

Yolin

User Manual for

E-bike Display

YL90E

Tianjin Yolin Technology Co.,Ltd.

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1. Product name and model

Intelligent digital display for e-bike; model: YL90E.

2. Specifications

- 36V/48V/60V power supply
- Rated working current 10mA
- Maximum working current 20mA
- Leakage current at power-off <1uA
- Working current at the supply controller end 50mA
- Working temperature -20~60℃
- Storage temperature -30~70℃

3. Appearance and dimensions



Fig. 3-1 Picture of Display 90E

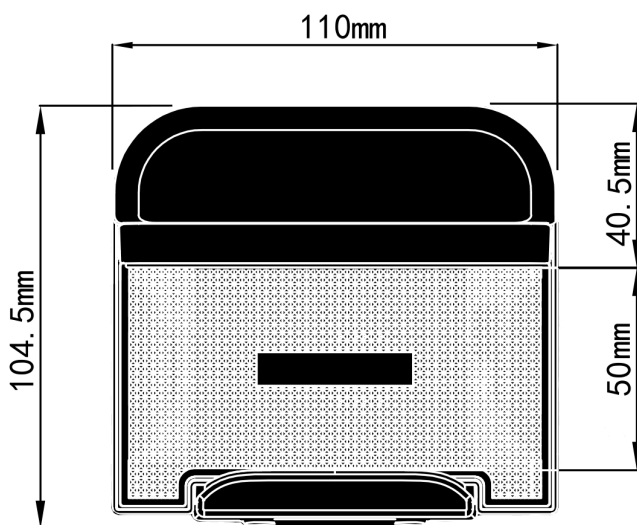


Fig. 3-2 Front View of Display 90E Dimensions



Fig. 3-3 Side View of Display 90E Dimensions

4. Function overview and functional area layout

4.1 Function overview

Display YL90E provides a variety of functions to meet the riding needs of users, including:

- Mobile phone holder
- Battery level indicator
- Speed indicator
- PAS level indicator (reserved)
- Headlight indicator (reserved)
- Steering indicator (reserved)

4.2 Functional area layout

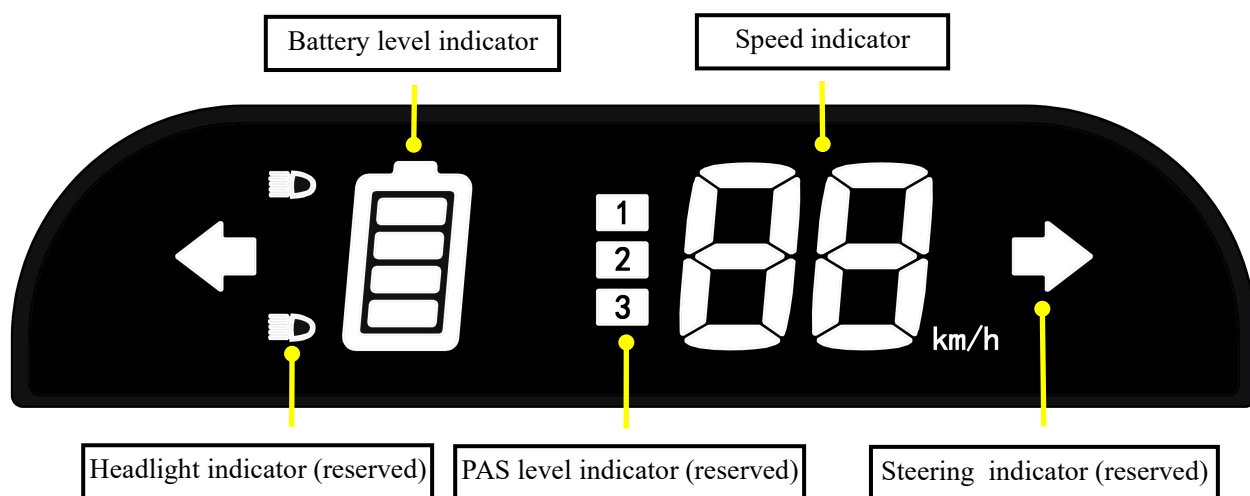


Fig. 4-1 Functional Area Layout Interface of Display YL90E

5. General operation

5.1 Power on / off

Turn on the power of the e-bike, the display will automatically power on and start to work. Turn off the power of the e-bike, the display will shut down and stop working, and its leakage current will be less than 1uA.

5.2 Display interface

After the display is turned on, the display will show the real-time speed (km/h) and battery level by default.

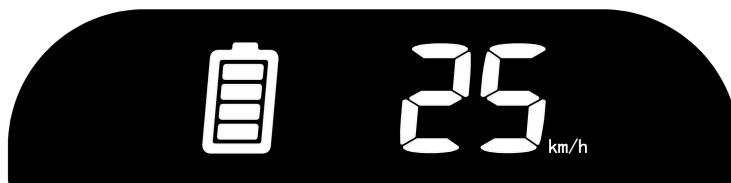
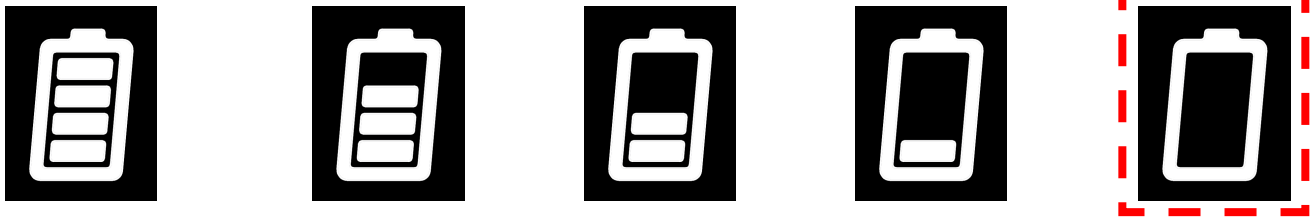


Fig. 5-1 Display Interface

5.3 Battery level indicator

The battery level indicator consists of four segments. When the battery is fully charged, the four segments will be all on. In case of undervoltage, the outline of the battery indicator will flash, which means the battery has to be charged immediately.



Full battery level indication 3-segment indication 2-segment indication 1-segment indication Undervoltage flashing

Fig. 5-2 Battery Level Indicator Interface

5.4 Headlight indicator (reserved)

Headlight indication function needs separate wiring control, and its high level is effective.

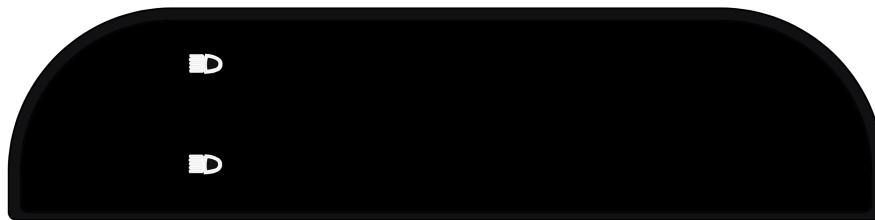


Fig. 5-3 Headlight Indicator (Reserved) Interface

5.5 PAS level indicator (reserved)

PAS level indication function can be supported by one - line communication.

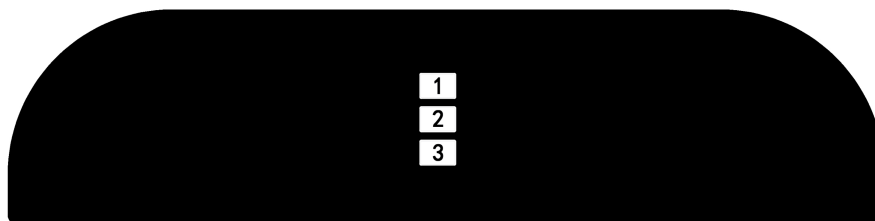


Fig. 5-4 PAS Level Indicator (Reserved) Interface

5.6 Steering indicator (reserved)

Steering indication function needs separate wiring control, and its high level is effective.

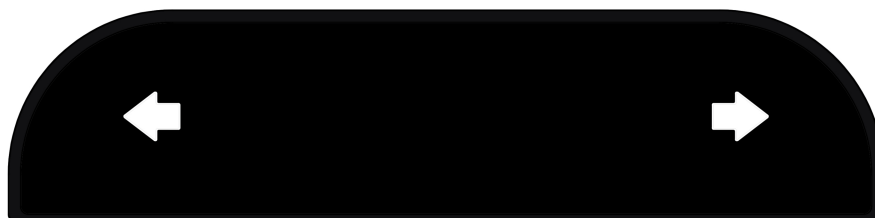


Fig. 5-5 Steering Indicator (Reserved) Interface

6. Speed acquisition modes

6.1 Acquisition Mode 1

Motor phase line speed measurement mode (according to the motor phase line voltage change simulation speed display) : Three output core wire of instrument (Power wire VCC, Ground wire GND, Phase line speed measurement signal A).

6.2 Acquisition Mode 2

Hall speed measurement method (reserved) : instrument output line three core (Power wire VCC, Ground wire GND, Hall speed measurement signal H)

6.3 Acquisition Mode 3

One-line communication protocol (reserved) : instrument outbound three-core wire (Power wire VCC, Ground wire GND, Communication receiving RX)

7. Quality commitments and warranty scope

7.1 Warranty information:

- For the faults caused by the quality of the product under normal use, the Company will be responsible for providing limited warranty during the warranty period.

- The warranty period of the product is within 12 months from delivery.

7.2 Non-warranty scope

- The enclosure is opened
- The connector is damaged
- The enclosure is scratched or damaged after delivery
- The outgoing line of the display is scratched or broken
- Faults or damage caused by force majeure (such as fires, earthquakes, etc.) or natural disasters (such as lightning strikes, etc.)
- The warranty period has expired

8. Wiring Sequence definition

Table 8-1 Wiring Sequence of Standard Connector

wiring sequence	Standard wire color	Function
1	Red (VCC)	Power wire of display
2	Blue (YXT)	Phase line speed measurement/ Hall speed measurement/ Communication receiving wire
3	Black (GND)	Ground wire of display

■ The outgoing lines of some products adopt waterproof connectors, and users cannot see the outgoing line color inside the wire harnesses.

9. Considerations

Please use safely, and do not plug or unplug the display when it is powered on.

◆ Please avoid bumping as far as possible.

◆ Please do not alter the background parameter settings of the display at will, otherwise normal riding cannot be guaranteed.

◆ If the display fails to work normally, it should be repaired as soon as possible.

◆ Due to product upgrades of the Company, part of the displayed contents or functions of the product you bought may be different from the manual, depending on the actual model.

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