

Smart eBike Display

User guide



Model: OLED-01

Catalog

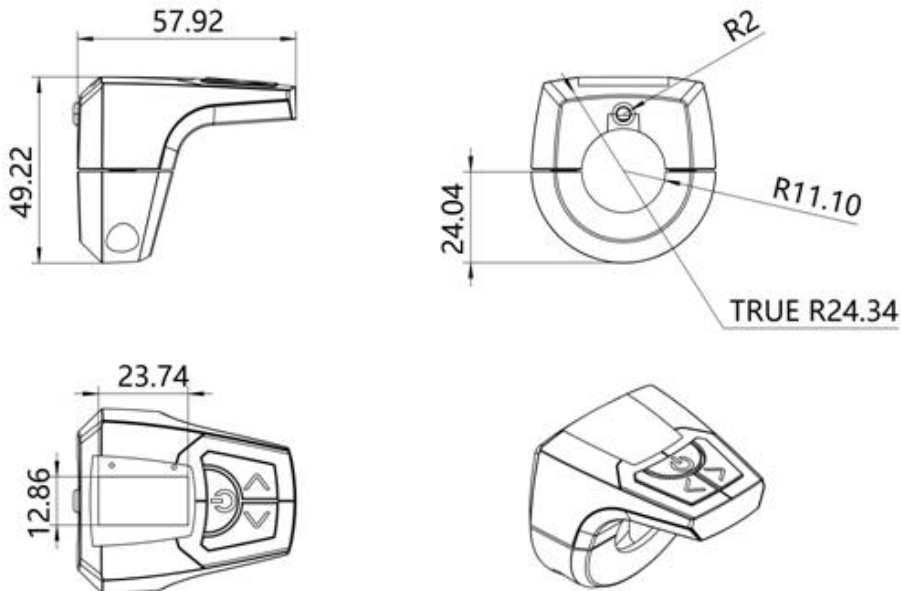
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1 About the User Manual

- ★ This manual contains important safety, performance. Read it carefully and completely before taking the first ride.
- ★ This manual is based on the general purpose. some of the content may not be applicable due to software updates or customization.
- ★ ***Important safety instructions:***
Do not try to connect with E-bike controller which is incompatible with this display, otherwise , will damage the display or controller.
- ★ ***Shut the battery off on time and stop the bike if some ERROR info show on screen.***
- ★ ***The copyright of all the APPs related with display are belong to us, get permission from us first before running these APPs, Any damage caused by the use of illegal APPs will out of warranty.***

2 Technical Parameters

- ◆ Power: 24 - 48VDC /10 ma
- ◆ Screen: Graphic dot matrix OLED
- ◆ Screen Color: White/Blue /Yellow, default is White
- ◆ Button: Transparent silicon rubber with LED Backlight
- ◆ LED Backlight: Power Button : Red ,
Up and Down button :Blue/Green/White
- ◆ Fix Position: Left or right of handlebar
- ◆ Communication: UART
- ◆ Material: ABS
- ◆ Ingress Protection: IP64
- ◆ Size:



3 Installation Instruction

This display can be fixed either left or right on the handlebar of bike ,Check the **FIX POSITION** menu item first (see 8. Setting menu) , change this setting due to the position want to fix ; adjust to an appropriate visual angle. Tighten all the connectors. And connect it with controller .



4 Features

OLED-01 is a control panel for eBike with Graphic dot matrix OLED screen ,Transparent silicon rubber keyboard with LED backlight, digital communicating interface , 15 different screen interface can be show to help user to check all the information come from bike,; Transparent silicon rubber keyboard with LED backlight feedback a nice feeling while operating; This display offers total 84 pieces menu items foe user to set the parameters related with the ebike.

Different screen can be switched by pressing button for user to check the info come from ebike on screen, such as below:





- ◆ Speed (Real-time speed, Average speed and Max speed)
- ◆ PAS Level , Light OnOff, Cruise OnOff
- ◆ Battery Voltage and Battery Capacity
- ◆ Trip, ODO , and the Accumulative energy consumption
- ◆ Real time Current and Power
- ◆ Motor Temperature and controller Temperature
- ◆ PAS speed
- ◆ Throttle real time voltage
- ◆ Device test interface for user to check the status of all the peripheral such as Brake ,Throttle ,Hall of motor ,Pas sensor ,Speed sensor, ,Shift sensor ;
- ◆ Screen brightness adjust
- ◆ Warning and Error blinking show
- ◆ large amount of menu items for user to set the parameters related with the bike ;

5 Display Interface

➤ Working Display Interface

It has 16 different display interface totally, each display interface can be blocked according to user demands;

How to block screen see **7.menu**

	<p>Screen1</p> <p>PAS Level Real time speed Light on off indicator Cruise status indicator Battery indicator</p>		<p>Screen 2</p> <p>PAS Level Average speed</p>
	<p>Screen 3</p> <p>PAS Level Max speed</p>		<p>Screen 4</p> <p>PAS Level Battery Voltage</p>

	<p>Screen5 PAS Level Battery Capacity</p>		<p>Screen 6 PAS Level Current</p>
	<p>Screen 7 PAS Level Power</p>		<p>Screen 8 PAS Level TRIP</p>
	<p>Screen 9 PAS Level ODO</p>		<p>Screen 10 PAS Level ENRRGY (Accumulative energy consumption)</p>
	<p>Screen 11 PAS Level PEDAL SPEED</p>		<p>Screen 11 PAS Level Motor temperature</p>
	<p>Screen 13 PAS Level Controller temperature</p>		<p>Screen 14 PAS Level Throttle Voltage</p>
	<p>Screen 15 PAS Level Device test</p>		<p>Screen 16 PAS Level Brightness Adjust</p>

6 Normal Operation

➤ Power On

- ◆ Long press the Power button 3 seconds to turn on the display
- ◆ Display will automatic start a synchronization process with controller.(There have 2 copy of the bike setting one is stored in display and other is stored in controller, must make the both copy is same);
- ◆ If you want to Enter Menu setting interface , long press POWER and UP button , if not , it will auto enter working interface after 3 seconds

➤ PAS Level change

Press UP or DOWN button can change the PAS level, bike will stop if Level come to Zero;

➤ **Display interface switch**

Press POWER button can switch Display interface

➤ **Cruise On/Off**

Long press DOWN button , bike will run with 6km/h when bike is IDEL, the CRUISE indicator will blink

Long press DOWN button , bike will enter CRUISE Stature when bike is moving , the CRUISE indicator will blink

➤ **Light On/off**

Long press UP button , turn the light on, the LIGHT indicator will blink , Long press again , turn the light off;

➤ **Power Off**

Long press the Power button 3 seconds to turn on the display , display will shut the power off .

Notice: Display will automatic shut the power off when bike is idel for some minutes , this parameter can be set by user;

FOR YOUR SAFETY, SHUT THE BATTERY OFF WHEN POWER THE DISPLAY OFF ,

7 Display Copy

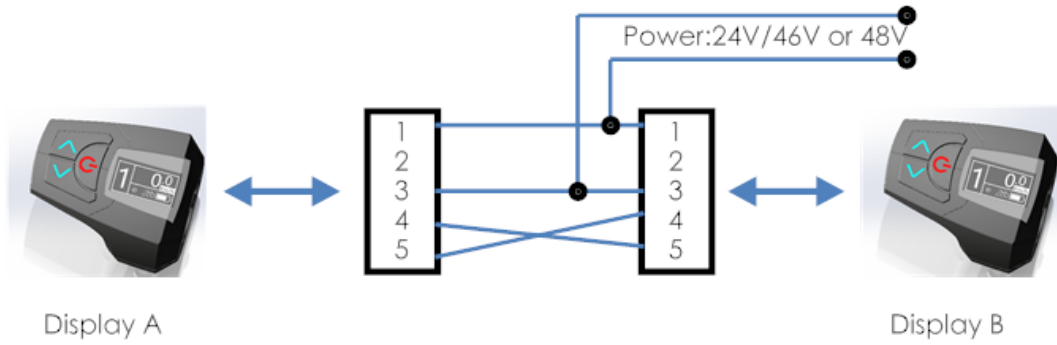
This is a quick and efficient method when user want to transfer the setting s from Display A to Display B. Before start , user should build a cable (COPY CABLE)or buy one from us . the cable as below:



(Copy Cable)

Setp 1 : Connecting the both 2 displays with COPY CABLE

Setp 2 : Connecting the COPY CABLE with 24v or 36v or 48v battery or other power supply



Setp 3 :Power on display A or display B , some guide message will show on screen, do it as the guide.

Setp 4: Long press DOWN button will receive settings from other , Long press UP will send settings to other

8 Whats the Setting Synchro

There have 2 same copy of key bike settings stored in controller and display memory , controller and display will automatic validate each other on power period ,if the key bike settings is not same , controller or display will start a parameter exchanging process between them;

Setting Synchro : Controller

Controller will send key bike settings to display

Setting Synchro : Display

Display will send key bike settings to controller

Setting Synchro : Display Once

Display will send key bike settings to controller only one time

9 PC APP

For some professional users, ,user can download an APP from our website , get permission from us first before run this APP

10 MOBILE APP

For some professional users, ,user can download an APP from our website , get permission from us first before run this APP

11 Quality assurance and Warranty scope

- ◆ The warranty time is 24 months from the shipping time.
- ◆ Responsible for all faults arising during normal operation that are caused by a quality defect.
- ◆ The following will either void or fall outside the scope of the warranty
 - If the display is disassembled
 - Damage due to incorrect installation or operations
 - Housing or cable is broken
 - Outside of the warranty period
 - The fault or damage is caused by the force majeure

12 Appendix A (System menu)

This is all the menu item preset in the display , maybe some functions is invisible for bike because some functions are invalid for your bike, also some settings are invalid even you had changed it because some functions need extra hardware option .

Notice , incorrect set will cause system can't work, you can select DEFAULT menu item to restore all the setting;








Main Menu	Menu Item	Value range	Default	Remark
Normal	WheelSize	4"—30"	26"	Define the the size of wheel
	Unit	Metric , British	Metric	Speed measurement unit
	FixPostion	Right, Left	Left	Accord to fix position on handbar
	RideMode	Smooth, Sport, Extreme	Smooth	Ride mode
	AutoLight	Disable , Enable	Disable	Need extra hardware
	MaxSpeed	10km/h-40km/h	25km/h	Max speed of bike
	MaxPushSpeed	4km/h-10km/h	6km/h	when bike is idel, Long press DOWN button , bike will run with this speed
	Cruise	Disable, Enable	Enbale	
	Energy Recover	Disable, Enable	Disable	Need extra hardware
	AutoPowerOffTime	5-20Minute	10Minute	Display will turn the system off when bike is idle in these minutes
	WarnShowMode	Disable, Enable	Enable	Warning message show
	Display Attrib	Slave, Master	Slave	See 8. Display copy
Setting Synchro	Controller, Display, Display Once	Controller	See 9 whats the Setting Synchro	
Battery	Voltage	24V,36V,48V. or others	36V	nominal voltage of battery
	Empty	These settings are related with the battery equipped on bike;	35V	
	20%Cap		37.3V	
	40%Cap		37.9V	
	60%Cap		38.7V	
	80%Cap		40V	
	Full		42V	
Controller	Max Current	10A-30A	15A	
	Low Cut Voltage	18V-50V	34V	
	TEMP Sensor	Disable, Enable	Disable	

Motor	Motor Hall	HallLess,Hall		
	Motor Gear	GearLess, Gear		
	Pole Pairs			
	Reduction Ratio			
	Speed Sensor	0-60	0	The speed sensor built-in motor 0-No speed sensor inside the motor 1-60,the number of signals when motor rotate one circle
	TEMPSensor	Disable, Enable	Disable	
Display	Enable	Disable, Enable	Enable	
	Level Count	3-6	5	
	AutoLevel	Disable, Enable	Disable	Invalid
	Level1_Speed	5-40km/h	10 km/h	Limit the speed according to the PAS Level
	Level2_Speed	5-40km/h	15 km/h	
	Level3_Speed	5-40km/h	18 km/h	
	Level4_Speed	5-40km/h	20 km/h	
	Level5_Speed	5-40km/h	25 km/h	
Level6_Speed	5-40km/h	30 km/h		
PAS Sensor	Enable	Disable, Enable	Enable	
	Magic Count	4-64	24	
	Direction	Auto , Low , High		
	Max Speed	10-300RPM		
	Start Count	1-50		
Throttle	DriveMode	Disable, Enable	Enable	
	MinVoltage	500mv – 3500mv	1300mv	
	MaxVoltage	500mv – 3500mv	3300mv	
Accessory	BrakeType	Low , High	Low	
	SpeedSensor	0-60		0- No speed sensor 1-60,the number of signals when wheel rotate one circle
	Shit sensor	Disable, Enable	Disable	
Screen	Warning Show	Disable, Enable	Enable	Enable or disable the screen interface show
	AVG Speed	Disable, Enable	Enable	
	MAX Speed	Disable, Enable	Enable	
	BATT Voltage	Disable, Enable	Enable	
	BATT Capacity	Disable, Enable	Enable	
	Current	Disable, Enable	Enable	

	Power	Disable, Enable	Enable	
	Trip	Disable, Enable	Enable	
	ODO	Disable, Enable	Enable	
	Energy	Disable, Enable	Enable	
	PAS Speed	Disable, Enable	Disable	
	Motor TEMP	Disable, Enable	Disable	
	Controller TEMP	Disable, Enable	Disable	
	Throttle VOL	Disable, Enable	Disable	
	Device Test	Disable, Enable	Enable	
	Brightness	Disable, Enable	Enable	
Default	Restore the default settings			
SAVE	Save all setting to display			
ABOUT	Show serial number			








13 Appendix B (Warning message)

These message will blink show on screen when warning event happened , user can skip it by press any button

 <p>WARNING CONTROLLER DISCONNECT</p>	<p>abnormal communication between display and controller Solve: check the cable and connect again</p>
 <p>WARNING OVER CURRENT</p>	<p>Current now is more than rated current Solve: try to reduce the power</p>
 <p>WARNING SPEED SENSOR</p>	<p>The speed sensor is broken</p>
 <p>WARNING LOW VOLTAGE</p>	<p>Voltage is low than limited low-cut voltage, it means the battery is empty Solve: charge the battery</p>
 <p>WARNING MOTOR HALL BROKEN</p>	<p>The Hall of motor is broken, if the system is on double mode , system will auto switch to no hall mode, if not, System will stop working</p>
 <p>WARNING MOTOR OVERTEMP</p>	<p>Motor temperature is over than limited value, system will reduce of shut off the power Solve: try to reduce the power</p>
 <p>WARNING CONTROLLER OVERTEMP</p>	<p>Controller temperature is over than limited value, system will reduce of shut off the power Solve: try to reduce the power</p>

14 Appendix C (Error message)

Bike will stop work if these error event happened, and ,These messages show on screen can help user to find the common fault out.

 <p>ERROR THROTTLE GALLOP</p>	<p>there have 3 possibilities if this error happened</p> <ol style="list-style-type: none"> 1. User grip the throttle during on power-on period , <i>Solve: release it and power again</i> 2. Throttle or the interface on controller are broken <i>Solve: Remove the throttle , and power on , if this error happened again, means controller interface is broken, if not , means Throttle is broken</i>
 <p>ERROR CONTROLLER MEMORY</p>	<p>This error only show on power on period and It means the controller MCU is broken <i>Solve: check the cable first and if this error happened again when power on again ,it means controller is broken</i></p>
 <p>ERROR SYNCHRO FAIL</p>	<p>This error only show on power on period and It means display can't build a stable communication with controller <i>Solve: check the cable first and if this error happened again when power on again , it means the either controller or display is broken</i></p>
 <p>ERROR CONTROLLER BROKEN</p>	<p>This is a Serious error , it means there have a short circuit problem in the controller, user should power off the battery stop use bike immediately <i>Solve: return bike back to factory</i></p>
 <p>ERROR MOTOR DISCONNECT</p>	<p>This error only show on bike startup period. It means system can't get response from motor when try to start the motor. <i>Solve: Check the connecter between motor and controller , connect it again</i></p>
 <p>ERROR MOTOR BROKEN</p>	<p>This error means there have a short circuit problem in the motor <i>Solve: return bike back to factory</i></p>
 <p>ERROR BATTERY DISMATCH</p>	

15 Appendix D (FAQ)

Q: Why can not turn on the display even press the POWR button with long time?

A: Make sure battery is power on , then check the cable is well connected with the controller.

Q: How to deal with ERROR message ?

A: Power off the system and try to Contact the e-bike maintenance station in time.

Q: System Can not work after changing some settings?

A: Enter Menu and select the DEFAULT item , then will restore factory settings;