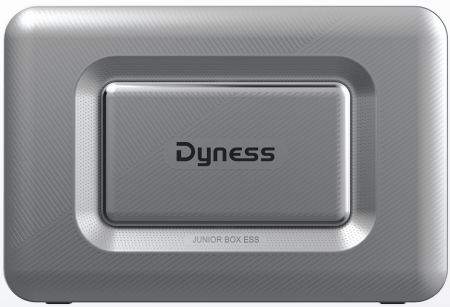


Junior Box

USER MANUAL

Balcony Solar System

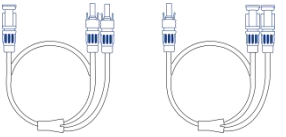
File version-20240516-V1-EN Information might be subject to change without notice during product improving.

Product identity definition

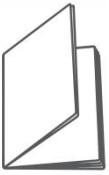
	Battery voltage is higher than safe voltage, direct contact with electric shock hazard.
	Be careful with your actions and be aware of the dangers.
	Read the user manual before using.
	The scrapped battery cannot be put into the garbage can and must be professionally recycled.
	After the battery life is terminated, the battery can continue to be used after it recycled by the professional recycling organization and do not discard it at will.
	This battery product meets European directive requirements.
	This battery product passed the TUV certification test.

What's in the Box

Dyness Junior Box



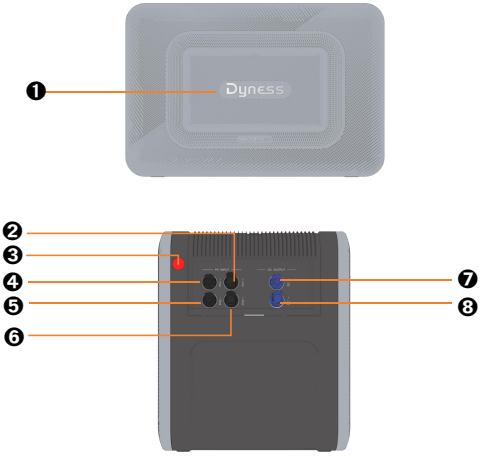
MC4 DC Output Cable(3m) ×2



User Manual

Overview

Product Overview



❶ BMS	❺ MC4 ports for PV2-
❷ MC4 ports for PV1+	❻ MC4 ports for PV2+
❸ Power Button	❼ MC4 ports for DC-(To Micro INVT)
❹ MC4 ports for PV1-	❽ MC4 ports for DC+(To Micro INVT)

Button Controls

Button	Action	Function
	Press for 3 seconds	Turn Junior Box on
	Press for 3 seconds	Turn Junior Box off

Getting Started

Install Your Junior Box

Option A: Position your Junior Box on a hard, level floor.

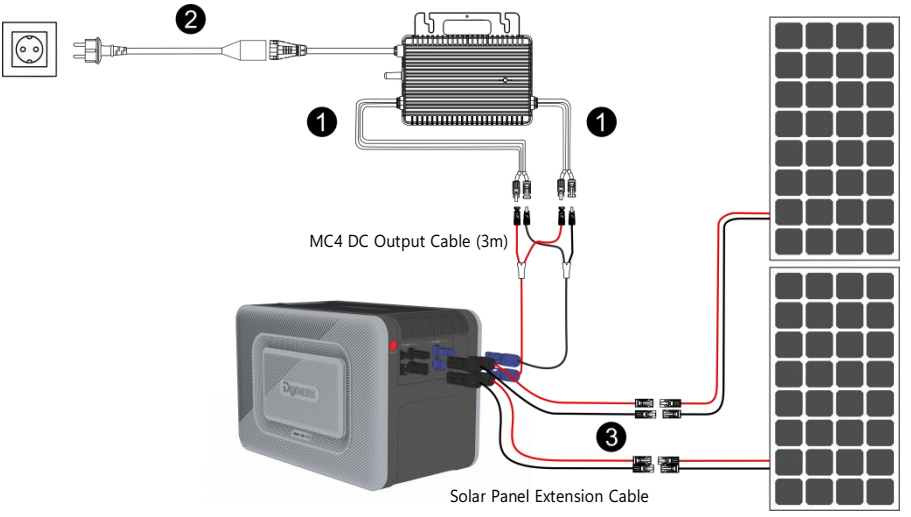
Option B: Mount your Junior Box onto a solid concrete wall using additional mount brackets*.

*Mount brackets need to be purchased separately

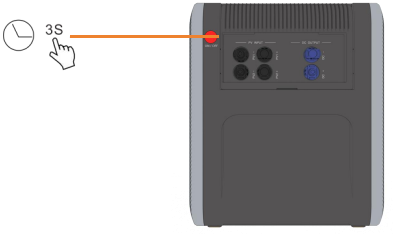
Connect Cables

Single Junior Box

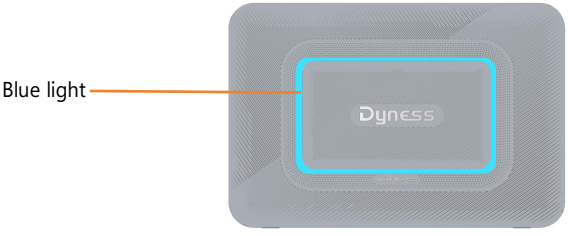
1. Connect Junior Box to the micro inverter using the included MC4 output cables.
2. Connect the micro inverter to a home outlet using the original cable.
3. Connect the solar panels to Junior Box using solar panel extension cables.



4. Press the power button for 3 seconds to turn on your Junior Box.



When powered on, the BMS status LED will display blue .After 3 seconds, the light will turn off automatically.



Extended Junior Box

Junior Box supports up to 3 stack expansions (Extended Battery)* with a capacity of 6.4KWh

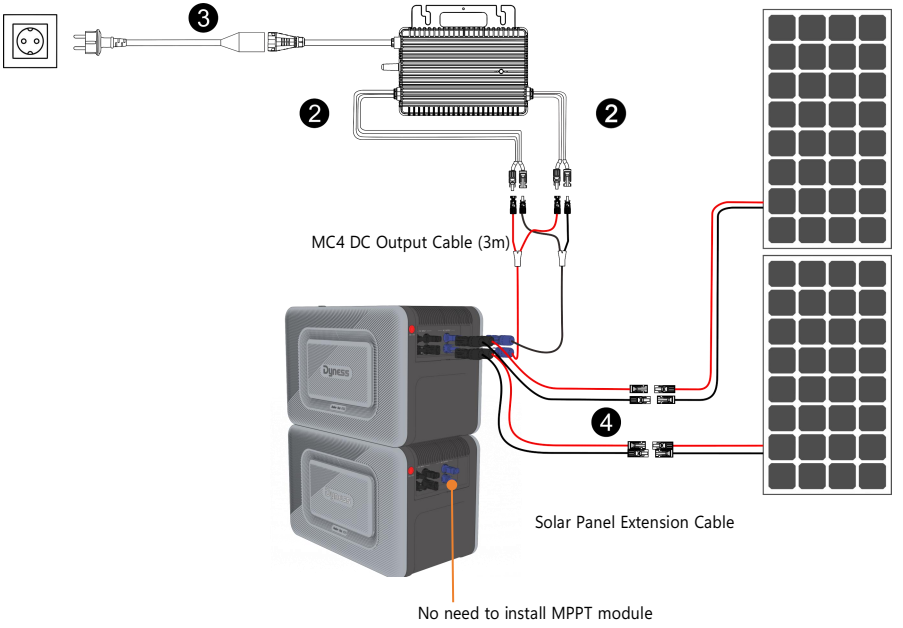
1. Install the stack connector* on the battery expansion port on the top of the bottomExtended Battery , and stack the Junior Box on the bottom module.

Stack Connector

*The stack connector is an extended battery accessory

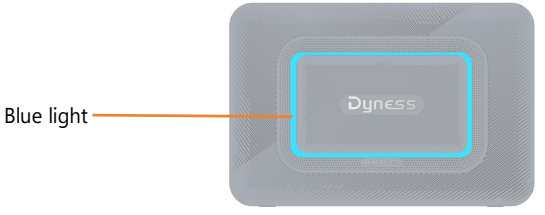
2. Connect the Junior Box(built-in MPPT module) to the micro inverter using the included MC4 DC Output Cable(3m).
3. Connect the micro inverter to a home outlet using the original cable.
4. Connect solar panels to Junior Box using Solar Panel Extension Cable

Install the stack connector on the battery expansion port on the top of the bottom module



5. Press the power button for 3 seconds to turn on your Junior Box.

When powered on, the BMS status LED will display blue. After 3 seconds, the light will turn off automatically.



*Note: 1. The Extended Battery sold separately.

2. Do not stack two Junior Boxes directly.

Dyness App for Smart Control

Download the Dyness App to get full functionality of your Junior Box from the **App Store** (iOS devices) **Google Play** (Android devices) or **Scan QR Code** blow：

iOS devices

Android devices

WIFI distribution network, use Dyness app to scan the QR code in the Wi-Fi Logger label

For more information, please refer to the Dyness User Manual.

Storage and Maintenance

For optimal performance, follow the instructions below to store and maintain your Junior Box regularly.

- Keep the product on a flat surface when using, charging, and storing.
- Use a cotton cloth and water to clean. Do not use steel wool or other hard materials for cleaning.
- For long-term storage, charge and discharge Junior Box once every 3 months (discharge Junior Box to 20%, then recharge it to 80%).
- If the BMS fails, it can be removed and replaced with a new BMS, as shown in the following

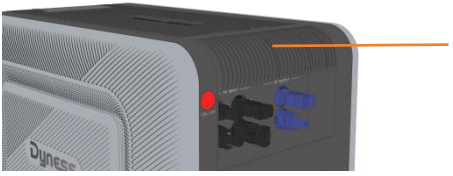
figure. Before removing the BMS, ensure that the battery is turned off.

❶ Insert two flat-head screwdrivers into the middle of the BMS

❷ Pull out the BMS that needs replacing

❸ Insert the new BMS

- If the MPPT fails and needs to be replaced, first plug the MC4 wiring harness, then press the MPPT buckle and pull out the MPPT module.



Specifications

BASIC	Battery Type	LiFePO4
	System Energy	1.6KWh
	Dimensions	420mm*283.5mm*245mm
	Weight	19.4KG
	Protection Level	IP55
	Cycle Life	≥8000 Cycles
	Warranty	10 Years
	Charging Temp. Range	0 °C to 55 °C
	Discharging Temp. Range	-20 °C to 55 °C
	APP	Yes
	Communication	RS485
	Max.PV Input Power（W）	1200W
	Max. Input Voltage（V）	65V

	MPPT Range(V)	18-60V
	Max.Input/ Output Currrent(A)	30A
	Max. Output(W)	800W
Expansion	Expansion Method	Stackable
	Maximum Expansion Modules	4 (Junior Box+3Extended Battery)
	Maximum expansion energy	6.4KWh
Certification	CE-EMC/ UN38.3/ IEC62619/ IEC62109/ CE-RED	

Specifications are subject to change without notice.

Safety Information

1. Please carefully read the documents before installing, operating or maintaining the equipment. The documents are subject to change due to product updates or other reasons.
2. Do not put heavy objects on the equipment.
3. Ensure that all cables and connectors are intact and dry before connecting to prevent electric shocks.
4. Do not install or operate the equipment in extreme weather events such as lightning, snow, heavy rain, strong wind and so on.
5. Do not damage, smear or rip off any warning labels on the equipment.
6. Do not hit, pull, drag, squeeze or step on the equipment, or throw it into the fire, as there is risk of explosion.
7. After installing, please clean the remains of the installation, such as boxes, clipped cable ties, ripped insulation materials, etc.
8. Do not modify or repair the equipment, please contact our customer service or qualified personnel if necessary.
9. Use tools and the equipment correctly to prevent personal injuries and product damage.
10. Understand the components and function of the grid-tied PV power system. Make sure that all electrical connections, and voltage and frequency at the connection point meet the local microinverter grid-tie requirements and electrical standards.
11. The installation location should be convenient for you to put out the connectors.

12. Before you pull out the AC (or battery) connector from the microinverter, disconnect the cable from the AC socket (or battery's) end.
13. Do not clean the product with harmful chemicals or detergents.
14. Misuse, dropping, or excessive force may cause product damage.
15. Do not use or store this product in direct sunlight for a long period, such as in a car, cargo bed, or any other place where it will be exposed to high temperatures. Doing so may cause the product to malfunction, deteriorate, or generate heat.
16. Do not use this product near strong static electricity or strong magnetic fields.
17. Do not immerse the product in water. If the product accidentally falls into water, place it in a safe, open place and keep it away from fire until it is completely dry.

Environment requirements

1. Make sure the equipment is installed, operated or stored in a well ventilated place.
2. Do not install or operate the equipment near flammable, explosive, corrosive, caustic or moist sources.
3. Do not expose the equipment to strong electromagnetic fields to avoid radio interference.

Customer Service

Email：sales@dyness-tech.com

Tel：+86 400 666 0655

Web：www.dyness.com

For more details, please scan the QR code or visit: https://www.dyness.com/qa

Dyness

DISCOVER YOUR NATURE

Address: No. 511 Chenzhuang West Road, Sanshui Street,
Jiangyan District, Taizhou City
Email: service@dyness-tech.com
Tel: +86 400 666 0655
Web: www.dyness.com

Official Website

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