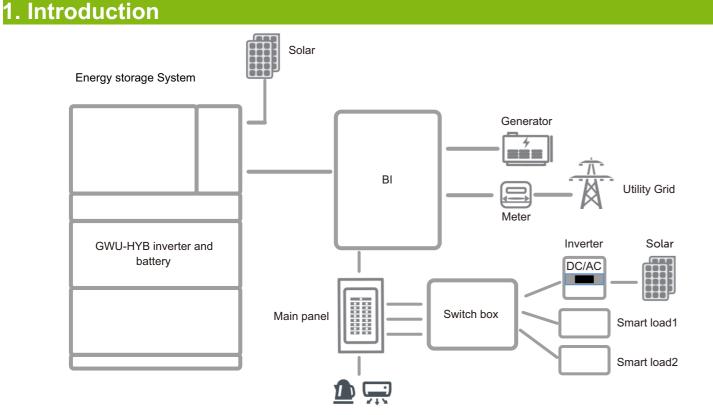
# Quick Installation Guide BI Switch box

greenworks

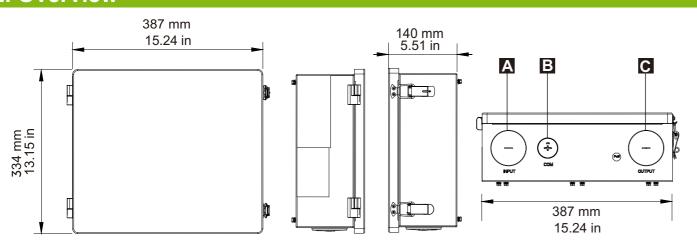
d) Screw the upper two screws, until the distance between screws and the wall is  $5 \sim 10$  mm.

e) Put on the machine, the brackets are aligned with the screws, use the inner hexagonal wrench to screw the upper and lower tapping screws until the buckle "bang" is heard.



BI, as the core component of the whole house load solution, is responsible for the access of an energy storage system to the home to realize intelligent switching and management of the home load. Through the expansion of Switch box and BI, intelligent home load switching management will be achieved.





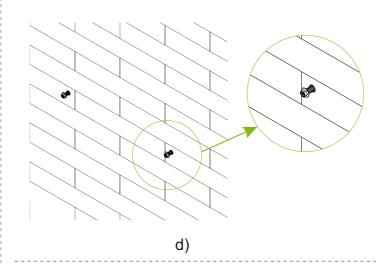
A INPUT Connect the load output of BI and the break of the inverter		Name	Object
	e break of the inverter	INPUT	A
B COM Connect sampling and control lines		COM	В
C OUTPUT Connect load and grid-connected inverter	verter	OUTPUT	С

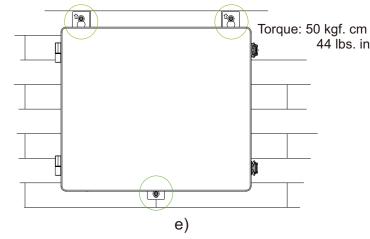
## 3. Preparation

# 3.1 Check Packing List

Open the package and check the materials and accessories according the following list.

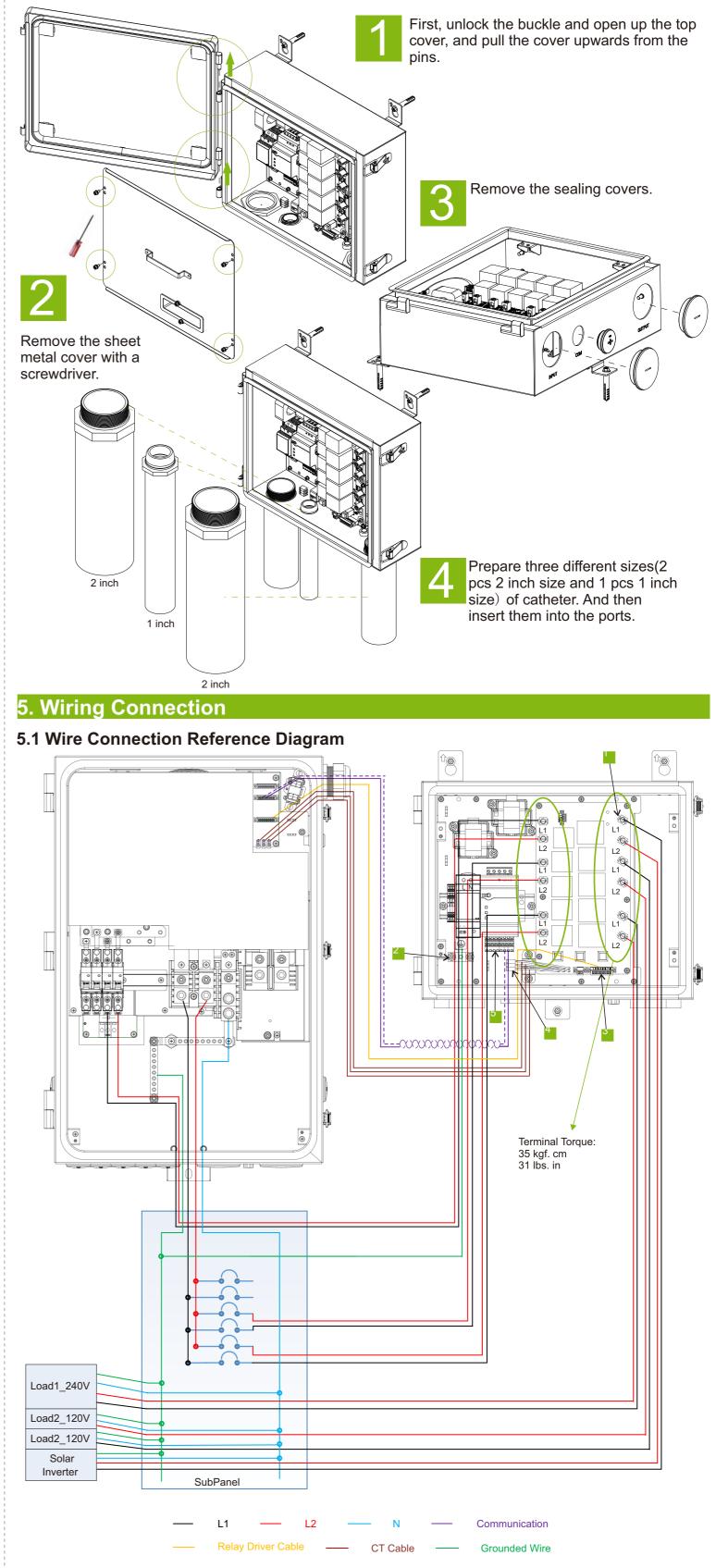






#### Step 3: Switch box internal wiring connection

Make sure all brackets (upper brackets and lower brackets) are well and firmly installed.

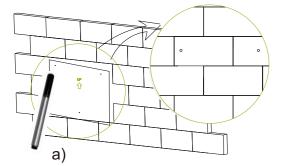


# 4. Mounting

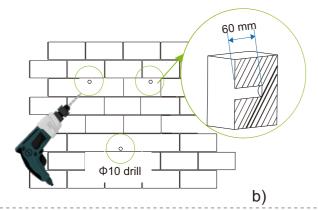
## Step 1: Install the bracket

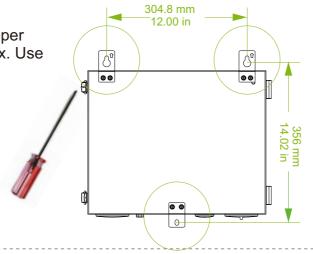
The bracket of the Switch box is composed of two parts. Upper bracket and Lower bracket are used to install the Switch box. Use the screwdriver to fix the brackets on the box.

# Step 2: Fix the position, drill holes and install the whole structure on the wall



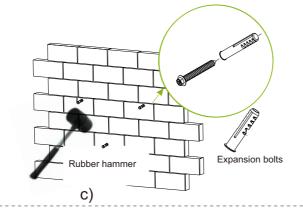
b) Drill holes at certain spots with diameter of 10 mm. (4 mm for wooden walls).





a) With the perforating paper, use a spirit level to mark the holes needed on the wall with a marker pen.

c) Insert expansion bolts into the holes, use rubber hammer to knock the expansion bolts into the wall.



For details on the connections, please refer to the wiring connections diagram label on the chassis. The next are the detailed wiring steps.

### 5.2 Required Wire Sizes and Torques

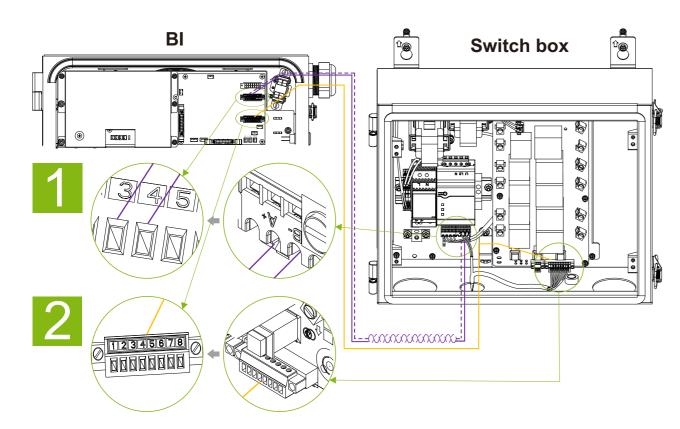
No.	Terminal	Туре	Range	Strip Length	Torque(lbs. in)
1	AC terminals	90 °C(194 °F) 600 V, copper	8-4 AWG	0.5 in./12 mm	31
2	Ground terminals	90 °C(194 °F) 600 V, copper	8 AWG	0.5 in./12 mm	31
3	Relay driver terminals	CAT5 or better	24-18 AWG	0.2 in./6 mm	1.8
4	СТ	90 °C(194 °F) 600 V, copper	24-18 AWG	-	-
5	RS485-meter	CAT5 or better	24-18 AWG	0.2 in./6 mm	1.8

## **5.3 Connection Steps**

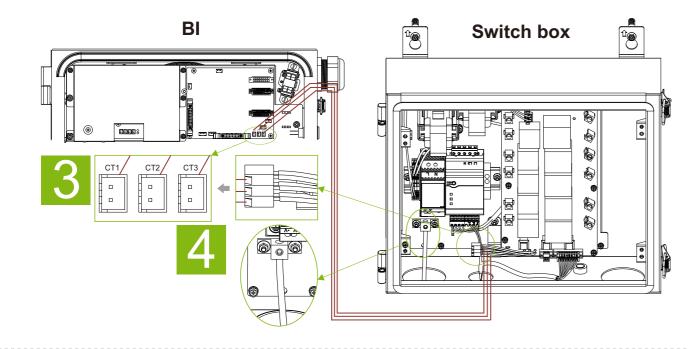
1) Connect RS485 in the Meter.

Connect the A+ to the No.3 pin of AUX 1 of BI Control, and B- to the 4 of AUX 1.

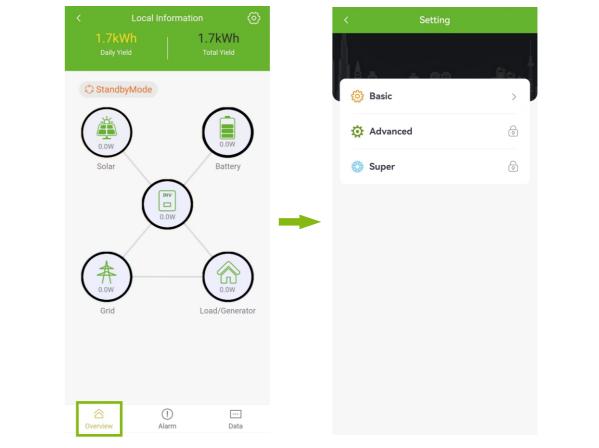
2) Connect 8 pins of COM terminal to the corresponding 8 pins of AUX 2 in the BI Control of BI.



3) Connect CT1, 2, 3 in the Switch box to the CT1, 2, 3 in the BI Control of BI. 4) Connect ground line from panel.



2) Tap the "Gear" in the upper right corner on the Overview page. Then tap "Basic".



3) Tap Smart Switch -> tap "Disable" and click "Enable" and "Save" to enable Smart Switch. The "SolarMeterExt" is set Disable or Enable according to the actual situation.

Date Time ~   Language ~   System Switch ~   Vork Mode ~   Work Mode ~   ARC Detection ~   Smart Switch ~   Smart Switch ~   Clear OverLoad Fault ~
Language  System Switch  Work Mode  ARC Detection  Smart Switch  ARC Detection  Smart Switch  Clear OverLoad Fault  V
System Switch        Work Mode        ARC Detection        Smart Switch        Smart Switch        Clear OverLoad Fault
Work Mode     ~       ARC Detection     ~       Smart Switch        Smart Switch        Clear OverLoad Fault     ~
Arc Detection        Smart Switch        Clear OverLoad Fault
Smart Switch  Clear OverLoad Fault SolarMeterExt
Clear OverLoad Fault ~ SolarMeterExt
Enable Save
Solar Inverter DO1
Solar Inverter Save
Status
Power OW
Solar Inverter
Auto Save
Trig Save

#### Note:

"SolarMeterExt" refers to the Switch box built-in meter. If The "SolarMeterExt" is set to enable, but there is no meter connected, There is a "BI\_BoxMeterComFault" in Alarm List.

4) After Smart Switch is enabled, There are "Solar Inverter DO1", "Smart Load DO2" and "Smart Load DO3". (Only two Dos on the diagram)

For each DO, two modes can be chosen: "Solar inverter" and "Smart switch".

The status and power can show the status and the load consumption of the current channel.

5) When the DOs are in the "smart switch" mode, they can choose "auto" and "manual".

In manual mode, only	< Basic	In auto mode, the
on or off can be	Smart Switch Save	priority start time and

5) Connections of power cable.

The input ports are on the left side, connected to the BI and panel. The output ports are on the right side, connected to the corresponding load.

Please refer to 5.1 Wire connection reference diagram for detailed wiring system wiring scheme.

# 6. APP Setting

The BI controls the ON/OFF of the Switch box load/PV inverter through 3 controllable DO outputs. Users can select smart control mode and manual mode to fine-tune the load power management according to their needs.

# Step 1: Download gPOWER APP

Scan the QR code below or visit https://access.greenworkspower.com to download APP.





### Step 2: Set the Switch box

1) Open the gPOWER app on the smartphone. Click on Local to enter, click on "Scan", and scan the QR code of the inverter WiFi, the password (which can be changed) will appear automatically and you can click on "Login" to log in.

	Local	<	Local		<	
		Registrati	ion No.*		Registratio	n No.ª
				8		
greenwo	POWER	the correspondence to the correspondence to the correspondence to the connect to	e this function, please connect onding GWU-WiFi first, and the ord of the GWU-WiFi below.( If the WIFI module, please ensure e version is 2.32.6 and above! )	n fill in the i cannot e that the	Tip: To use t the correspon local passwo connect to th WIFI module	nding G rd of th e WIFI
User name						
Login account / E-mail						
Password						
				_		
Password						
Remember password	Forgot password					
Login						
Create a new acco	ount					

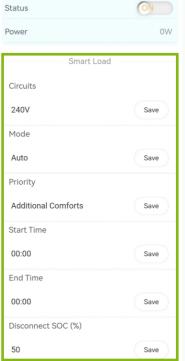
\_\_\_\_\_

Smart Switch	
Enable	Save
SolarMeterExt	
Enable	Save
Smart Load DO1	
Smart Switch	Save
Status	ON
Power	0W
Smart Lo	ad
Circuits	
240V	Save
Mode	
Manual	Save
Manual	
ON	Save

on or on can be chosen.

ON: Closed manually by App. Except for BI failure, manually press the mechanical button on the device to switch and off, and keep it closed.

#### **OFF: Manual** disconnection by App. Except for BI failure, manually press the mechanical button on the device to switch and off, and keep it off.



priority, start time, end time and SOC can be set.

Circuits

Priority definition: **Essential:** Important load (highest priority) Everyday: Daily load (medium priority) Additional comfort: Comfort load (lowest priority)

#### Note:

Smart Switch

Smart Switch Enable SolarMeterEx Enable

Solar Inverte Solar Inverte

Solar Inverte Manual Manual Off

Smart Load D Smart Switch

Status Pow

If the inverter had an overload fault the last time, BI will try to cut off the Additional Comforts and Everyday loads according to the load priority. The Essential load is generally installed on the Backup port and will not be cut off. The inverter tries to start off-grid again. If the load priorities in multiple DOs are the same, the cutting sequence is DO3->DO2->DO1.

### 6) When the DO is in the solar inverter mode, it also can choose auto and manual.

Basic		In manual mode,	< Basic		In auto mode, there is
	^	there are only on and off can be chosen.	System Switch	~	only a trig button.
			Work Mode	$\sim$	The inverter will
	Save	ON: Closed manually by App. Except for BI	ARC Detection	$\checkmark$	automatically turn on or off the inverter
		failure, manually	Smart Switch	^	according to the
	Save	press the mechanical button on the device	Smart Switch		working conditions.
r DO1		to switch and off, and	Enable	Save	Trig, in this state, the
er.	Save	keep it closed.	SolarMeterExt		inverter can be turned
		OFF: Manual	Enable	Save	on manually, and it can only be operated
	ON	disconnection by App.	Solar Inverter DO1		once within 30
r	000	Except for BI failure,	Solar Inverter	Save	minutes.
	Save	manually press the mechanical button on	Status	ON	
		the device to switch	Power	OW	
	Save	and off, and keep it	Solar Inverter		
		off.	Auto	Save	
DO2					
h	Save		Trig	Save	