only will go to grid.

There are three operating modes available:

- Self-Storage: Prioritize power storage (to the battery). Select this option if you want to prioritize charging the **Cell-Pack 2500** until it reaches the charging limit. In this mode, the **Cell-Pack 2500** will not discharge to the microinverter/grid.
- Self-Consumption: Prioritize power supply (to the grid). Select this option if you want to prioritize meeting the power consumption of the home. In this mode, all solar input will be directed to microinverter/grid.
- Customization: Set your preferences based on time frames and wattage values. Seven customized settings can be added.

3. How can I access real-time data on the power generated by the POWAFREE system?

Advanced features, controls, and device information of **POWAFREE** Balcony Solar; like your power consumption, storage capacity, and panel productivity to name a few, can be accessed in real-time from **BigBlue** 's custom-specified app – '**BigBlue** Energy' over a Wi-Fi connection.

FREQUENTLY ASKED QUESTIONS

Extra Information

1. Can the POWAFREE Balcony Solar operate in the wintertime?

Thanks to the revolutionary and ground-breaking **BigBlue's** Complementary Optimization technology, the **POWAFREE Cell-Pack 2500** continues to dis/charge even in below-freezing conditions when faced with extremely cold temperatures.

2. What certificates does POWAFREE Balcony Solar offer?

CE, RoHS

3. Can I claim the tax rebate?

Every country or region varies. We can't give tax advice. But in many cases, yes: this system qualifies for the 0% VAT.

WARRANTY CARD

Name		Phone Number	
Email		Name Of Shop	
Model		Order Number	
UPC No.		Date Of Purchase	
Address			



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