

Vanpowers Bike

Display User Manual

For Manidae

USER GUIDE

SW-LCD



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User Instructions

Dear User,

To ensure the best possible performance for your e-bike, please read through the SW-LCD display manual carefully before use.

From hardware installation to settings to basic functions, this manual will go over every aspect of the display in brief and concise language. It will also help you troubleshoot potential problems to prevent you from having to research confusing technological terms.

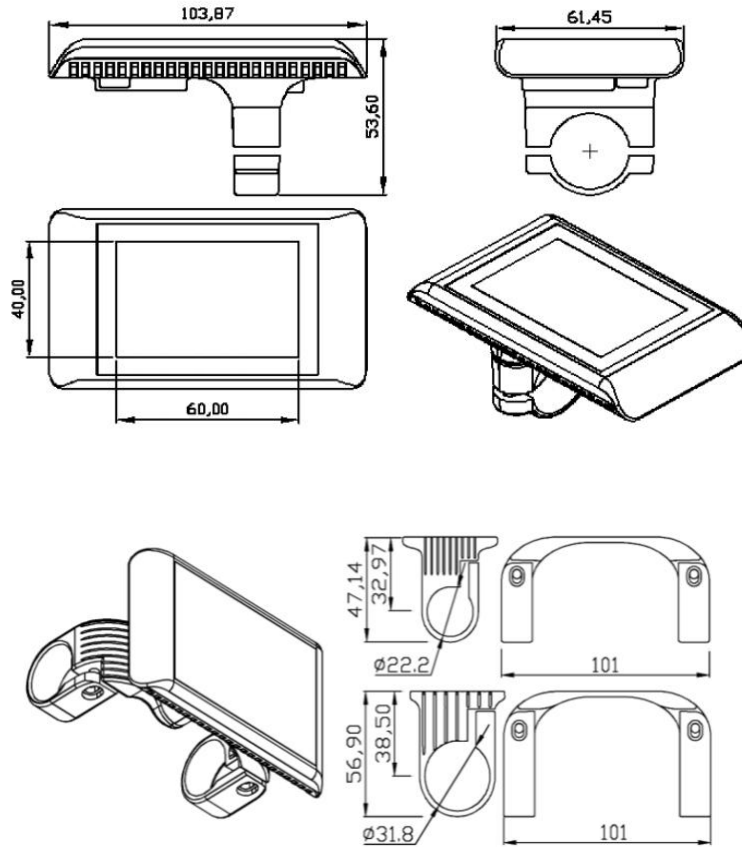
1. Appearance and Specifications

1.1 Materials

The SW-LCD display shell has a sleek black-and-white design and can be used normally at temperatures ranging from $-20\text{ }^{\circ}\text{C}$ to $60\text{ }^{\circ}\text{C}$.

1.2 Display Measurements

Units are in millimeters (mm).



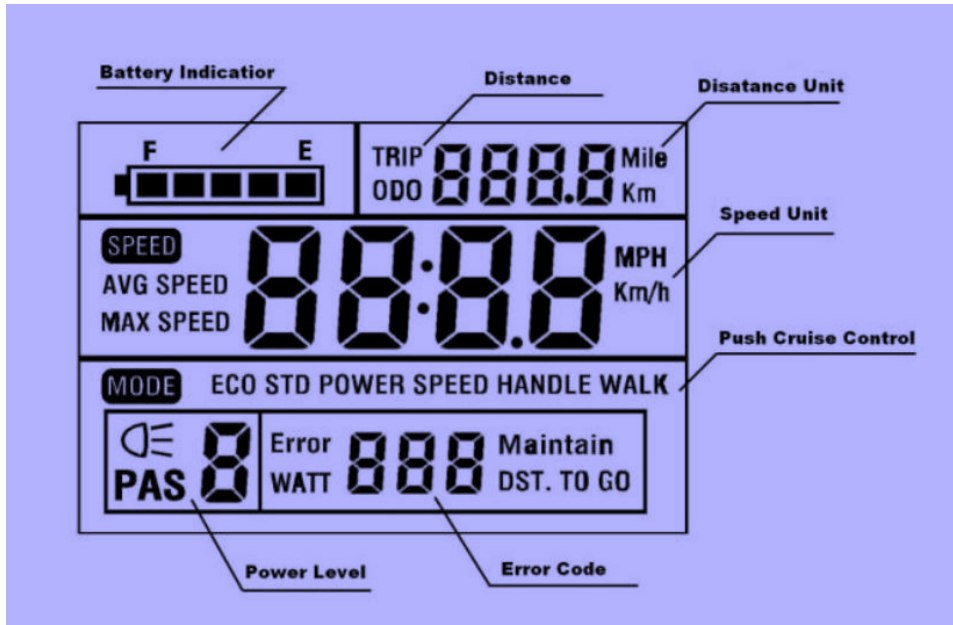
2. Overview of Functions and Buttons

2.1 Preset and Default Items

The available SW-LCD user settings include wheel diameter (18–28 inches), max speed, backlight level, display units, and more.

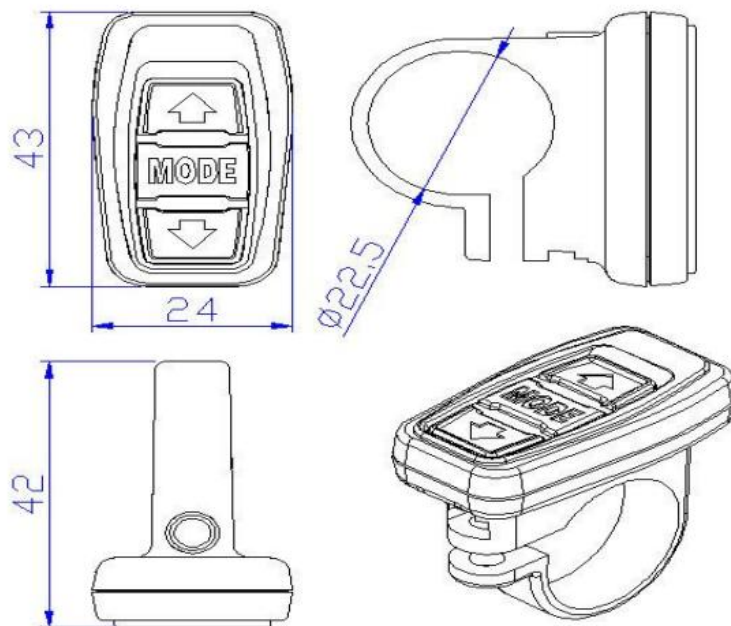
2.2 Display Example Image

The screen displays battery capacity, assist level, speed, distance traveled, power usage, cruise control mode, and an error code if there is an issue with the electronic control system.






2.3 Buttons

The SW-LCD is equipped with a button set that can be installed on either side of the handlebar. Its specifications in millimeters are as follows:



The button set is connected to the bottom of the SW-LCD display via the lead cable.

In the following instructions,  is represented by [MODE],  is represented by [UP], and  is represented by [DOWN].

3. Installation Instructions

Affix the display and the button set to the handlebar and adjust the angle for easy viewing while riding. With the e-bike turned off, connect the display cable to the controller cable to finish installation.

4. Setup

4.1 Pre-Startup

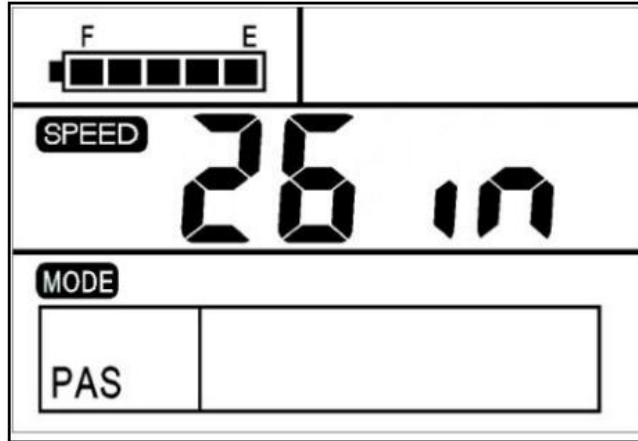
Make sure the display cable and controller cable are properly connected.

4.2 Startup and Settings

Press the [MODE] button for 1.5 seconds to turn on the display. Hold both the [UP] and [DOWN] keys for 2.5 seconds to enter the menu to change your settings. The current setting being adjusted will blink.

4.3 Wheel Diameter

The first setting is wheel diameter. The interface looks like this:

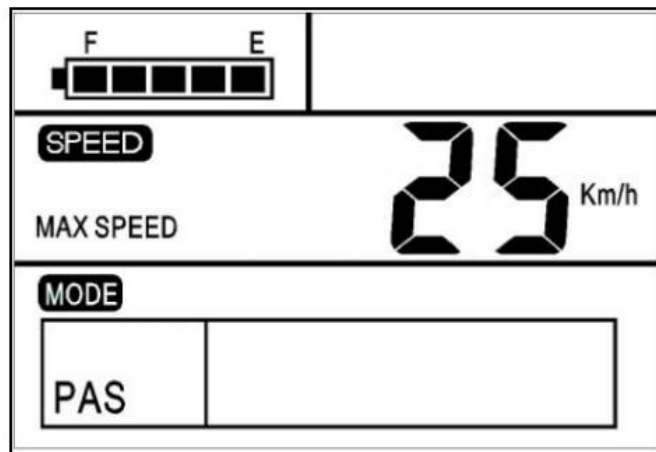


Wheel diameter interface

Press [UP] or [DOWN] to choose the correct diameter (18–28 inches) for your wheels. The default setting is 26 inches. Press [MODE] to save your changes and progress to the maximum speed setting.

4.4 Maximum Speed

The second setting is maximum speed. The interface looks like this:



Maximum speed interface

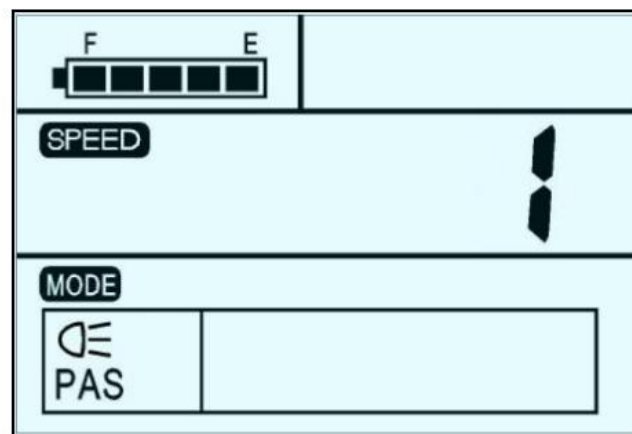
This is where the maximum riding speed can be set. The bike will not exceed the set maximum speed for the rider's safety. The options for maximum speed range from 7.5 to 25 mph (12 to 40 km/h). Press [UP] to

increase the maximum speed and [DOWN] to decrease it. The default setting is 15.5 mph (25 km/h). Press [MODE] to save your changes and progress to the backlight brightness setting.

Warning: Raising the speed limit of your e-bike may violate your local laws. Vanpowers Bike is not responsible for any issues caused by your decision to change the speed limit.

4.5 Backlight Brightness

The third setting is backlight brightness. The interface looks like this:

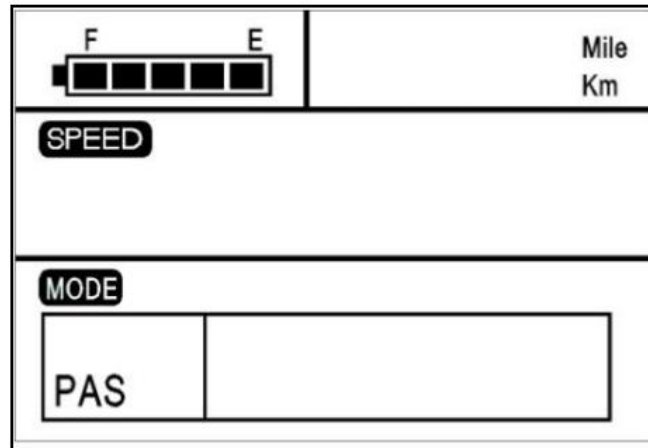


Backlight brightness interface

Press [UP] or [DOWN] to modify the backlight brightness. You can choose from three brightness levels, with 1 being the lowest and 3 being the highest. The default setting is level 1. Press the [MODE] key to confirm the backlight brightness and progress to the unit settings.

4.6 Unit Settings

The fourth setting is speed and distance units. The interface looks like this:



Unit settings interface

Press the [UP] or [DOWN] key to choose between imperial and metric speed units. The distance units will change accordingly.

4.7 Exit Settings

While in the settings, long press the [MODE] key for 3 seconds to save your changes and exit.

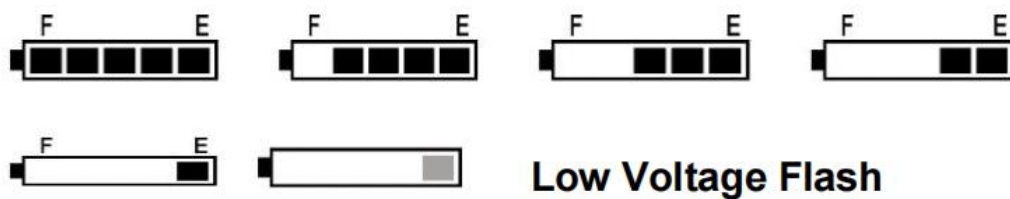
5. Standard Operation

5.1 Power On/Off

Long press the [MODE] key to start up the display and supply power to controller. Long press the [MODE] key again to turn off the display and the controller. In the power-off state, the display and controller will no longer consume battery power.

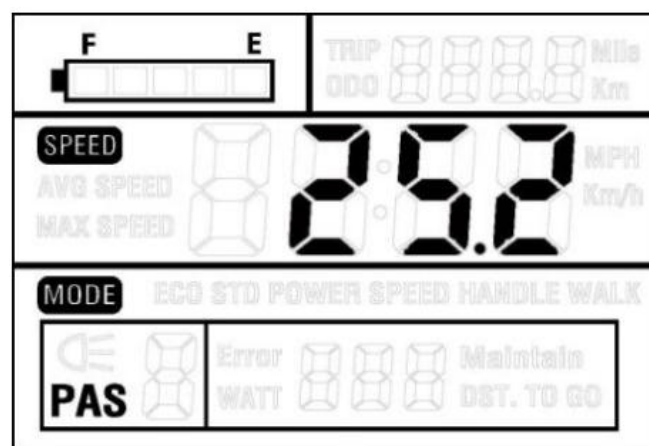
5.2 Battery Capacity

When the battery is charged to full or nearly full capacity, all five segments will be lit. When the battery is running low, the last segment will flash at 1 Hz, indicating that the battery needs to be recharged immediately.

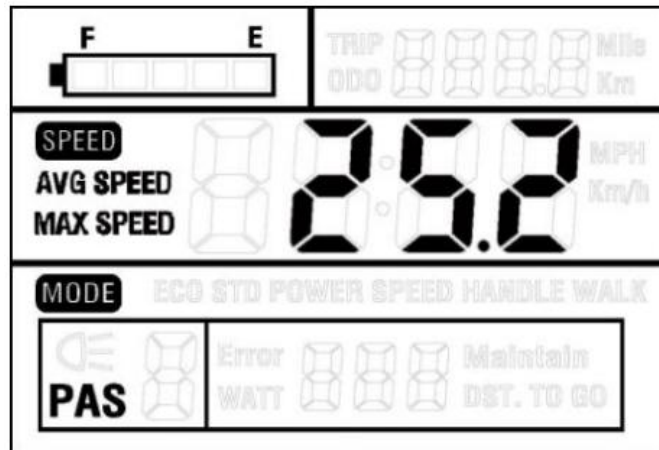


5.3 Speed

When the e-bike is turned on, the display will automatically show the current speed (SPEED).



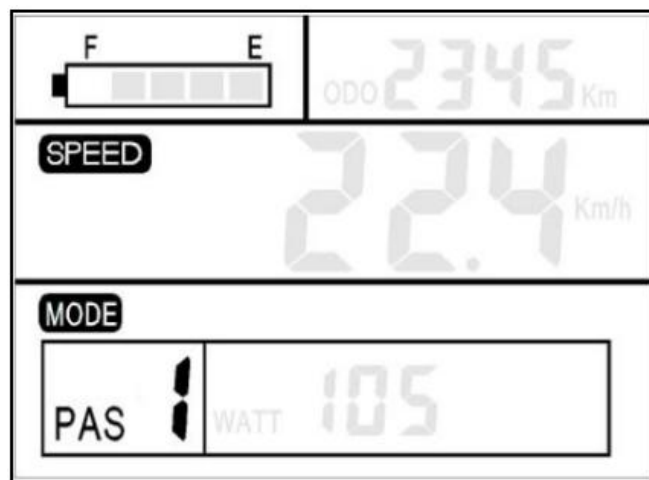
Hold [UP] to show the maximum speed (MAX SPEED) reached during the current ride. Hold [UP] again to show the average speed (AVG SPEED) reached so far on the current ride. Hold [UP] again to return to the current speed.



Speed display interface

5.4 Assist/Throttle Level

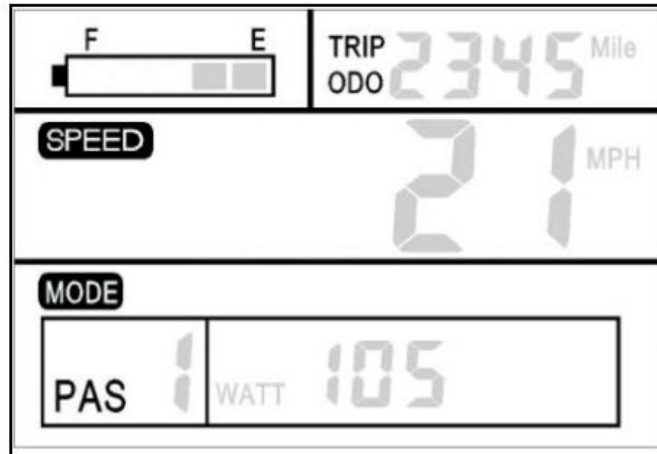
Press [UP] or [DOWN] to change the output power of the motor. The power ranges from level 1 to level 5, with 1 being the minimum and 5 being the maximum. The default level is 1.



Assist level interface

5.5 Odometer

Press the [MODE] key to switch between current trip distance (TRIP) and total distance (ODO).



Distance interface

5.6 Cruise Control

Long press the [DOWN] key for 3 seconds to enter a power-assisted walk mode. The bike will travel at a fixed speed of 3.7 mph (6 km/h).



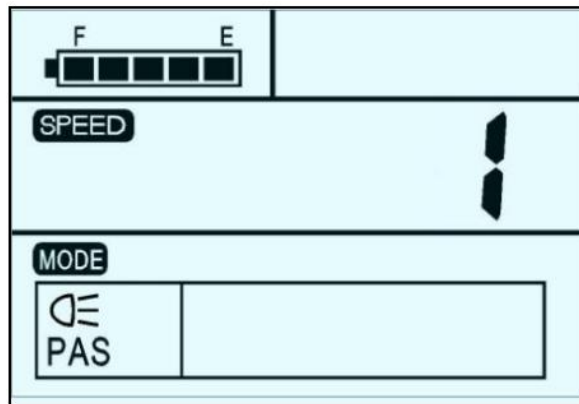
Power-assisted walk interface

Warning: Cruise control mode is only recommended while pushing the bike. Please do not use it while riding.

5.7 Backlight On/Off

Hold both [UP] and [MODE] for 3 seconds and turn on the display's backlight. Hold both [UP] and [MODE] for 3 seconds again to turn it off.

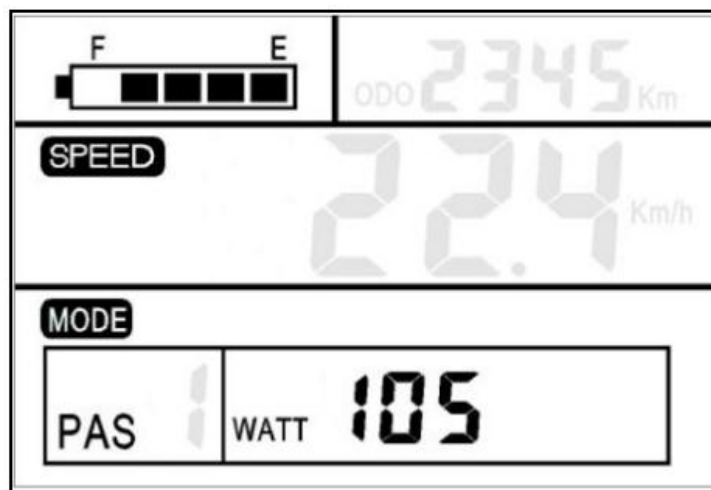
When the backlight is turned on, the headlight will be also turned on if the bike has one.



Backlight interface

5.8 Power Usage

This displays the e-bike's real-time power consumption.



Power usage interface

6. Warnings

- Practice safe riding and avoid collision with the display as much as possible.
- Avoid exposing the display to harsh environments such as heavy rain, snow, and direct sunlight.

- Avoid riding with a low battery to prevent damage to it.
- The screen will get dark when temperatures fall below $-10\text{ }^{\circ}\text{C}$ and will brighten again as the temperature rises.

7. Q&A

Q: Why can I not turn on the display?

A: Please check whether the lead cable is properly connected to the controller cable.

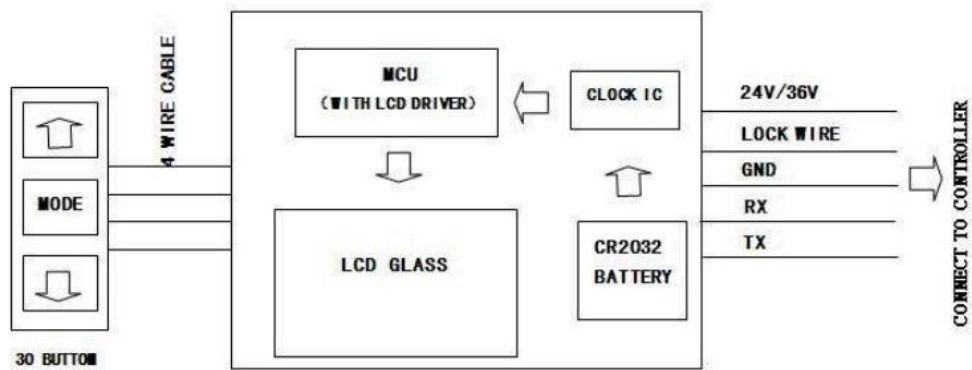
Q: What do I do when an error code appears on the display?

A: Contact a mechanic for repairs.

8. Warranty Terms

- We are not responsible for any scratches or damage sustained by the display shell after the product leaves the factory.
- Scratched or broken lead wires are not covered by our warranty.
- The warranty period for the display is 24 months from the day the product leaves the factory.

9. Circuit Diagram



Red: 24V/36V; Blue: lock wire; Black: GND; Green/ Yellow: RX / TX wire.

Due to the use of waterproof cable connectors, users will not be able to see the colors of internal wires.

10. Software Version

This instruction manual was written for a general-purpose version of the display software (V2.0). The software version used in some displays may be slightly different from that described in this manual, and in these cases, the actual version shall take precedent over the manual's.