

# Stepping Motor Driver

## 5 Phase Stepping Motor Driver Series



### 5 Phase Stepping Motor Driver-AC110V/220V input TR514-1 • TR514-2



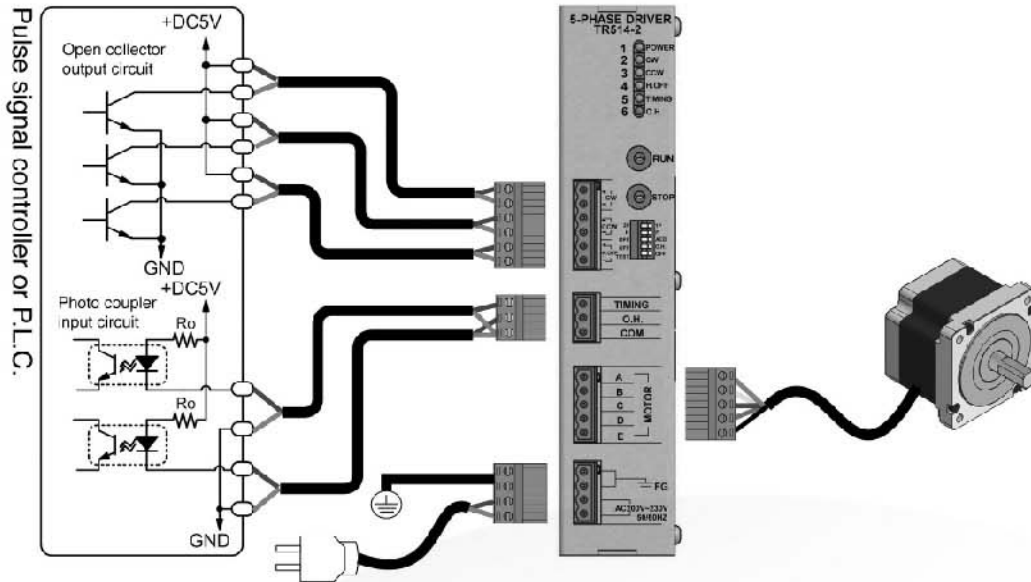
#### ► Features

- Small size, AC110V or 220V power input directly
- New driving type—Pentangle which is high efficiency, low noise and vibration, the characteristic of torque and response improved greatly
- SMD (Surface Mounting Design) design for raised stability of circuit
- With auto current down circuit it can depress the motor's temperature rising
- Self-test/TIMING function and easy circuit inspection
- With over voltage protection function, auto current cut off when the input current over the rated value

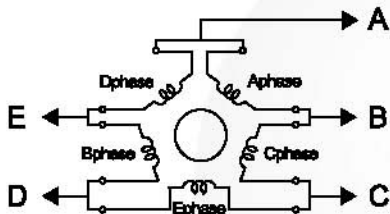
#### ► Specs

Driver model		TR514-1	TR514-2
Power Input		AC100~115V±15% 5A 50/60Hz	AC200~230V±10% 3A 50/60Hz
Drive current		1.4A/phase	
Excitation mode		Full step : 0.72° 4 phase excitation Half step : 0.36° 4-5 phase excitation (Switch selectable)	
Signal output/input mode		Photo Coupler input interface Open Collector output interface	
Input signal	CW pulse Input	2 pulses : CW pulse signal Input ; 1 pulse : Rotation pulse signal Input	
	CCW pulse input	2 pulses : CCW pulse signal input ; 1 pulse : Direction of rotation signal input	
	H.OFF input	HOLDING OFF input	
Output signal	TIMING output	Signal is output every time the excitation sequence returns to step 0	
		Full step : Signals is output every 10 pulses Half step : Signal is output every 20 pulses	
	H.OFF output	Signal is output when the internal heat sink exceed 80°C	
Functions		<ul style="list-style-type: none"> <li>• Pulse Input mode switch (1P/2P)</li> <li>• Step angle switch (H/F)</li> <li>• Auto current down (ACD)</li> <li>• Auto current OFF when overheat (O.H.)</li> <li>• Self test (TEST)</li> </ul>	
Protection functions		<ul style="list-style-type: none"> <li>• Overheat protection : Signal is output when the internal radiator exceed 80°C , motor stops running</li> <li>• Over voltage protection : Auto current cut off when the input voltage over the rated value</li> </ul>	
Light display		POWER、CW、CCW、H.OFF、TIMING、O.H.	
Ambient temperature		0 °C~+40 °C	
Dimension (mm)		115 (L) × 42 (W) × 200 (H)	
Weight (g)		940	960

## ► Wiring diagrams



### ■ 5 phase motor internal wiring diagram :



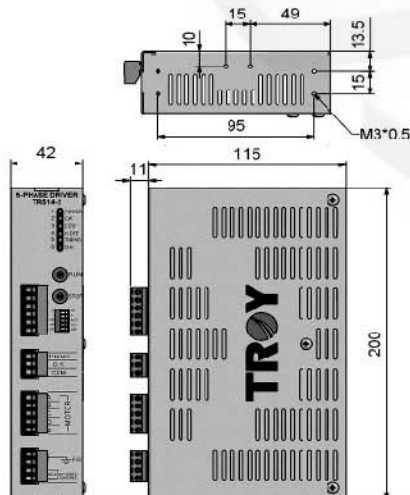
### ■ Wiring chart :

	TROY		SANYO DENKI			TAMAGAWA		ORIENTAL	
Line	5lines	10lines	5lines	5lines*	10lines	5lines	10lines	5lines	10lines
A	Blue	Blue / Black	Black	Blue	Black / Yellow	Blue	Blue / Black	Blue	Blue / Black
B	Red	Red / Brown	Orange	Red	Black White / Orange	Red	Red / Brown	Red	Red / Brown
C	Orange	Purple / Orange	Blue	Orange	Orange White / Blue	Orange	Purple / Orange	Orange	Purple / Orange
D	Green	Yellow / Green	Red	Green	Red White / White	Green	Yellow / Green	Green	Yellow / Green
E	Black	White / Gray	Yellow	Black	Yellow White / Red	Black	White / Gray	Black	White / Gray

※ 「\*」 means 5 phase stepping motor new color mark of Sanyo Denki which is different the old one. Please refer to the wiring chart to compare the lines what you got

## ► Dimension (Unit:mm)

### ■ Driver dimension :



### ■ Mounting plate dimension :

