

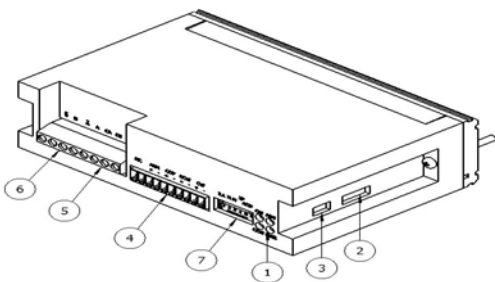
- Thanks for purchased our product, Please read this user manual before using the product. Please reserve this user manual for looking up at any time.
- The environment conditions of surrounding temperature of working area for this unit is 0~+40°C, the relative moisture must be under 85% RH.
- Do not use this unit as water, oil and too much dust nearby or where the sun burn directly.
- Please select the right DC20~40V · above 4A, power supply of specification.

**Features**

- DC20~40V Power Input.
- Can choose current from 0.5A~4.0A adjustments.
- Overheating protection and signal output function
- Resolution can choose 200,400,500,800,1000,1600

- 2000,3200,5000,6400,10000,12800,25000,25600,50000,51200
- Automatic current down (ACD) function for reduced motor heat.
- Constant current driving unipolar method, suitable for 6 leads or 8 leads 2-phase step motors.

**Function & Contact**



- 1.for power light
- 2.3.for current setting
- 4.for input/output connector
- 5.for input
- 6.for motor
- 7.for function setting switch

☉ POWER LIGHT

	Description
PWR	When the driver accept DC20~40V, PWR will be light.
ALM	When motor current overload , ALM will be light.

☉ CURRENT ADJUSTMENT SWITCH

	Description
RUN	To set the drive current when motor run (0.5A~4.0A)

	1.0A	1.2A	1.4A	1.6A	1.8A	2.0A	2.2A	2.4A
D	0	1	0	1	0	1	0	1
C	0	0	1	1	0	0	1	1
B	0	0	0	0	1	1	1	1
A	0	0	0	0	0	0	0	0
	2.6A	2.8A	3.0A	3.2A	3.4A	3.6A	3.8A	4.0A
D	0	1	0	1	0	1	0	1
C	0	0	1	1	0	0	1	1
B	0	0	0	0	1	1	1	1
A	1	1	1	1	1	1	1	1

☉ INPUT SIGNAL TERMINAL

	Description
CW	1P : Clock signal input terminal 2P : The pulse input terminal which have the motor CW.
CCW	1P : Direction signal input terminal 2P : The pulse input terminal which have the motor CCW.
COF	When add a high voltage in this point, the current of the driver would down to zero at once.

☉ FUNCTION SETTING SWITCH

	200	800	1600	3200	6400	12800	25600	51200
K	0	1	0	1	0	1	0	1
L	0	0	1	1	0	0	1	1
M	0	0	0	0	1	1	1	1
N	0	0	0	0	0	0	0	0
	400	500	1000	2000	5000	10000	25000	50000
K	0	1	0	1	0	1	0	1
L	0	0	1	1	0	0	1	1
M	0	0	0	0	1	1	1	1
N	1	1	1	1	1	1	1	1

☉ POWER INPUT TERMINAL

	Description
V+	POWER DC20~40V@4A positive input
V-	POWER negative input

☉ MOTOR TERMINAL

		A	/A	B	/B	CA	CB
VEXTA	6Leads	black	green	red	blue	yellow	white
TAMAGAWA	6Leads	black	green	red	blue	yellow	white
SANYO	6Leads	black	green	red	blue	yellow	white
TECO	6Leads	black	green	red	blue	yellow	white
TECO	6Leads	red	red white	green	green white	black	white
TECO	8Leads	red	black	green	yellow	red,white black,white	green,white yellow,white

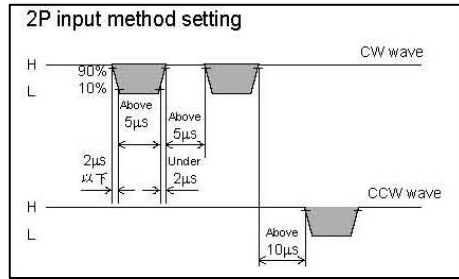
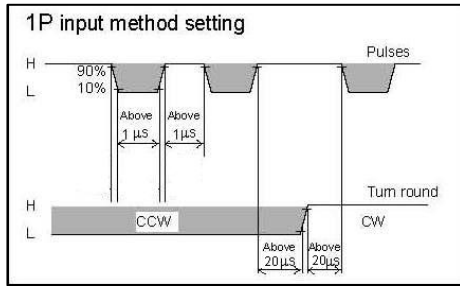
## Signal Specification

Pulse signal is negative level contact is for noise isolation · When pulse from HIGH change LOW · driver will drive the motor one step.

Pulse width above 1 $\mu$ Sec. · the changeover interseptal time of H · L is under 20 $\mu$ Sec.

Pulse voltage should be with DC4~10V and keep the current under 20mA · Output current of drive should keep under 20mA · To make sure photo coupler wasn't burned · (if vcc 12V, add 1K $\Omega$ 1/4W resistor · if vcc 15V, add 1.5K $\Omega$ 1/4W resistor · if vcc 24V 2K $\Omega$ 1/2W resistor)

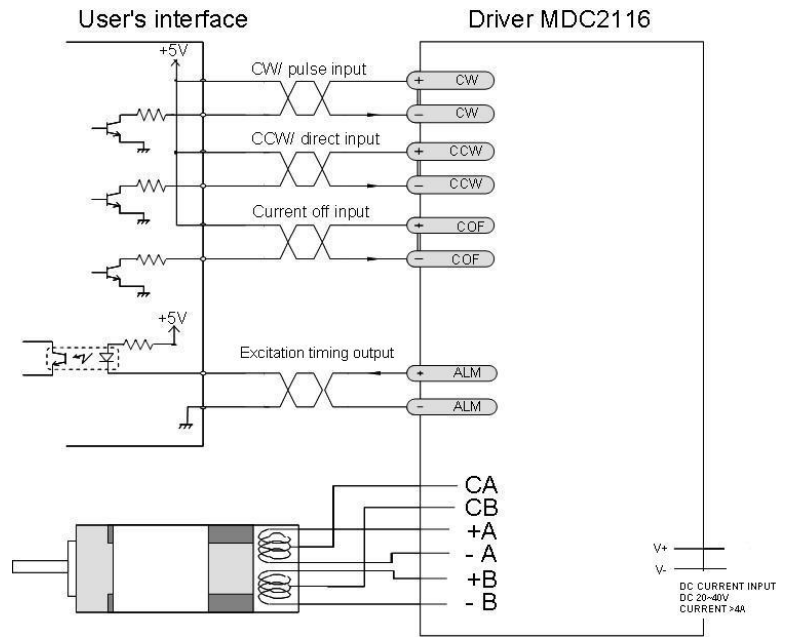
1P input, when LOW the motor run with CCW direction, when HIGH the motor run with CW direction.



## Specification

Item/Model	2 phase micro step drive / MDC2116
Power	DC20 ~ 40V @ 4A
Drive Method	PWM Constant Current
Drive Current	0.5A ~ 4.0A/PHASE
Resolution	Can choose : 200 · 400 · 500 · 800 · 1000 · 1600 · 2000 · 3200 · 5000 · 6400 · 10000 · 12800 · 25000 · 25600 · 50000 · 51200s/r
Control Mode	1P (Signal-Pulse) · 2P (Two-Pulse)
Max Pulse Speed	800K Hz (above)
Pulse Width	>1 $\mu$ S (Min)
Direction Respond	>20 $\mu$ S (Min)
Input Signal	L: 0~+0.5V · H: +4~+10V, <20mA
Input Signal impedance	220 $\Omega$
Output Signal	(Open Collector) · 40V, 20mA (Max)
Noise Isolation	Use of Photo Coupler
Temperature	0 ~ +40 $^{\circ}$ C
Moisture	< 85%RH
Dimension (mm)	133.5(L) x 90(W) x 41.5(H)
Weight	325g

## Connecting Diagram



## Dimension (mm)

