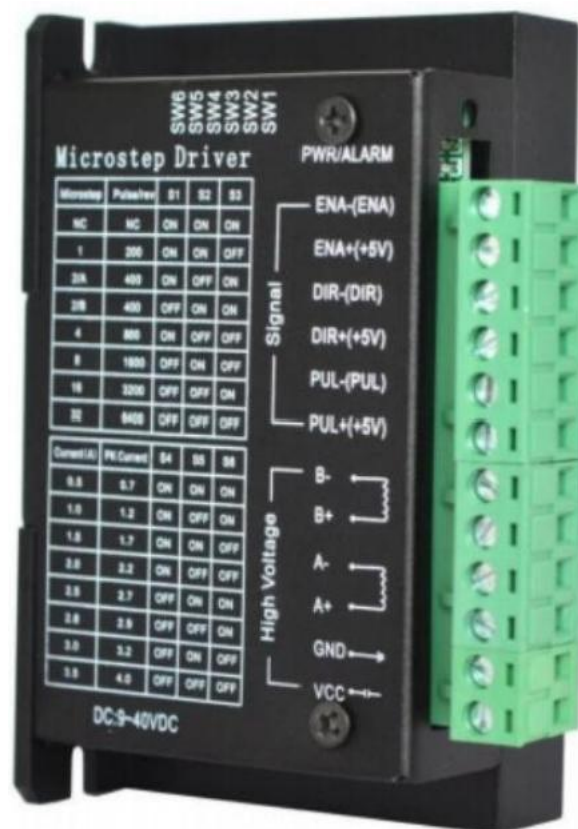


TB 6600 Upgrade the instruction manual

Please read this instruction manual carefully before use



Overview of ① products

TB6600 Upgraded driver, a professional two-phase hybrid stepper motor driver. Four-wire, six-wire, eight-wire two-phase hybrid stepper motor with a suitable phase current below 4.0A and 35, 39, 42, 57mm. 32 various subdivision and 4A, internal various currents, can meet the needs of most small equipment applications. Using high-efficiency motor current control to greatly reduce the motor heating and vibration, built-in overheating, overcurrent, overvoltage detection, good stability.

② application area

Suitable for a variety of automation equipment and instruments in the field of motion control, such as: 3D printer, laser processing equipment, carving equipment, medical equipment, measuring equipment, electronic processing equipment, textile and clothing equipment, etc. In the user expected low vibration, low noise equipment application, the cost performance of the field of strong competitive first choice.

③ Interface Definition

Control signal interface

name	function
PUL + PUL -	Pulse input signal The pulse effective edge is adjustable, and the default pulse rise edge is effective: in order to reliably respond to the pulse signal, the pulse width should be greater than 1.2us. The 5-24VDC level is compatible.
DIR + DIR -	Direction input signal High / low level signal, to ensure reliable motor change, direction signal before the pulse signal at least 5us. The initial running direction of the motor is related to the motor winding wiring and interchange Either phase winding (e. g. A +, A-exchange) can change the direction of the initial operation of the motor. The 5-24VDC level is compatible.
ENA + ENA -	Enable to control the signal This input signal is used to enable or prohibit the drive output. ENA connected to low level (or internal light Coupling-on), the driver will cut off the current of each phase of the motor to keep the motor in a free state, Do not respond to the stepping pulse. When this function is not required, the enabling signal terminal can be suspended. The 5-24VDC level is compatible.

name	function
VCC	Positive electrode of DC power supply, range + 9V- - + 42V.
GND	DC power anode
A+A-	Motor A phase winding
B+B-	Motor B phase winding

④ 参数设定

The driver uses a six-digit dial switch to set the subdivision accuracy and dynamic current, described as follows:

control function	Subdivision accuracy	dynamic current
Dial switch bit number	SW1、SW2、SW3	SW4、SW5、SW6

Subdivision accuracy setting

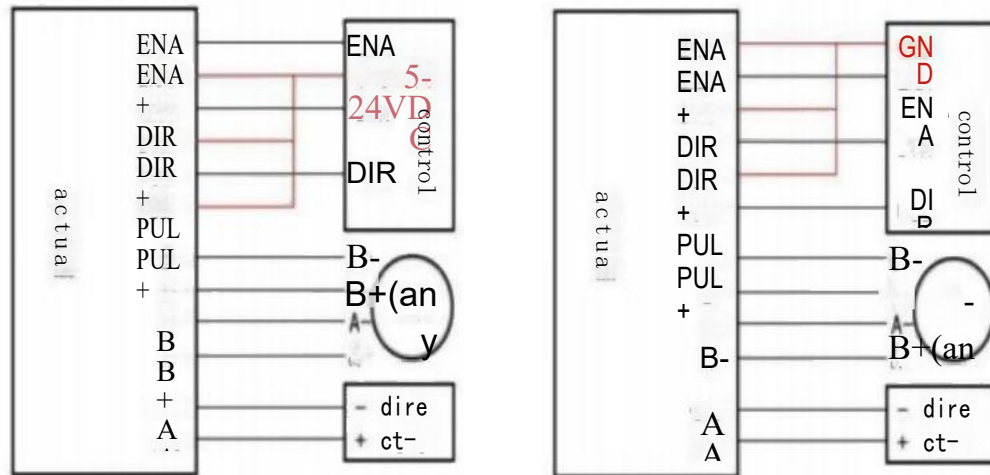
Subdivision accuracy	Pulse number / circle	SW1	SW2	SW3
NC	NC	ON	ON	ON
1	200	ON	ON	OFF
2/A	400	ON	OFF	ON
2/B	400	OFF	ON	ON
4	800	ON	OFF	OFF
8	1600	OFF	ON	OFF
16	3200	OFF	OFF	ON
32	4000	OFF	OFF	OFF

Run current setting

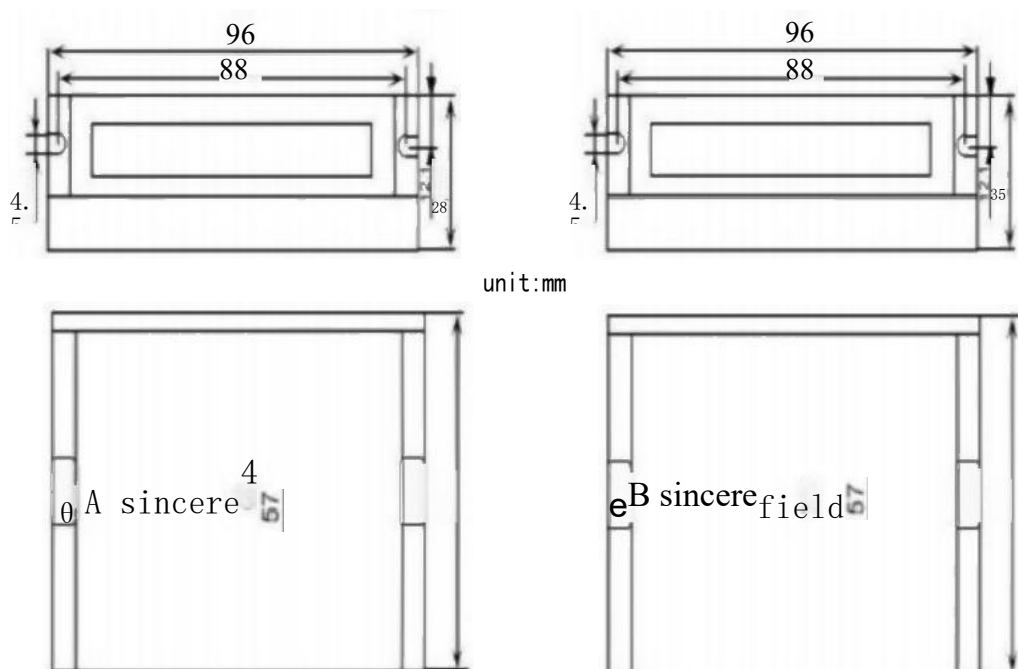
average current	peak point current	SW4	SW5	SW6
0.5A	0.7	ON	ON	ON
1.0	1.2	ON	OFF	ON
1.5	1.7	ON	ON	OFF
2.0	2.2	ON	OFF	OFF
2.5	2.7	OFF	ON	ON
2.8	2.9	OFF	OFF	ON
3.0	3.2	OFF	ON	OFF
3.5	4.0	OFF	OFF	OFF

⑤ Control signal wiring diagram

Common anode (low level) common cathode (high level)

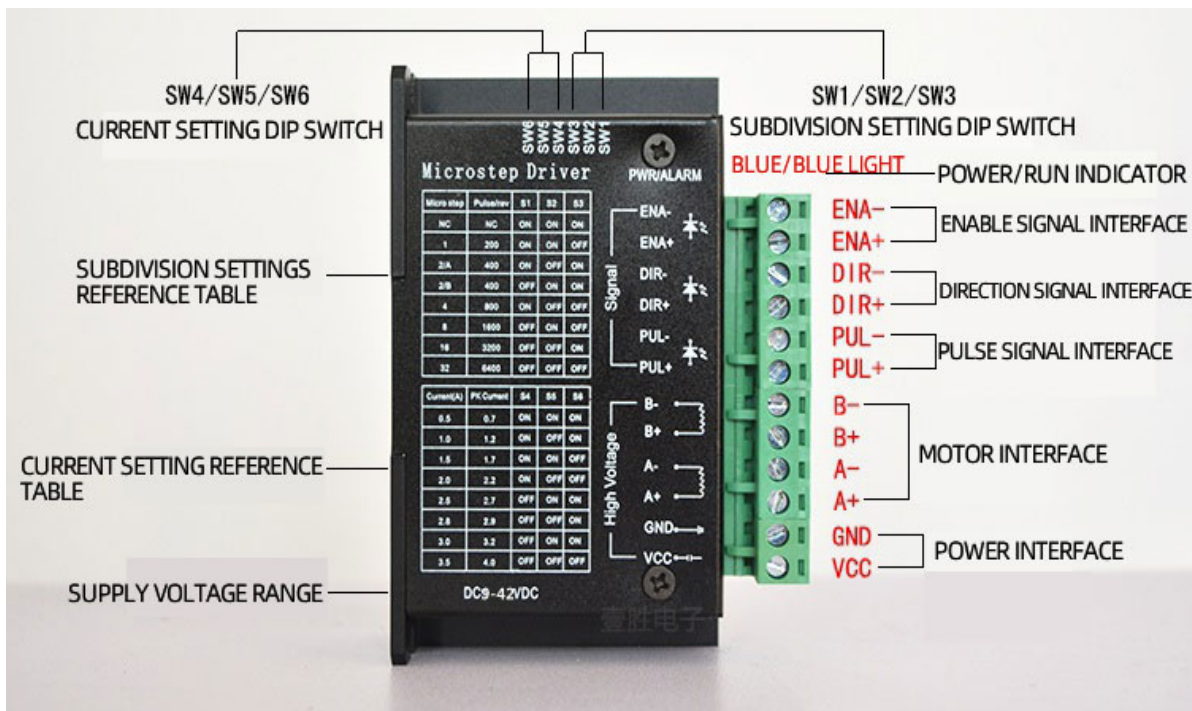


⑥ Outline installation dimensions



⑦ Use of the environment and the parameters

cooling-down method		Natural cooling or forced air cooling
service environment	occasion	Avoid dust, oil pollution, corrosive gas, too high humidity and strong vibration Place, the combustile gas and conductive dust are prohibited.
	temperature	0℃—50℃
	humidity	40-90%RH
	shake	10-55Hz/0.15mm
Save the temperature		-20℃—65℃
weight		0.2kg



FEATURES

- ※ CAN CONTROL A FOUR-WIRE, SIX-WIRE, EIGHT-WIRE TWO-PHASE STEPPER MOTOR
- ※ VOLTAGE INPUT RANGE: 9-42VDC, BETTER EFFECT WITHIN 12-24V
- ※ CURRENT OUTPUT OPTIONAL: 0.5-4.0A
- ※ SUBDIVISION OPTIONAL: 1, 2, 4, 8, 16, 32
- ※ SIGNAL INPUT: SINGLE-ENDED, PULSE/DIRECTION, 5-24VDC LEVEL COMPATIBLE
- ※ IMPULSE RESPONSE FREQUENCY MAX UP TO 50KHZ
- ※ PRECISE CURRENT CONTROL GREATLY REDUCES MOTOR HEATING
- ※ THE CURRENT IS AUTOMATICALLY HALVED AT STANDSTILL
- ※ OPTICAL ISOLATION SIGNAL INPUT, STRONG ANTI-INTERFERENCE ABILITY
- ※ OVERHEATING, OVERCURRENT PROTECTION FUNCTION
- ※ OFFLINE (ENA) PROTECTION FUNCTION