35670-ME

SUMMARY:

This monitor is a multi-function instrument with back lighted LCD screen and low power consumption.
The factory default setting is suitable for use in 12V lead acid batteries.
If you need to set up other types of batteries, go into Setting Mode to adjust settings.
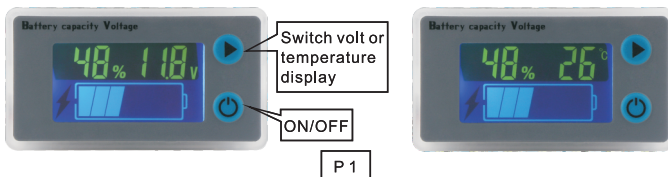Connections: Red wire to the positive terminal, Black wire to the negative terminal.

FEATURES:

1. Clear plastic case with dustproof waterproof protection cover.
2. Color LCD display
3. Suitable for lead-acid, lithium-ion batteries, lithium iron phosphate, metal hydride battery.
4. Displays the percentage of remaining battery power, voltage and ambient temperature.
5. 10min~100Vmax wide input voltage range with reverse protection.
6. Sleep mode after ~10sec
7. "Lightning Bolt" Alarm Flashes at ~20% of the "Bargraph" Setting
8. Simple, Snap-In mounting
9. The open programming mode

INSTRUCTIONS:

1. PH2.0 terminal conductor, connected to PCB opposite connector
2. Red line to the positive terminal, black line to the negative terminal.
3. After the instrument is powered on, it shows the percentage of the battery power, the voltage, and battery icon.
4. Press ⏻ to turn off the instrument. In close status, you can wake up the instrument by pressing any button.
5. Press ▶ in the working status, you can switch the voltage and temperature to display.
6. 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.
7. The voltage on the display interface is measured in real time, and the voltage value is displayed on 10-100V.
8. The percentage on the display interface is the percentage of the remaining battery power.
9. When the battery is connected to the charger or the discharge of the large current load, the display parameters will fluctuate
10. The red lightning flashes the alarm when the battery is low
11. If the battery specification is special, you can enter the programmable mode 3-- and reset the upper and lower limits of the battery.

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	℃	
Sleep consumption	6	10	12	uA	20V
Working temperature	-10	25	55	℃	

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 customed.
4- -: Buzzer and alarm value setting.NOT AVAILABLE IN THIS MODEL
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.

P 2

Submenu functions explanation:

1- -: Quick change battery type

Under this Menu, you can change the default battery parameters quickly:
L represents a Lithium battery, and the # is the number of cells
F represents a Lithium Phosphate battery and the # is number of cells
P represents a Lead-acid battery, the # is the Voltage (12/24)

Switch volt or temperature display

ON/OFF

P 1

NOTE: MINIMUM INPUT VOLTAGE: 10V
MAY REQUIRE MINIMUM OF 4 CELLS, A SETTING OF "L3" WILL
NOT FUNCTION WITH DISCHARGED CELLS

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*3S=12.6V.
L7 represents 4 string lithium
4.2V*7S=29.4V.
F4 represents 4 string lithium iron
phosphate battery 3.2V*4S=12.8V.
F8 represents 8 string lithium iron
phosphate battery 3.2V*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 and
the voltage value is accurate.
All parameters are subject to the last save.

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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.

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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.

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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.

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BUZZER IS NOT AVAILABLE ON THIS MODEL

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.

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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)

Battery capacity Voltage
36. 00
screen
19.50
33.36
61.36
13.50
58.05
1.50
33.36
2.47
28 00
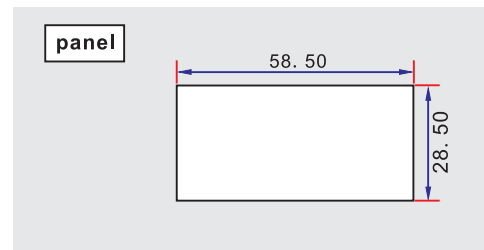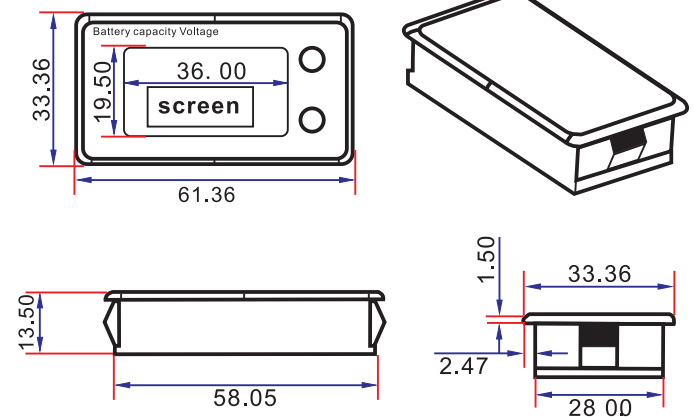
panel
58. 50
28. 50

Panel Openings Dimensions

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