Yuecoom SW900

Yuecoom SW900 Electric Bike LCD Display User Manual

Model: SW900 | Brand: Yuecoom

1. Introduction

The Yuecoom SW900 LCD Display provides essential data for your electric bike or scooter. Its large screen offers clear visibility of various parameters, and the backlight ensures readability in low-light conditions. This manual provides detailed instructions for installation, operation, and maintenance to ensure optimal performance and longevity of your device.

Key Features:

- **Durable Construction:** Features a 5-pin waterproof design and durable ABS material.
- **Real-Time Power Tracking:** Accurately displays remaining battery power and real-time power consumption.
- **Multi-Function Display:** Tracks speed, mileage, Pedal Assist System (PAS) levels, and trip data.
- **Easy Installation:** Designed for 22.5mm/28.6-inch handlebars and compatible with most 36V/48V systems.
- **User-Friendly Interface:** Compact design with an adjustable backlight for day and night visibility.

2. Important Safety Information

NOTE: This product operates using the No. 2 communication protocol. It must be used with a controller that also supports the No. 2 communication protocol. Incompatibility will prevent the display from functioning correctly.



Image: The SW900 LCD display with its control buttons, highlighting the important communication protocol note.

3. Package Contents

Please check the package for the following items:

- 1 x Electric Bike LCD Display (SW900)
- 1 x Mounting Base
- 1 x Instruction Manual (this document)

4. Setup and Installation

4.1 Handlebar Mounting

The SW900 display is designed for easy mounting on handlebars with a diameter of 22.5mm or 28.6mm. Secure the display and control unit firmly using the provided mounting base and screws.



Image: The SW900 display mounted on an electric bike handlebar, illustrating its compact design.

4.2 Wiring Connection

Connect the 5-pin waterproof connector from the display to the corresponding connector on your e-bike controller. Ensure the connection is secure and fully seated to prevent water ingress and ensure reliable communication.



Image: Close-up of the 5-pin waterproof connector.

Refer to the following table and diagram for the correct wiring order:

Order of Line	Color of Line	Function
1	Red (VCC)	Instrument power cord
2	Blue (K)	Controller power line
3	Black (GND)	Meter earth wire
4	Green (RX)	Meter data receiving line
5	Yellow (TX)	Data transmission line of instrument

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Image: Visual representation of the 5-pin connector wiring.

5. Operating Instructions

5.1 Power On/Off

- **To Power On:** Long press the 'Mode' button.
- **To Power Off:** Long press the 'Mode' button.

5.2 Display Functions

The SW900 display shows various parameters:

- Current Speed (AVG/MAX)
- Battery Level Indicator
- PAS (Pedal Assist System) Level
- Trip Distance (TRIP)

- Total Odometer (ODO)
- Trip Time
- Headlight Indicator
- Error Codes

5.3 Button Operations



Image: Close-up of the control buttons: Up, Mode, Down.

- **'Up' Button (∧):** Short press to increase PAS level or navigate up in settings.
- **'Down' Button (∨):** Short press to decrease PAS level or navigate down in settings.
- **'Mode' Button (M):** Short press to cycle through display modes (e.g., TRIP, ODO, Time).

5.4 Combination Key Functions

- **Enter/Exit Settings:** Long press 'Up' + 'Down' buttons simultaneously.
- **Turn Headlights On/Off:** Long press 'Up' + 'Mode' buttons simultaneously.
- **Activate 6KM/h Cruise Mode:** Long press 'Down' + 'Mode' buttons simultaneously.
- **Switch Speed Display (AVG/MAX):** Short press 'Up' + 'Down' buttons simultaneously.

5.5 Parameter Settings (P01-P22)

To access settings, long press 'Up' + 'Down' buttons. Use 'Up'/'Down' to change values and 'Mode' to switch between parameters. Long press 'Mode' to save and exit.

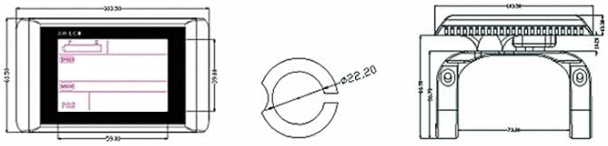
- **P01: Backlight Brightness:** 1 (dimmest) to 3 (brightest).
- **P02: Mileage Unit:** 0 (KM), 1 (Miles).
- **P03: Voltage:** 24V, 36V, 48V, 60V.
- **P04: Dormancy Time:** 0 (no dormancy), 1-60 (minutes).
- **P05: PAS Levels:** 0-9.
- **P06: Wheel Diameter:** Set in inches.
- **P07: Speed Magnetic Steel Number:** 1-100.
- **P08: Speed Limit:** 0-100%.
- **P09: Start Mode:** 0 (Zero start), 1 (Non-zero start).
- **P10: Drive Mode:** 0 (Power drive), 1 (Electric drive), 2 (Power + Electric drive).
- **P11: PAS Sensitivity:** 1-24.
- **P12: PAS Start Intensity:** 1-5.
- **P13: Current Limit:** 1-20A.
- **P14: Controller Undervoltage Protection Value.**
- **P15: Controller Overvoltage Protection Value.**
- **P16: ODO Reset:** Long press 'Mode' for 5 seconds to reset ODO.
- **P17: Cruise Control:** 0 (Off), 1 (On).
- **P18: Speed Ratio Adjustment:** 50-150%.
- **P19: Power Bit:** 0 (0.0 file), 1 (no 0.0 file).
- **P20: Communication Protocol:** 0 (Protocol 1.5.5), 1 (Protocol 2).
- **P21: Throttle Control Gear:** 0 (Full throttle), 1 (No gear discrimination).
- **P22: EABS Regenerative Braking:** 0 (Off), 1 (On).

User Manual

LCD-SW900 Hand Control Panel Operation Instruction

一、 Out shell Size and Material

Out shell material is ABS, Liquid crystal transparent window material is high hardness acrylic, which hardness is same as toughened glass.



Front view Transfer ring 22.2mm、25.4mm 、28.6mm optional Side view

二、 Work Voltage and connection mode

1、Work voltage: DC24V 、36V、48V、60V(which you can choose on the meter),the others you can customized.

2、 connection mode

Line sequence of the label connector

Order of line	Color of line	Function
1	Red(VCC)	Meter wire
2	Yellow(k)	wire of Controller
3	Black(GND)	Meter earth wire
4	Green(RX)	Meter data receiving line
5	Blue(TX)	Meter data transmission line

Extended function

Headlamp: Brown(DD):Positive electrode

White(GND):Negative electrode

PWM voltage type power shift control, An independent speed sensor, The color of wire otherwise defined.

Notes: Part of the products lead wire use waterproof connection. User cannot see the color of lead line.

三、Function description

1、Display function

Speed display, Power shift display, Battery indicator, Malfunction indication, Total mileage, single mileage, headlamp display, Single running time display

2. Control, Set function

Power switch control, headlamp switch control,6Km/h point control, wheel diameter set, Maximum speed set, auto sleep time set when unused, Backlight brightness set,Voltage grade set

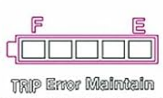
3.UART Communication protocol:

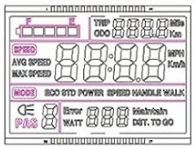
All contents of the display screen(All show within 1 second after boot-strap)

Display content introduction

3.1Headlamp

3.2battery indicator BATTERY

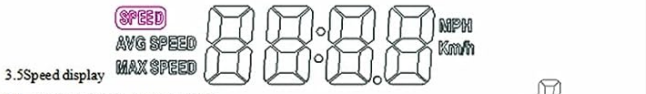




3.3Multifunctional display area ODO WATT DST. TO GO Total mileage ODO, Single mileage TRIP, Malfunction code, Watt,Maintain,DST TO GO (Temporary unused)

3.4The vehicle model MODE ECO STD POWER SPEED HANDLE WALK

ECO: STD: POWER: SPEEDHANDLE: WALK:



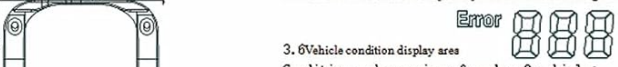
3.5Speed display

AVG Maximum speed, Average speed, MPH, Km/h

The meter will calculate real speed by wheel diameter and sign data.

3. 7Power condition display area PAS

Power condition (0-9gears), 、6km/h walk mark WALK



3. 6Vehicle condition display area

Condition code meaning of number 2 vehicle:

Status code(Decimal system)	Condition meaning	Remark
0	Normal	
1	Stay	
2	Brake	
3	power sensor problem	
4	6KM/H cruise control	Not
5	cruise real time	implemented
6	Battery under voltage	here
7	Electrical machinery problem	
8	handle problem	
9	Controller problem	
10	Communication reception problem	
11	Communication send problem	
12	BMS communication problem	
13	Headlamp problem	

3.8. Setting

P01: Backlight brightness, the darkest level 1, the brightest level 3;

P02: mileage unit, 0: KM; 1: MILE;

P03: Voltage level: 24V, 36V, 48V, 60V, 64V default 36V;

P04: Dormancy time: 0, not dormancy; Other numbers are dormancy times, range: 1-60; Unit minutes;

P05: Help file bit: 0, 3 file mode:1,5 gear mode:2,9 gear mode

P06: Wheel diameter: unit, inch;

Protocol 2 wheel diameter value: 5.0 ~ 50 Precision: 0.1 inch

P07: Speed gauge magnetic steel number: range: 1-100;

This parameter is related to the meter display speed and needs to be entered correctly;

If it is an ordinary hub motor, the number of magnetic steel is input directly;

If it is a high-speed motor, it is also necessary to calculate the deceleration ratio, and the input data = the number of magnetic steel × deceleration ratio;

For example: number of motor magnets 20, deceleration ratio 4.3: input data is: 86 = 20 × 4.3

P08: Speed limit: Agreement No. 2 range 0-100%, 100 means no speed limit;

For example, if it is set to 80, the speed of each gear will be 80% of the original speed

P09: zero start, non-zero start setting, 0: zero start; 1: Non-zero start;

P10: The drive mode is set to 0: Power Drive(how much power is output is determined by the power file bit, and the switch is invalid at this time).

1: Electric drive(by turning the handle drive, the power file bit is invalid at this time).

2: Power Driven and Electric Driven Coexistence

P11: Help sensitivity setting range: 1-24;The sensitivity of PAS is from high to low

P12: Help start intensity setting range: 1-5;Start process from slow to fast

P13: Power Magnetic Steel Disk Type Setting 5, 8, 12 Magnetic Steel Types

P14: Controller limit value set default 12A range: 1-20,The higher the value is, the larger the current increases, the range is 0-4a,When set to 20, increase 4a

Image: Detailed user manual page showing display functions, error codes, and parameter settings.

6. Maintenance

- **Cleaning:** Use a soft, damp cloth to clean the display. Do not use abrasive cleaners or solvents.
- **Water Exposure:** While the display is waterproof, avoid prolonged submersion or high-pressure water jets. Ensure the connector is always dry before connecting.
- **Storage:** Store the display in a dry, cool place when not in use for extended periods.

7. Troubleshooting

Common Issues and Solutions:

- **Display Not Turning On:** Check battery connection and ensure the display is securely connected to the controller. Verify battery voltage.
- **Incompatible Protocol:** If the display shows an error related to communication, ensure your e-bike controller uses the No. 2 communication protocol.
- **Incorrect Readings:** Check wheel diameter (P06) and speed magnetic steel number (P07) settings.

Error Codes:

The display may show error codes to indicate specific issues:

Code	State Meaning
E00	Normal
E01	Battery under voltage
E02	Motor failure
E03	Handle failure
E04	Controller failure
E05	Communication failure
E06	Overvoltage
E07	Undervoltage
E08	Current anomaly
E09	Temperature anomaly
E10	Sensor anomaly

8. Specifications

Feature	Detail
Brand	Yuecoom
Model	SW900
Material	ABS, LCD
Color	Black
Voltage Compatibility	Default 36V (Compatible with 24V, 36V, 48V, 60V)
Communication Protocol	No. 2 Protocol
Connector Type	5-Pin Waterproof
Cable Length	25cm
Mounting Type	Handlebar Mount (22.5mm/28.6-inch)
Display Type	LCD with Backlight
Human Interface Input	Buttons
Product Dimensions	5.12"L x 3.94"W x 2.76"H
Item Weight	0.22 Kilograms

9. Warranty and Support

This product is covered by a standard manufacturer's warranty against defects in materials and workmanship. For specific warranty details, please refer to the documentation provided at the time of purchase or contact your retailer.

For technical support, troubleshooting assistance, or inquiries regarding your Yuecoom SW900 LCD Display, please contact Yuecoom customer service through your purchase platform or the official brand website.

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Anonymous

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question