

# DV860

## 2-Phase Stepper Motor Drive

## مشخصات فنی و ابعاد و اندازه استپر موتورهای سری DV860

### Features

- 16 channels constant angle, constant torque micro steps, highest micro step: 51200ppr
- Highest response frequency: 200Kpps
- Current of winding will be reduced by approximately 50% when no step pulse command is received for 1.5 seconds
- Opto-isolated signal I/O
- Drive current is adjustable in 16 channels from 2.0A/phase to 6.0A/phase (peak 8.4 )A/Phase
- Single power supply from Single power supply from 18V to 80VAC or 24V to 110VDC
- Better to overcome the problem of low frequency vibration
- Dimension : 150×53×97.5mm<sup>3</sup>; Net Weight : 0.6Kg
- Certification: CE / ISO9001

### Current Setting

Stepper driver working current is set by DIP switches SW1 to SW3

Working current (A)	2.0	2.5	3.2	3.8	4.2	4.8	5.3	6.0
SW1	ON	OFF	ON	OFF	ON	OFF	ON	OFF
SW2	ON	ON	OFF	OFF	ON	ON	OFF	OFF
SW3	ON	ON	ON	ON	OFF	OFF	OFF	OFF

SW4 is set to half current or full current mode: OFF=Half current. ON=Full current.

### Micro-step Setting

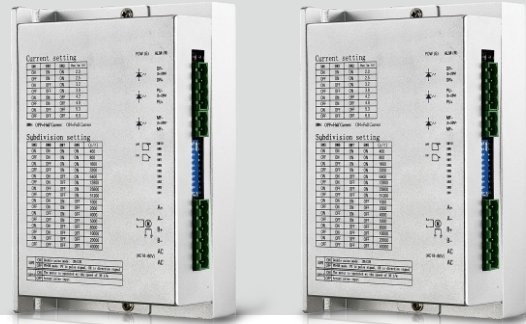
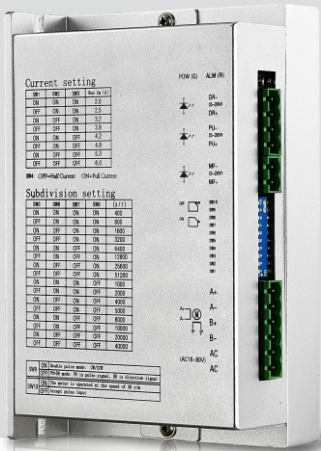
The subdivision (micro step) is set by DIP switches D5 to D8, 16 channels in total. D9 and D10 are used to set the driver function.

Subdivision (micro step) ppr	400	800	1600	3200	6400	12800	25600	51200
SW5	ON	OFF	ON	OFF	ON	OFF	ON	OFF
SW6	ON	ON	OFF	OFF	ON	ON	OFF	OFF
SW7	ON	ON	ON	ON	OFF	OFF	OFF	OFF
SW8	ON	ON	ON	ON	ON	ON	ON	ON
Subdivision (micro step) ppr	1000	2000	4000	5000	8000	10000	20000	40000
Sw5	ON	OFF	ON	OFF	ON	OFF	ON	OFF
Sw6	ON	ON	OFF	OFF	ON	ON	OFF	OFF
Sw7	ON	ON	ON	ON	OFF	OFF	OFF	OFF
SW8	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Sw9	ON, double pulse: PU is positive pulse signal, DR is negative pulse signal							
	OFF, single pulse: PU is pulse signal, DR is direction signal							
Sw10	Self detect switch (OFF: accept external pulse, ON: the driver send pulse to make the motor work at the speed of 30r/m)							

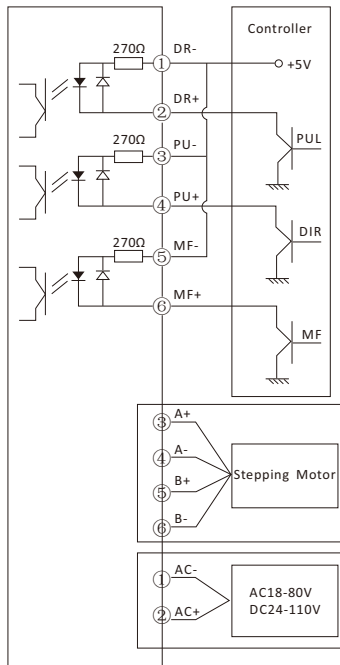
Note: Subdivisions can be customized.

### Caution

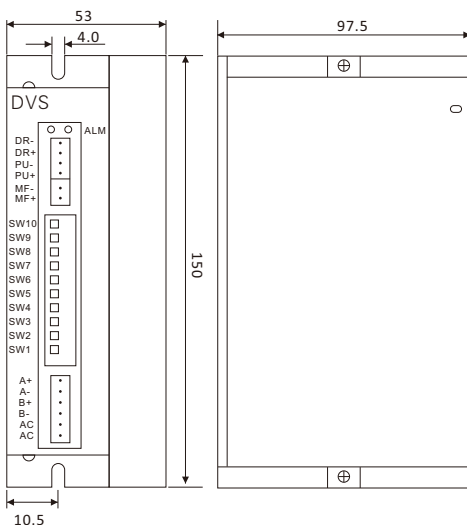
- The supply voltage shouldn't exceed AC80V/DC110V.
- Input control signal is 5V~28V, and it is not necessary to connect current-limiting resistance when it is over 5V.
- Other points are the same as DV542.



## Typical System Connection



## Dimension



اعداد مندرج در این اشکال بر حسب میلیمتر (mm) می باشد

## Terminals

Symbol	Functions / Applications	Definition
PU+	Positive of opto-isolated input signal	Connect to +5V power supply, drive voltage ranges from 5V to +28V. Current-limiting resistance is not needed when it is over 5V.
PU-	DP9=OFF, PU is step pulse signal	With the falling edge of the signal PU, the motor executes an angular step. The input resistance is 220Ω. Low voltage 0-0.5V, high voltage 4V, pulse width>2.5μs.
	DP9=ON, PU is positive step pulse signal	
DR+	Positive of opto-isolated input signal	Connect to the end of the power supply, drive voltage ranges from 5V to +28V. Current-limiting resistance is not needed when it is over 5V.
DR-	DP9=OFF, DR is direction signal	Change the motor's direction of rotation. Input resistance is 220Ω. Low voltage 0-0.5V, high voltage more than 4V, pulse width>2.5μs
	DP9=ON, DR is negative step pulse signal	
MF+	Positive of opto-isolated input signal	Connect to the end of the power supply, drive voltage ranges from 5V to +28V. Current-limiting resistance is not needed when it is over 5V.
MF-	Motor free signal	The motor current will be cut off and the driver stops working when it is effective.
AC	Power Supply	AC18-80V
AC		DC24-110V
A+	Connection	
A-		
B+		
B-		