

**Tube Controller instruction manual  
(2018,12,12 V1)**

Display meter

**1、 Power on**

Press middle button for 2 seconds to turn on the power

**2、 speed gear shift (1-3 gear)**

Up button: speed increases

Down button: speed decreases

**3、 enter set model**

Press up and down buttons at the same time for 2 seconds to enter "set mode"

**4、 speed unit set**

Under "set mode", press middle button to find P1

Up button: 1-MP/H, down button: 0-KM/H

**5、 auto cruising set**

Under "set mode", press middle button to find P2

Up button: 1 open (uniform driving 5 seconds enter auto cruising)

Down button: 0 close

**6、 non zero start**

Under "set mode", press middle button to find P3

Up button: 1 open, Down button: 0 close (Non zero start, throttle only work when the motor is running by manual)

**7、 motor size check**

Under "set mode", press middle button to find P4

You will find two size here 5.5 inch and 6.5 inch

**8、 rated voltage check**

Under "set mode", press middle button to find P5

You will find the rated voltage of the controller

**9、 speed gear set**

Under "set mode", press middle button to find P6

To set how many gear you would like via up button and down button

**10、 other set**

Under "set mode", press middle button to find P7,P8,P9

Do you set any value, they are undefined functions

Controller

**1、 hall sensors sine wave controller**

**2、 gear and speed support**

	No load speed(km/h) (3 - gears)	No load speed(km/h) (5 gears)
5	none	23-24
4	none	20
3	23-24	15
2	20	10
1	12	5
0	0	0

## 2、max current

Max output current 14A.

## 3、short circuit protection

Motor phase cable short, activated protection, error code number '4'

## 4、motor stall

Motor stall error code"6"

## 5、braking

The motor speed can be slowed or stopped by press braking thumb. If there is no braking connected, motor can only run 1 gear speed.

## 6、speed meter display

Press middle button to shift display : time, range, total range, speed, voltage

## 7、throttle

Throttle with display can control motor speed when your press or release

## 8、voltage protection

When battery voltage lows to 22.0V, error code"5", it needs charging. Motor will not run when voltage under 21.5V

## 9、safety check

If the throttle is pressed when open the power, error code"7", motor will not move. Release throttle and motor works again.

## 12、Hall check

If Hall sensors failed or unconnected, error code"2", there is no error code if phase cable not connected.

## 13、throttle and braking check

If throttle or/and braking thumb is not connected, error code"3", it is ok to run motor if the braking thumb is not connected.

## 14、Controller fail check

If there is error code"4" when power on or driving, the controller is failed, controller needs repairing.

## 15、power off

If the throttle or braking thumb is not at zero position, it is unable to power off the controller.