Wuxi Kyesang Technology Co.,LTD

## The instructions of display LH-100

(Special for scooters)

The vision of 2018-V1.1

一、Product specification

The shell of the product is ABS.The transparent window is crystal with high hardness acrylic,

hardness value is equivalent to toughened glass.
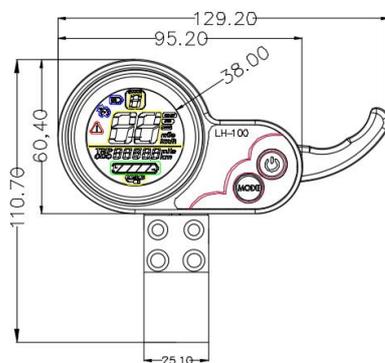
Elevation   Side elevation

$\phi 22.2$
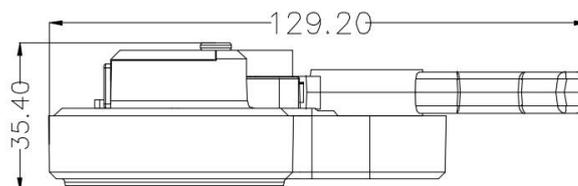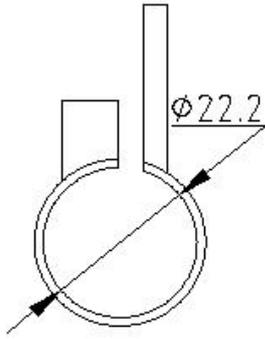
The support of LH-100

二、 Working Voltage and the Mode of Connection

1. Working Voltage: DC24V/36V/48V (display choose by itself)

   And we also can set the voltage.

2. Mode of connection

   Standard connection
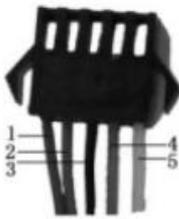
| The connector with controller | The connector with display | The connector with Butted line |

The line number	The color of the line	Function
1	Red(VCC)	The power of the display
2	Blue (K)	The power of the controller
3	Black (GND)	Earth line of display
4	Green (RX)	The data acceptance line of display
5	Yellow (TX)	The data transmission line of display

Some display use waterproof plug-in components,so it cann't see the color of the line.

三、 Function

1. Show content:

The content of speed、power、hitch、Total mileage、Single mileage

2. The function of controll and setting:

Controller the switch power、Wheel diameter setting、Idle automatic sleep time setting、

Backlight setting、Startup mode setting、Drive mode setting、Voltage level setting、Controller

Current Limit Setting、USB charging function

3. Communicating Protocol:URAT

All content on display(power on within 1 second)
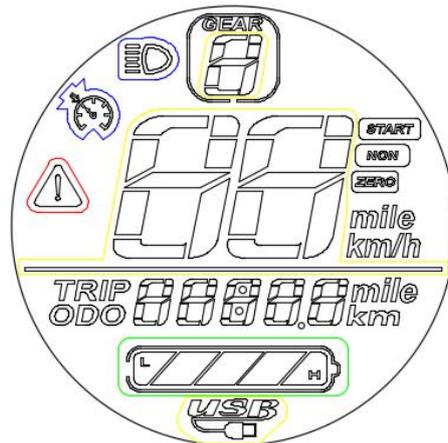
3.1 Voltage level
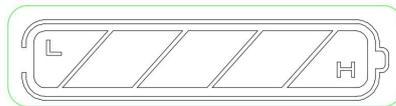
3.2 Multifunctional display area

Total mileage **ODO**、Single mileage **TRIP**、Digital voltage display **VOL**、Fault code **ERR**

Fault code (decimal system)	fault condition	remarks
0	Normal status	
1	keep	
2	brake	
3	PAS sense hitch（Riding sign）	Not implemented here
4	6KM/H cruise	
5	Real-time cruise	
6	Battery undervoltage	
7	Motor fault	
8	Turnstile fault	
9	Controller fault	
10	Communication receiving fault	
11	Communication transmission failure	
12	BMS communication failure	
13	Headlamp failure	

3.3 Speed display area
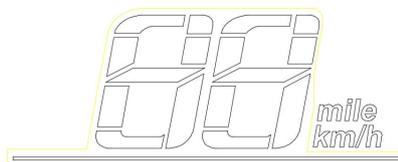
Unit： MPH, KM/H

The speed signal is taken from the Hall signal inside the motor.Sent to controller by

controller(Time of single Hall period,unit:1MS).The display calculate the true speed based on

wheel diameter and signal data calculate the true speed(The motor Holzer also needs to set the number of magnetic steel)

3.4 Vehicle power gear adjustment， 0-9 digital display;

3.5 vehicle status display area

 Zero start and non-zero start prompt
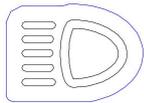
 The headlight turns on the prompt;

 Constant speed cruise hint;

 Communication fault prompt;
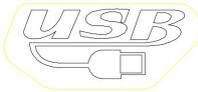
 USB charging hint

4. Setting

P01：Backlight brightness:The 1 level is the darkest，Level 3 brightest；Default: 3

P02：Mileage: unit,0：KM；1：MILE；Default: KM

P03: Voltage level: 24V，36V，48V，52V，60V, Default:52V

P04: Dormancy time:0 means no dormancy;Other numbers are dormant time.The range is

1-60 minute.Default:5

P05: Reserve

P06: Wheel diameter: The unit is inch. The accuracy is 0.1; Default:10.0

P07: Speed measuring magnetic steel number.The range is 0-255. Default:30

P08: Rate-limiting: The range is 0-100km/h.Default: 100

P09: Zero start、no zero start setting；0 means zero start.1means no Zero start.Default: 0

P10:Reserve

P11: EABS switch choose.0 means closing.1 means opening.

P12: Soft and hard start strength.The range is 1-5. The softest is 1.The hardest is5.Default: 3

P13: Reserve

P14: Reserve

P15: Controller under-voltage

P16: ODO Zero setting: keep pressing + for 5 seconds,ODO will zero clearing.

P17: When it shows 0,it can not use cruise.When it shows 1,it can use cruise.Default:0

P18: Reserve

P19: Reserve

P20: Communication protocol is defaults 4.It can not change.

三、Introduction of buttons and interfaces
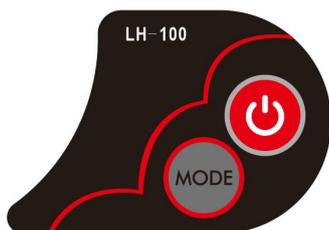
1. When it is shutdown, long-time pressing to turn on the power. When it is power

on ,It can change interface between the ODO、TRIP、VOL, by pressing for short time.

2. When it is power on, long-time pressing to turn off,short-time pressing can

change gear.

3. Long-time pressing and can get into the menu to change the interface.

4. Get into the setting interface, short-time pressing can change parameter.

Short-time pressing or long-time pressing can add or reduce the numerical value.After

changing,short-time pressing to change the next numerical value.After

changing,long-time pressing and to get out of the interface,or waiting 8

seconds,it can save the numerical value and drop out by itself.

五、Crankshaft regulating motor speed by Up and down, Motor speed increase;relax hand it

return to zero.