

# Stepper motor driver 2H1106T

## Characteristic :

- 1.Using new digital sinusoidal micro-segmentation algorithm
- 2.Support single / dual control pulse input
- 3.A test run function, power failure, phase memory function
- 4.Positioning accuracy, low noise, small temperature rise, high efficiency
- 5.Simple high-performance, multi-function, operation, cost-effective
- 6.With short circuit, overvoltage, undervoltage, overtemperature protection and improving functions
- 7.Motor parameters automatically adapt to the function to ensure maximum play all types of motor function

## Stepper Motor driver Specification :

Input Power supply :	AC50V-110V 6A(MAX)
Output Current	2.0A-6.0A
Drive Way	PWM constant current chopping , two phase Sine wave output current
Suitable stepper motor	85, 86, 110,130 series two phase stepper motor
Ambient environment	-10℃~55℃ 15~85%RH、No condensation. Non-corrosive, flammable, explosive, conductive gas, liquid and dust
Keeping enviroment	—40℃~+55℃, <93%RH, No condensation, no frost
Size (L*W*H)	160X65X115 mm
Weight	0.95Kg

## Setting Current

2H1106T	SW8-SW10	000	001	010	011	100	101	110	111
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	Phase current	2.0A	2.5A	3.0A	3.5A	4.0A	4.5A	5.5A	6.0A
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## Setting **Microstep selection**

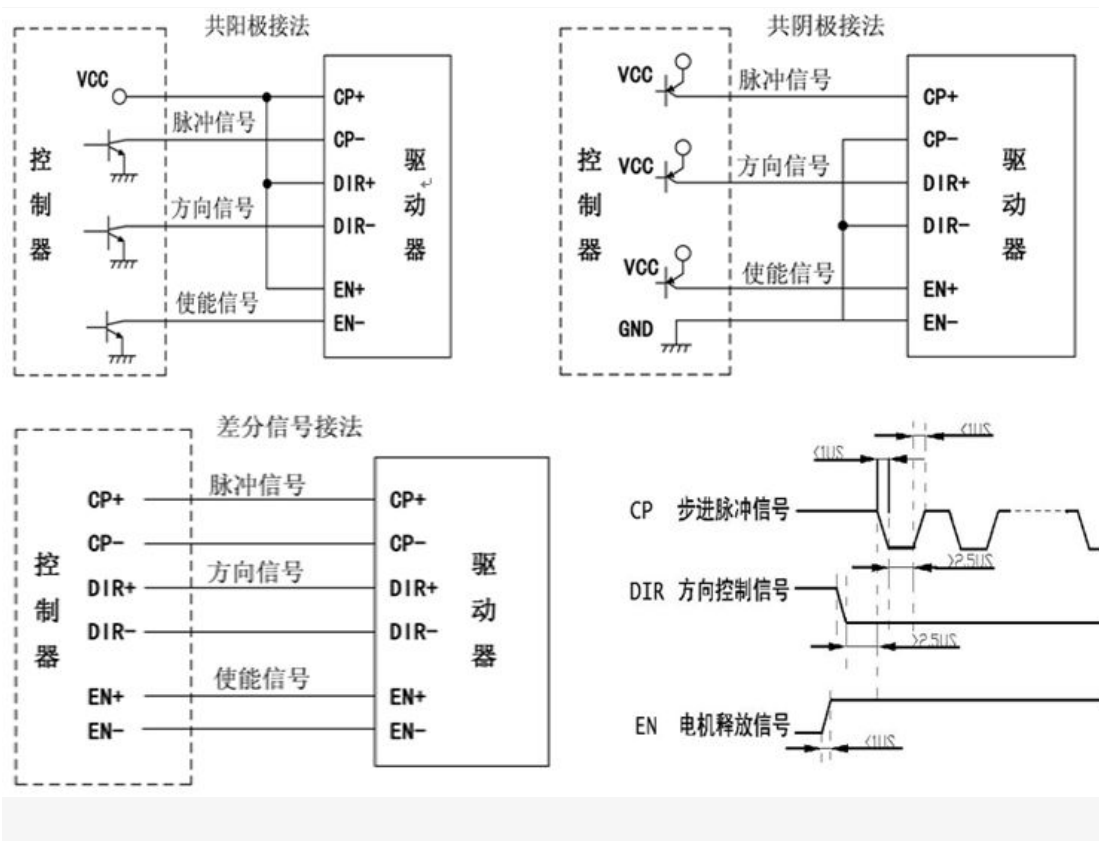
SW1—SW5	00000	00001	00010	00011	00100	00101	00110	00111	01000	01001
Steps/rev	200	400	500	600	800	1000	1200	1600	2000	2400
SW1—SW5	01010	01011	01100	01101	01110	01111	10000	10001	10010	10011
Steps/rev	2500	3000	3200	3600	4000	5000	6000	6400	7200	8000
SW1—SW5	10100	10101	10110	10111	11000	11001	11010	11011	----	11111
Steps/rev	10000	12000	12800	20000	24000	30000	40000	60000	----	Tesp

## Description :

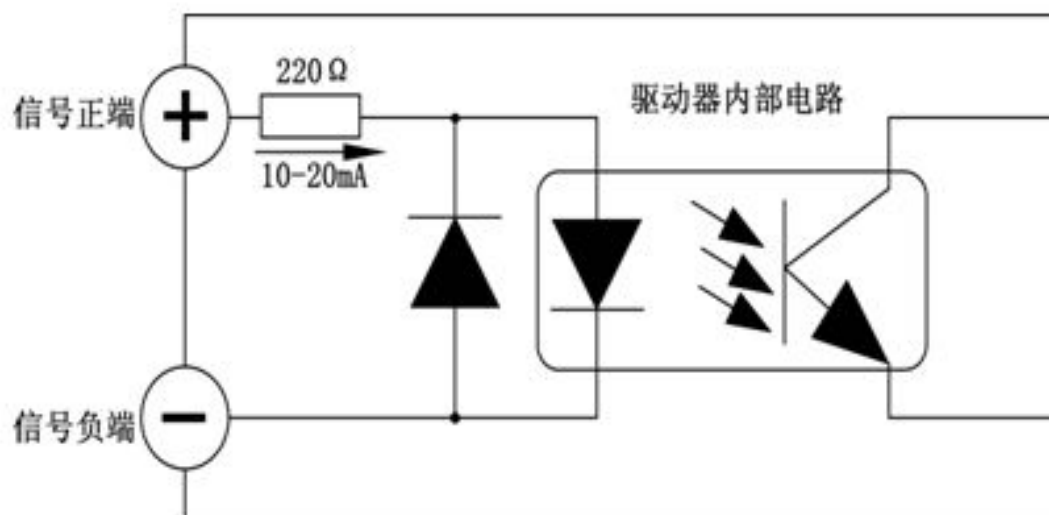
Microstep setting	Users can set the driver Microstep by the SW1-SW5 five switches, total 28 micro-step. When you set the microstep , pls stop the driver working。 The setting of the specific Microstep subdivision, please refer to the instructions of the driver panel figure .
Output current setting	Users can set the driver Microstep by the SW1-SW5 five switches. The setting of the specific Microstep subdivision, please refer to the instructions of the driver panel figure..
Double pulse setting	SW7 sets pulse mode, setting “on” as double pulse mode, setting “off” as pulse + direction mode., CW+/CW is Clockwise , CCW+/CCW- is Counterclockwise , need to confirm the wire of stepper motor 。
Automatic half current function	Users can set the driver half flow function by SW6. "OFF" indicates the quiescent current is set to half of the dynamic current, that is to say, 0.5 seconds after the cessation of the pulse, current reduce to about half automatically. "ON" indicates the quiescent current and the dynamic current are the same. User can set SW6 to "OFF", in order to reduce motor and driver heating and improve reliability.

Self test function	When SW1-SW5 is OFF , Inner of drive send 1K pulse to test whether the motor, wire, and self is normal。
signal Interface	PUL+ and PUL- are the positive and negative side of control pulse signal; DIR+ and DIR- are the positive and negative side of direction signal; ENA+ and ENA- are the positive and negative side of enable signal .
Motor Interface	A+ and A- are connected to a phase winding of motor; B+ and B- are connected to another phase winding of motor. If you need to backward, one of the phase windings can be reversed .
Power Interface	It uses DC power supply, recommended working voltage is 50—110VAC, power is over 300W, voltage shouldn' t be over 115VAC and below 50VAC。
Indicator Lightor	There are two indicator lights. Power indicator is green. When the driver power on, the green light will always be lit. Fault indicator is red, when there is over-voltage or over-current fault, the red light will always be lit; after the driver fault is cleared, if re-power the red light will be off.。
Installation	The size of motor driver is 151×97×53 mm, mounting holes is 139mm。Chest and upright installation are ok, we suggest upright installation。During installation, it should be close to the metal cabinet for heat dissipation.

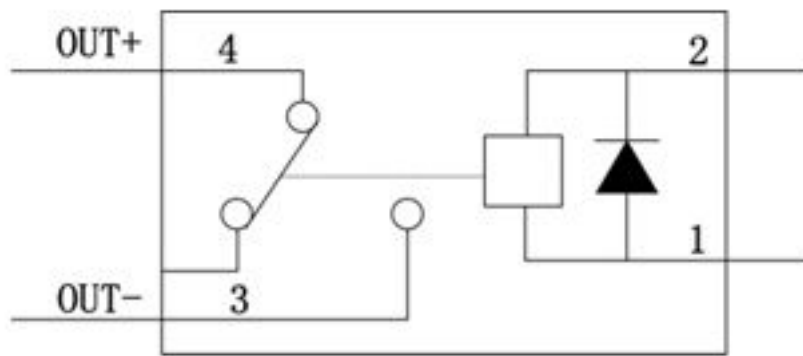
**signal interface and sequence in time :**



Inner electric circuit of motor drive :



Connection of Output alarm



**注意：OUT 为光电隔离 OC 输出，最高承受电压30VDC，最大饱和电流100mA 驱动器  
正常工作时，输出光耦不导通。**

Note : OC is output of photoelectric isolation , Max voltage capability is 30VDC ,maximum saturation current is 100 MA motor driver .

Output optocoupler is not conducted under the normal working condition .

**Interface connection and installing size :**

