Estink Estinkor4fps3zq1711

LCD S900 Display Control Panel User Manual

Model: Estinkor4fps3zq1711

1. Introduction

The Estink LCD S900 Display Control Panel is a versatile accessory designed for electric bicycles and scooters. It serves as a comprehensive trip computer and control interface, providing essential riding data and allowing for system adjustments. This manual provides detailed instructions for installation, operation, and maintenance to ensure optimal performance and longevity of your device.

2. Specifications

Feature	Detail
Item Type	LCD S900 Display Control Panel
Material	Plastic
Display Panel Size	Approx. 11x6mm / 4.3x2.4in
Applicable Handlebar Diameter	22.2mm / 0.9in
Product Weight	Approx. 223g / 7.9oz
Voltage Compatibility	36V, 48V
Interface Type	5 pin Interface
Communication Protocol	No. 2 (UART)
Application	Suitable for JN Controller and Pasion Electric Motor Kit

Feature	Detail
Manufacturer Part Number	Estinkor4fps3zq1711

3. Setup and Installation

This section provides instructions for setting up and installing your LCD S900 Display Control Panel.

3.1 Handlebar Installation

The LCD S900 Display Control Panel is designed for handlebars with a diameter of 22.2mm (0.9 inches).

1. Ensure your handlebar has the correct diameter (22.2mm / 0.9in).
2. Carefully position the display control panel on the handlebar.
3. Secure the panel using the provided mounting hardware. Ensure it is firmly attached and does not obstruct other controls.



Figure 3.1: LCD S900 Display Control Panel installed on a handlebar, showing its position relative to other bike controls.

3.2 Electrical Connection

The display connects to your controller via a 5-pin interface. It is crucial to ensure compatibility with your controller's communication protocol.

- Locate the instrument interface on your electric bicycle's controller.
- Connect the 5-pin interface of the LCD S900 Display Control Panel to the controller's instrument interface.
- **Important Note:** The communication protocol for this display is Protocol No. 2 (UART). Verify that your controller also uses Protocol No. 2 to ensure proper functionality. Incompatibility may prevent the display from working correctly.

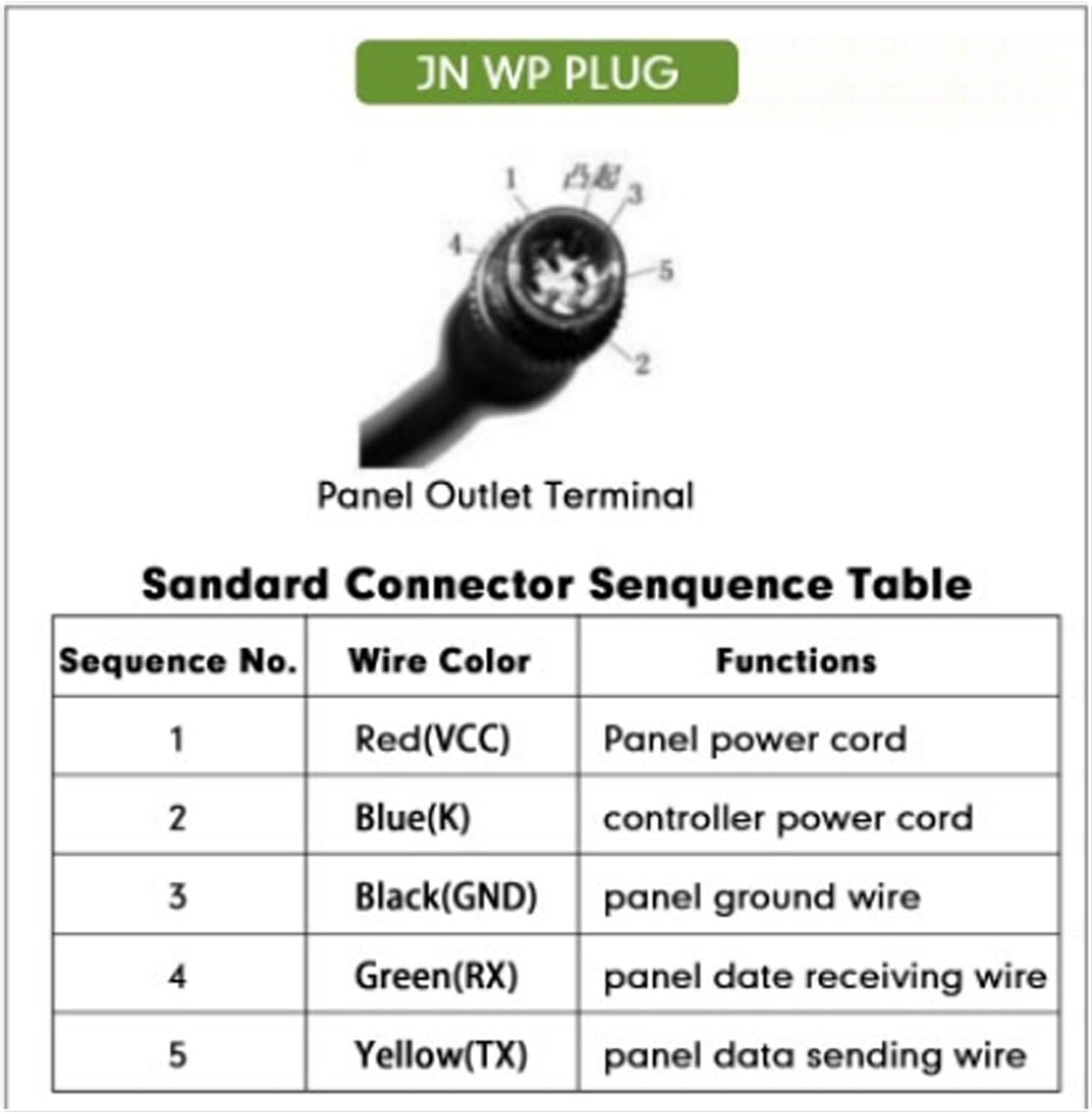


Figure 3.2: Detailed diagram of the 5-pin JN WP plug, illustrating the wire colors and their corresponding functions for proper connection.

Table 3.1: Standard Connector Sequence Table (5-pin Interface)

Sequence No.	Wire Color	Functions
1	Red (VCC)	Panel power cord
2	Blue (K)	Controller power cord
3	Black (GND)	Panel ground wire
4	Green (RX)	Panel data receiving wire
5	Yellow (TX)	Panel data sending wire

4. Operating Instructions

The LCD S900 Display Control Panel offers a range of functions to enhance your electric bicycle experience.

4.1 Display Functions

The display provides real-time information about your ride:

- **Speed Display:** Shows current riding speed.
- **Power Assisted Gear Display:** Indicates the current level of pedal assist.
- **Power Indicator:** Displays remaining battery power.
- **Fault Prompt:** Alerts to system errors.
- **Total Mileage:** Records the total distance traveled by the bicycle.
- **Single Mileage:** Records the distance of the current trip.
- **Headlight Display:** Indicates headlight status.
- **Single Driving Time Display:** Shows the duration of the current trip.



Figure 4.1: The LCD S900 display showing various data fields, including speed, mode, and PAS level, providing comprehensive ride information.

4.2 Control and Setting Functions

The control panel allows you to manage various settings and functions:

- **Power Switch Control:** Turns the system on/off.
- **Headlight Switch Control:** Controls the bicycle's headlights.
- **6Km/h Jog Control:** Activates a low-speed assist mode (walk assist).
- **Wheel Diameter Setting:** Allows calibration for accurate speed and distance readings.
- **Maximum Speed Setting:** Configures the maximum assisted speed.
- **Idle Automatic Sleep Time Setting:** Sets the duration before the display enters sleep mode due to inactivity.
- **Backlight Brightness Setting:** Adjusts the display's backlight intensity.
- **Voltage Level Setting:** Configures the voltage (36V/48V) for accurate power display.
- **PAS Connect:** Manages the connection and level of the pedal assist system.



Figure 4.2: The LCD S900 display unit alongside its wired control buttons, which are used to navigate menus and adjust settings.

5. Maintenance

Proper maintenance ensures the longevity and optimal performance of your LCD S900 Display Control Panel.

- **Cleaning:** Use a soft, damp cloth to clean the display screen. Avoid abrasive cleaners or solvents that could damage the plastic.
- **Protection:** Protect the display from direct sunlight for prolonged periods and extreme weather conditions (heavy rain, snow, extreme temperatures) when not in use.
- **Connections:** Periodically check all cable connections to ensure they are secure and free from corrosion or damage.
- **Storage:** If storing the bicycle for an extended period, ensure the display is clean and stored in a dry, temperate environment.

6. Troubleshooting

This section addresses common issues you might encounter with your LCD S900 Display Control Panel.

- **Display Not Turning On:**
  - Check if the power switch on the display is pressed.
  - Verify that the 5-pin connection to the controller is secure and fully inserted.
  - Ensure the bicycle's main battery is charged and turned on.
  - Confirm that the controller is receiving power.
- **Incorrect Readings (Speed/Distance):**
  - Check the wheel diameter setting in the display's menu. Ensure it matches your bicycle's wheel size.
  - Verify that the speed sensor (if external) is properly installed and functioning.
- **Display Shows Error Code:**

- Refer to your electric bicycle's controller manual for specific error code definitions, as the display often relays codes from the controller.
- Common issues include motor, battery, or sensor malfunctions.

- **No PAS Functionality:**
  - Ensure the PAS sensor is correctly installed and connected.
  - Check the PAS settings on the display.
- **Display Not Communicating with Controller:**
  - **Crucial:** Confirm that both the display and your controller use the same communication protocol (Protocol No. 2 / UART). If protocols differ, they are incompatible.
  - Check for any visible damage to the 5-pin cable or connectors.

If you continue to experience issues, please consult a qualified technician or contact customer support.

7. Important Notes

- **Product Variation:** Please be aware that due to manufacturing processes, the new and old types of this product may be shipped randomly. While functionality remains consistent, there might be minor aesthetic differences.
- **Communication Protocol:** This display operates using Communication Protocol No. 2 (UART). It is essential to confirm that your electric bicycle's controller also uses Protocol No. 2 to ensure proper adaptation and functionality after purchase.



Figure 7.1: Illustration of potential variations between new and old models of the LCD S900 Display Control Panel.

© 2024 Estink. All rights reserved.
For support, please visit Estink Store.