



User's Manual

For

ISDT17-20

Integrated Stepper Motor Driver



Address: 15-4, #799 Hushan Road, Jiangning, Nanjing, China

Tel: 0086-2587156578

Web: www.omc-stepperonline.com

Sales: sales@stepperonline.com

Support: technical@stepperonline.com

Table of Contents

1. Features.....	1
2. Parameters	1
3. Electrical Interface.....	2
4. Typical Connection Diagram.....	3
5. Packing	3
Appendix I DIMENSIONS (mm)	4
Appendix II INSTALLATION	5

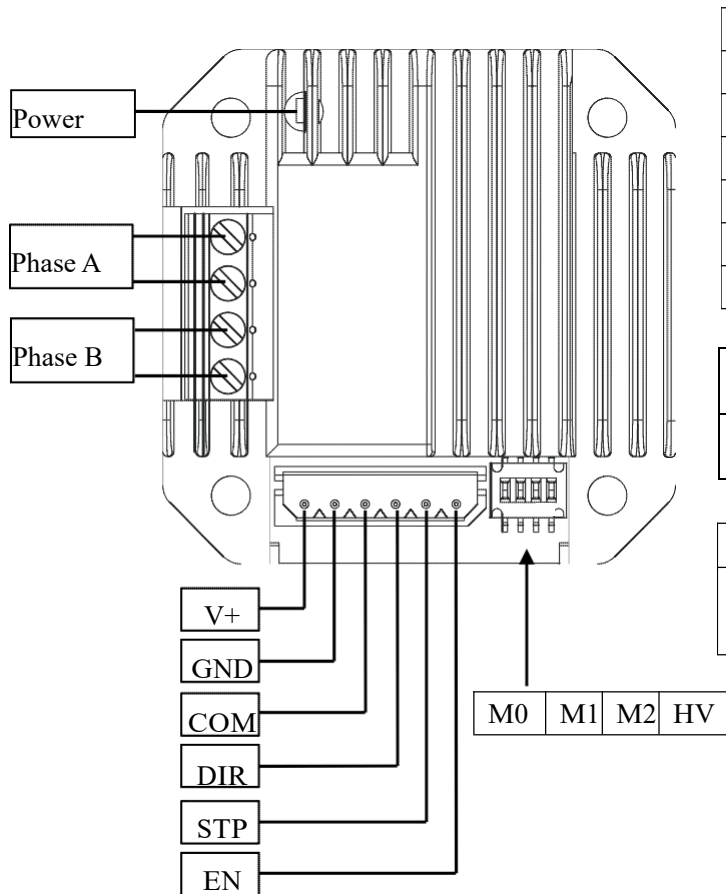
1. Features

- ☆ Miniature design, mounted onto NEMA 17 step motor
- ☆ Enclosure is made of die-cast aluminum which improve heat dissipation
- ☆ Current reduce to 50% automatic when inoperation
- ☆ Optical-isolated input, Compatible with 3.3-5V and 12-24V signal voltage
- ☆ Common signal support common anode and cathode
- ☆ Drive current adjustable between 0.6A-2A
- ☆ 1/2/4/8/16/32 microstep options

2. Parameters

Supply Power		DC11V-DC28V/2A, recommend DC24V
microstep Interface	COM	signal voltage common anode/cathode signal voltage :3.3V-5V [HV slide switches switch ON] signal voltage :12V-24V [HV slide switches switch OFF]
	DIR	0V or Vcom current : 8mA@3.3V/8mA@12V/15mA@5V/18mA@24V
	STP	0V or Vcom. current : 8mA@3.3V/8mA@12V/15mA@5V/18mA@24V Frequency 100-20KHz
	EN	0V or Vcom. current : 8mA@3.3V/8mA@12V/15mA@5V/18mA@24V Vcom Or NC:enable stepper motors;0V disable
Drive Current		2.0-A Maximum Drive Current. 0.6A-2A adjustable drive current
Drive mode		PWM chopper constant current
microstep		Optional 1、2、4、8、16、32
Protect		Supply Power Reverse protection, Out overload, drive overheating, drive overcurrent
Operating temperatur		-20°C-85°C

3. Electrical Interface



M0	M1	M2	microstep
ON	ON	ON	1
OFF	ON	ON	2
ON	OFF	ON	4
OFF	OFF	ON	8
ON	ON	OFF	16
OFF	ON	OFF	32

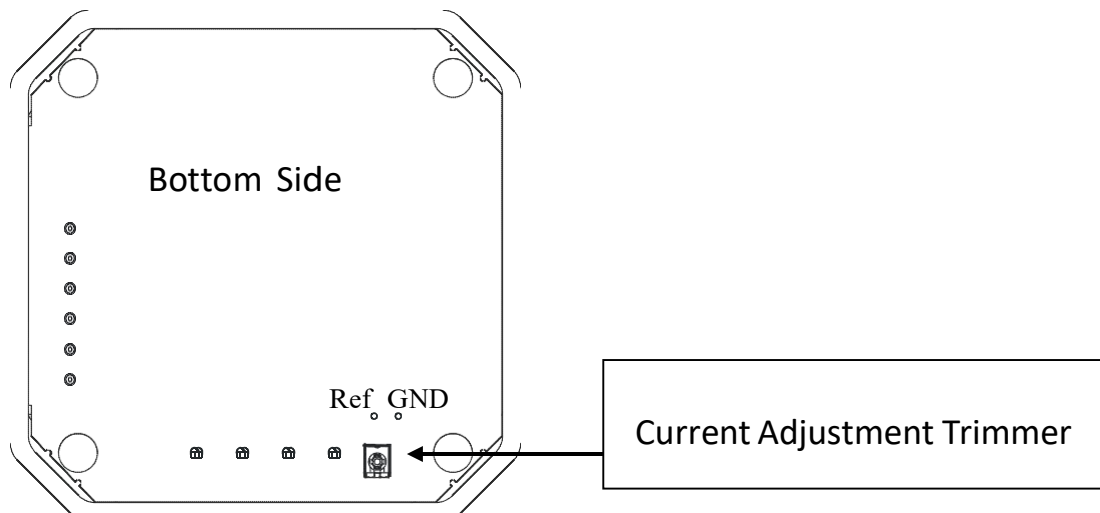
COM@DC3.3V-5V : HV to ON
COM@DC12V-24V : HV to OFF

Motor terminal	kf128-3.81-4P
User interface terminal	5264-6P

Adjust drive current

Motor Driver is capable of providing maximum 2A per phase drive current respectively. A trimmer (potentiometer) is provided to serve this purpose at the bottom of the controller, as shown in the following figure. Measuring the mapped voltage (Ref) when Motor stop and power on

Mapped voltage "ref" of 0.3 - 1V proportionally represents 0.6 ~ 2A

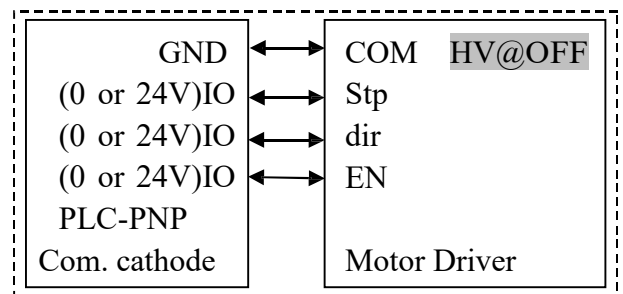
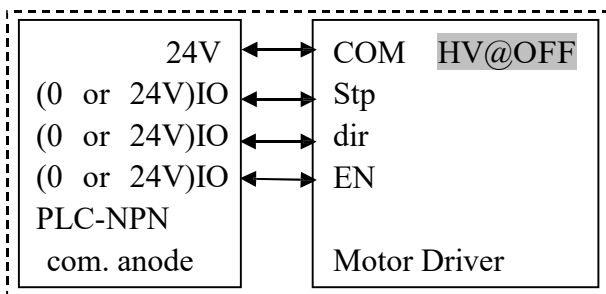
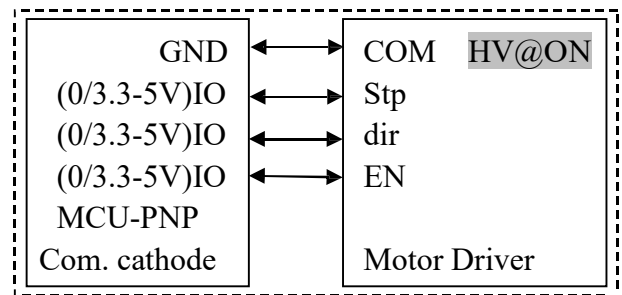
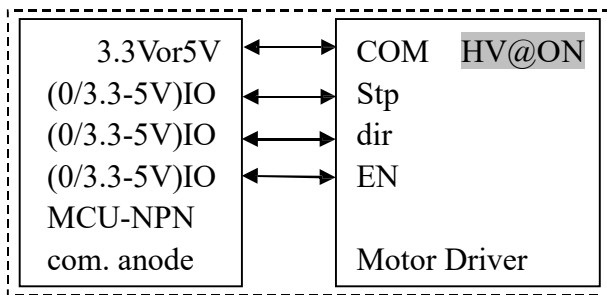
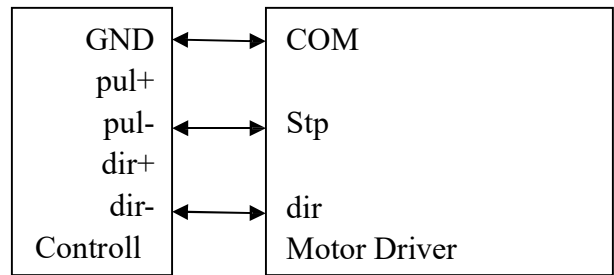
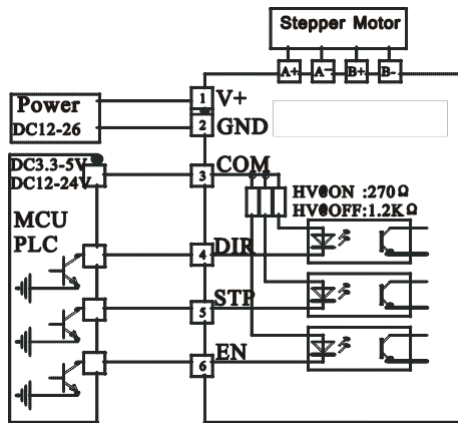


4. Typical Connection Diagram

Signal voltage Compatible with 3.3V-5V and 12V-24V

Pin “HV” of slide switches Slide to “ON”, Signal voltage must be lower than 5V

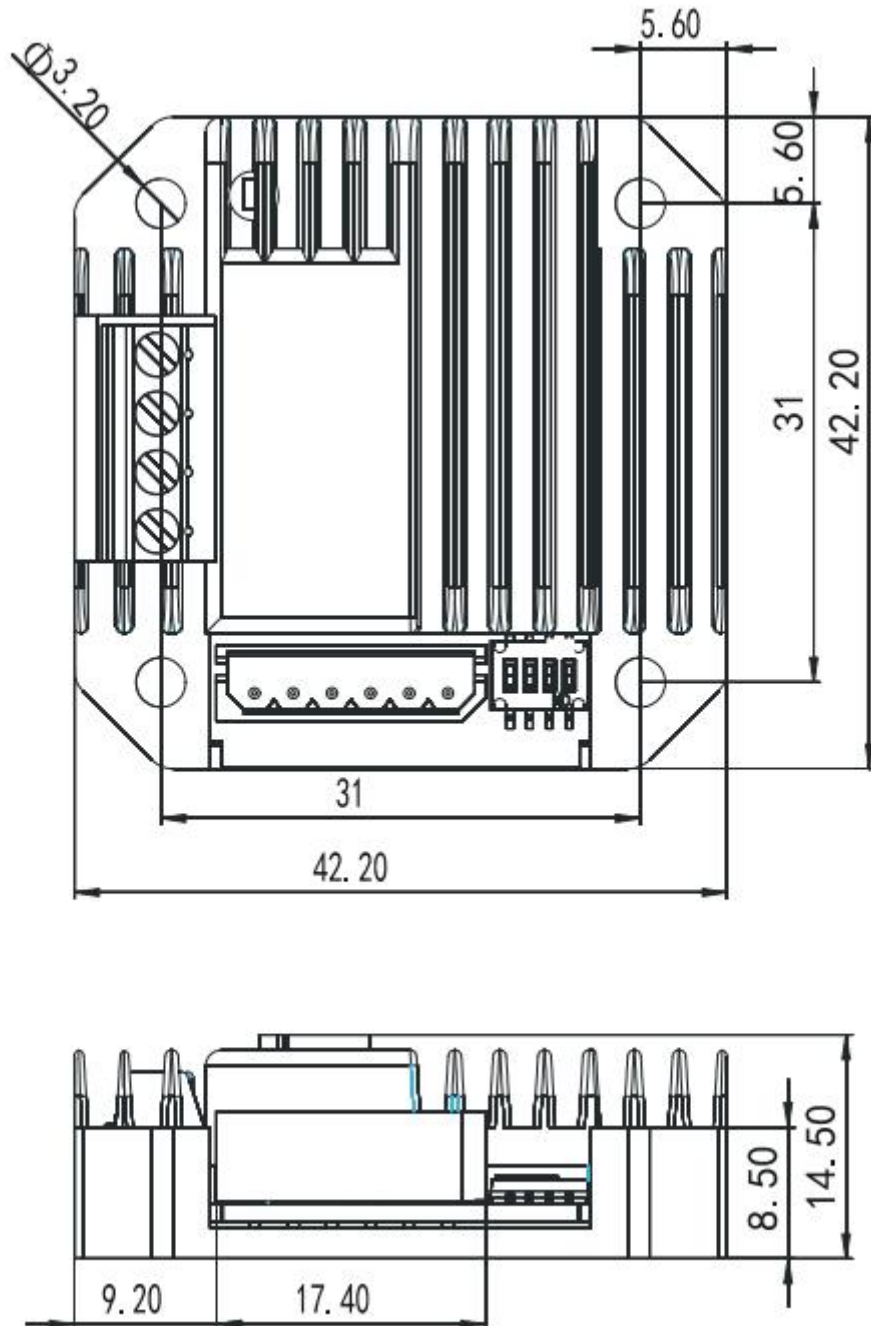
Pin “HV” of slide switches Slide to “OFF”, The signal voltage can be applied to 12 to 24V



5. Packing

NO.	Number	parts
1	1	stepper motor driver
2	1	5264-6P with line 30cm

Appendix 1 DIMENSIONS (mm)



Appendix II INSTALLATION

NEMA 17 Stepper Installation

1. Screw mount motor driver onto the motor
2. Wire the motor leads.

※Warning※ : Before Screw mount motor driver onto the motor, the driver current should be adjusted according to the motor!

