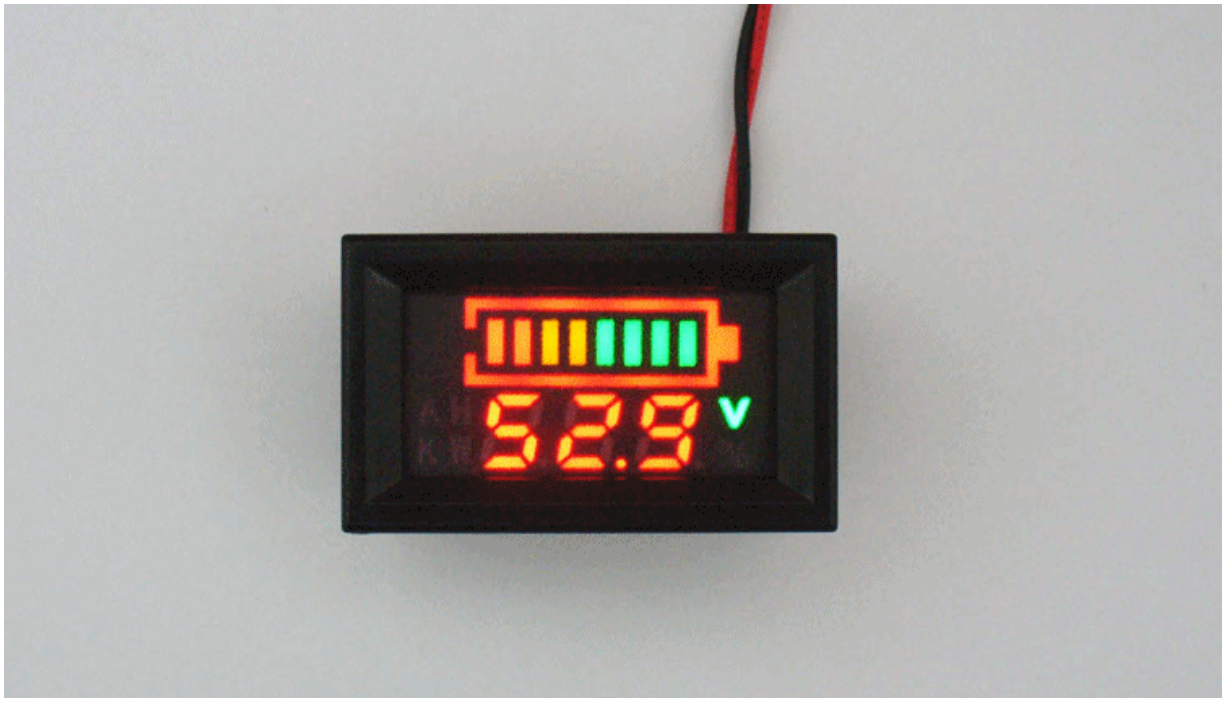
12V Acid Lead Batteries LED Indicator Battery Capacity Digital Tester Voltmeter

Note:
*If the battery type and the number of cells (strings) are not set correctly, the power and percentage power will not be displayed. Please set it correctly

*This meter is not suitable to be installed on the line with xenon lamp. When the xenon lamp is turned on, there will be a high voltage of several thousand volts, which may directly burn the meter head. If it must be installed, it cannot be installed on the same line, and the meter head should be far away from the xenon lamp

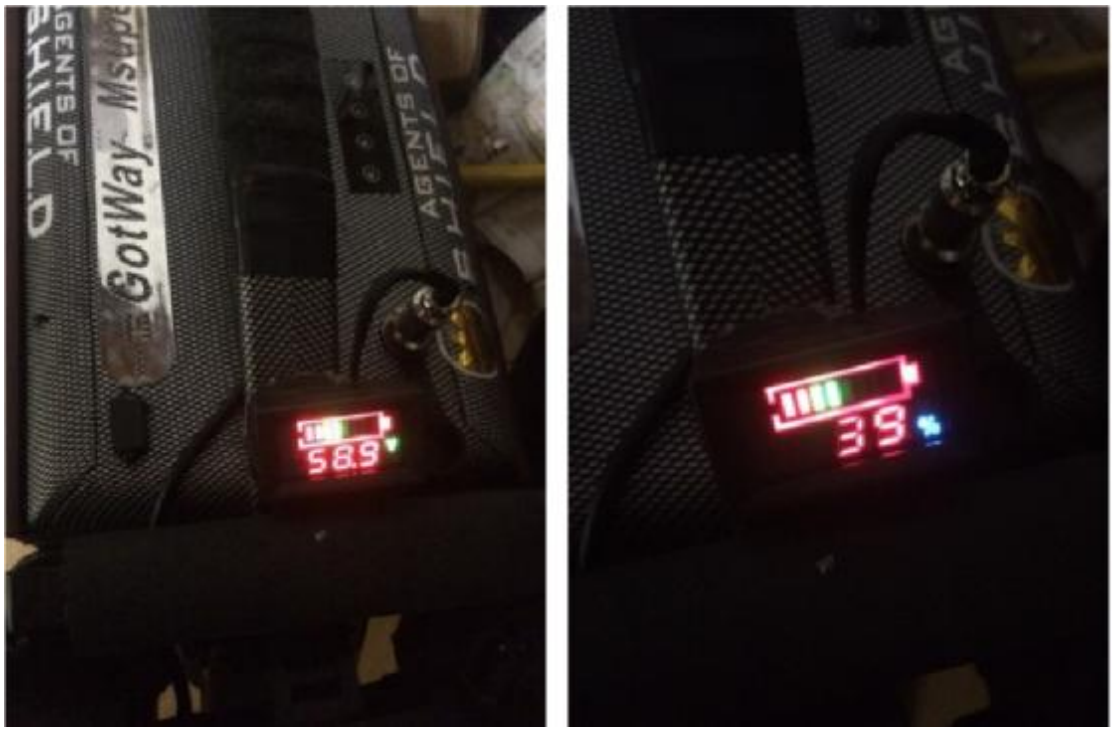
*It's not very clear in the case of direct sunlight during the day. This is a normal phenomenon (no matter how bright the product is, it can't be bright in the sunlight)

Product display:



Electric vehicle modification drawing:
If there was no electricity meter, connect the negative pole to any negative pole on the car, and connect the positive pole to the output line of the electric door lock. (it's OK to directly connect the positive and negative poles of the battery, but it will always show that it can't be closed.)

Modification drawing of unicycle:



Physical picture of electric vehicle modification:

Solar charging system:

Product features:

* The battery type can be set by pressing the button: lead-acid battery, lithium battery, Ni MH battery, and the number of batteries in series (the number of batteries in series) can also be set by pressing the button

* This meter is suitable for: 12V, 24V, 36V, 48V, 60V, 72V, 84v battery cars, electric cars, battery packs, balance cars, inverters, electric forklifts, sightseeing cars, electric cars, automotive batteries, battery powered mobile devices, etc. it can also be used for other voltage and power testing purposes

* This meter can test and display real-time voltage, power and percentage power

* Display mode: single display voltage; single display percentage power; voltage and percentage power cycle display (default)

* Two wire system, wide supply voltage, wide test voltage: dc6-100v, simple and convenient wiring

* With reverse connection protection function, reverse connection will not burn

* Low power flashing alarm function

* LED color display, high-grade atmosphere

Technical parameters:
* Power supply voltage: dc6-100v (wide range), note: the maximum input voltage should not exceed 100V, otherwise there is a risk of burning

* Test voltage: DC 6 ~ 100V

* Power Resolution: 1%

* Working current: < 20mA

* Display mode: LED color screen

* External dimension: 48 × 29 × 21 mm

* Installation opening: 45.5 × 26.5 mm

* Measurement rate: ⩾ 500ms / time

* Voltage measurement accuracy: 1% (± 2 words)

* Lead length: > 150 mm

Extreme working conditions:

* Minimum supply voltage + 6

* Maximum supply voltage + 100V

* Working temperature: - 10 ~ + 65℃

* Working humidity: 10-80% (no condensation)

* Working pressure: 80 ～ 106kpa

* Sunlight exposure: no direct exposure

Menu Operation Instruction

Main Menu	First Level Menu	Default Value	Notes
P-1(Set battery type)	12.0 (represents a single 12V lead-acid battery)	12.0	Short press the button to switch the battery type
	3.7 (represents a single 3.7V Polymer battery)		
	3.2 (represents a single 3.2V Lithium iron phosphate battery)		
	2 (represents a single 2V lead-acid battery)		
	1.2 (represents a single 1.2V Nickel metal hydride battery)		
P-2 (Set the number of batteries)	(Set the number of batteries)		(P-1)*(p-2)≤100
P-3 (set capacity calculation method)	P1(Normal discharge)	P1	Calculate the corresponding capacity percentage according to the set interval in the program
	P2(Custom discharge interval)		The voltage value corresponding to 0% or 100% of the power can be set
P-4(Custom discharge interval)	NH (Voltage value corresponding to 100% power)		This value is only valid when P2 is selected in P3 setting "capacity calculation method"
	NL(Voltage value corresponding to 0% powe)		
P-5(etting the working mode)	F1(It will alarm if it is lower than the lower limit of percentage or higher than the upper limit of percentage; otherwise, the alarm will be released)	F1	Short press the button to switch the battery type
	F2(It will alarm if it is higher than the lower limit of percentage or lower than the upper limit of percentage ; otherwise,		

	the alarm will be released)		
	F3(It will alarm if below the lower percentage limit; until it is higher than the upper percentage limit, the alarm will be released)		
	F4(It will alarm if below the lower voltage limit; until it is higher than the upper voltage limit, the alarm will be released)		
	F5(It will alarm if the voltage is higher than the lower limit or lower than the upper limit, otherwise the alarm will be released)It will alarm if the voltage is higher than the lower limit, or it will alarm if the voltage is lower than the upper limit, otherwise the alarm will be released)		
	F6(It will alarm when the voltage is lower than the lower limit, the alarm will be released when the voltage is higher than the upper limit)		
P-6(Alarm output mode)	BP(Buzzer sound alarm mode)	BP	
	L(Low level [pulse] output alarm mode)		When P15 is set to ON, it can be displayed circularly, otherwise only BP is displayed
	H(High level [pulse] output alarm mode)		
P-7(Set alarm value)	BL(Percentage lower limit alarm value)	20%	When adjusting the value, long press the key and the value will jump up; release the key and long press the key again and the value will jump down
	BL(Percentage upper limit alarm value)	101%	
	BL(Lower voltage limit alarm value)	11	
	BL(Alarm value of upper voltage limit)	110	
P-8(Alarm delay time)	SL(Trigger lower limit delay alarm time)	3	When adjusting the value, long press the key and the value will jump up; release the key and long press the key again and the value will jump down
	SLS(Release the lower limit delay alarm time)		
	SH(Trigger upper limit delay alarm time)	3	
	SHS(Release upper limit delay alarm time)	3	
	SD(Level output time setting)	0	When "level [pulse] output alarm mode" is selected: SD = 0, alarm output is continuous level; SD is other value, according to the set time value, single pulse output;
	BD(Buzzer alarm duration)	10	Buzzer buzzering time
P-9(Voltage and percentage display	S1-V(Display voltage only)		Short press the key to switch the display mode
	S2-%(Show percentage only)		

mode)	S3-V%(Voltage and percentage 4 second cycle display)	S3-V%	
P-10(Charging display mode of power bar)	01(Static display)	01	In the process of battery charging, the dynamic display of the power bar can visually identify the charging state
	02(dynamic display)		
P-11(Set energy saving time)	0-999(second)	0	Unit second, 0 means turn off energy saving, the maximum delay is 999 seconds
P12(Voltage trimming calibration)	Voltage trimming calibration		
P13(Alarm output "level alarm mode" switch)	OFF(Turn off the alarm mode selection of level output in P-6)	OFF	
	ON(Turn on the alarm mode selection of level output in P-6)		
P14(Restore factory settings)	ON(Do not restore default parameters)	NO	If "YES" is selected, all the current parameters will be restored to the factory settings
	YES(Restore default parameters)		

Operation method of key adjustment parameters:

1. Key operation is divided into long press and short press;

Long press: press the button for more than 3 seconds to release;

Short press: press the key to release within 1 second;

2. Key definition
Long press the key: enter the next level menu or adjust the numerical parameters;
Short press the key to switch the same level menu;

When adjusting the value, long press the key, the displayed value will continue to increase or decrease, and the speed will gradually increase. Release the key, and long press the displayed value again will change the direction, and continue to decrease or increase. When it is close to the set value, release the key, and press again for fine adjustment;

3. The parameter value is saved and returned
After the parameter adjustment is completed, there is no key operation. After 5 seconds, the screen will flash twice to save the parameter and return to the superior menu.

FAQ:

1. Question: how to use the electricity meter? need to set it?
Answer: the electricity quantity is set according to the model purchased, which is convenient for customers. The received electricity meter can be used as long as the red line is connected to the positive side of the battery and the

black line is connected to the negative side of the battery. If you have special requirements, you can contact the sales manager to set up.

2. Question: do you want to switch the percentage and voltage manually?
Answer: the default power percentage and voltage value are automatically displayed in turn, with 4S interval. Users can also set one of the fixed display.

3. Question: I don't know how many strings my lithium battery is? How can I buy it
Answer: lithium batteries are generally divided into 3.7V and 3.2V.

All lithium batteries in the options are 3.7V (full charge is 4.2V) by default. See the charger maximum output voltage / 4.2V can get how many strings. For example, the maximum output of charger is 54.6V. 54.6v/4.2v = 13 strings. 6 V / 4. 2 v = 3 strings. Lithium batteries are connected in parallel.

3.2V lithium battery (full charge 3.6V). For example, the maximum output of the charger is 14.4V. 4 / 3.6V = 4 strings. For the 3.2V lithium battery, the customer should set it by himself or contact the sales manager.