

*Power the World*

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# USER MANUAL

**Power wall**

**P/R/F Series**

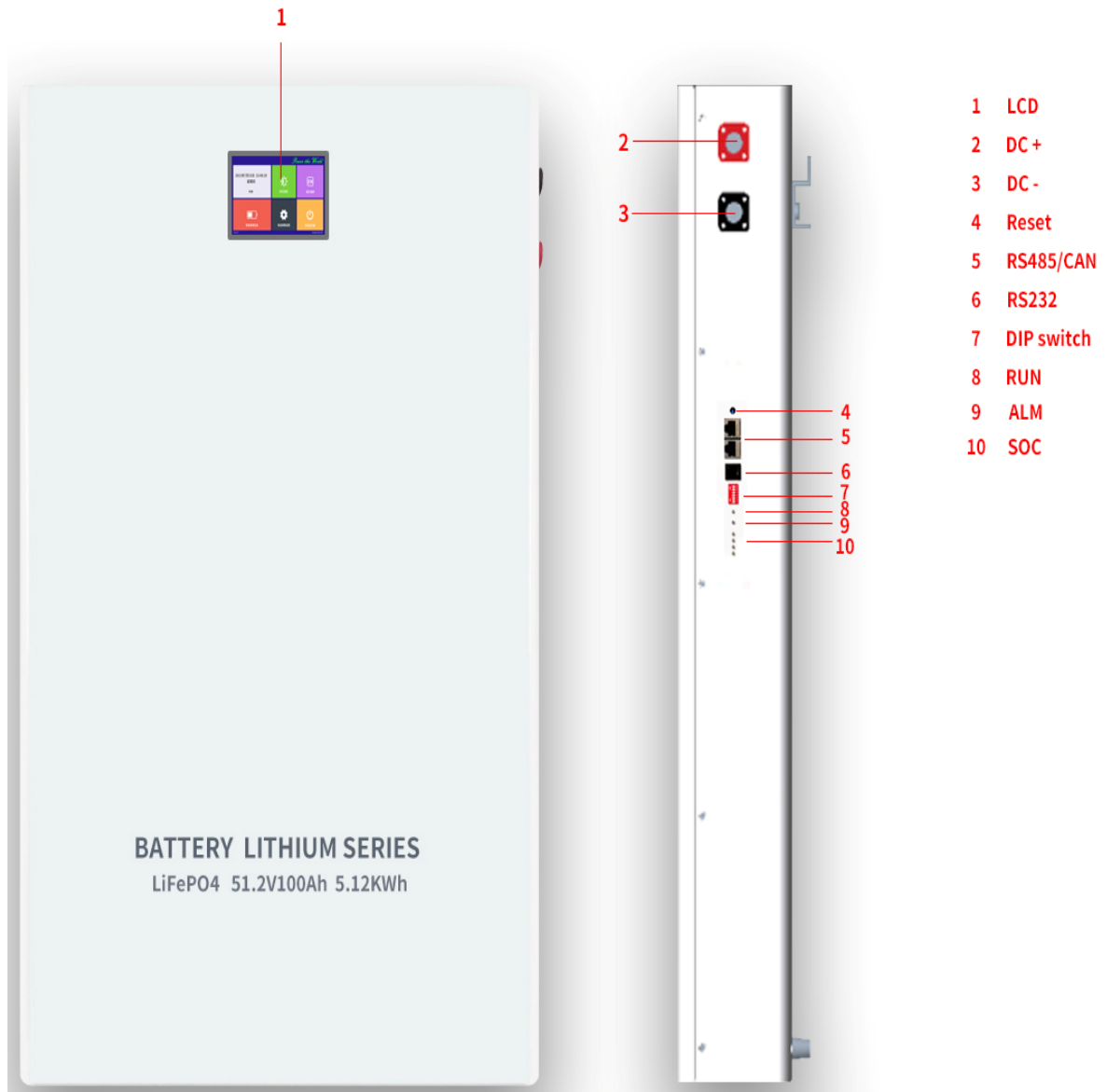
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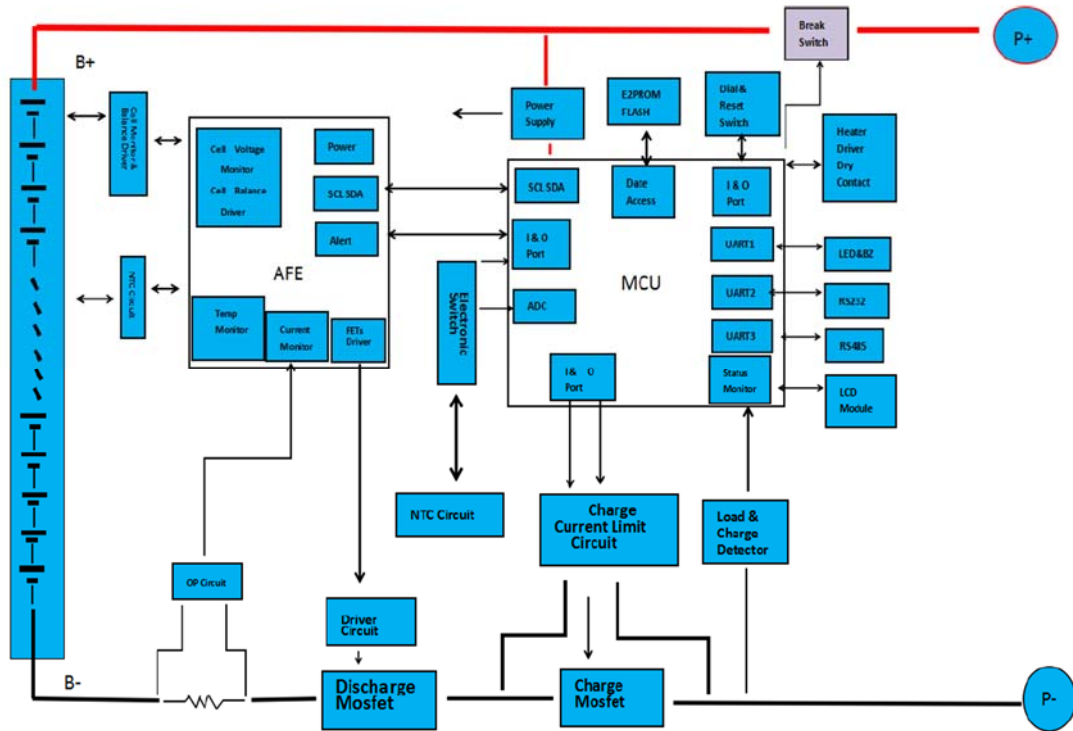
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## 1. PRODUCT INSTRUCTION

### 1.1 PRODUCT OVERVIEW



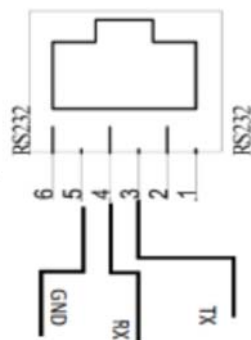
## 1.2 BASIC SYSTEM ARCHITECTURE



## 1.3 COMMUNICATION INTERFACE

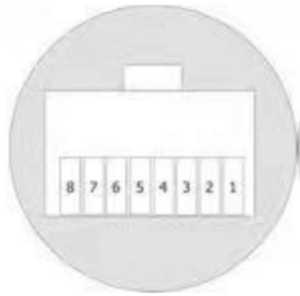


### 1.3.1 RS232 INTERFACE



## 1.3.2 RS485/CAN INTERFACE

- 1 - Ext Sync
- 2 - GND
- 3 - None
- 4 - CAN H
- 5 - CAN L
- 6 - GND
- 7 - RS485-A+
- 8 - RS485-B-



## 1.4 BATTERY ADDRESS SETTING



DIP	1	2	3	4	5	6	address	address (H)
status	0	0	0	0	0	0	16	0X10
	0	1	1	1	1	0	1	0x01
	0	1	0	0	0	0	2	0x02
	0	0	1	0	0	0	3	0x03
	0	1	1	0	0	0	4	0x04
	0	0	0	1	0	0	5	0x05
	0	1	0	1	0	0	6	0x06
	0	0	1	1	0	0	7	0x07
	0	1	1	1	0	0	8	0x08
	0	0	0	0	1	0	9	0x09
	0	1	0	0	1	0	10	0x0A
	0	0	1	0	1	0	11	0x0B
	0	1	1	0	1	0	12	0x0C
	0	0	0	1	1	0	13	0x0D
	0	1	0	1	1	0	14	0x0E
	0	0	1	1	1	0	15	0x0F
note: this DIP switch 0 is off, 1is on								

1.5 PARAMETER

**BA-32S-R/32S-P BA-34S-R/34S-P**

Battery PACK parameter Specification				
Model	BA-32S-R	BA-32S-P	BA-34S-R	BA-34S-P
Cell pack basic parameter				
Pack Nominal Voltage/V	51.2	51.2	51.2	51.2
Cell model	34135192	34135192	43173205	43173205
Cell nominal Voltage/V	3.2	3.2	3.2	3.2
Max charge Voltage/V	3.65	3.65	3.65	3.65
Cell nominal voltage/AH	100	100	150	150
Cell MAX Discharge rate/C	2	2	2	2
Cell MAX charge Rate / C	1	1	1	1
Cell in series	16	16	16	16
Cell in parallel	1	1	1	1
Battery pack method	Laser welding	Laser welding	Laser welding	Laser welding
Battery pack Energy/KWH	5.12	5.12	7.68	7.68
battery parameter				
BMS Type	Software	Software	Software	Software
Discharge				
Operating Voltage Range/V	40-58.4	40-58.4	40-58.4	40-58.4
continuous current/A	100	100	150	150
over current/A	110	110	165	165
over current delay/S	5	1	5	1
Short circuit current/A	300	300	450	450
Short circuit current delay/ $\mu$ S	448	448	448	448
Charge				
charger voltage(MAX)/V	58.4	58.4	58.4	58.4
Type current/A	50	50	75	75

continuous current(MAX)/A	100	100	150	150
Cut-off Voltage/V	58.4	58.4	58.4	58.4
Cut-off current/A	0-1	0-1	0-1	0-1
<b>Protection</b>				
Cell over voltage Alarm/V	3.6	3.6	3.6	3.6
Cell over voltage Alarm resume/V	3.4	3.4	3.4	3.4
Cell over voltage protection/V	3.65	3.65	3.65	3.65
Cell over voltage protection resume/V	3.4	3.4	3.4	3.4
Cell over voltage protection delay/S	1	1	1	1
PACK over voltage Alarm/V	57.6	57.6	57.6	57.6
PACK over voltage Alarm resume/V	54.4	54.4	54.4	54.4
Pack over voltage Protection/V	58.4	58.4	58.4	58.4
Pack over voltage Protection resume/V	54.4	54.4	54.4	54.4
Pack over voltage Protection delay/S	5	5	5	5
Cell under voltage Alarm/V	2.800	2.800	2.800	2.800
Cell under voltage protection/V	2.700	2.700	2.700	2.700
PACK under voltage Alarm/V	44.8	44.8	44.8	44.8
Pack under voltage Protection/V	43.2	43.2	43.2	43.2
charge over current alarm /A	100	100	150	150
charge over current protection /A	110	110	165	165
charge over current protection delay/S	1	1	1	1
Loader detect	YES	YES	YES	YES
short circuit current protection /A	300	300	450	450
charging High temperature prtction/°C	60	60	60	60
charging High temperature prtction resume/°C	55	55	55	55



charging low temperature /°C	-2	-2	-2	-2
charging low temperature resume/°C	0	0	0	0
Discharging High temperature protection /°C	70	70	70	70
Discharging High temperature protection resume /°C	60	60	60	60
Discharging low temperature protection /°C	-20	-20	-20	-20
Discharging low temperature protection resume /°C	-15	-15	-15	-15

## Interface

charge/Discharge port	M8 bolt	6mm Socket	M8 bolt	M8 bolt
RS232	RJ25	RJ25	RJ25	RJ25
RS485	RJ45	RJ45	RJ45	RJ45
CAN	RJ45	RJ45	RJ45	RJ45
LED Display	3.5/7'	3.5/7'	3.5/7'	3.5/7'
Bluetooth	touchable	touchable	touchable	touchable
charge limit	YES	YES	YES	YES
heater	YES	YES	YES	YES
Cooler	support	support	support	support
battery Case material	Support	Support	Support	Support
	metal	metal	metal	metal

battery dimension

Net weight

**BA-32S-R**  
482mm\*390mm\*240mm



**BA-32S-P**  
480mm\*85mm\*720mm



**BA-34S-R**  
482mm\*440mm\*240mm



**BA-34S-P**  
500mm\*105mm\*850mm



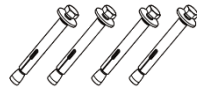
## 2. INSTALLATION

### 2.1 PARTS LIST

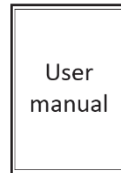
Check the equipment before installation. Please make sure nothing is damaged in the package.

You should have received the items in the following package:

**BA-32S-P**  
480mm\*85mm\*720mm



Stainless steel anti-collision  
bolt M8×80



User manual x1



Parallel communication  
cable x1



### 2.2 MOUNTING INSTRUCTIONS INSTALLATION PRECAUTION

### 2.3 LOAD CONNECTION

## 3. PARALLEL

## 4. OPERATION

### 4.1 POWER ON/OFF

### 4.2 OPERATION AND DISPLAY PANEL

## 5. LCD DISPLAY ICONS

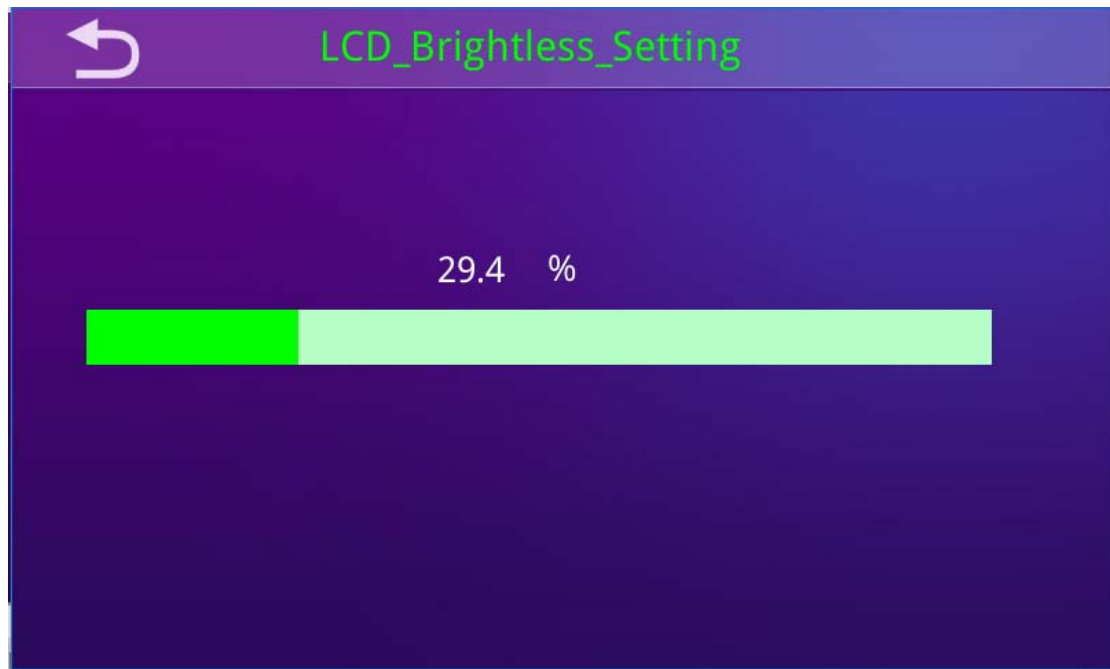
### 5.1 MAIN SCREEN



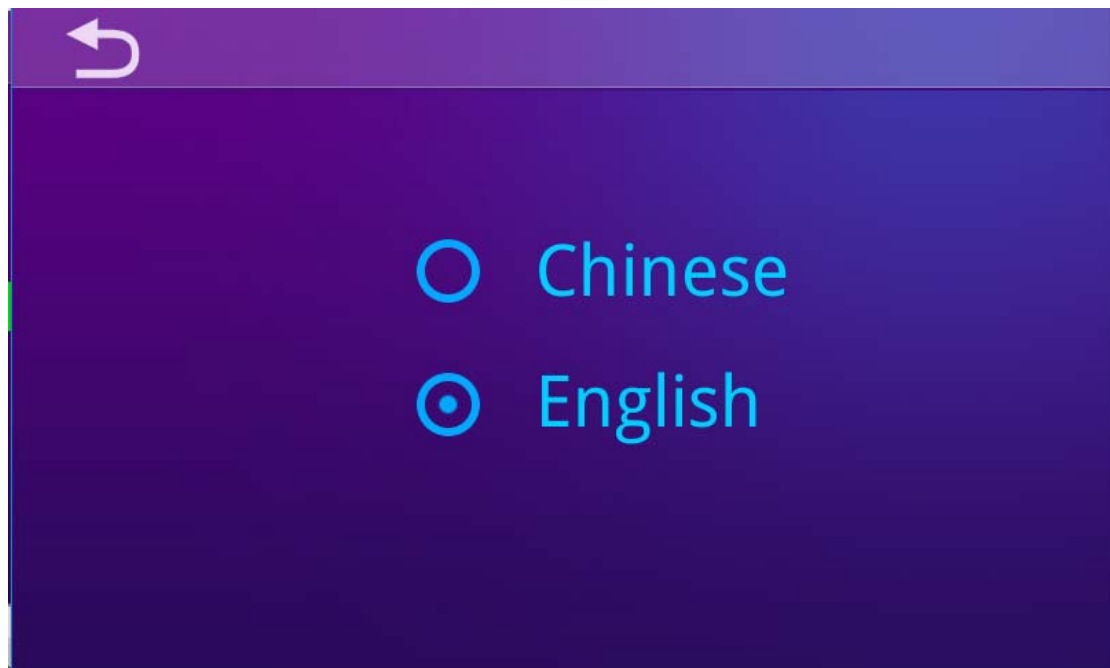
## 5.2 TIME SETTING SCREEN



## 5.3 LCD BRIGHTLESS SETTING SCREEN



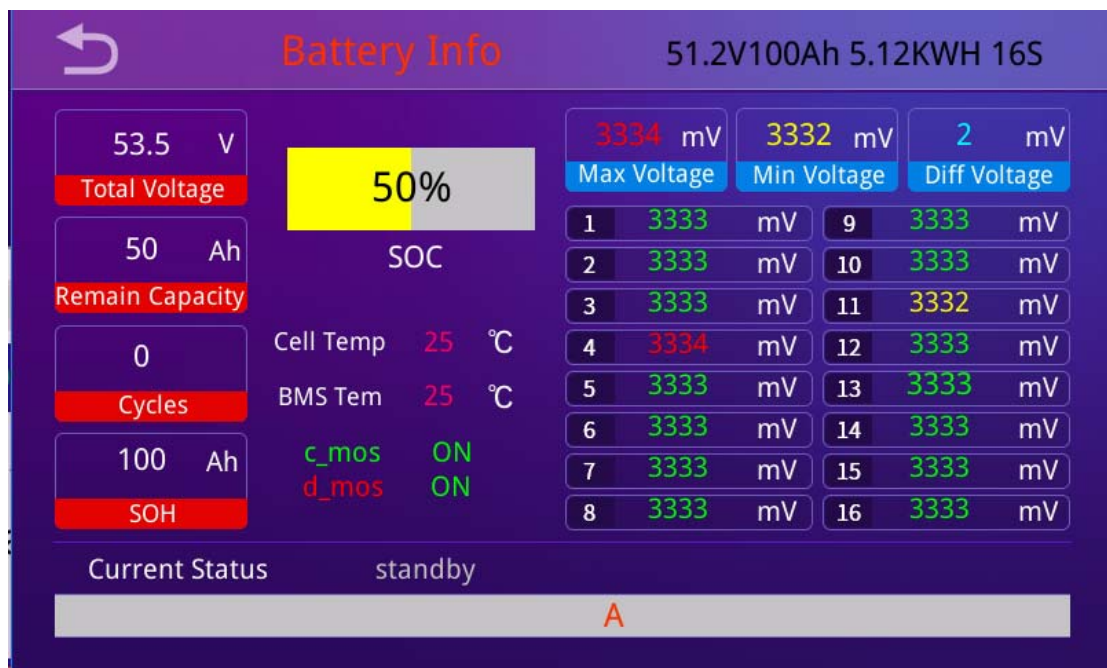
5.4 LANGUAGE SETTING SCREEN



5.5 BATTERY INFORMATION SCREEN



Defeat Password is 888888, and cannot be modify by User.



### 5.6 BATTERY PARAMETER SETTING SCREEN

Forbid to set parameter by LCD.



## 5.7 LCD SHUT DOWN



Click this Area once to turn off

## 5.8 5.7 LCD AWAKEN





Press any area Except turn off area will be awake this LCD display

## 6. COMMUNICATION PROTOCOL

Please refer to the protocol dedasheet.

## 7. MAINTAIN

For safety, if the battery is abnormal and needs to enter maintenance mode, contact technical support engineers

## 8. ATTENTION

8.1 Battery connect to load must link with DC breaker

8.2. Please do not use the battery in a high temperature environment and keep away from fire.

8.3. Prevent water from entering the battery. If water enters the battery, stop using it immediately and contact technical support engineers

8.4. Damage caused by human factors and accidents will not enjoy free warranty

8.5. The damage caused by battery short circuit is not covered by warranty

8.6. Damage caused by force majeure is not covered by free warranty

## 9. WARRANTY

Three years limited warranty, Please refer to the contract for specific warranty condition