DISPLAY INSTRUCTION FOR LH100
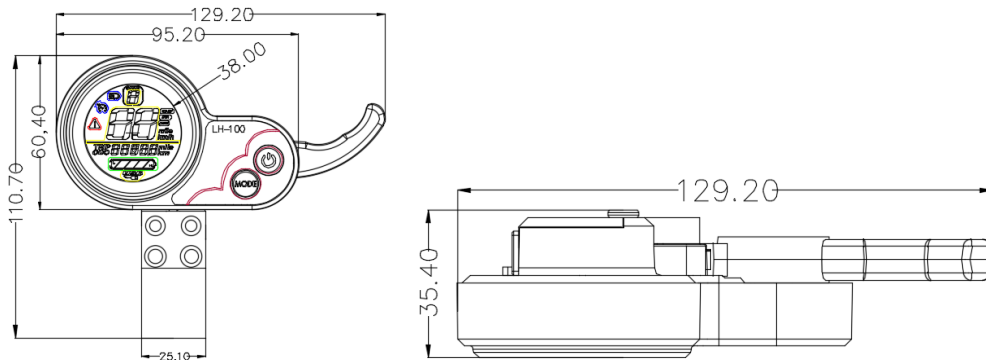
NUMBER 2 COMMUNICATION PROTOCOL
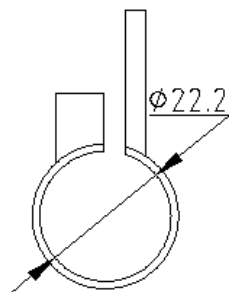
For electric scooter updated 2018/9/18

(we may program it to fit for our controller, please talk to the service person if u

have problem)

1, SIZE AND MATERIAL

Its shell is made of ABS, LCD transparent screen is made of high hardness acrylic, same hard as armored glass.
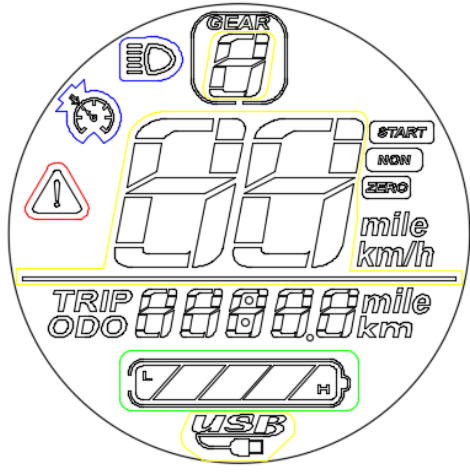

this is the install hole diameter

2. working voltage and wiring: DC24V /36V/48V

First is wire which connected with controller,   second is display wire,

1— red –VCC –DISPLAY power wire

2— blue-K-CONTROLLER power control wire

3— black-GND-Display ground wire

4— green-RX-display data receive wire

5— yellow-TX-DISPLAY data sending wire
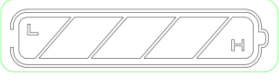
3. Function introduction

indicate this after 1 second when u open the machine

3.1 Indicate speed, battery level, error code, odometer, single trip

3.2 Can Control, set this functions bellow

Power lock/electric switch, rim size, auto sleeping time, backlight lightness, start way , driven way, voltage, controller current, USB charging

3.3 communication protocol :   UART

this is voltage condition grade

this is multifunction indication area, ODO, TRIP, voltage .

speed unit MPH, KM/H

   Speed signal: takes from motor inside hall signal. send to display through controller, (single hall cyle period, unit 1MS.) display will count to real speed according to rim size and signal data, (motor hall need to set magnetic steel number).
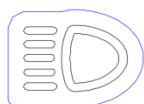

vehicle pedal gears adjustable, 0-9gears

 zero start and non zero start

frontlight cruise error usb charging

Bellow is error code

Error code	Error condition	remark
0	Normal work	
1	no	
2	Brake	
3	Pas sensor error (riding icon)	No here
4	6KM/H cruise	
5	Timely cruise	
6	Battery undervoltage	
7	Motor error	
8	Throttle error	
9	Controller error	
10	Communication receive error	
11	Communication send error	
12	BMS Communication error	
13	Frontlight error	

4. Setting

P01：backlight lightness, 1 is most dark, 3 is most light,

P02：set range unit，0：KM；1：MILE；

P03：voltage ：24V/36V/48V/60v ，default setting : 36V；

P04：sleeping time：0-no sleep；other number means sleeping time，scope：1-60；unit in minute；

P05：pedal gears : 0： 3gears mode；

P06: rim size ： unit ，inch；precision：0.1；

P07: speed testing magnetic steel number ：scope：0-255；

P08：speed limit：scope 0-100km/h，(did not open this)

P09：zero start/non-zero start，0：zero start；1：non-zero start；

P10：driven way set

0 : pedal drive: pedal gears will decide how many pedal power to output.now the throttle will not work

1 : electricity: driven by throttle, now pedal donot work

2 : both pedal and throttle will wor (zero start will not work under electricity mode)

P11：pedal sensitivity (donot open)

P12：pedal strength set (unopened)

 P13：pedal magnetic   sensor   set 5/8/12

P14：controller current limit set, default setting 13A   scope：1-20A

P15：controller under voltage set

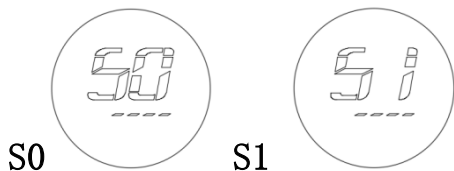P16： ODO zero clear set , long press for 5 seconds, ODO come to zero
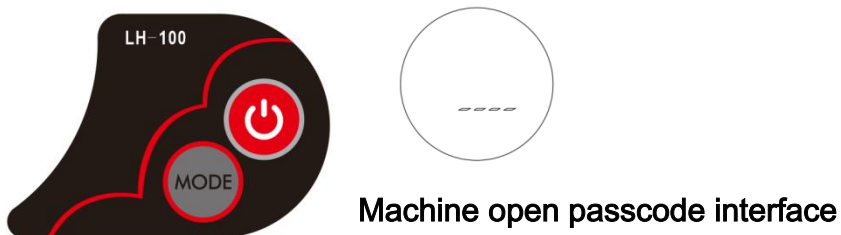
P17：0：no cruise，1：can cruise；

auto cruise available only for number 2 communication protocol

P18：indicating speed ratio set, scope：50%~150%,

P19：0 available or not ，0：with 0 gear，1：no 0 gear

P20：0: 2 number protocol 1: 5S protocol 2：standby 3：standby

5, button and interface introduction

Machine open passcode interface

S0   S1

1、MACHINE off, long press to open it；then short press the interface will switch between ODO/TRIP/VOL.

2、when machine open, long press to turn machine off，short press MODE button can switch GEAR

3、long press +will go into passcode and manual set and choose interface S0. Under S0, short press **b**utton can switch passcode digi**t**,. Short press button can change numbers,

3.1 input "1111" then long press will go into S1, short press switch passcode digit，short press button will change current number. After finish pass code setting, long press will exit S1interface and back to normal and will store the passcode you set. （attention please: next time if need to open, need input this pass code, please remember it. If u set it 0000, means no passcode, u will go directly into normal interface when open the machin）。

3.2 input "6666" then long pressbutton will go into setting interface. .under any data, short pressto switch data，short press or long pressbutton add or reduce data（long presswill change direction of the number changing，left indicate "A"means add，left indicate"d"means reduce），after change, short presswill switch to next data and store.. after setting please long press +to store and exit setting interface，or wait 8seconds, it will exit automatically and store data.

4、crank adjust motor rpm, from up to down, rpm add, release , it will return to zero.

5. standby "3745" passcode operation

If u forget your pass code, please input "3745", -this is a standby passcode， long press 10seconds,

it will go into normal interface.

6. about its controller
For dual mode controller 6/9/12/15/18/24 mosfet.
Please connect display and controller together and set display right when u first get this group, connect controller right with battery positive and negative, and use self learning wire to match controller phase and hall sensor wire well with those of motors. U will have less problem .

Power positive negative pole

Connect with battery positive and negative output (please donot make it oppositely),

Motor phase wire and hall connector

WAY 2
USE self learning function intelligently identify motor phase and turning direction
Connect power, motor phase wire, hall wire, electric switch, rolling handlebar /throttle wire, learning wire, make sure it is right and turn power on, motor runs automatically. If direction right, then cut off learning wire after 2-3seconds, this finished the learning.
If motor turns in opposite direction, then cut off learning wire, and connect on immediately or using handlebar, motor change to right direction automatically. Cut off learning wire after motor running 2-3seconds, this finished learning.
Using Learning wire only in connecting period, when finished wiring, cut off it, you need not connect it.
For 350w controller sine wave controller , No self learning wire, u need match motor phase wire and hallsensor wire with those of controllers' by hand., (it need motor with hallsensor). Donot suggest this model if u are new learner
Way 1: match the phase (for each way, after test should reset)
Keep hall wire A unchanged, change the connecting way of controller and motor phase wire(6ways)
1. Color match (yellow for yellow, green for green, blue for blue) -this has one method
2. Make one stagger (2 keep yellow for yellow and switch blue and green)-this has 3 ways)
   (3keep green for green, switch blue and yellow)(4keep blue for blue exchange yellow and green)
3. Stagger all colors (5. Yellow connect blue, green with yellow, blue for green)--this has 2 method (6 yellow for green, green for blue, blue for yellow)
Exchange blue and yellow on hall B wire, then copy the six connecting way above
The right phase: motor runs with clear sound, no-load current 0.8-2A
Bellow is the link to order this group 350w
https://www.aliexpress.com/item/LCD-display-white-screen-and-colored-scrreen-with-shifter-controller-for-electric-bike-scooter-24v36v48v60v-250w350w/32840331092.html
here is the link from 350w-1000w
https://www.aliexpress.com/store/product/24v36v48v-400W-1000W-BLDC-controller-LCD-display-with-throttle-blue-screen-or-colored-screen-electric-scooter/2802219_32793593953.html?spm=2114.10010108.1000023.1.799c6619AzL2hZ
here is 1500-3000w display+controller
https://www.aliexpress.com/store/product/24v36v48v60v-1500w-3000W-BLDC-controller-LCD-display-with-throttle-shifter-white-colored-screen-electric-scooter-MTB/2802219_32877096954.html?spm=2114.12010612.8148356.32.713247acjiWTpi

for motor hallsensor wire

Motor hall

1. Red-+5v

2. White external speed test(some controller has no this wire)

3. Black-ground wire

4. Yellow-hall A

5. Green-hall B

6. BLUE-HALL C

Controller size and weight grow due to its power, such as

6mosfet controller 88*52*30mm

9mosfet controller 110*85*45mm

12mosfet controller 145*85*45mm

15mosfet controller 176*85*45mm

18mosfet controller 170*108*58mm

24mosfet controller 225*125*75mm

For other function of controller please check the link.

WE may update the display setting and controller wiring, if what u get is different from the online introduction or u have any question please leave message to us. We have the right to explain it.