

JS-C33 General Programmable Battery Power Display

SUMMARY:

This product is a general instrument, adopts LCD color screen, can long-term display the battery, voltage, temperature (Selective assembly); sound-light alarm (Selective assembly) can be used in a variety of lighting conditions. The default parameters are suitable for lithium batteries, lead-acid batteries, lithium iron phosphate battery, Ni MH battery application field; through the development of programming, can be applied to any battery, simple wiring, convenient maintenance and disassembly using standard connector.

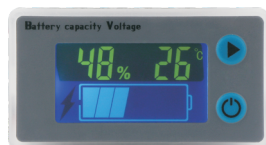
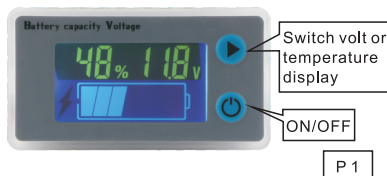
FEATURES:

- The patented product adopted neutral packaging production, with simple dustproof waterproof surface, with full protection cover.
- The color liquid crystal material, clear display, display softly at night.
- To customize the type of battery, suitable for lead-acid, lithium-ion batteries, lithium iron phosphate, metal hydride battery, etc.
- To display the percentage of remaining battery power, voltage, temperature.
- The 10~100V wide input voltage, reverse protection.
- The product can go to sleep after 10 seconds.
- The red indicator flashes to alarm when it is low battery.
- The installation is simple, with a buckle, without screws.
- The buzzer alarm switch, alarm voltage setting (Selective assembly).
- The real-time detection of the battery temperature (Selective assembly).
- Open programming mode



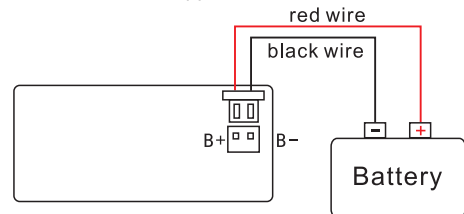
PARAMETER :

Parameter	Min	Typical	Max	Unit	Figure
Product size				mm	61.5*33.5*13.5
Installation size				mm	58.5*28.5
Display size				mm	36*19.5
Weight	20	21	22	g	
Working voltage	10		100	V	Common
Working consumption		5	6	mA	LED ON
Voltage accuracy		±0.1	±0.5	%	
Temperature accuracy		±0.5	±1	°C	Selective assembly
Sleep consumption	6	10	12	uA	20V
Working temperature	-10	25	55	°C	
Buzzer volume	70	75	80	db	Selective assembly
Buzzer voltage	11.5		100	V	adjustable



INSTRUCTIONS:

1. PH2.0 terminal conductor, connected to PCB opposite connector
2. External NTC temperature sensor, please put the sensor to measure the temperature of the parts, do not squeeze the sensor (selective assembly).
3. Red line to the positive terminal, black line to the negative terminal.
4. After the instrument is powered on, it shows the percentage of the battery power, the voltage, and battery icon.
5. Press to turn off the instrument. In close status, you can wake up the instrument by pressing any button.
6. Press in the working status, you can switch the voltage and temperature to display.
7. The battery icon on the display interface, from the right to the left, are 7 display boxes representing the battery power from low to high.
8. The voltage on the display interface is measured in real time, and the voltage value is displayed on 10-100V.
9. The percentage on the display interface is the percentage of the remaining battery power.
10. When the battery is connected to the charger or the discharge of the large current load, the display parameters will fluctuate
11. The red lightning flashes the alarm when the battery is low
12. Low voltage buzzer alarm (Selective assembly)
13. If the battery specification is special, you can enter the programmable mode 3-- and reset the upper and lower limits of the battery.



Go into programming mode:

1. Power-on status, press last about 5 seconds, enter the main menu, as shown in Figure P2.
2. The main menu has 5 sub menus: 1--, 2--, 3--, 4--, 5--.
3. Press , and the 5 submenu loops.
4. Each function of the 5 sub menu :
 - 1-- : Select built-in preset battery specification: lithium battery, lead acid battery, LFP battery.
 - 2-- : Setting Delay Time Delay OFF/ON, and select Delay Time
 - 3-- : The voltage of percentage 0 to 100 could be customized.
 - 4-- : Buzzer switch and alarm value setting.
 - 5-- : Calibrate the instrument voltage again.
5. Press , select the menu to enter, long press to quit.
6. All parameters are subject to the last save.



Submenu functions explanation:

1-- : Quick change battery type

Under this menu, you can change the default parameters speedy: L represents the lithium battery, and the latter figure is the series quantity;

F represents the lithium iron phosphate battery, and the latter figure is the series quantity;

P stands for lead-acid batteries, and the numbers behind represent voltage.

Setting steps: Enter the menu 1--, as shown in P3, and display 1-- L/P/F xx, press to switch among L, P and F. Press to select the appropriate battery specifications, enter L/F to select the battery series quantity. Long press to save after finishing selection. If you don't need to change other parameters, long press to quit.

E.g.
L3 represents 3 string lithium
 $4.2V \times 3S = 12.6V$.
L7 represents 4 string lithium
 $4.2V \times 7S = 29.4V$.
F4 represents 4 string lithium iron
phosphate battery $3.2V \times 4S = 12.8V$.
F8 represents 8 string lithium iron
phosphate battery $3.2V \times 8S = 25.6V$.
P12V stands for lead-acid 12V batteries.
P24V stands for lead-acid 24V batteries.

Note: Please set parameters according to the battery specifications, otherwise, the percentage value is inaccurate; the voltage value is accurate.
All parameters are subject to the last save.

2--: Delay ON-OFF, Delay time setting

On this menu, delay OFF and the delay time can be set, as shown in P4:

Left side to switch ON or OFF;
Right side select the delay time
(10/30/60/120 unit:S)

Setting steps : Enter the menu 2--, Press to change the parameters, press to carry bits, press to save parameters. If you don't need to change other parameters, press to quit.

Note: D symbol light on after turning on the delay function. If the switch is OFF, the delay function will be invalid.

3--: The voltage of percentage 0 to 100 could be customize

The menu customizes the percentage of the upper and lower voltage, and after changing this parameter, the product can be applied to nickel-hydrogen, fuel cells and Enter the menu 3--,as shown in P5 :

Left side is power 0%, represents the low battery voltage.
Right side is power 100%, represents the full battery voltage.

Setting steps: Enter the menu 3--, Press to adjust the setting voltage, press to carry, press to save parameters. If you don't need to change other parameters, press to quit.

Notes: The input value must not exceed the instrument working voltage. If the value on the left side is greater than or equal to the value on the right side, the save is invalid.

4--: Buzzer alarm value setting and ON/OFF

This menu customizes buzzer working voltage and red alarm value. Enter the menu 4--,as shown in P6:
The left side is the buzzer ON/OFF status.
The left side is for setting buzzer alarm voltage.

Setting steps :
Enter the menu 4--, press to take the buzzer ON or OFF, press to carry, long press to save. If you don't need to change other parameters, press to quit.

Notes: When the buzzer works, the red lightning symbol flashes in sync. If the switch is OFF, it will be no working.

5--: Calibrate the instrument voltage again

Enter the menu 5--,as shown in P7:

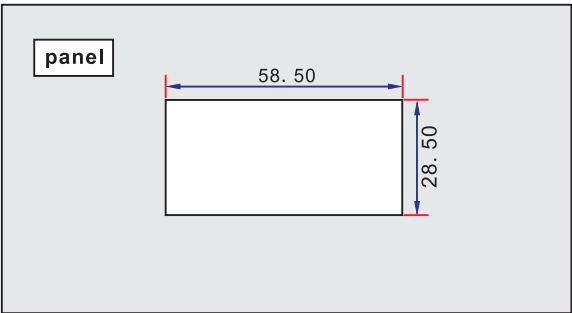
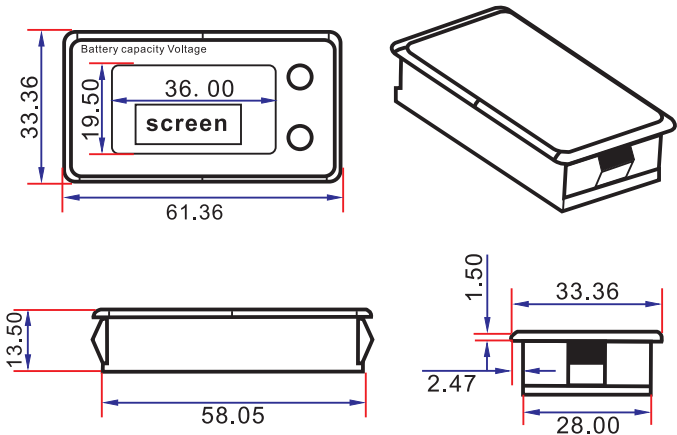
Before entering the calibration interface, please provide an accurate 20V operating voltage for the instrument.

To prevent misoperation, long press to enter the menu in 5-- status, and then the meter will be automatically calibrated according to the supplied voltage. But it cannot be calibrated if the voltage range is not between 19 and 20V.

Notes: Please provide an accurate 20V operating voltage for the instrument to ensure correct calibration, otherwise, the error will be bigger.

When the calibration is complete, the instrument will automatically exit this menu and display the normal working interface.

SIZE: (mm)



Panel Openings Dimensions

Note: The best panel thickness 2-3mm, please adjust slotted size according to the panel material properly.