



Omid Intelligent Technology

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The user
manual

**LD-S700 special instrument for
lithium-assisted electric vehicle**

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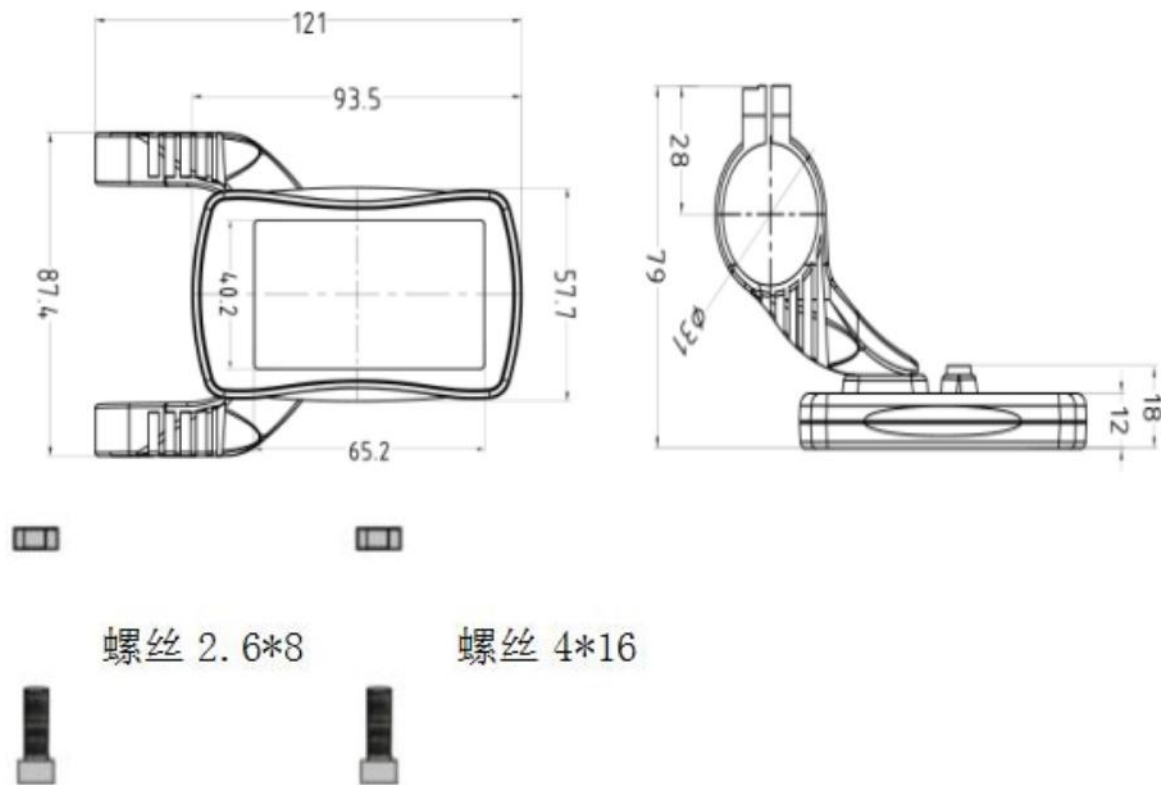
Dear users, in order to make you use the LCD-S700 liquid crystal display meter correctly, please read the user manual and relevant precautions carefully before use. We will help you to understand and be familiar with the functions of the instrument in the most concise language, guide you how to operate the instrument, how to set the system parameters, how to achieve the best matching state of the motor, controller and instrument, and improve the electric vehicle control performance. The content of this manual covers the installation, operation, system parameter setting and correct use method of the instrument, so as to help you solve the problems and doubts in the actual use.

1. Outline drawing and dimensions

1) Main material and color

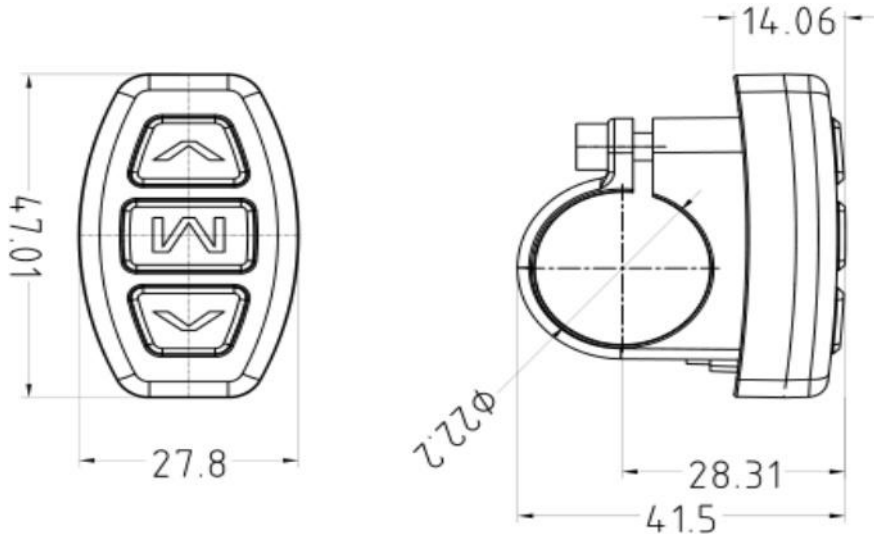
LD-S700 instrument shell and external keys are mainly made of ABS material, and the liquid crystal transparent window is acrylic.

2) Instrument dimensions and installation dimensions (unit: mm)

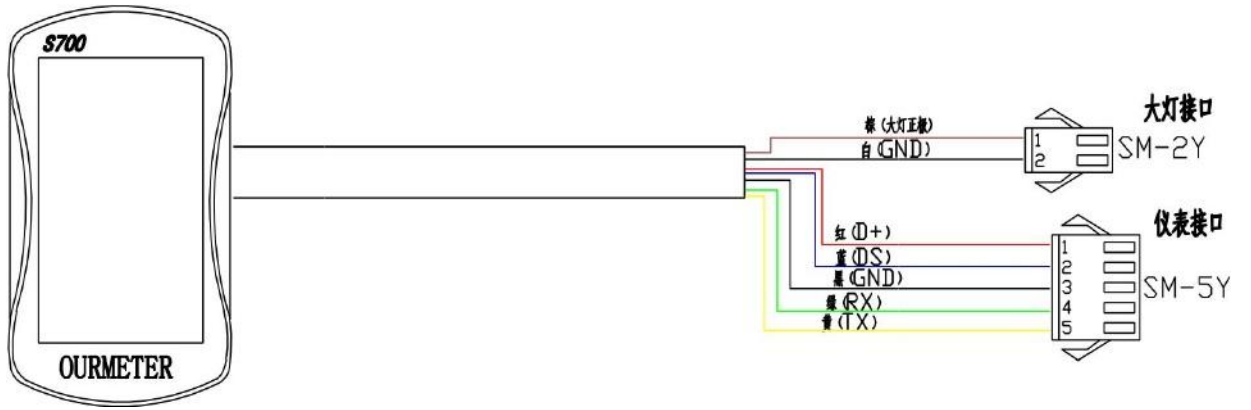


3) Graphical size and mounting size of external keys (unit: mm)





4) Wiring diagram



Red line: Power positive VCC
 Blue line: Electric lock
 DS Black line: Power negative GND
 Green line: Data receiving line RX
 Yellow line: Data sending line TX
 Brown line: Headlight positive DD
 White line: Headlight

negative GND

Note: The specific wiring mode and wire color can be customized according to customer requirements.

5) Physical installation diagram

Fix the LCD display part of the instrument and the external button on the handlebar of the electric vehicle, and adjust the appropriate viewing Angle. In the case of power failure of the vehicle, connect the instrument connector with the controller adapter. Turn on the power, and the electric vehicle and meter enter the positive

The instrument is installed in normal operating state.



2. Product introduction and function overview

1) Adopt two-way communication protocol and external three-way keys to make the operation convenient and quick for customers.

2) Speed display: including real-time SPEED, maximum SPEED, MAX SPEED, average SPEED AVG SPEED

3) Km/ mile display: set the display of Km/h and miles Mph according to customers' habits.

4) Intelligent power display: real-time display of

the current power of the battery.

5) Headlight control: turn on and off the headlights through external keys.

6) Backlight brightness level 3 adjustment: according to the customer's habit to set the backlight brightness, 1

Level 3 is the darkest and level 3 is the brightest.

7) 5 gear control: according to customer needs can be selected through the external button power gear 0~5, of which 0 is neutral no power (the general default is 5).

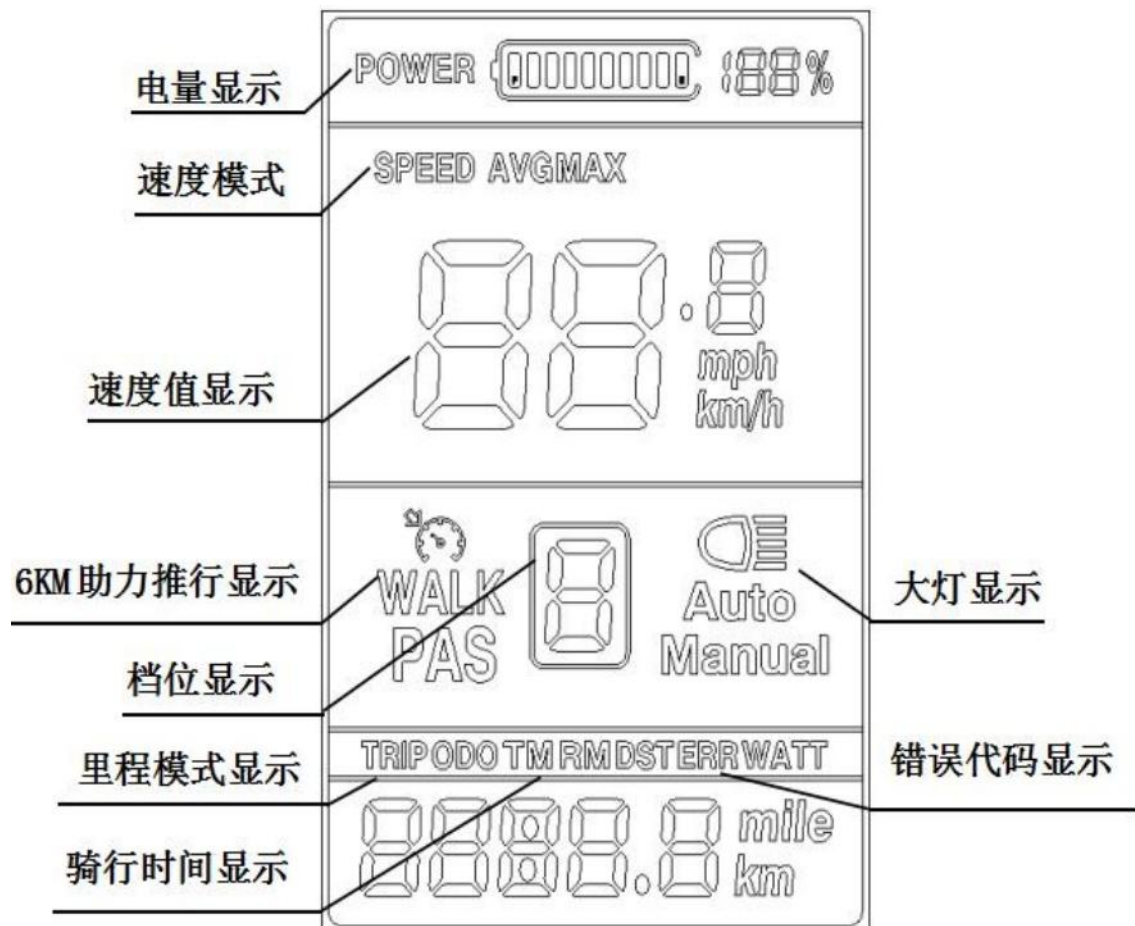
8) **Mileage display: it can display cumulative mileage ODO, single mileage Trip and cycling time.**

9) Fault code prompt: see the definition of error code and Attached Table 1.

10) 6KM assisted promotion mode: display cruise WALK in 6KM assisted promotion mode.

11) Parameter setting: various parameters can be set through the setting interface, including gear position, wheel diameter, speed limit, etc.

3. Liquid crystal display content and instructions



1) Electric quantity display: 10 stages of electric quantity indicator, 8 can be set according to customer demand

Voltage
value.

2) Speed mode: AVG Speed, Max Speed,

Real-time SPEED.

3) Speed value display: display speed value, Km/h Km/h, MPH
miles /h.

4) 6KM power promotion display: display cruise WALK in 6KM power
promotion mode.

5) Gear display: display the current power gear, 0~5, where 0 is
the neutral helplessness.

6) Headlight display: it is displayed when
the headlight and backlight are turned on.

7) Mileage mode: it is divided into single mileage Trip
and cumulative mileage ODO.

8) Riding time: Display the
riding time.

9) Error code display: display the sign ERRO and error code when a
fault is detected.

4. Definition of external keys

LD-S700 adopts the instrument liquid crystal display part and the
external three-way key design structure form, the communication
between the two is connected by the bottom lead.

The key is provided with Key to replace the

Key to replace the Key instead of the

5. Operation method and function instruction 1) Power on and power off

Long press when Key (MODE) for 3 seconds,

Start working, turn on the controller power



(MODE) for 3 seconds, the meter power off, and the controller power off. If you are not riding for 10 minutes (time can be set by the user) and the meter is not operated, the meter will automatically turn off the power. In the off state, the power consumption of the meter and controller is zero.

The instrument boot display interface is shown in Figure 1.



图 1

2) Speed mode switching

Long press the key and the key can be switched speed

Real-time SPEED → maximum SPEED → average SPEED (AVGSPEED).

The display interfaces of speed mode and cycling time are shown in Figure 2, Figure 3 and Figure 4.



实时速度

图 2



最高速度

图 3



平均速度

图 4

3) Mileage mode, cycling time, error code switch

Short press the button to switch the display of

Cycle display single mileage (Trip) → accumulated mileage (ODO) → cycling time

Time → error code ERR.

The switching mode display interface is shown in Figure 5, Figure 6, Figure 7 and Figure 8.



图 5



图 6



图 7



图 8

4) power gear selection

Short press the key or key, switch the power gear,

Power, the lowest 1 gear, the highest 5 gear, the default is 1 gear when the meter is turned on.

Zero is the gap. As shown in Figure 9 and Figure 10.





图 9



图 10

5) Headlight switch

Long  Press 3 seconds to turn on  Key

Seconds, turn off the headlights. The display interface of the headlight is shown in Figure 11 and Figure 12.



图 11




图 12

6) 6Km promotion (walking mode)

After the vehicle presses the key for 3 seconds in Row state, speed is displayed according to external conditions (display value is 4.5~7.5km/h),

Display the Walk  Key (or again  Key

Second or press the  button once), the electric bike

There are two modes of short press and long press, and the specific use method is customized according to customer requirements.

See Figure 13



图 13

6. System parameter setting

In the boot state, long press the key and the key to Set the state (Figure 14), in which the instrument parameters can be set, and then

Long The Key to exit setting state or no

Can automatically exit the setting state.

In the parameter  Th  Key to adjust

Value,  Key toggle Settings project, and save by

1) Backlight brightness: display  Th  Key display

1 is the darkest backlight and 3 is the brightest. 2 is the default state, as shown in Figure 14.



图 14

2) Metric/Imperial  Th  Key

Km/h or MPH is displayed. Metric/imperial system is set, and the default state is km/h, as shown in Figure 15,16.



图 15



图 16

3) Meter support working voltage: display P03,  s  ke

Displays 24~48, step is 12, default is 36V, as shown in Figure 17.

4) Dormancy time: display P04, press the key/key to display 0~60,

Denotes the automatic shutdown time (in minutes) when the vehicle is at rest and without operation. 0 means no automatic shutdown. The default hibernation state is 5 minutes, as shown in the figure

18.



图 18

5) Power gear: display P05,



Th



The key says

2.

0: Power gear is in 3 gear modes: 1, 2 and 3 respectively;

1: Power gear for 5 modes: 1, 2, 3, 4, 5;

2: The power gear is in 9 gear modes: 1, 2, 3, 4, 5, 6, 7, 8, 9;

The power shift position is 1, and the operation interface has 5 shift modes, as shown in Fig. 19 and Fig. 20.



图 19

显示助力档位



图 20

对应5档模式

6) Wheel diameter selection: display P06 shows the

The corresponding wheel diameter, unit is inch, precision: 0.1, as shown in Fig. 21.

7) Number of magnetic steels for speed measurement: P07 is displayed, and

Th

Key



图 22

8) Speed limit adjustment:



Indicates the speed limit range of 0~100Km/h, and 100 indicates no speed limit, as shown in Fig. 23.



图 23

9) Zero startup, non-zero startup Settings: display P09, short press





Key toggle shows 0, 1. 0: zero start, 1: non-zero

See Figure 24.



图 24

10) Drive mc



Toggle displays 0, 1, 2, as shown in Figure 25.

0: power drive (through the power gear to determine how much power output, this time the turn is invalid);

1: electric drive (through the handle drive, the power gear is invalid);

2: Power assisted drive and electric drive coexist at the same time (electric drive zero startup state without

Effect).



图 25

11) Power sensitivity setting:  The  ke

Switch the display range from 1 to 24, as shown in Figure 26.

12) Set the lifting strength of the helping Th



Key toggle display range 0~5, as



显示助力启动强度

图 27

13) Assisted magnetic steel plate type setting:



The key switch displays three types of



显示助力磁钢盘类型

图 28

14) Controller current limit value



Key toggle display range 1~20A, as shown in Figure 29.



图 29

15) Controller under-voltage value display: display 30.



图 30

16) Accumulated mileage clearing: display P16, speed

Value, long press the key (5s), when the speed

Mileage has been cleared to zero, as shown in Figures 31 and 32.



图 31



图 32

17) Restore factory Settings: display P18, long press the key (5s),

When the degree position displays SSSS, the parameter is set to restore the factory value (except the accumulated mileage), as shown in Figure 33.



图 33

7. Instrument specifications and parameters

- 1) 24V,36V,48V power supply
- 2) Rated working current of meter is 10mA
- 3) The maximum working current of the meter is 30mA
- 4) Shutdown leakage current <math>< 1\mu\text{A}</math>
- 5) Supply controller working current 50mA
- 6) Operating temperature: -18~65°C
- 7) Storage temperature: -30~80°C

8. Error code definition

S700 can provide warning to vehicle faults. When a fault is detected, the LCD displays the Error icon, and the ERROR code N is displayed at the location of the ERROR code, and the

ERROR code N =0~11 is displayed. The ERROR code is shown in Table 1 below

State meaning of state code (decimal)		handling
0	The normal state	
6	Battery under voltage	Battery recharging
7	Motor fault	Check whether the power line is loose
8	Turn the fault	Check the connection of the turnbuckle. If normal, replace the turnbuckle
9	Controller failure	Check the controller Hall connection
10	Communication receiving fault	Check whether the instrument cable is properly connected
11	Communication transmission fault	Check whether the instrument cable is properly connected

9. Use caution

During use, the time interval between power-on and power-off should not be less than 3 seconds, and do not press the MODE key at will when the power-off state is in use.

In use, pay attention to safe driving and avoid collision with instrument. Try to avoid the use in the harsh environment, such as heavy rain, snow, sun exposure. Try to avoid using under voltage to avoid damage to electric vehicle battery.

When the temperature is below -10°C , the screen will darken as the temperature drops and return to normal when the temperature rises again.

1) Q: Why can't I turn on the computer?

Answer: check whether the instrument wiring harness is in good contact with the connector of the controller. 2) Q: How should the instrument display fault code be dealt with?

Answer: timely to the electric vehicle agency point for maintenance.

11. Quality commitment and warranty scope

After the instrument leaves the factory, the shell scratch, damage is not covered repair; Lead scratches, fracture does not include repair; Warranty period: within 12 months from the date the instrument leaves the factory.

12. Version changes

The operation manual of this instrument is the general version of S700. The instrument used on some vehicles is slightly different from this manual, which is subject to the actual version used.

