



# **User Manual**

**Rechargeable Lithium Ion Battery System**Lynx Home U Series



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#### NOTICE

The information in this user manual is subject to change due to product updates or other reasons. This guide cannot replace the product labels or the safety precautions in the user manual unless otherwise specified. All descriptions here are for guidance only.



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# **About This Manual**

This manual describes the product information, installation, electrical connection, commissioning, troubleshooting and maintenance. Read through this manual before installing and operating the product. All the installers and users have to be familiar with the product features, functions, and safety precautions. This manual is subject to update without notice. For more product details and latest documents, visit https://en.goodwe.com.

# 1.1 Applicable Model

This manual applies to the listed models below:

- LX U5.4-L
- LX U5.4-20

# 1.2 Target Audience

This manual applies to trained and knowledgeable technical professionals. The technical personnel has to be familiar with the product, local standards, and electric systems.

# 1.3 Symbol Definition

Different levels of warning messages in this manual are defined as follows:

### DANGER

Indicates a high-level hazard that, if not avoided, will result in death or serious injury.



Indicates a medium-level hazard that, if not avoided, could result in death or serious injury.



Indicates a low-level hazard that, if not avoided, could result in minor or moderate injury.

#### NOTICE

Highlights and supplements the texts. Or some skills and methods to solve product-related problems to save time.

# **Updates**

The latest document contains all the updates made in earlier issues.

#### V1.0 2021-03-30

· First release.

#### V1.1 2021-07-19

• Updated 5.3 System Installation.

#### V1.2 2022-03-15

• Updated 2.2 Symbol Description.

#### V1.3 2022-08-30

- Updated 5.3.3 Cable Connection.
- Updated 6.2 Power On.
- Updated 6.5 Power Off.
- Updated 07 Technical Parameters.

#### V1.4 2022-12-15

- Updated 5.2 Space Requirements.
- Updated 6.2 Power On.

### V1.5 2023-01-15

• Updated 07 Technical Parameters.

#### V1.6 2023-02-15

• Updated 4.1 Storage Environment.

#### V1.7 2023-03-20

• Updated 4.1 Storage Environment.

#### V1.7 2023-08-25

• Updated 5.3.3 Cable Connection.

# **Safety Precaution**

Please strictly follow these safety instructions in the user manual during the operation.

#### NOTICE

The products are designed and tested strictly to comply with related safety rules. Read and follow all the safety instructions and cautions before any operations. Improper operation might cause personal injury or property damage as the products are electrical equipment.

# 2.1 General Safety

#### NOTICE

- The information in this user manual is subject to change due to product updates or other reasons. This guide cannot replace the product labels or the safety precautions in the user manual unless otherwise specified. All descriptions here are for guidance only.
- Before installations, read through the user manual to learn about the product and the precautions.
- · All operations should be performed by trained and knowledgeable technicians who are familiar with local standards and safety regulations.
- · Use insulating tools and wear personal protective equipment (PPE) when operating the equipment to ensure personal safety. Wear anti-static gloves, cloths, and wrist strips when touching electronic devices to protect the equipment from damage.
- Strictly follow the installation, operation, and configuration instructions in this manual. The manufacturer shall not be liable for equipment damage or personal injury if you do not follow the instructions. For more warrant information, please visit: https://en.goodwe.com/ warranty.

# 2.2 Battery Safety

# **DANGER**

- The battery system exists low voltage during the equipment running. Please keep Power
  Off before any operations to avoid danger. Strictly follow all safety precautions outlined in
  this manual and safety labels on the equipment during the operation.
- The inverter used with the battery shall be approved by the battery manufacturer. The
  approved list of battery and the matched inverter can be obtained through the official
  website.
- Do not disassemble, modify, or replace any part of the battery or the power control unit without official authorization from the manufacturer. Otherwise, it will cause electrical shock or damages to the equipment, which shall not be borne by the manufacturer.
- Do not hit, pull, drag, squeeze or step on the equipment or put the battery into fire.
   Otherwise, the battery may explode.
- Do not place the battery in a high temperature environment. Make sure that there is
  no direct sunlight and no heat source near the battery. When the ambient temperature
  exceeds 60 °C, it will cause fire.
- Do not use the battery or the power control unit if it is defective, broken, or damaged.
   Damaged battery may leak electrolyte.
- To protect the battery pack and its components from damage during transportation, please ensure that the transportation personnel are professionally trained. All operations during the transportation have to be recorded. The equipment shall be kept in balance, thus avoiding falling down.
- The battery equipment is heavy. Please equip the corresponding personnel according to its weight, so that the equipment does not exceed the weight range of the human body can carry, and cause personnel injury.
- Contact after-sale service immediately if the battery is not able to be started. Otherwise, the battery might be damaged permanently.
- Do not move the battery system if it is connected with external battery modules. Contact after-sales service if the battery shall be replaced or added.

# ♠ CAUTION

- Protect the battery system from damage during transportation and storage.
- The transportation must be carried out by trained professionals. All operations during the process have to be recorded.
- Keep the equipment stable to avoid dumping, which can result in equipment damage and personal injuries.
- Place the cables at least 30mm away from the heating components or heat sources, otherwise the insulation layer of the cables may be aging or broken due to high temperature.
- Tie the cables of the same type together, and place cables of different types at least 30mm apart. Do not place the cables entangled or crossed.

## **Label Description**

Symbol	Description	Symbol	Description
	Potential risks exist. Wear proper PPE before any operations.		Install the equipment away from fire sources.
A	High voltage hazard. Power off the equipment first before any operations.		Keep the equipment away from children.
	Operate the equipment properly to avoid explosion danger.		No extinguishing with water.
	The equipment contains corrosive electrolytes. In case of a leak in the equipment, avoid contact the leaked liquid or gas.		Do not dispose of the equipment with household garbage at its end of life.
	Read through the user manual before any operations.		Put the battery in the right place and recycle it in compliance with local environmental regulations.
	Pay attention to safety protection during installation	( (	CE Mark
	RCM Mark		Grounding. To indicate PE cable connection position.

# 2.3 Emergency Measures

## **Battery Electrolyte Leakage**

If the battery module leaks electrolyte, avoid contact with the leaking liquid or gas. The electrolyte is corrosive. It will cause skin irritation or chemical burn to the operator. Anyone contact the leaked substance accidentally has to do as following:

- Breath in the leaked substance: Evacuate from the polluted area, and seek immediate medical assistance.
- Eye contact: Rinse your eyes for at least 15 minutes with clean water and seek immediate medical assistance.
- Skin contact: Thoroughly wash the touch area with soap and clean water, and seek immediate medical assistance.
- **Ingestion**: Induce vomiting, and seek immediate medical assistance.

#### Fire

- The battery may explode when the ambient temperature exceeds 150°C. Poisonous and hazard gas may be released if the battery is on fire.
- In the event of a fire, please make sure that the carbon dioxide extinguisher or Novac1230 or FM-200 is nearby.
- The fire cannot be put out by water or ABC dry powder extinguisher. Firefighters are required
  to wear full protective clothing and self-contained breathing apparatus.

# 2.4 EU Declaration of Conformity

GoodWe Technologies Co., Ltd. hereby declares that the inverter without wireless communication modules sold in the European market meets the requirements of the following directives:

- Electromagnetic compatibility Directive 2014/30/EU (EMC)
- Electrical Apparatus Low Voltage Directive 2014/35/EU (LVD)
- Battery Directive 2006/66/EC and Amending Directive 2013/56/EU
- Waste Electrical and Electronic Equipment 2012/19/EU
- Registration, Evaluation, Authorization and Restriction of Chemicals (EC) No 1907/2006 (REACH)

You can download the EU Declaration of Conformity on the official website: <a href="https://en.goodwe.com">https://en.goodwe.com</a>.

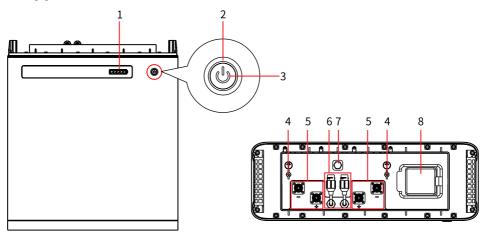
#### **Product Introduction** 03

- This manual introduces Lynx Home U Series(LV) Battery System (hereinafter referred to as the Battery System), including the product introduction, application, installation, commission, and technical parameters, etc.
- At most 6 batteries can be connected in this Battery System.
- The battery system can be compatible with the following inverter series:



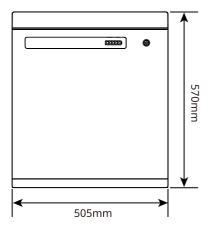
Goodwe Inverter

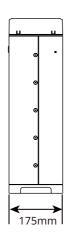
# 3.1 Appearance

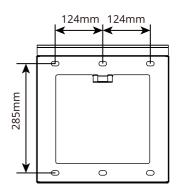


No.	Parts	
1	SOC Indicator	
2	Switch Button	
3	Button Indicator	
4	Grounding Teminal	
5	Power Cable Port	
6	CAN COM Port	
7	Ventilation Valve	
8	Circuit-Breaker	

# 3.2 Dimensions







# 04 Storage and Package

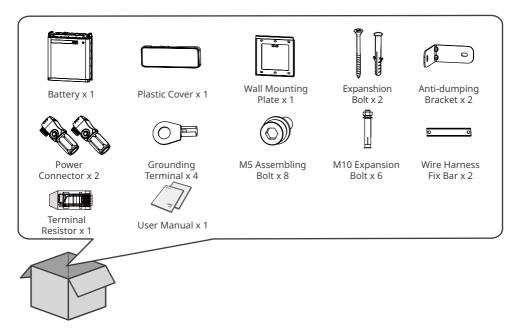
## 4.1 Storage Environment

If the equipment is not to be installed or used immediately, please ensure that the storage environment meets the following requirements:

- Pack the equipment using a packing box and put some desiccant in the box before sealing.
- Put the equipment back to the packing box if it is not to be installed in 3 days after unpacking.
- Storage SOC: 25%~50%SOC. Charge and discharge the battery every 6 months.
- Recommended storage temperature: 0°C~35°C (less than one year), -20°C~0°C or 35°C~40°C (less than one month).
- Recommended storage humidity: 0%~95%RH(no condensation). Do not install the battery if any moist or condensation is found.
- Place the guipment in a cool place where away from direct sunlight.
- Keep the equipment away from inflammable, explosive, and corrosive matters.
- Keep the equipment away from the rain.

# 4.2 Packing List

- Check outer packing for damage and model before unpacking it. If you find any damage or the model is not what you requested, do not unpack the product and contact the after-sales service as soon as possible.
- Check whether the deliverables are intact and complete first after unpacking the battery.If anything wrong, contact the after-sales service as soon as possible.



# **05** System Installation

# **5.1 Installation Environment**

- Install the Battery System on the ground with sufficient bearing capacity and flatness. Increase the bearing capacity and flatness of the ground by laying the foundation, adding bearing plates and so on.
- The optimal temperature for the battery is 20~40°C.
- Avoid exposing the equipment to direct sunlight or rain.
- Install the equipment away from heat/cold source.
- Do not install the equipment in the place where the temperature changes extremely.
- Install the equipment away from strong interferences to ensure its regular work.
- Keep children away from the equipment.
- Do not install the equipment in places prone to accumulate water.
- Do not put inflammable or explosive matters near the equipment.

# **5.2 Space Requirements**

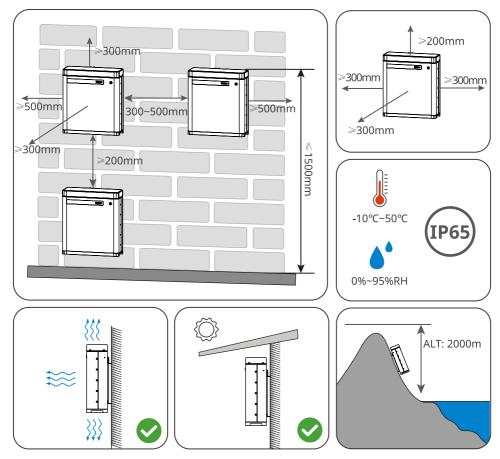
#### NOTICE

The space between the left and the right battery is a recommened distance. Keep the distance as short as you can if there is no influence to the operation.









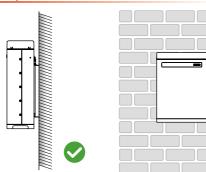
The installation distance shall statisfy the requirements of the battery and the inverter at the same time when an inverter is connected with the battery system. For the installation distance requirement of the inveter, please refer to the related inverter's user manual.

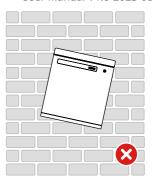
#### **Mounting Support Requirements**

- The mounting support shall be nonflammable and fireproof.
- Install the equipment on a surface that is solid enough to bear the product weight.
- Put the battery system near the wall and install the locking brackets to prevent the battery from falling down

#### **Installation Angle Requirements**

• Install the equipment vertically, no tilt or upside down.





# 5.3 System Installation

#### **NOTICE**

If multi batteries are to be connected, check and select batteries with similar production date and a same cell grade.

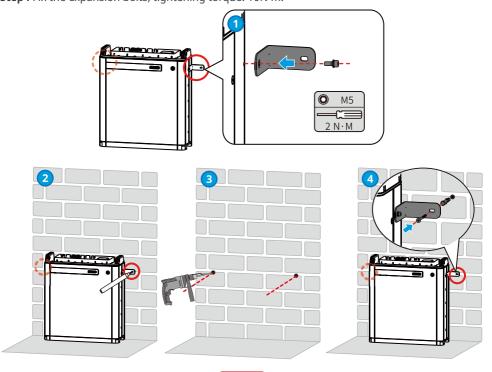
# **5.3.1 Floor Mounting**

**Step1** Screw the anti-dumping bracke on the battery.

**Step2** Align the battery and the wall, then put the anti-dumping bracket close to the wall. Mark the drilling position and remove the battery.

**Step3** Drill a hole on the wall using the driller. Hole diameter 10mm and depth 80mm.

**Step4** Fix the expansion bolts, tightening torque: 10N·m.



# 5.3.2 Wall Mounting

### **NOTICE**

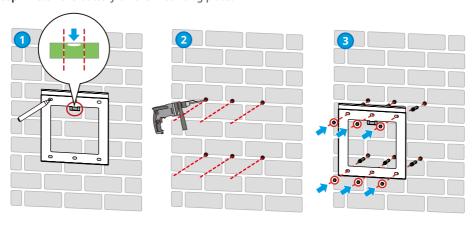
Wall mounting needs to be done by two persons.

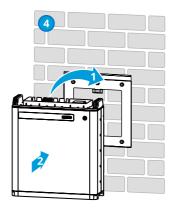
Step1 Place the wall mounting plate close to the wall firmly, mark the drilling position and remove the wall mounting plate.

**Step2** Drill a hole on the wall using the driller. Hole diameter 13mm and depth 65mm.

**Step3** Fix the M10 expansion bolts, tightening torque: 10N·m.

Step4 Install the battery on the mounting plate.



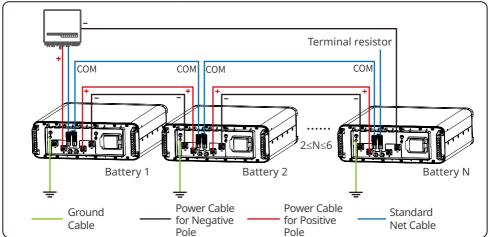




#### 5.3.3 Cable Connection

#### Overview of the cable connection

Take SBP inverter series as an example connection here.



#### **Ground Cable Connection**

#### NOTICE

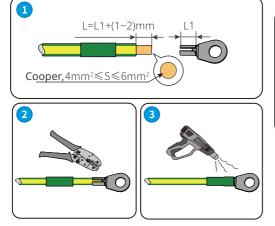
- Connect the PE cable first before installing the equipment. Disconnect the PE cable before dismantling the equipment.
- The drawing force of the cables after crimping is at least 400N.
- Connect any one of the two ground cables to the ground. Reserve the other ground cable.
- The cross-sectional area of the PE cable conductor: 4-6mm<sup>2</sup>. The cable should meet standards for outdoor use.

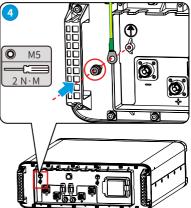
Step1 Prepare PE cable.

**Step2** Crimp the PE cable.

Step3 Install the Heat shrink tube.

**Step4** Connect the PE cable to the battery.





### **Power Cable Connection**

#### NOTICE

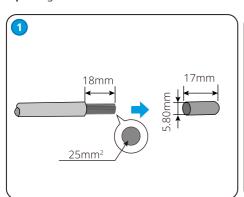
- Connect the red power cable to the red wire harness, and the black power cable to the black wire harness. The cross-sectional area of the crimping part is 25mm<sup>2</sup>.
- Withstand Voltage: DC1500V; Temperature: -40°C~200°C.
- Stripped conductor length: 18±1mm.
- Secure the back shell and check whether there is any gap.
- Recommended tool: manual hydraulic press plier(mould:25mm²)
- Drawing force after crimping≥1200N.
- If a single battery is applied, you are suggested to connect any one of the two power ports and cover the other port using the protective cover.
- · Connect power cables between multi batteries in parallel, which means connect postive pole of one battery to the positive pole of the next battery, and negative pole to negative pole. Cover and protect the reserved power port of the last battery.
- The power cable between the batteries should be as short as it can be and meet installation requirements.

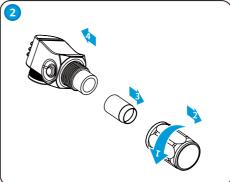
Step1 Prepare Power cable.

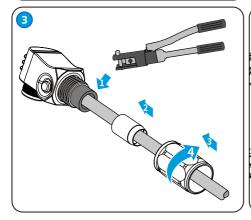
**Step2** Disassemble the Power connector.

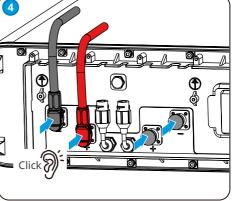
**Step3** Insert the Power Cable into the Power connector.

**Step4** Plug the Power connector into the Power Cable Port.









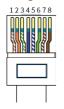
#### **Communication Cable Connection**

#### NOTICE

The two communication cables are the same.

- Do not use RJ45 cable with protective cover.
- When one battery is applied, connect one communication cable to the inverter by RJ45 connector and connect the other cable to the terminal resistance.
- When multiple batteries are applied, connect the communication ports in series using net cables. Connect one communication cable of the last battery to the terminal resistance.

#### **RJ45 Registered Jack**

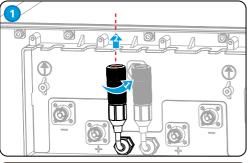


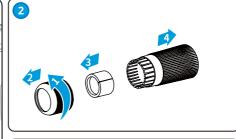


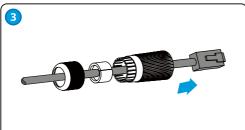
#### **CAN COM Port**

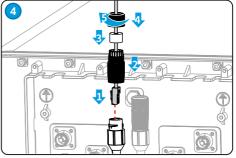
PIN	LX U5.4-L	LX U5.4-20
1	N/A	RS485_A
2	N/A	RS485_B
4	CAN_H	CAN_H
5	CAN_L	CAN_L
3,6,7,8	N/A	N/A

- **Step1** Remove the waterproof module.
- **Step2** Disassemble the waterproof module.
- **Step3** Route the cable through the waterproof module.
- **Step4** Connect the communication cable to the battery.

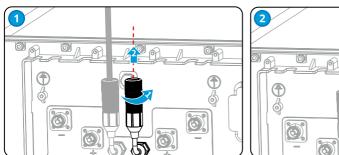


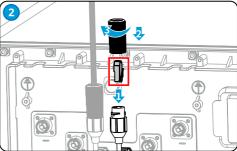




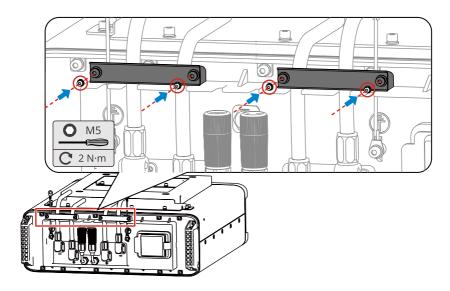


# Installing the terminal resistor





# 5.3.4 Install the Wire Harness Fix Bar



# 06 System Operation

# **6.1 Check Before Power On**

Check the following items before power on. Otherwise, the Battery System may be damaged.

No.	Items
1	The equipment is installed firmly in a place where is convenient for operation and maintenance. The installation place is clean and well ventilated.
2	The ground cable, power cable, communication cable and terminal resistance are connected correctly and securely.
3	The cable ties meet the cabling requirements and are reasonably distributed. No cables or ties are broken.
4	Unused ports are sealed.

### 6.2 Power On

#### NOTICE

- The DC breaker between the inverter and the battery, and between the two batteries, shall be installed in accordance with local laws and regulations.
- The breaker should isolate both positive and negative conductors simultaneously.

#### LX U5.4-L

**Step1** (Optional) Turn on the breaker between the inverter and the battery system.

Step2 (Optional) Turn on the breaker between the batteries (For parallelized batteries).

**Step3** Turn on the inverter in the system following the instructions in the user manual of the inverter.

**Step4** Turn on the Circuit-Breaker.

**Step5** Press the switch button of all batteries in 30s, otherwise the equipment will start alarming.

#### LX U5.4-20

Step1 (Optional) Turn on the breaker between the inverter and the battery system.

**Step2** (Optional) Turn on the breaker between the batteries (For parallelized batteries).

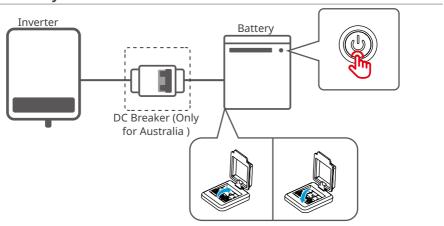
Step3 Turn on the Circuit-Breaker.

**Step4** Press the battery buttons. (Only press one battery's button when batteries are in parallelized connection.)

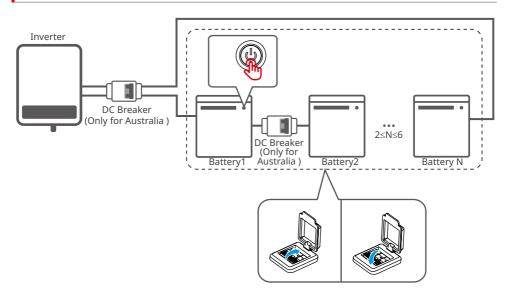
**Step5** Turn on the inverter in the system following the instructions in the user manual of the inverter.



# Single battery



# Parallelized batteries



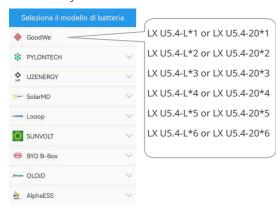
# **6.3 Battery Parameter Settings**

Select the right options on SolarGo after connecting the battery and the inverter.

APP Installatin and Connection:



Select the battery model on SolarGo:



Select "LX U5.4-L or LX U5.4-20" on SolarGo.

#### NOTICE

"Battery Selection Abnormal" will be displayed if you select the wrong battery model. Please select the right battery model accordingly.

# 6.4 Indicator Status(LX U5.4-L)



SOC Indicator Button Indicator

Button Indicator	Status
Green Light	Standby, Working, Alert
Red Light	Faulty



### 6.4.1 Normal State

Button Indicator	SOC Indicator	Description
Standby:green light blinking for 1s Working:green light on		SOC<5%
		5%≤SOC<25%
		25%≤SOC<50%
		50%≤SOC<75%
		75%≤SOC<95%
		SOC≥95%

# 6.4.2 Alerting

<del>_</del>			
Button Indicator	SOC Indicator	Alerting	Solutions
		Temperature Exception	Power off and restart after 2 hours.If the
		High Temperature	problem persists, please contact GoodWe.
		Low Temperature Discharging	Power off and Wait for the temperature to increase. Restart the battery. If the problem persists, please contact GoodWe.
		Overcurrent When Charging	
Green light		Overcurrent When Discharging	Restart the battery. If the problem persists please contact GoodWe.
blingking for 3s		Overvoltage	
	Under voltage if you can charge the	Press the button consecutively for 5 times in 10s if you can charge the battery. The voltage will recover to normal.	
		Low Temperature Charging	Power off and Wait for the temperature to increase. Restart the battery. If the problem persists, please contact GoodWe.
		The cell voltage difference is extremely high	Power off and restart after 2 hours.If the problem persists, please contact GoodWe.

### **NOTICE**

- Restart the battery by pressing the switch button. If the batteries power off under undervoltage protection and multiple batteries are connected, just press the button of any one battery consecutively for 5 times to activate them.

# **6.4.3 Faulty**

Button Indicator	SOC Indicator	Fault	Solution
		Temp. sensor failure	Restart the battery. If the problem persists,
		MOS Failure	please contact GoodWe for help.
		Circuit-Breaker Failure	Turn on the Circuit-Breaker.If the problem persists, please contact GoodWe.
		Slaver Control Communication Lost	Power off and check the communication cable. Restart the battery.If the problem persists, please contact GoodWe.
		SN Failure	Contact GoodWe for help.
Red light blinking for 3s		Master Control Communication Lost	Power off and check the communication cable. Restart the battery.If the problem persists, please contact GoodWe.
		Inconsistent Software Version	Contact GoodWe for help.
		Multi Master Control Failure	Start all batteries in 30s after shutting down.
		MOS Overtemperature	Power off for 2 hours.If the problem persists, please contact GoodWe.
		Communication Failure	Power off and check the communication cable. Restart the battery. If the problem persists, please contact GoodWe.



# 6.5 Indicator Status(LX U5.4-20)



Button Indicator	Status
Green Light	Standby, Working
Red Light	Alert, Faulty

### 6.5.1 Normal State

Button Indicator	SOC Indicator	Description
		SOC<5%
Idla grapp light blink 2		5%≤SOC<25%
Idle: green light blink 2 times in 1 second Standby: green light blink 1 time in 1 second Working: Steady green		25%≤SOC<50%
		50%≤SOC<75%
		75%≤SOC<95%
		SOC≥95%

### **NOTICE**

- The SOC indicator keeps on when charging.
- The SOC indicator blinks one time when discharging.

# 6.5.2 Alerting

Button Indicator	SOC Indicator	Solution
Red light blink 1 time in 1 second		The alerting is dealt by the battery system itself. For more
		detailed information, you can check via SolarGo App.

# **6.5.3 Faulty**

# NOTICE

• Restart the battery by pressing the switch button.

Button Indicator	SOC Indicator	Fault	Solution		
Steady red		Overvoltage	Power off for 2 hours.If the problem persists, please contact GoodWe.		
Red light blink 1 time in 1 second		Under voltage	Contact GoodWe for help.		
		Cell High Temperature	Power off for 2 hours.If the problem persists, please contact GoodWe.		
		Low Temperature Charging	Power off the equipment and wait until the temperature recovers. If the problem persists after restarting, please contact GoodWe.		
		Low Temperature Discharging	Power off the equipment and wait until the temperature recovers. If the problem persists after restarting, please contact GoodWe.		
		Overcurrent When Charging	Restart the battery. If the problem persists,		
		Overcurrent When Discharging	please contact GoodWe for help.		
		Temperature Exception	Power off for 2 hours.If the problem persists, please contact GoodWe.		
		The cell voltage difference is extremely high	Power off for 12 hours.If the problem persists, please contact GoodWe.		
Steady red		Harness Abnormal			
		MOS Open-Circuit Fault	Restart the battery. If the problem persists, please contact GoodWe for help.		
		MOS Short-Circuit Fault			
		Parallelized Connection Fault	Check the battery model. If the battery model is not correct, please contact GoodWe.		
		BMU Communication Fault	Restart the battery. If the problem persists,		
		MCU Internal Communication Fault	please contact GoodWe for help.		
		Air Switch Short- Circuit Fault	Contact GoodWe for help.		

	Precharge Failure	Restart the battery. If the problem persists, please contact GoodWe for help.	
Standard	MOS Overtemperature Fault	Power off for 2 hours.If the problem persists, please contact GoodWe.	
Steady red	Current Sensor Overtemperature Fault	Power off for 2 hours.If the problem persists, please contact GoodWe.	
	Microelectronic Fault	Contact GoodWe for help.	

#### 6.6 Power Off

Please follow the steps to power off the Battery System, otherwise, the System may be damaged.

#### LX U5.4-L

Step1 Press the switch button for at least 5s until the indicator lights off. Press the button of any one battey if multi batteries are connected.

Step2 Turn off the Circuit-Breaker.

**Step3** Make sure that the SOC indicator of the battery is off.

#### LX U5.4-20

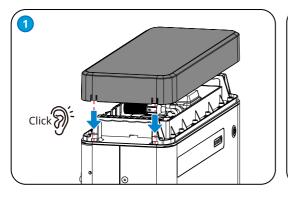
**Step1** Disconnect the circuit breakers of all batteries.

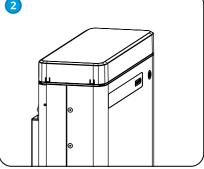
**Step2** Make sure that the SOC indicator of the battery is off.

# 6.7 Install the Plastic Cover

#### **NOTICE**

- Ensure that the battery can work normally before installing the cover.
- Do not press the cables during installation.





# 07 Technical Parameters

Techni	ical Data	LX U5.4-L	2*LX U5.4-L	3*LX U5.4-L	4*LX U5.4-L	5*LX U5.4-L	6*LX U5.4-L		
Rated Ene	rgy (kWh)*1	5.4	10.8	16.2	21.6	27	32.4		
Usable Ene	ergy (kWh)*2	4.8	9.6	14.4	19.2	24	28.8		
Cel	l Туре			LFP(l	iFePO4)				
Cell Con	figuration	16S1P 16S2P 16S3P 16S4P 16S5P 16S6P				16S6P			
Rated V	oltage (V)			5	1.2 V				
Operating Vo	ltage Range (V)			48	~57.6				
	uous Discharge nt (A)*3	50			100				
	narge Power W)*3	2.88 5.76							
Short-Circ	cuit Current	2.323kA@1.0ms							
Commi	unication	CAN							
Weig	ht (Kg)	57	114	171	228	285	342		
Dimensions	(W*D*H) (mm)	505×570×175 (LX U5.4-L)							
Operating Te	mperature (°C)	Charge:0~+50 / Discharge:-10~+50							
Storage ten	nperature (°C)	-20~+40 (≤One Month) / 0~+35 (≤One Year)							
Hur	nidity	0~95%							
Altitu	ude (m)			2	2000				
Protecti	on Degree	IP65							
Installati	on Location	Wall-Mounted / Ground-Mounted							
Round-tri	p Efficiency	93.0%							
Cycl	e Life*4	≥ 4000 @0.5C/0.5C							
	Safety			IEC62619, I	EC 62040, CE	C			
Standard and	ЕМС	CE, RCM				CE, RCM			
Certification	Transportation	UN38.3							
*1: Tost condit	ions Coll Voltage	ne 2.5~3.65V, 0.5C charge & discharge at +25+2 °C for hattery system at							

<sup>\*1:</sup> Test conditions, Cell Voltage 2.5~3.65V, 0.5C charge & discharge at +25±2 °C for battery system at beginning life. System Usable Energy may vary with different Inverter.

<sup>\*2:</sup> Test conditions, 90% DOD, 0.5C charge & discharge at +25±2 °C.

<sup>\*3:</sup> Nominal Dis-/Charge Current and power derating will occur related to Temperature and SOC.

<sup>\*4:</sup> Based on Cell under 0.5C/0.5C @ 25±2°C test condition and 80% EOL.

Techn	ical Data	LX U5.4-20	2*LX U5.4-20	3*LX U5.4-20	4*LX U5.4-20	5*LX U5.4-20	6*LX U5.4-20
Usable En	ergy (kWh)*1	5.4 kWh	10.8 kWh	16.2 kWh	21.6 kWh	27 kWh	32.4 kWh
Cel	I Туре	LFP(LiFePO4)					
Cell Con	figuration	16S1P	16S1P 16S2P 16S3P 16S4P 16S5P 16S6P			16S6P	
Nominal	Voltage (V)		51.2				
Operating Vo	ltage Range (V)	47.5~57.6					
	Dis-/Charge ent (A)*²	50			100		
Nominal I	Power (kW)*2	2.56			5.12		
Short-Cire	cuit Current	2.323kA@1.0ms					
Comm	unication	CAN, RS485					
Weig	ht (Kg)	57 114 171 228 285 342				342	
Dimensions	(W*D*H mm)	505×570×175 (LX U5.4-20)					
	Temperature ge (°C)	Charge:0~+50 / Discharge:-10~+50					
Storage Ter	nperature (°C)	-20~+40 (≤ One Month) / 0~+35 (≤One Year)					
Relative	Humidity	0~95%					
Max. Operati	ng Altitude (m)	2000					
Ingress Pro	tection Rating	IP65					
Mountir	ng Method	Wall-Mounted / Grounded					
Round-tri	p Efficiency	95.0%					
Cycl	e Life*³	≥ 4000 @0.5C/0.5C					
	Safety	IEC62619, IEC63056, IEC 62040, CEC					
Standard and Certification	ЕМС	CE, RCM					
Continuation	Transportation UN38.3						

<sup>\*1:</sup> Test conditions, Cell Voltage 2.5~3.65V, 0.5C charge & discharge at +25±3 °C for battery system at beginning life. System Usable Energy may vary with different Inverter. \*2: Nominal Dis-/Charge Current and power derating will occur related to Temperature and SOC.

<sup>\*3:</sup> Based on Cell under 0.5C/0.5C @ 25±2°C test condition and 80% EOL.

#### For Australia:

Techni	ical Data	LX U5.4-20	2*LX U5.4-20	3*LX U5.4-20	4*LX U5.4-20	5*LX U5.4-20	6*LX U5.4-20	
Rated En	ergy (kWh)	5.4	10.8	16.2	21.6	27.0	32.4	
Usable En	ergy (kWh)*1	5.4	10.8	16.2	21.6	27.0	32.4	
Cel	I Туре		LFP(LiFePO4)					
Cell Con	figuration	16S1P 16S2P 16S3P 16S4P 16S5P 16S6P			16S6P			
Rated Ca	pacity (Ah)	105	210	315	420	525	630	
Nominal	Voltage (V)	51.2						
Rated DC	Power (kW)	2.56 5.12						
Operating Vo	ltage Range (V)	47.5~57.6						
	g / Discharging ent (A)	50 100						
	g / Discharging er (kW)	2.56 5.12						
Fault c	urrent (A)	990 1265 1393 1469 1518 1552				1552		
Operating Te	emperature (°C)	Charge: 0 ~ +50; Discharge: -10 ~ +50						
Relative	Humidity	0 ~ 95%						
Max. Operati	ng Altitude (m)	2000						
Commi	unication	CAN, RS485						
Weig	ıht (Kg)	57 114 171 228 285 342				342		
Dimensions	(W×H×D mm)	505×570×175 (LX U5.4-20)						
Ingress Pro	tection Rating	IP65						
Mountir	ng Method	Wall Mounted / Grounded						
Wai	rranty	10 Years (Performance Warranty) / 10 Years (Product Warranty)				ranty)		
	Safety	IEC62619, IEC63056, IEC 62040, CEC						
Standard and EMC CE, RCM								
Certification	Transportation	UN38.3						
*1: Test condi	tions, Cell Voltage	tage 2.5~3.65V, 0.5C charge & discharge at +25±2 °C for battery system at						

<sup>\*1:</sup> Test conditions, Cell Voltage 2.5~3.65V, 0.5C charge & discharge at +25±2 °C for battery system at beginning life. System Usable Energy may vary with different Inverter.



#### Maintenance 08

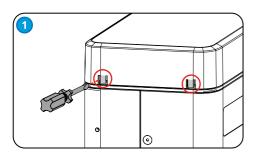
Item	Period
Fully charge the battery and discharge it to 25~50% if the battery is not in use.	Once Every 6 months
Check the wall mounting plate, fix it if it is not secured.	Once Every 6 months
Check whether the outer shell is broken. Repair the painting or contact after-sales service if there is any broken.	Once Every 6 months
Check whether there is an exposed cable. Replace the exposed cable or contact after-sales service for help.	Once Every 6 months
Check whether there is debris accumulation around the battery to avoid affecting heat dissipation.	Once Every 6 months
Check for water and pest to avoid prolonged intrusion.	Once Every 6 months

#### **WARNING**

- Please contact after-sales for help if you find any problems that may influence the battery or the inverter. Disassemble without permission is strictly forbidden.
- · Please contact after-sales for help if the conductive wire is exposed because high voltage danger exists. Do not touch or disassemble privately.
- In case of other emergencies, contact the after-sales as soon as possible. Please operate following the guidance of the after-sales, or just wait for the after-sales service operators.

#### Remove the Plastic Cover

Gently pry up two clips on one side using a screwdriver to remove the plastic cover.







# GoodWe Technologies Co., Ltd.



