DISPLAY CDC52

USER MANUAL

Preface

Dear user,

To help you get the best from your e-bike, please read this CDC52 display manual carefully before use. It explains the operation of the display step by step in plain language, including hardware installation, settings and normal operation. It will also help you resolve any questions or difficulties you may encounter.

CONTENTS

1. PRODUCT INTRODUCTION 4

2. APPEARANCE AND DIMENSIONS 5

3. TECHNICAL PARAMETERS 5

4. BUTTON DEFINITION 6

5. INSTALLATION INSTRUCTIONS 7

6. OPERATION INSTRUCTIONS 11

7. LEAD-OUT WIRE DESCRIPTION 12

8. FREQUENTLY ASKED QUESTIONS 13

9. QUALITY COMMITMENT AND WARRANTY SCOPE 13

ANNEX: ERROR CODE DEFINITION TABLE 14

CUTOUT TEMPLATE (SCALE 1:1) 16

1. PRODUCT INTRODUCTION

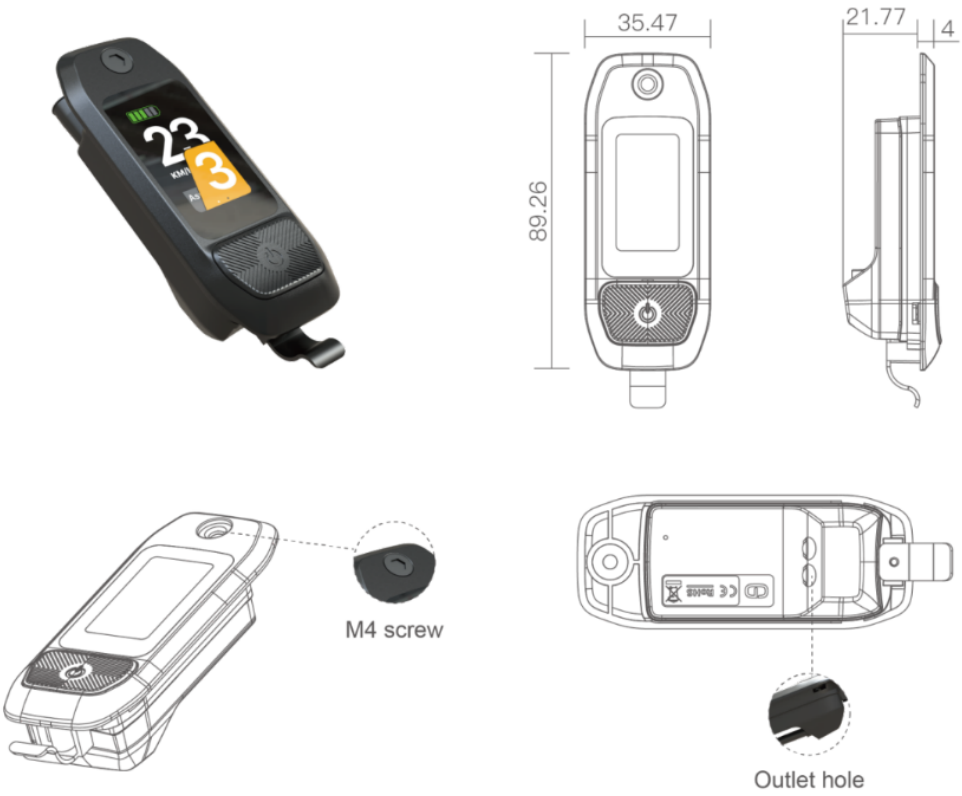
The CDC52 display uses a 1.47-inch TFT screen and an ABS housing with a black frosted finish, offering an elegant appearance, clear frames and a minimalist design. The housing material allows normal use at temperatures from -20 °C to 60 °C and has excellent mechanical properties.



Main functions:

- Total mileage indication
- Trip mileage indication
- Maximum speed indication
- Average speed indication
- Current speed indication
- Pedal assist level setting
- Battery level indication
- Error code indication
- Headlight function
- Walk function
- Speed unit conversion
- Wheel diameter setting
- Voltage setting
- Speed limit setting
- Total mileage reset
- Power-on password setting

2. APPEARANCE AND DIMENSIONS



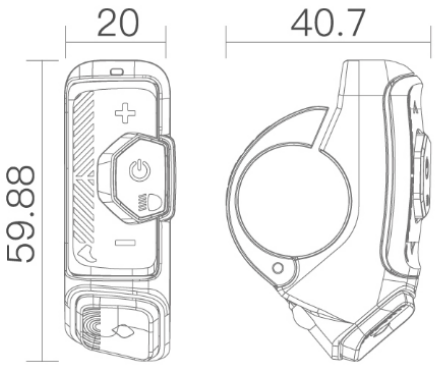
Dimensions in mm.

3. TECHNICAL PARAMETERS

Name	Technical parameter
Rated voltage	36 V, 48 V, 52 V
Rated current	< 30 mA
Ambient temperature	-20 °C to 60 °C
Ambient humidity	15 to 95% RH
Protection level	IP67
Viewing angle	Full viewing angle

4. BUTTON DEFINITION



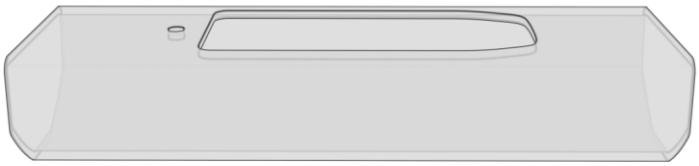


Dimensions in mm.

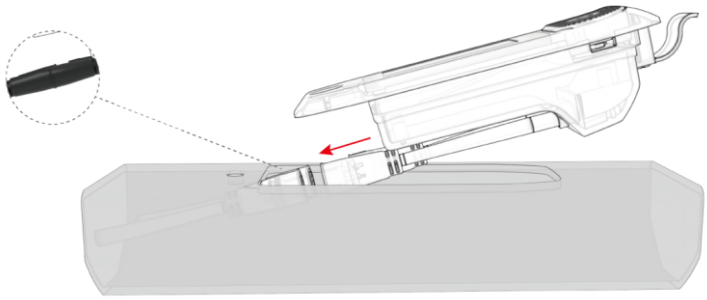
Button	Operation	Function
	Press 2 s	1. On the main interface, enter the setting menu; 2. On the setting interface, return to the main interface.
	Click	1. On the main interface, switch between main interface 1 and main interface 2; 2. In the setting menu, enter the setting item; 3. On the setting item interface, confirm the change and return to the setting list.
	Press 2 s	None
	Click	1. On the main interface, increase the assist level; 2. On the setting interface, switch options; 3. On the password interface, increase the value of the current password digit.
	Press 2 s	1. On the main interface, activate the walk (push) function.
	Click	1. On the main interface, decrease the assist level; 2. On the setting interface, switch options; 3. On the password interface, decrease the value of the current password digit.
	Press 2 s	1. Power off, from any interface.
	Click	1. When switched off, power on; 2. On the main interface, turn the front headlight on/off; 3. On the password input interface, move to the next password digit.

5. INSTALLATION INSTRUCTIONS

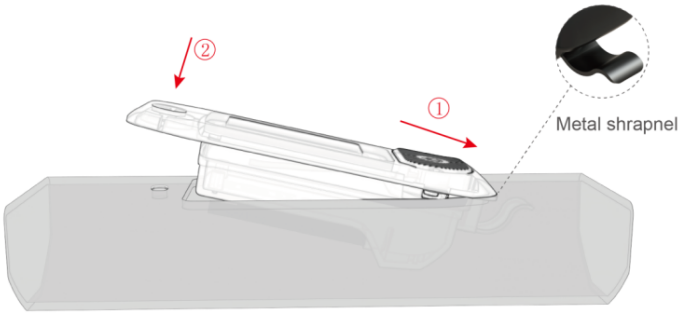
1. Cut a mounting opening for the display in the upper tube according to the supplied template. (A full-size 1:1 cutout template is included at the end of this manual; you may cut it out and use it for marking.)



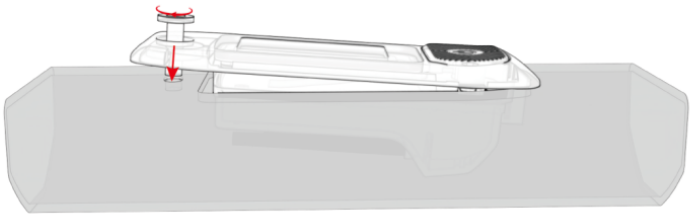
2. Connect the display connector to the controller connector inside the tube, arrange the cables and insert them into the upper tube of the frame.



3. Insert the end with the metal spring tab obliquely downward into the opening of the frame tube, then press the display down.

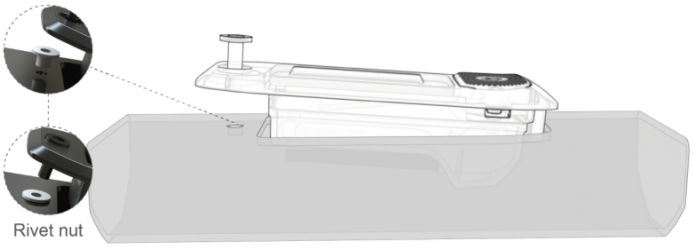


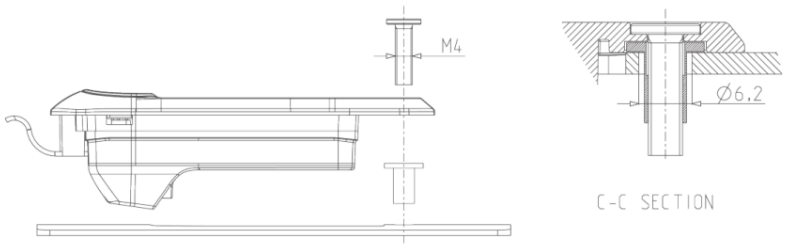
4. Seat the other end of the display in position, align its screw with the threaded hole on the frame and tighten clockwise. The tightening torque is 1.3 N·m.



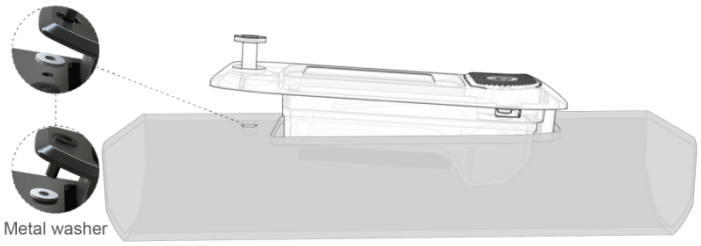
Note: there are two ways of preparing the upper tube for the fixing screw. Choose one according to the characteristics of the upper tube.

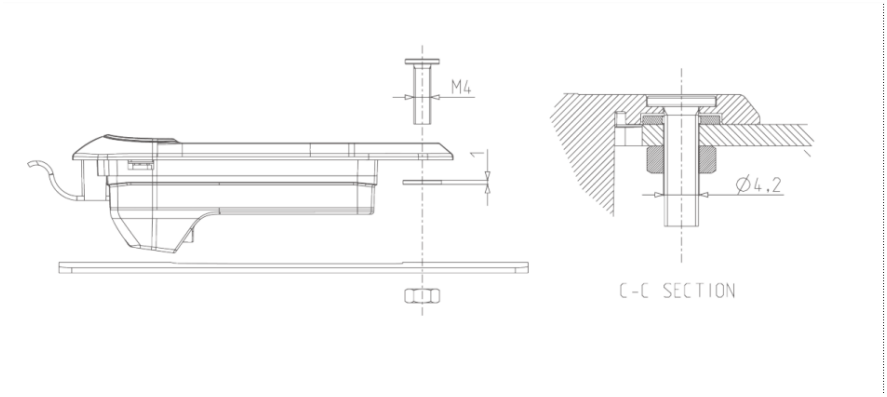
Method 1 – Rivet nut. Drill a 6 mm diameter hole in the upper tube and fit an M4 blind rivet nut (alternatively, an M4 thread can be machined directly in the tube), then tighten with the screw. As shown in the figure below:



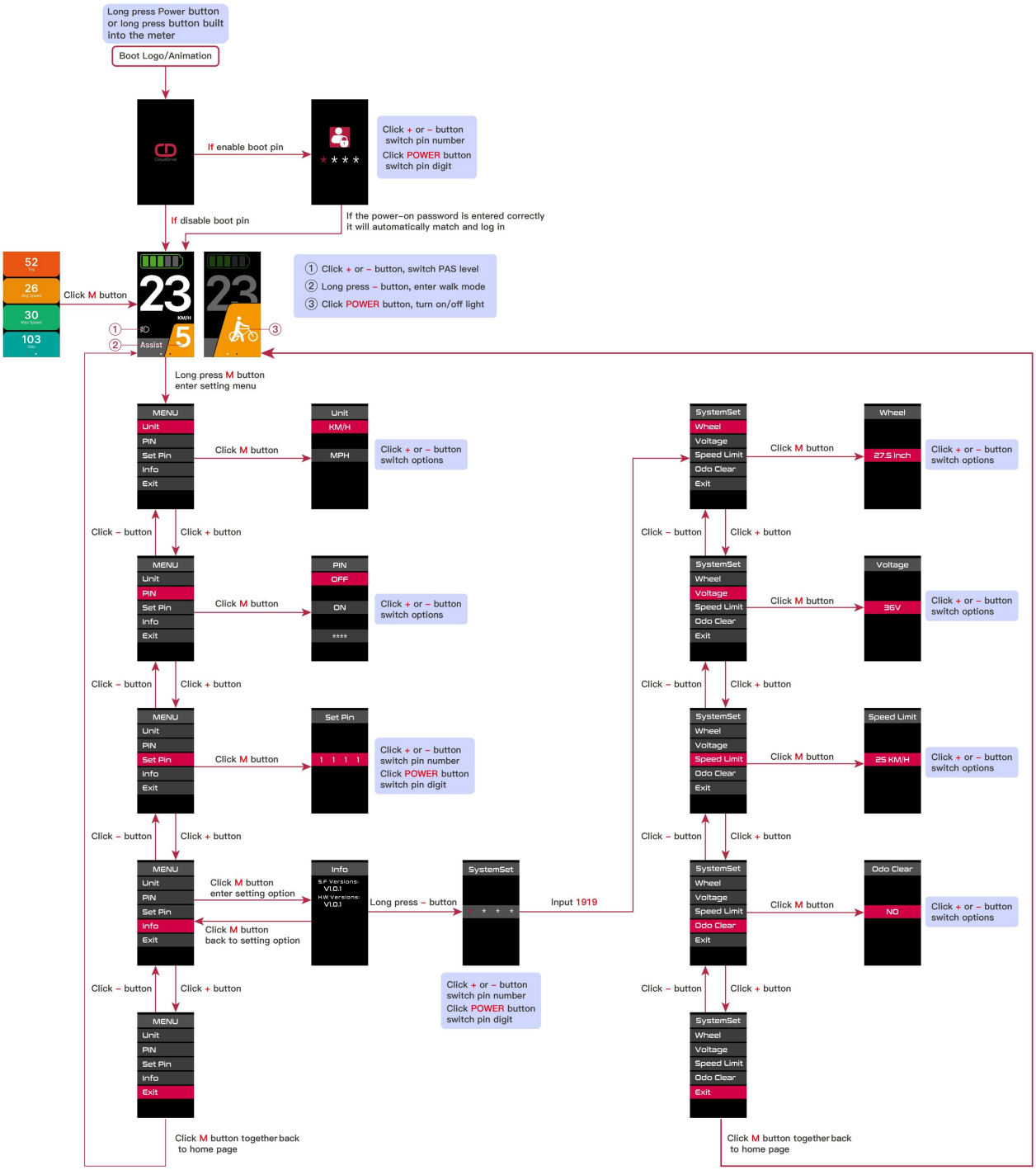


Method 2 – Metal washer. Drill a hole in the upper tube, then place a 1 mm thick metal washer between the display and the upper tube and tighten with the screw. As shown in the figure below:





6. OPERATION INSTRUCTIONS



Key to the diagram

Power on: long press the Power button (on the remote or on the display itself). After the start-up screen, if the power-on password is enabled the display asks for it; once the correct password is entered, the display unlocks automatically. If the password is disabled, the main interface opens directly.

Entering a password: click + or − to change the value of the digit; click Power to move to the next digit.

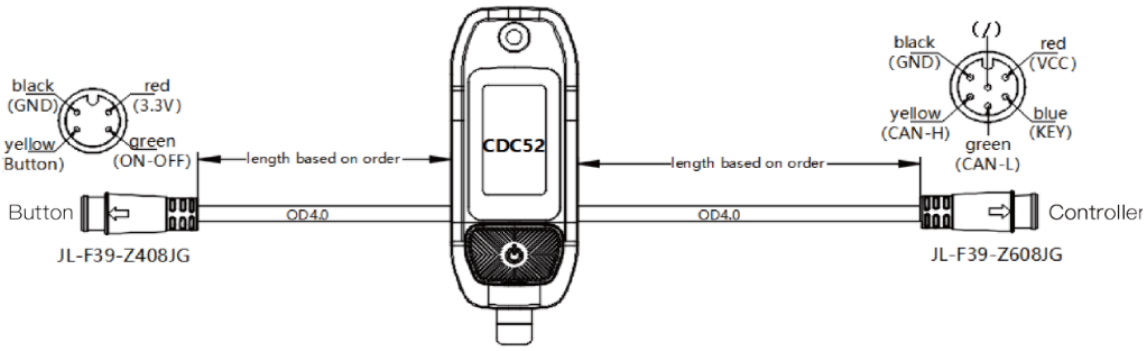
Main interface: click + or − to change the assist (PAS) level; long press − to enter walk mode; click Power to turn the light on/off; click M to switch between main interface 1 (speed, assist level) and main interface 2 (Trip, Avg Speed, Max Speed, Odo).

Setting menu (MENU): long press M on the main interface. Click + or − to move between the items, click M to open the selected item, click + or − to switch options and click M to confirm. Select Exit and click M to return to the main interface.

Menu items: Unit (speed unit: KM/H or MPH); PIN (power-on password ON/OFF); Set Pin (set the 4-digit power-on password); Info (software and hardware versions); Exit.

System settings (SystemSet): on the Info screen, long press − and enter the system password. Items: Wheel (wheel diameter), Voltage (system voltage), Speed Limit, Odo Clear (total mileage reset), Exit.

7. LEAD-OUT WIRE DESCRIPTION



8. FREQUENTLY ASKED QUESTIONS

Q: Why can't the display power on?

A: Check that the connector between the display harness and the controller is making reliable contact.

Q: What should I do if the display shows an error code?

A: First identify the problem corresponding to the error code displayed. If you cannot solve it yourself, take the e-bike to a repair shop promptly.

9. QUALITY COMMITMENT AND WARRANTY SCOPE

Warranty information:

1. For faults caused by quality defects of the product itself under normal conditions of use, our company will provide a limited warranty within the warranty period.

2. The warranty period of the product starts from the date on which the user purchases the display and lasts for 18 months.

Out-of-warranty terms:

The following situations are not covered by the warranty:

1. Unauthorised disassembly or modification.
2. Faults or damage caused by misuse or by incorrect installation and set-up by the user or a third party.
3. Scratches or damage to the housing after the display has left the factory.
4. Scratches or breaks on the wires.
5. Faults or damage caused by force majeure (such as fire, earthquake, etc.) or natural disasters (such as lightning strikes, etc.).
6. The product is beyond the warranty period.

ANNEX: ERROR CODE DEFINITION TABLE

Fault code	Definition	Solution
1	(Controller) Communication fault	1. Check that the signal cable between the controller and the display is plugged in securely; 2. Check the signal cable for short circuits or breaks; 3. Check whether the controller's ground wire has poor contact; 4. Restart the power system and reset the controller parameters; 5. Replace the controller and test.
2	Current short-circuit fault	1. The controller enters protection mode after detecting a high current. Check for foreign objects between the three-phase wires and the Hall signal connector, or for internal short circuits or poor connections; 2. Replace the cable with a new one; 3. Replace the controller with a new one; 4. Replace the motor with a new one.
3	Motor locked rotor	1. The motor is stuck. If the motor is stuck for more than 2 seconds and stops working, reduce the load and restart the system to resolve the issue; 2. Check for foreign objects between the three-phase wires and the Hall signal connector, or for internal short circuits or poor connections; 3. Replace the controller; 4. Replace the motor.
4	Under-voltage (< 30.5 V / 41.5 V)	1. Check whether the battery is charged; 2. Remove the battery and measure it with a multimeter to check whether it has power internally; 3. Charge the battery; 4. Replace the controller.
5	Brake signal abnormal	1. Do not operate the brake before the e-bike is powered on; 2. Check whether the cable connected to the brake is loose, or whether the connector to the display or controller is damaged; 3. Replace the brake with a new one; 4. Replace the controller.
6	Motor Hall problem	1. Check whether the Hall signal cable connector has poor contact. Reconnect it and restart the system to check; 2. Replace the motor.
7	Throttle signal abnormal	1. Check whether the throttle has returned to its initial position; 2. Check whether the cable connected to the throttle is loose; 3. Check whether the cable connection sequence is correct; 4. Use a multimeter to measure whether the voltage is normal; 5. If the problem persists, replace the throttle with a known good one.

Fault code	Definition	Solution
9	Over-voltage (> 45 V / 58 V)	1. Check whether the battery voltage exceeds the upper limit of the displayed value; 2. Replace with a battery of matching specifications.
11 (B)	Controller high-temperature protection	1. The internal temperature of the controller is too high. It is recommended to stop riding. The error will disappear automatically once the controller's internal temperature decreases.
12 (C)	MOSFET fault	1. The controller has detected a damaged MOSFET. It is recommended to replace the controller directly.
14 (E)	Motor high-temperature fault	1. The internal temperature of the motor is too high. It is recommended to stop riding. The error will disappear automatically once the motor's internal temperature decreases.
15 (F)	Display communication fault	1. Check whether the cable between the display and the controller is loose, or whether the connector is damaged; 2. Reconnect the connector between the display and the controller; 3. Replace the display to see whether the fault is eliminated. If not, the controller is probably damaged: replace the controller.

CUTOUT TEMPLATE (SCALE 1:1)

Dimensions in mm. Print this page at 100% (actual size, without "fit to page") and check the 32.50 mm and 73.60 mm dimensions with a ruler before cutting.

