# LCD Display S5

# **User Manual V.2016**

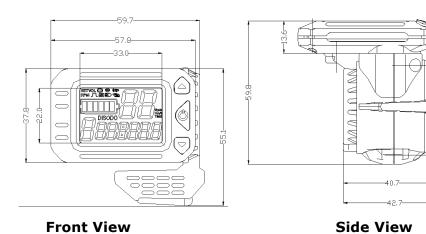


## 1. Exterior Parameters

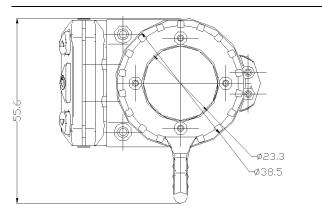
Casing Material: ABS

Display Material: High Hardness Acrylic (the same hardness value as

tempered glass).

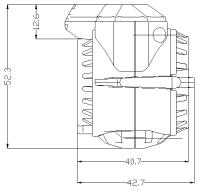


1



**Throttle View** 

**Brake Front View** 



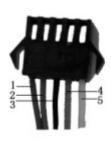
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**Brake Side View** 

**Brake Throttle View** 

- 2. Operating Voltage and Connectors
- a. Operating Voltage: DC24V / 36V Compatible, 36/48V Compatible (set by the control panel), 60V. Other operating voltage can be customized.
- b. Connectors:

Standard Connector Type











Coupling Input Connector

## **Standard Connector Arrangement**

Sequence No.	Wire Colour	Functions
1	Red (VCC)	Display Power Cable
2	Blue (K)	Controller Power On/Off Cable
3	Black (GND)	Display Ground Cable
4	Green (RX)	Display Data Receiving Wire
5	Yellow (TX)	Display Data Sending Wire

<sup>\*</sup>Note: Some products use waterproof connectors, whose internal wire arrangements cannot be identified from the exterior.

## 3. Functions

# a. Display

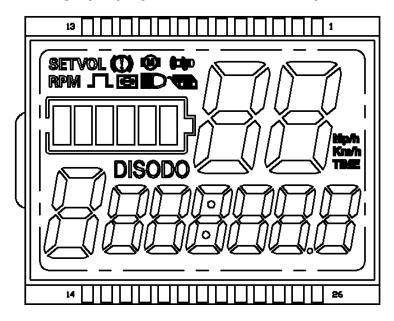
Speed Display PAS Level Display Battery Level Display Error Indication Total Mileage Single Mileage Light Indication Single Trip Time

# **b.** Control and Settings

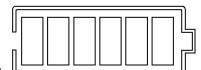
Power Switch Front Light Control 6km/h Cruise Control Real-time Cruise Control Wheel Diameter Setting Top Speed Setting Sleep Interval Setting Backlight Brightness Setting Voltage Level Setting

#### c. Communications Protocol: UART

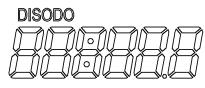
# Display Readings (display at start for 1 second)



# **Display Interface**



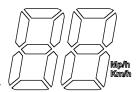
## 3.1 Battery Level



# 3.2 Multi-Functions Display

Total Mileage: ODO

Single Mileage: DIS (Unit: MILE/KM)



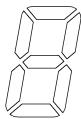
# 3. 3 Speed Display

Measuring Unit: MPH or KM/H

The speed signal is generated from the Hall signal in the motor and is sent to the display by the controller.

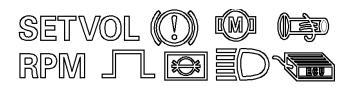
The display will calculate the actual travelling speed based on the wheel diameter and signal data (number of magnetic steel is needed for Hall motors).

## 3.4 PAS Level



Power Assist Level 1/2/3.

# 3.5 Vehicle Status Display



SET: Setting Mode VOL: Digital Voltage :Brake Indicator

🏿 :Motor Failure 🔎:Throttle Failure 🖼:Wheel Diameter

:Controller Failure

#### 8. Settings

**P01: Backlight Brightness** (1: darkest; 3: brightest)

**P02: Mileage Unit** (0: KM; 1: MILE) **P03: Voltage Class** 24V / 36V / 48V

P04: Sleep Interval

(0: never, other value means display sleep interval) Unit: minute

#### **P05: Power Assist Gear**

0/3 Gear Mode: Gear 1: 2V Gear 2: 3V Gear 3: 4V

1/5 Gear Mode: Gear 1: 2V Gear 2: 2.5V Gear 3: 4V Gear 4: 3.5V Gear 5: 4V

**P06: Wheel Diameter** Unit: inch Precision: 0.1

**P07: Magnet Steel Numbe**r (for Speed Test) Range: 1-100

#### P08: Speed Limit

Range: 0-50km/h, parameter 50 indicates no speed limit.

1. Non-communications status (panel-controlled)

When the current speed exceeds the speed limit, the PWM output will be shut down; when the current speed falls to lower than the speed limit, the PWM output will be activated and the driving speed will be set as the current speed  $\pm$  1km/h (only applies to assist power speed, not applicable to the handlebar speed).

2. Communications status (controller-controlled)

The driving speed will be kept constant as the limited value.

Error Value:  $\pm 1$ km/h (applicable to both the assist power/handlebar speed)

Note: The above-mentioned values are measured by metric unit (kilometers). When the measuring unit is switched to imperial unit (mile), the speed value displayed on the panel will be automatically switched to corresponding imperial unit, however the speed limit value in the imperial unit interface won't change accordingly.

## P09: Direct Start / Kick-to-Start Setting

0: Direct Start

1: Kick-to-Start

## P10: Drive Mode Setting

- 0: Power Assist The specific gear of the assist drive decides the assist power value. In this status the handlebar does not work.
- 1: Electric Drive The vehicle is driven by the handlebar. In this status the power gear does not work.
- 2: Power Assist + Electric Drive Electric drive does not work in zero-start status.

P11: Power Assist Sensitivity Range: 1-24

**P12: Power Assist Starting Intensity** Range: 0-5

**P13:** Power Magnet Steel Number 5 / 8 / 12pcs

**P14:** Current Limit Value: 12A by default; Range: 1-20A

P15: Unspecified

P16: ODO Zero-Out

Long press the up key for 5 seconds and ODO value will be erased.

# 4. Introduction of Keys

- 1. Short press ON/OFF to turn on the display when it's off. Short press ON/OFF to switch the interface among ODO/TRIP/RM/TM/ERRO mode when the display is on.
- 2. Long press ON/OFF to turn off the display when it's on. Short press the up Key + to increase the PAS level, short press the down key to turn down the PAS level.
- 3. Long press up key + to adjust the parameter.

In the setting interface, short press ON/OFF to switch parameters, and long press MODE to turn up ("A" on the left side) / down ("d" on the left side) the value.

After the change, short press on/off to switch to the next parameter and save the last parameter, or long press MODE and the parameter will stop blinking and be saved. Long press ON/OFF+MODE to exit parameter setting interface, or wait for 10 seconds and automatically exit the mode.

4. The throttle is used to adjust the motor rotational speed. Turn it from top down and the motor will accelerate, release the lever the motor will decelerate.

Note: Due to product upgrade, the product you purchased may be slightly different from the descriptions in this user manual, and this won't affect normal usage.