

## JS-C35 general purpose programmable battery power display

### SUMMARY:

This product is a universal instrument, the color LCD screen, with low power consumption, long time switch, can display the battery voltage, temperature value (Selective assembly), alarm (Selective assembly) can be used in a variety of lighting conditions. The default parameters 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.

### IMPORT FEATURES:

- The patented product, neutral packaging production, with simple dustproof waterproof surface, with full protection cover.
- Integrated display port, anti puncture and sun protection, excellent touch experience with soft keys
- The color liquid crystal material, light clear display, Soft brightness at night
- To customize the type of battery, suitable for lead-acid, lithium-ion batteries, lithium iron phosphate, metal hydride battery.
- To display the percentage of remaining battery power, voltage, temperature value (Fahrenheit and Celsius can be switched)
- The 10~100V wide input voltage, reverse protection.
- The product can go to sleep oneself after your selected time.
- The low power red mark flashes to remind.
- The installation is simple, with a buckle, without screws.
- Low power activates buzzer alarm (Selective assembly).
- High temperature activates buzzer alarm (Selective assembly).
- Detection of the battery temperature (Selective assembly).
- Product can be altered according to requirements (Large order)



### 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   | 33*16.5                          |
| Weight            | 20  | 21      | 22   | g    |                                  |
| Working voltage   | 10  |         | 100  | V    |                                  |
| Power waste       |     | 8       | 10   | mA   | Backlight ON                     |
| Delay shutdown    | 10  |         | 120  | S    | 10.20.30.60.120(can be selected) |
| Sleep power       |     | 15      | 20   | uA   | 20V                              |
| Voltage accuracy  |     | ±0.1    | ±0.5 | %    |                                  |

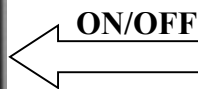
|                              |      |      |      |    |  |
|------------------------------|------|------|------|----|--|
| Temperature accuracy         |      | ±0.5 | ±1   | °C | standard configuration inside(optional for external 30cm long sensor)                  |
| Temperature value range      | -19  |      | 80   | °C | Celsius  |
| Temperature value range      | -2.2 |      | 179  | °F | Fahrenheit   |
| Over temperature alarm value | 0    |      | 79   | °C | Buzzer ringing at 1-second intervals with flashing temperature display (when alarm on) |
| Over temperature alarm value | 0    |      | 179  | °F | Buzzer ringing at 1-second intervals with flashing temperature display (when alarm on) |
| Low power alarm value        | 10.5 |      | 60.0 | V  | Buzzer ringing at 1-second intervals with flashing volt display (when alarm on)        |
| Buzzer decibel               | 60   | 70   | 80   | db | Selective assembly   |
| working temperature          | -10  | 25   | 65   | °C |  |



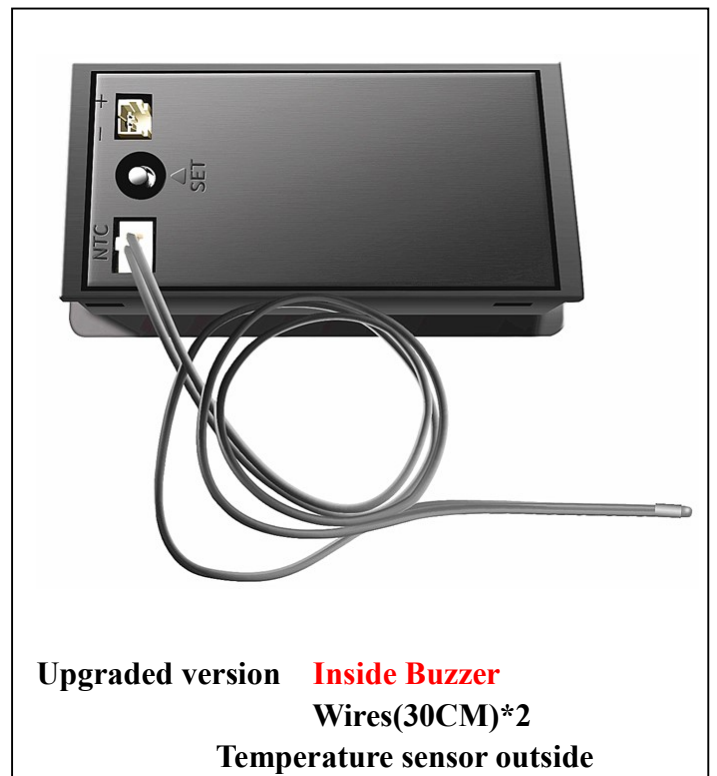
**Celsius °C**



**Fahrenheit °F**



P 1



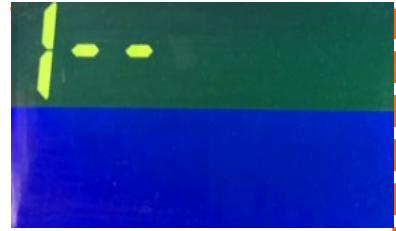
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**INSTRUCTIONS:**

1. The product is directly wired according to the type of battery selected at the time of purchase.
2. 1.25 terminal products supporting the use of wire, connected to the circuit board face should plug back.
3. External NTC temperature sensor, please put the sensor to measure the temperature of the parts, do not squeeze the sensor( selective assembly).
4. Red line to the positive terminal, black line to the negative terminal.
5. After the instrument is powered on , which shows the percentage of the battery power, the voltage value, and the symbols of the analog battery.
6. Press the button to turn off the instrument. In close mode, you can wake up the instrument by pressing any button, The product can go to sleep oneself after your selected time when this function is turned on.
7. If Volt-Alarm function is turned on, the battery voltage is lower than the set voltage, Buzzer ringing at 1-second intervals with flashing temperature display (**Selective assembly**)
8. If Temperature-Alarm function is turned on, the battery temperature is higher than the set voltage, Buzzer ringing at 1-second intervals with flashing volt display (**Selective assembly**)
9. The battery symbols on the display interface, from the right to the left, are 7 display boxes representing the pool power from low to high.
10. The voltage on the display interface is measured in real time, and the voltage value is displayed on 10-100V without external power supply.
11. The percentage on the display interface is the percentage of the remaining battery power
12. Fahrenheit and Celsius can switch display to each other, The basic version temperature shows the product temperature, The upgraded version of temperature shows the temperature in the environment of.
13. When the battery is connected to the charger or the discharge of the high current load, the display parameters will fluctuate.
14. Button behind(SET), This button is used to set various functions of this product.
15. **If the battery specification is special, you can enter the set mode 3-- and reset the upper and lower limits of the measured battery voltage.**

**Go into settings mode:**

P 2



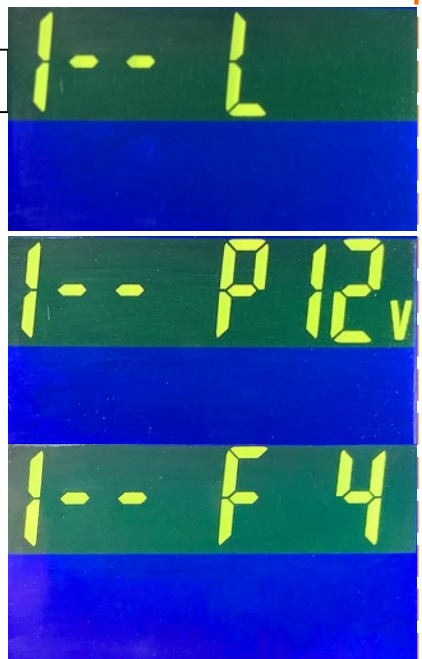
- 1, Turn on the machine, press the button behind(**SET**) for 2 seconds, enter the main menu, as shown in Figure P 2.
- 2, The main menu has 6 sub menus: 1--,2--,3--,4--,5--,6--.
- 3, Click the **SET**, and the 6 sub menu loops.
- 4, Each function of the 6 sub menu
  - 1- -: Select lithium battery(L) or lead acid Battery(P) or LiFeCoPO4 Battery(F)
  - 2- -: Setting Delay Time Delay OFF/ON, and select Delay Time(10s,30s,60s or 120s)
  - 3- -: The voltage of percentage 0 to 100 could be customized
  - 4- -: Buzzer on/off and alarm value setting.10.5V-60V
  - 5- -: Over temperature alarm value set, temperature unit set(°C/°F)
  - 6- -: Calibrate the product voltage again, make sure the input voltage is 20V
- 5, Click the **SET**, select the menu to enter, and hold the **SET** for a little long time to quit
- 6, All parameters must be saved at the last time

**Detailed Submenu function:****1- -: Quick change battery type**

Under this menu, you can change the default parameters quickly, The L represents the lithium battery, and the latter figure is the series quantity of the lithium battery, P stands for lead-acid batteries, and the numbers behind represent voltage.

**SET STEP:** Enter the menu(press and hold the button(**SET**) for five seconds) 1--,as shown in P3,and display 1—L/P/F xx, Click the button(**SET**) to switch between F, P, and L. Press the Front button to change the parameters, select the appropriate battery specifications. After selection, press and hold the Front button to store it .If you don't need to change other parameters, press and hold the button(**SET**) for a little long time to quit.

P 3



For example: 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 LiFeCoPO4  $3.2V \times 4S = 12.8V$

F8 represents 8 string LiFeCoPO4  $3.2V \times 8S = 25.6V$

P12V stands for lead-acid 12V batteries

P48V stands for lead-acid 48V batteries

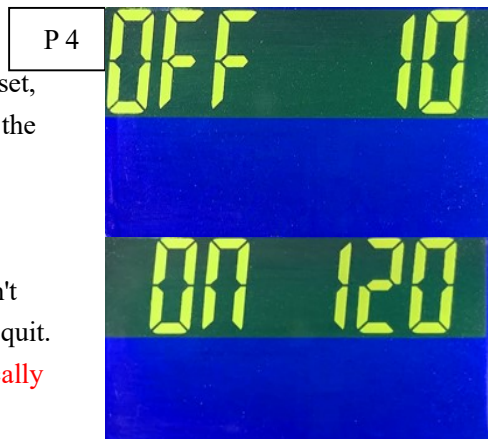
**Note:** If you choose the battery specifications and the actual battery specifications are different, The percentage valuen can not be used as a reference value for the remaining battery power. the voltage value is the current battery voltage.  
All parameters must be saved at the last time.

**2- -: setting Delay Time ,Delay ON-OFF**

Under this menu, the time delay function and the delay time can be set, as shown in P 4: Left side display switch status, Right side display the delay time(10/30/60/120 unit: S)

**Set step:** Enter the menu 2--, Click the button(**SET**)to change the Parameters, click the front button to switch the on/off or delay time. After selection, press and hold the front button to store it. If you don't need to change other parameters, press and hold the button(**SET**) to quit.

**Note:** If this function is turned on, This product will sleep automatically after the set time.

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

If the battery specification is not conventional, then you can adjust the battery lines by using the function under this menu.

Enter the menu 3--,as shown in P 5:

- 1, The value on the left represents the voltage value of 0%
- 2, The value on the right represents the voltage value of 100%.



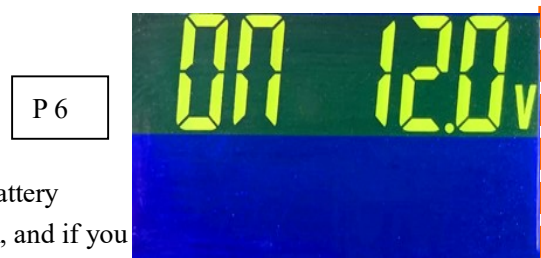
**Set step:** Enter the menu 3--, Click the button(**SET**) to adjust the setting voltage, press the button(**SET**) to carry, press and hold the front button to store, and if you enter this menu is a mistake, you can press and hold the button(**SET**) to exit.

**Note:** if 10.0v on the left,20.0v on the right, means if the volt of battery is 15v,the percent will be 50. not professionals don't try this function.

**4- -: Buzzer alarm value setting and on-off**

Enter the menu 4--,as shown in P 6:

- 1, The left side is the buzzer on-off status.
- 2, The value on the right is the alarm voltage value.(When the battery voltage is lower than the set value, the buzzer will give an alarm, and if you make this function work)



**Set step:** Enter the menu 4--, click the button(**SET**) to take the buzzer on or off, click the front button to carry, press and hold the front button to store, and if you enter this menu is a mistake, you can press and hold the button(**SET**) to exit.

**Notes :** Valid in this range (10.5V-60V).buzzer ringing at 1-second intervals with flashing temperature display(when alarm on).

**Reference value:**

LiFeCoPO4 Battery: 3.0V\*strings. 7 LiFeCoPO4 batterys in series, 3\*4=12V

lithium battery: 3.5V\*strings.7 lithium batteries in series, 3.5\*7=24.5V

lead acid Battery: Nominal voltage /12\*11.5, 48V lead acid battery,48/12\*11.5=46V

## 5--: Over temperature alarm and unit switch

Under this menu, Opening and closing of over temperature alarm, Change of over temperature alarm value and Temperature unit switching(°C、°F)

Enter the menu 5--,as shown in P 7:

- 1, The left side is the buzzer on-off status.
- 2, The value on the right is the alarm temperature value.
- 3, Unit switch(°C、°F).

P 7



**Set step:** Enter the menu 5--,click the button(**SET**) to change the buzzer on-off status ,the over temperature value and temperature unit. Click the front button to change what you want change. Hold and press the front button to store it, press and hold the button(**SET**) to exit.

**Notes:** over temperature alarm value range is 0°C to 79°C(0-179°F), If the collected temperature is higher than the set value, the buzzer will work to remind you.

## 6 --: Calibrate the instrument voltage again

Enter the menu 6--,as shown in P 7:

When 6—display on the screen, hold and press the front button to enter this menu, the instrument voltage again. If the product is powered by under 19V or higher 21V stable voltage source, it can not be stored.

**Note:** Before entering this menu, ensure that the product is powered by 20V stable voltage source. After calibration, the product will exit setting mode.

P 8

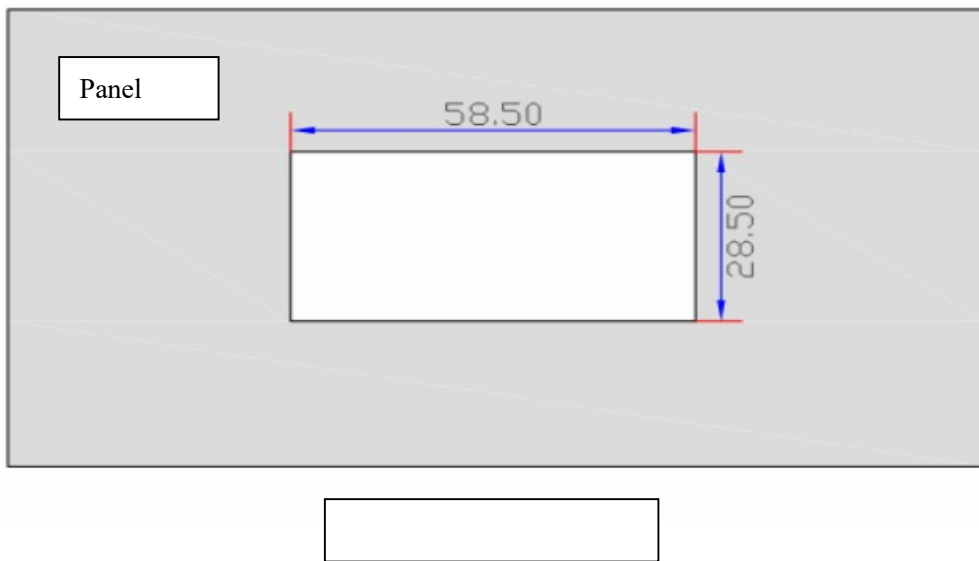


## Common troubleshooting methods:

- 1, **The LCD of this product has no display content after inserting the wire:** Check the wiring is correct and make sure the product has been powered.
- 2, **The voltage and temperature values are displayed correctly, Inaccurate display of power value:** First, confirm whether the default Battery Specification selected at the time of purchase corresponds to the actual tested battery. If not, please reset it according to the instructions 1 --. If you don't know what battery you are, please consult your battery purchaser to confirm the specification.
- 3, **The battery still has 50% power, but the buzzer gives an alarm and voltage display flashes:** Please read the above one first. If the problem is not solved, Go into settings mode(under menu 4--) to change the value.
- 4, **The buzzer will alarm as soon as this product is powered on and temperature display flashes:** Detection temperature exceeds the set alarm value . Go into settings mode(under menu 5--) to change the value.
- 5, The part of the display temperature is shown as ---: Sensor not connected or The sensor is damaged.
- 6, For other phenomena, check all wiring and whether the switch is touched by foreign matters. The product is a liquid crystal product, which can not be forced to install violently. The opening size can be appropriately

enlarged according to the material to ensure the smooth entry of the product. Pay attention to waterproof on the reverse side of the product.

**Product dimension drawing: (unit:mm)**



Note: if the material is too hard, the hole size can be properly enlarged by 0.1mm on each side  
The best thickness of the panel is 1.5-2mm. Please adjust the slot size according to the panel material.