
MICROSTEP DRIVER

MA860

Version1.3



Shenzhen Dingtuoda Electromechanics Co.,Ltd

Address: 4F 7building, Makanyimin industrial park, Xili, Nanshan district, Shenzhen, Guangdong China,518020

Tel: 0755-25796858,25796857

Fax: 0755-25796696

Technical Service Line: 0755-21682428

[http://: www.dt-me.com](http://www.dt-me.com)

E-mail: dingtuo@dt-me.com

Read the operating instructions carefully before putting the driver into operation with power

Summary

The MA860 is an economical high performance microstepping diver based on the most advanced technologies in the world today. It is suitable for driving any 2-phase and 4-phase hybrid stepping motors. By using advanced bipolar constant current chopping

technique, it can output more speed and power from the same motor, compared with tradition technologies such as L/R drives. Its 3-state current control technology allows coil currents to be well controlled, with relatively small current ripple and therefore less motor heating

Specification

- Small size, large power
 - Supply voltage up to 90VAC
 - 20KHz chopping frequency
 - Half - static current automatically
 - the maximum drive current is 6A
 - Multilayer PCB technology, high reliability
 - the subdivision precision can be adjusted up to 64 subdivision
 - over voltage, over current protection
- .Small size(150x108x48cm)

Current setting

Current value	SW1	SW2	SW3
2.5A	OFF	OFF	OFF
3.0A	ON	OFF	OFF
3.5A	OFF	ON	OFF
4.0A	ON	ON	OFF
4.5A	OFF	OFF	ON
5.0A	ON	OFF	ON
5.5A	OFF	ON	ON
6.0A	ON	ON	ON

Full/Half setting: SW4 : ON=Half OFF=Full **SW5 :** ON=Double pulse
OFF=single pulse

Electronic specifications

Parameters	Min.	Typical	Max.	Unit
Supply voltage	40	80	90	VAC
Output current	2.5	-	-	A
Logic input current	6	10	30	mA
Pulse effect frequency	0	-	300	KHz
Pulse low level	30	-	-	us
Over voltage protection	-	-	95	VAC

Pin Assignment and Description

Control signal connector P1 pins

Signal	Description
PUL+(+5V) PUL-(PUL)	Pulse signal: in single pulse(pulse/direction) mode, this input represents pulse signal, effective for each rising or failing edge(set by inside jumper J1)
DIR+(+5V) DIR-(DIR)	Direction signal: high / low level signal, the initial operation direction of the motor is related to the wiring of the motor. The exchange of any phase winding (such as A+, A- switching) can change the direction of the motor initial operation.
ENA+(+5V) ENA-(ENA)	Enable signal; this signal is used for enabling/disabling the driver. High level for enabling the driver and low level for disabling the driver, usually left UNCONNECTED(ENABLED)

Control signal connector P2 pins

Signal	Description
A C	60VAC~80VAC
A C	60VAC~80VAC
A+	Motor A phase
A-	Motor A phase
B+	Motor B phase
B-	Motor B phase

Wire connection

