Battery-Box Premium LV BMU - IP55 Instruction Manual

V1.1

VALIDITY

This document is valid for the Battery-Box Premium LV BMU - IP55 (Battery Management Unit) ("**BMU**") from firmware version 1.11.

INTENDED USE

BMU is applicable for the BYD Battery-Box Premium LV system(s) (LVS 4.0, LVS 8.0, LVS 12.0, LVS 16.0, LVS 20.0, LVS 24.0 and LVL 15.4) (**"Battery-Box"**), and works as a control unit for the system(s).

PRODUCT DESCRIPTION

BMU is equipped with a WLAN interface as a standard. The APP Be Connect could communicate with BMU through the WLAN.

Be Connect

GET IT ON
Google play

Download on the
App Store

The WLAN name and code are on the label of BMU.
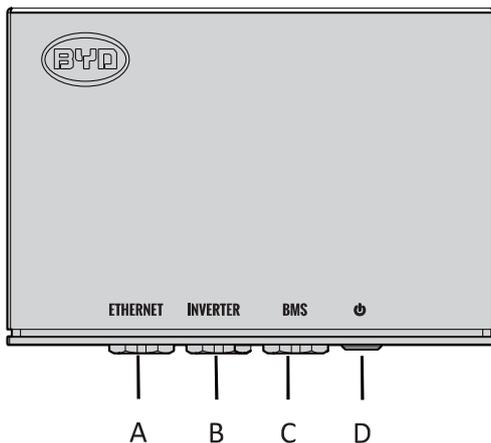
A: Ethernet port

B: RJ45 port for connection with an inverter

C: RJ45 port for connection with Battery-Box

D: Stop button and status LED

ETHERNET   INVERTER   BMS

A   B   C   D

Assignment of Port B
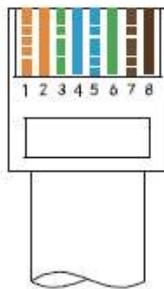
No.	Assignment
1	485-A
2	485-B
3	Unused
4	CAN H
5	CAN L
6	Unused
7	Unused
8	Unused

SCOPE OF DELIVERY

● 1×BMU

● 1×Instruction Manual

● 3×Connectors

● 1×Hanger

TECHNICAL DATA

Communication	Ethernet/CAN/RS 485
Input voltage*	40-60 V
Input current	200 mA
Weight	2 kg
Dimensions (L×W×H)	222 mm×154 mm×59 mm
Ambient temperature in operation	-10°C to 50°C
Relative humidity (non-condensing)	5% to 95%
Degree of protection (in accordance with IEC 60529)	IP55

*BMU is powered by Battery-Box through the network cable. No other power supply is needed.

CONNECTION DIAGRAM

INVERTER

BMU

ETHERNET INVERTER BMS
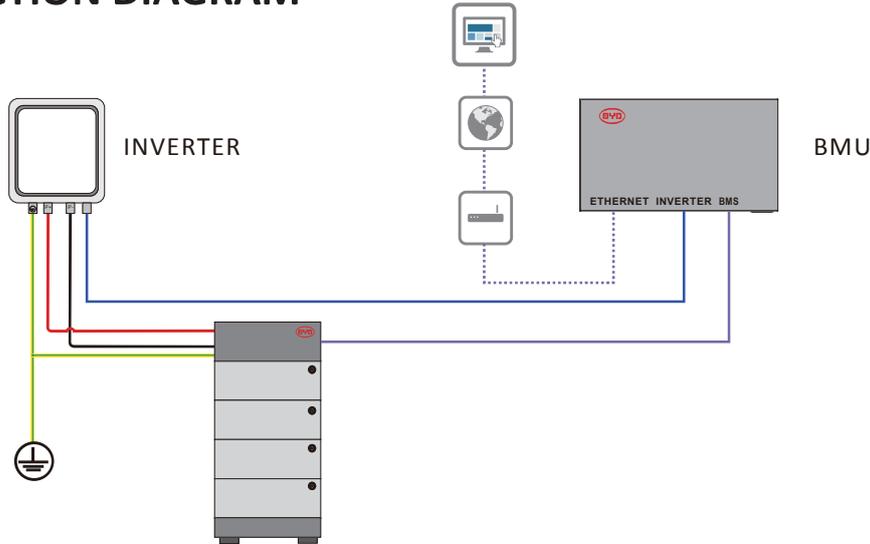
|	BMU	SMA	STUDER	VICTRON	SELECTRONIC	SOLAREDGE	GOODWE	SUNGROW	SCHNEIDER	SOLIS
CAN H	4	4	4	7	1	4	4	4	14	4
CAN L	5	5	5	8	2	5	5	5	12	5

1. Detailed connection instructions with inverters could be read in the Battery-Box LVL/LVS Quick Start Guide.
2. The communication cable between BMU and an inverter cannot be longer than 10 meters. And the cable should be CAT 5 shield or above.
3. Please make sure the correct pins are connected between BMU and an inverter.
4. The connection between BMU and Battery-Box should be the Straight-Through Wired Cable.
5. Connected to the Internet is highly recommended.

MOUNTING AND CONNECTION

Install BMU on the wall or a rack. The recommended expansion screw size is M6×12. The minimum distance from the ground is 180 mm.

1

180mm

2

3
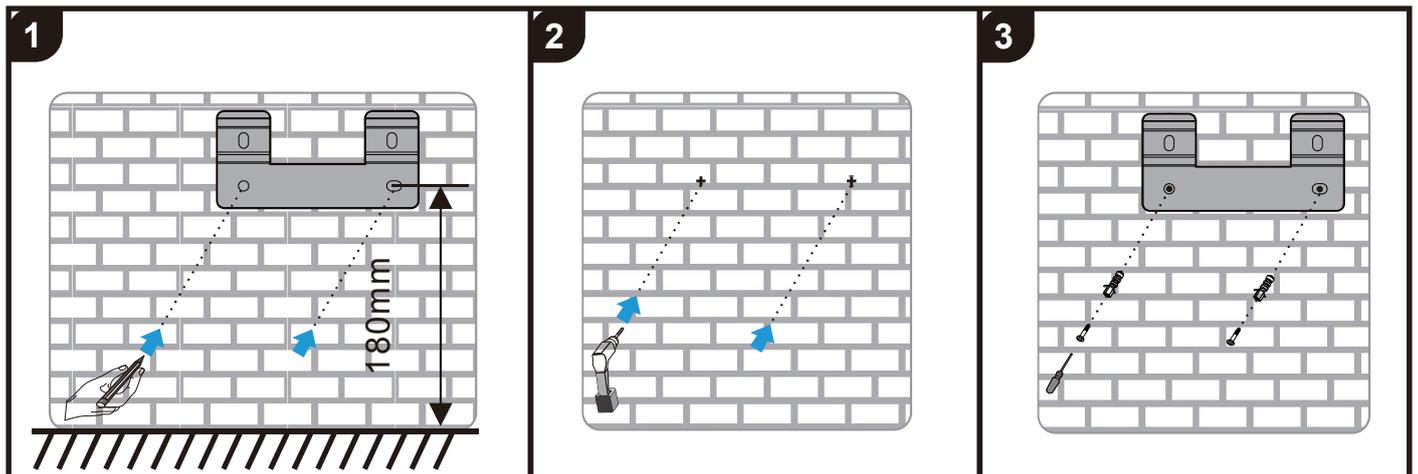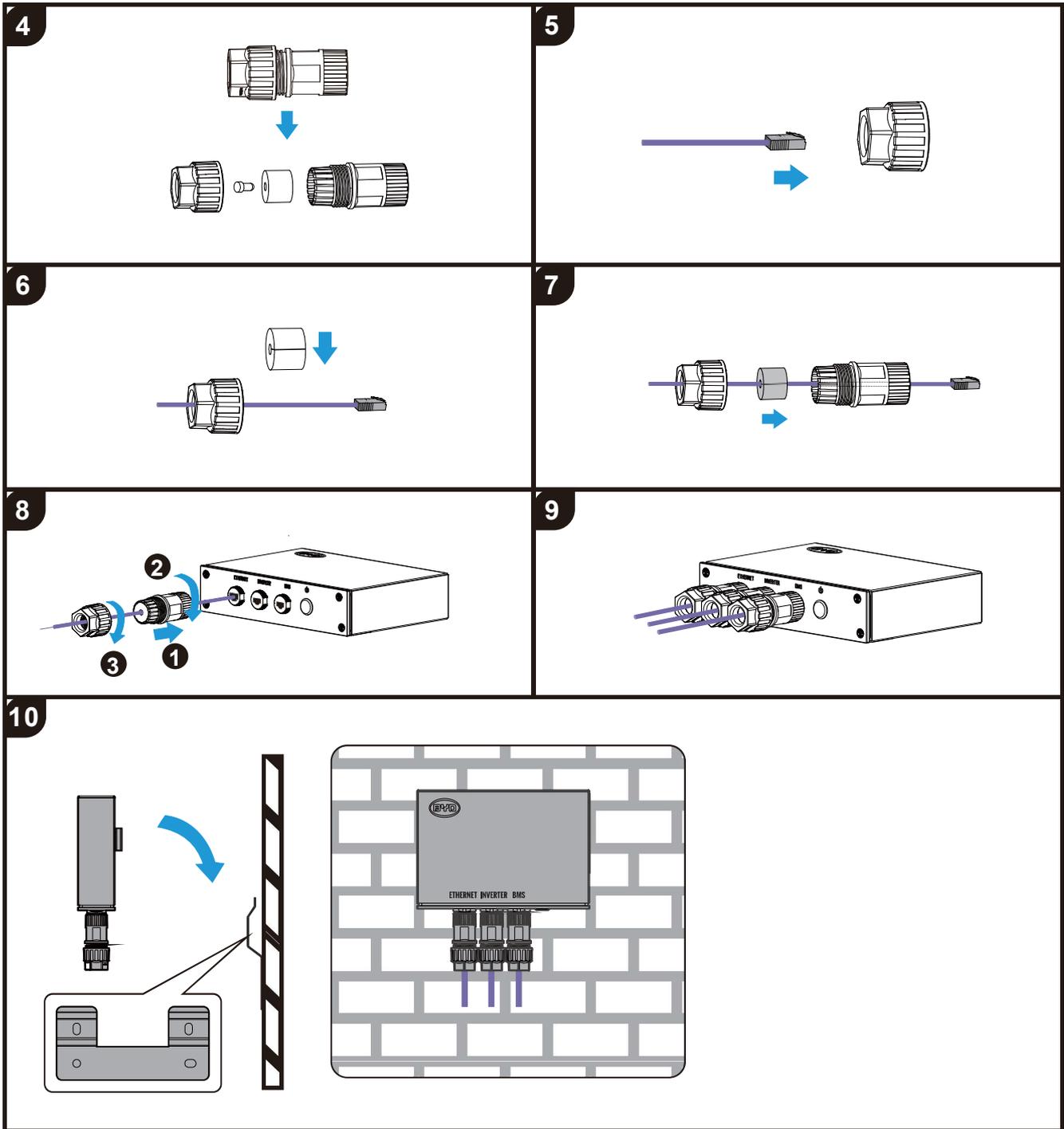
COMMISSIONING

1. Make sure an inverter, Battery-Box, and BMU are correctly connected.
2. Press the Start Button on Battery-Box for 3 seconds.
3. Refer to Battery-Box Premium LVL/LVS Operating Manual for further steps.

UPDATING FIRMWARE

The firmware of BMU could only be updated when it operates with Battery-Box. Please refer to Battery-Box Premium LVL/LVS Operating Manual for further information.

LED STATUS

Flashing white and blue alternatively	White ○ ON/OFF Blue ● ON/OFF		The battery system is initiating.
Glowing white	White ○ ON/OFF Blue ● ON/OFF		Idle (the battery system is neither charging nor discharging).
Flashing white slowly	White ○ ON/OFF Blue ● ON/OFF	2S 2S 2S	The battery system is charging.
Flashing white quickly	White ○ ON/OFF Blue ● ON/OFF	1S 1S	The battery system is discharging.
Flashing white and glowing blue	White ○ ON/OFF Blue ● ON/OFF	1S 1S	The battery system is discharging, and the SOC of Battery-Box is below 15%.
Flashing white and blue	White ○ ON/OFF Blue ● ON/OFF	1S 1S N	An error has occurred. **
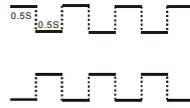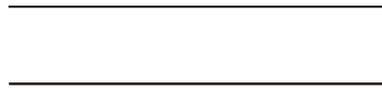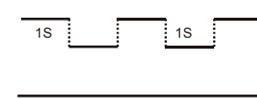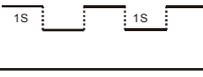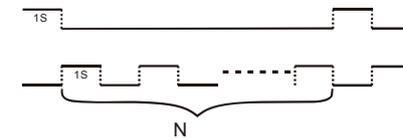
** The definition of the error codes could be found in Battery-Box Premium LVL/LVS Operating Manual.

DISPOSAL

Dispose of BMU following the locally applicable disposal regulations for electronic waste.

CONTACT

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Social media link

https://www.facebook.com/BatteryBoxBYD/

https://twitter.com/BYD_BatteryBox

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