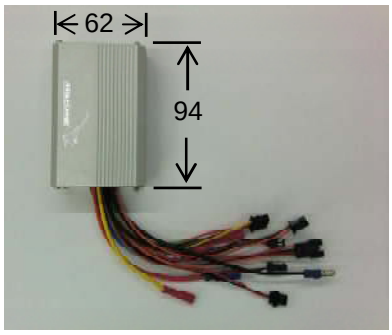
# SPECIFICATION OF CONTROLLER AND TRANSMISSION SYSTEM

## 1. DIMENSIONS：

L94mm*W62mm*H35mm

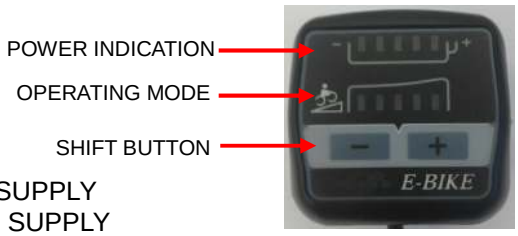



## 2. FEATURES：

CONTROLLER SUPPLY VOLTAGE: DC24V ~ DC60V
CONTROLLER SUPPLY CURRENT: 15A
BLDC (BRUSHLESS DC MOTER) VOLTAGE: DC24V OR DC60V
BLDC (BRUSHLESS DC MOTER) WATT: MAXIMUM 500W

## 3. 3 DATAS FOR SPEED SETTING CATCALATION：

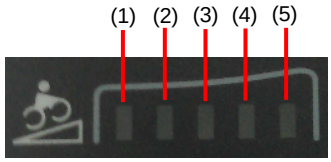
1). NUMBER OF POLE OF BLDC (BRUSHLESS DC MOTER)
2). GEAR RATIO OF BLDC (BRUSHLESS DC MOTER)
3). TIRE SIZE




## 4. OPERATING PANEL：

1.POWER INDICATION:
(+) LIGHT CLOSE TO (+) INDICATES SUFFICIENT POWER SUPPLY
(-) LIGHT CLOSE TO (-) INDICATES INSUFFICIENT POWER SUPPLY

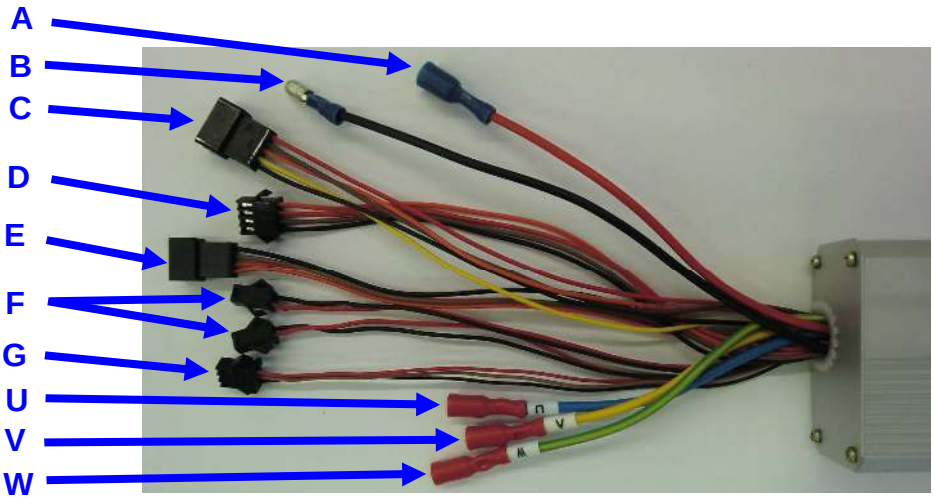
2.OPERATING MODE:
PRESS BUTTON (+) OR (-) TO CHOOSE SPEED ADJUSTING MODES
1). SPEED ADJUSTING: THROTTLE ADJUSTING
2). FIXED SPEED ADJUSTING: 10Km/Hr
3). FIXED SPEED ADJUSTING: 15Km/Hr
4). FIXED SPEED ADJUSTING: 20Km/Hr
5). FIXED SPEED ADJUSTING: 25Km/Hr




REMARK: IT IS NORMAL WHEN OPERATING MODE WAS SET UP ON (2), THE (1) WILL LIGHT ON TOO

## 5. WIRING DIAGRAM：

A: RED- BATTERY INPUT VOLTAGE DC24V ~ DC60V
B: BLACK- BATTERY INPUT VOLTAGE 0V
C: BLDC HALL SENSOR 2.54-5P(MALE):
PIN1-->+5V PIN2-->0V PIN3-->HA PIN4-->HB PIN5-->HC
D: 2.54-4PIN(MALE): CONNECTING WITH CONTROL PANEL
E: 2.54-4PIN(FEMALE): CONNECTING WITH BB SPEED SENSOR
F: 2.54-2PIN(2 SETS) : CONNECTING WITH HANDLEBAR BRAKE SIGNAL
G: 2.54-3PIN CONNECTING WITH HANDLEBAR SPEED ADJUSTING
PIN1(RED)-->5V PIN2(BLACK)-->0V PIN3(ORANGE)-->VO
U: BLUE-BLDC U PHASE
V: YELLOW-BLDC V PHASE
W:GREEN-BLDC W PHASE

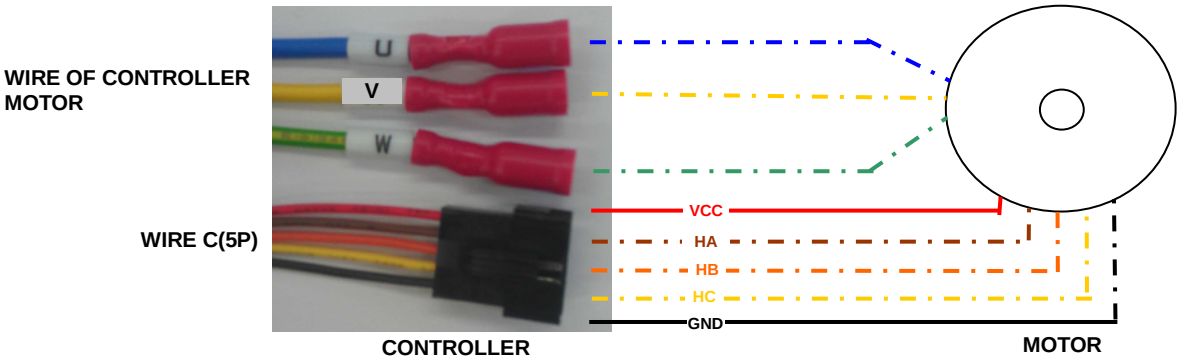


## 6. BLDC (BRUSHLESS DC MOTER) WIRING DIAGRAM：

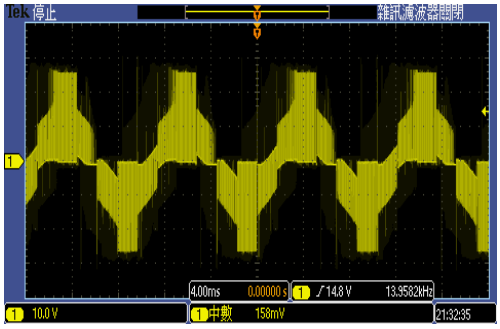
1. WIRING CONTROLLER U,V AND W WITH BLDC MOTOR U,V AND W
2. WIRING CONTROLLER HA, HB AND HC WITH BLDC MOTOR HA, HB AND HC

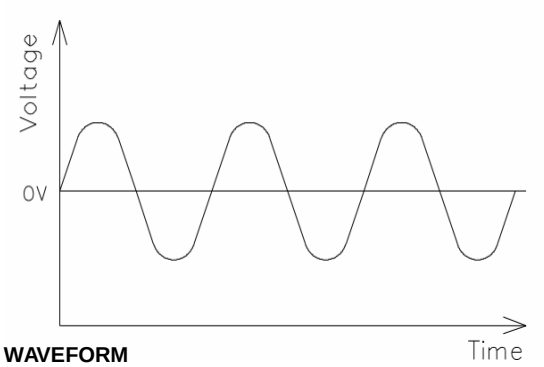
## 7. INTEGRATION：

TO MEASURE U AND V VOLTAGE WAVEFORM BY AN OSCILLOSCOPE AND THE CORRECT WAVEFORM OF WIRING DIAGRAM WILL BE SHOWN AS DRAWING 1. IT IS NECESSARY TO SHIFT MOTOR WIRING IF THE WAVEFORM SHOWS AS DRAWING 2. OR DRAWING 3.THE COMBINATION OF 36 WIRING DIAGRAM IS SHOWN AS TABLE 1.



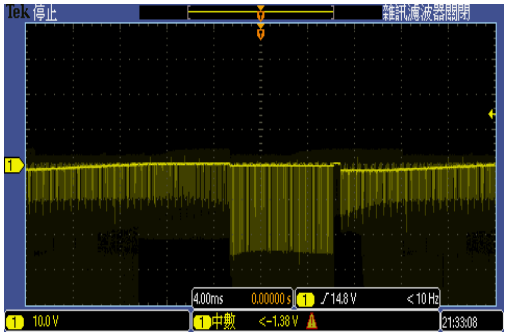

DRAWING 1

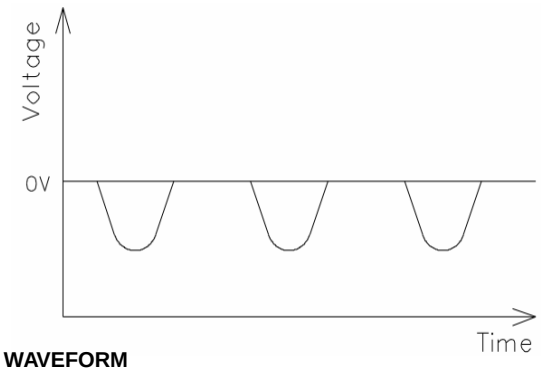





CORRECT WAVEFORM

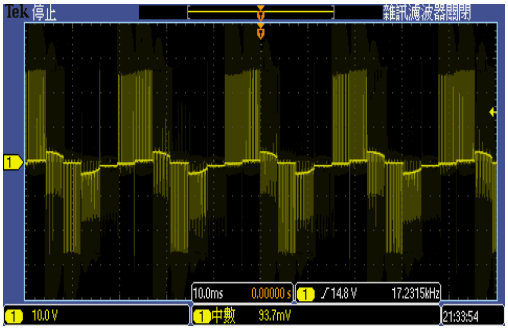
DRAWING 2

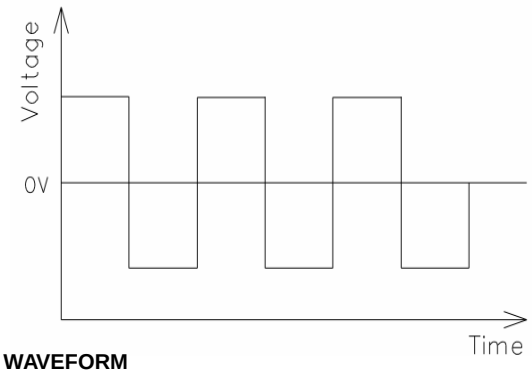





INCORRECT WAVEFORM

DRAWING 3






INCORRECT WAVEFORM

TABLE 1

| | | FIXED | | FIXED | |
|---|---|---|---|---|---|
| | CONTROLLER | BLDC | CONTROLLER | BLDC | CORRECT WAVEFORM |
| 1 | U V W | U V W | HA HB HC | HA HB HC | |
| 2 | U V W | U V W | HA HC HB | HA HB HC | |
| 3 | U V W | U V W | HB HA HC | HA HB HC | |
| 4 | U V W | U V W | HB HC HA | HA HB HC | |
| 5 | U V W | U V W | HC HA HB | HA HB HC | |
| 6 | U V W | U V W | HC HB HA | HA HB HC | |
| 7 | U W V | U V W | HA HB HC | HA HB HC | |
| 8 | U W V | U V W | HA HC HB | HA HB HC | |
| 9 | U W V | U V W | HB HA HC | HA HB HC | |
| 10 | U W V | U V W | HB HC HA | HA HB HC | |
| 11 | U W V | U V W | HC HA HB | HA HB HC | |
| 12 | U W V | U V W | HC HB HA | HA HB HC | |
| 13 | V U W | U V W | HA HB HC | HA HB HC | |
| 14 | V U W | U V W | HA HC HB | HA HB HC | |
| 15 | V U W | U V W | HB HA HC | HA HB HC | |
| 16 | V U W | U V W | HB HC HA | HA HB HC | |
| 17 | V U W | U V W | HC HA HB | HA HB HC | |
| 18 | V U W | U V W | HC HB HA | HA HB HC | |
| 19 | V W U | U V W | HA HB HC | HA HB HC | |
| 20 | V W U | U V W | HA HC HB | HA HB HC | |
| 21 | V W U | U V W | HB HA HC | HA HB HC | |
| 22 | V W U | U V W | HB HC HA | HA HB HC | |
| 23 | V W U | U V W | HC HA HB | HA HB HC | |
| 24 | V W U | U V W | HC HB HA | HA HB HC | |
| 25 | W U V | U V W | HA HB HC | HA HB HC | |
| 26 | W U V | U V W | HA HC HB | HA HB HC | |
| 27 | W U V | U V W | HB HA HC | HA HB HC | |
| 28 | W U V | U V W | HB HC HA | HA HB HC | |
| 29 | W U V | U V W | HC HA HB | HA HB HC | |
| 30 | W U V | U V W | HC HB HA | HA HB HC | |
| 31 | W V U | U V W | HA HB HC | HA HB HC | |
| 32 | W V U | U V W | HA HC HB | HA HB HC | |
| 33 | W V U | U V W | HB HA HC | HA HB HC | |
| 34 | W V U | U V W | HB HC HA | HA HB HC | |
| 35 | W V U | U V W | HC HA HB | HA HB HC | |
| 36 | W V U | U V W | HC HB HA | HA HB HC | |