


MICROSTEPPING DRIVER DS335

Summarize		Picture
Max. driver current	3.5A / phase , 8 kinds of alternative current	
Microsteps	2~125 steps, 15 kinds of alternative microsteps	
Input pulse	0~20KHZ	
Power Supplier	DC 15V ~ 46V / AC 10~30V	
Driver Mode	constant current and chopped wave	
All of input signals are passed photo-isolation		
Auto decrease half current when motor stops		

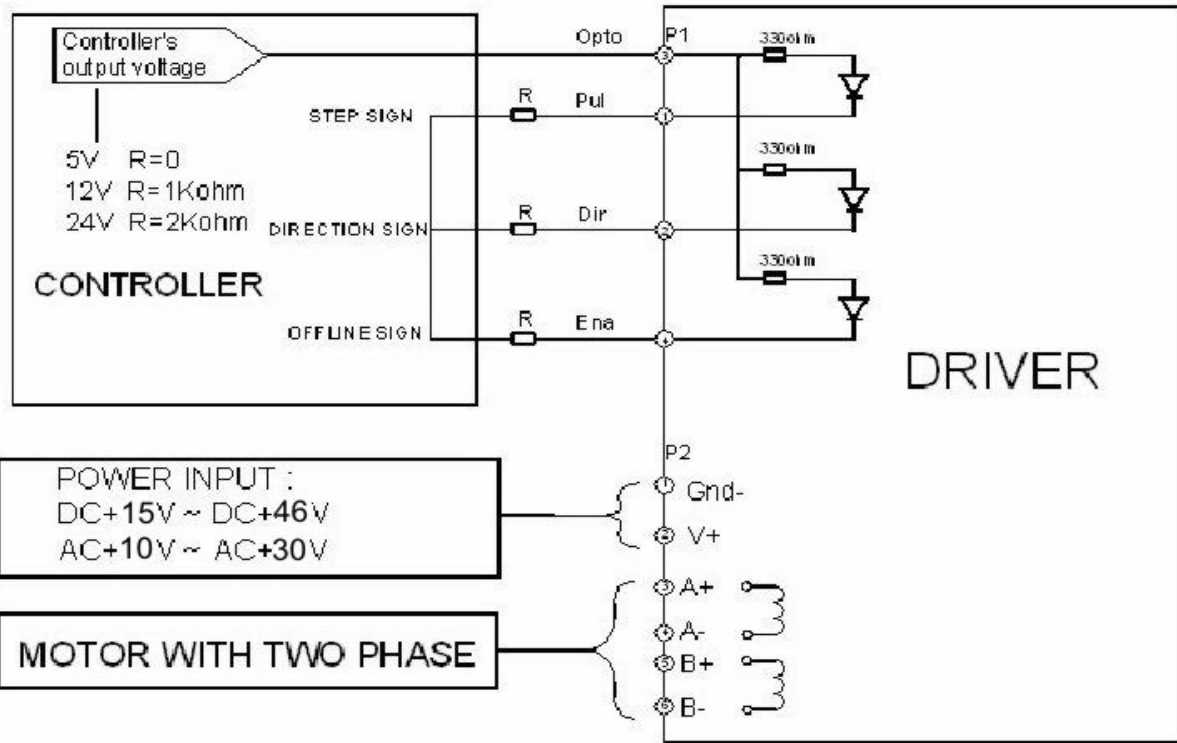
Switch setting (SW1,2,3,4,5,6,7,8)						
MICROSTEP SETTING (ON=0, OFF=1)			CURRENT SETTING			
SW5,6,7,8	Microstep	Step angle	Current	SW1	SW2	SW3
1000	2	0.9 °	1.3A	ON	ON	ON
0100	4	0.45 °	1.6A	OFF	ON	ON
1100	8	0.225 °	1.9A	ON	OFF	ON
0010	16	0.1125 °	2.2A	OFF	OFF	ON
1010	32	0.05625 °	2.5A	ON	ON	OFF
0110	64	0.028125 °	2.9A	OFF	ON	OFF
1110	128	0.0140625 °	3.2A	ON	OFF	OFF
0001	5	0.36°	3.5A	OFF	OFF	OFF
1001	10	0.18 °				
0101	20	0.09 °				
1101	25	0.072 °				
0011	40	0.045 °				
1011	50	0.036 °				
0111	100	0.018 °				
1111	125	0.0144 °				

Static current is controlled by SW4 :
 Half current : One second after step signal stops, the motor's phase current will be decreased 40% , the temperature is also dropped. In using the accumulator, it will decrease the wastage.
SW4 : on=>full current , off=>half current

Electrical Specification				
	Min.	Best	Max.	Unit
Output phase current	1.3	-	3.5	A
Input voltage(V)	15	36	46	VDC
	10	26	30	VAC
Input logistic current	6	10	30	Ma
Step pulse	0	-	100	KHz
Insulated resistance	500			Mohm
The min. time of pulse	5			uS

Driver Connection

A complete stepper motor control system contains stepper motor, step driver, DC power and controller, the following is standard connection diagram



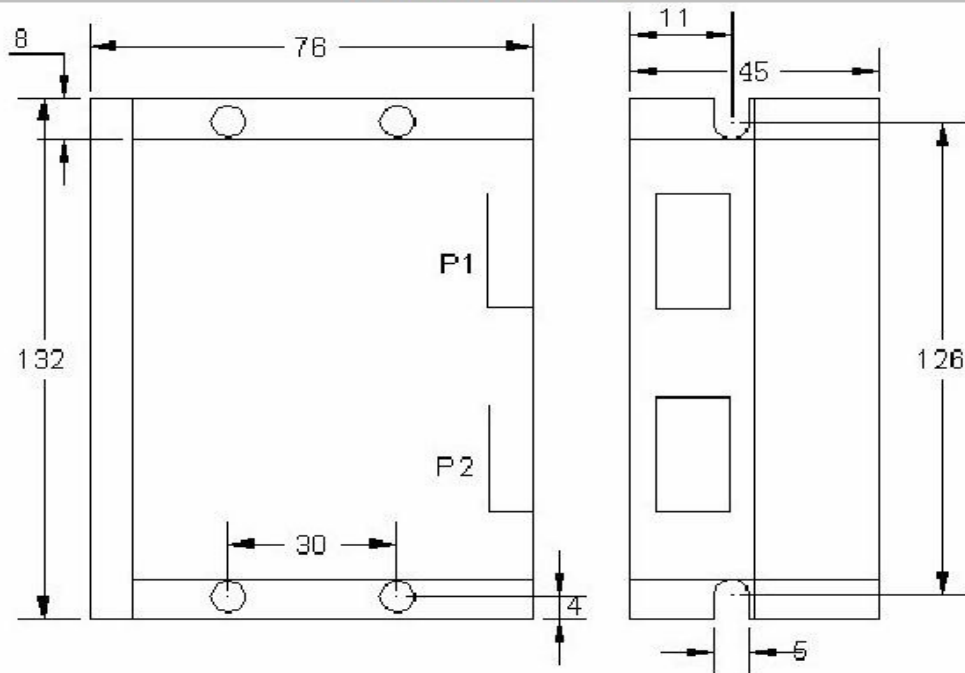
Pin Function

	Pin	Signal	Assignment
P1 Weak power	1	Pul	Frequency signal control
	2	DIR	Direction signal
	3	OPTO(+5V)	+COM
	4	Ena	Free or high frequency
P2 Strong Power	1	GND	Ground
	2	+V	DC +15V~+46V AC +10V~+30V
	3,4	A+, A-	Motor A phase
	5,6	B+, B-	Motor B phase

Running Condition

Cooling mode		Natural cooling and fan cooling
Running condition	place	Avoiding dust, oil smog and corrosive gas
	temperature	0°C ~ +50°C
	humidity	40~90%RH
	vibration	5.9 m/s ² Max
Store temperature		-20°C ~ +65°C
Weight		Approx. 500g

Mechanical Dimensions



Motor Connection

DS335 driver applies for the motor with two phase or four phase in four lines, six lines and eight lines, phase current is down 6A
 Stepping motor A phase Pin 3 & Pin 4 in P2
 B phase Pin 5 & Pin 6 in P2

The following diagram is showed for connection of 4 lines, 6 lines and 8 lines motor :

