

High torque servos 12V-24V



Application: Robot, mechanical arm, production line, the camera haeundae control robot



FEATURES

- wireless remote control and analog voltage control
- + Metal gear high torque output
- + Current limiting control
- + Easy to install, strong and durable

Application

- Large arm of the robot joints and heavy load of leg joint movement control
- Industrial automation production line robot control
- + Accurate control of the valve Angle
- Large camera haeundae remote control

RECOMMENDED OPERATING CONDITIONS

Parameter			
Operating Voltage	11V~24V/DC (11V/MIN~30V/MAX)		
No-load current	<400mA		
Limit Angle	±150° or 0°~300° (MAX)		
Control mode	R C mode	1ms pulse mode:1ms~2ms(pulse width)	
		2ms pulse mode:0.5ms~2.5ms(pulse width)	
	voltage mode	0V-5V input voltage (0.22V to 0°,4.78V to 300°)	
Material	Gear and shaft: alloy steel; gear box: aluminum		
Weight	550g		
Dimension	95mm*60mm*110mm		
Mechanical Life	> 1,000,000/full load (conservative values)		

ABSOLUTE MAXIMUM RATINGS

Parameter			
limit input voltage	11V~30V/DC (MAX)		
limited output current	5A±0.2A (MAX)		
limit Angle	±150° or 0°~300° (MAX)		
Control mode	R C mode	1ms pulse mode : 1ms~2ms(pulse width)	
		2ms pulse mode : 0.5ms~2.5ms(pulse width)	
	voltage mode	0V-5V input voltage (0.22V to 0°,4.78V to 300°)	
Weight	510g~560g		

Models and Specifications

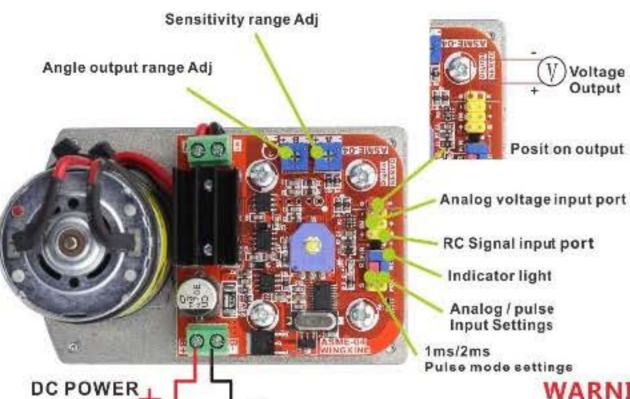
Models	Starting Torque	Holding Torque	Rated speed(24Vpower)
ASME-04A	260kg.cm max	220kg.cm max	0.12s/60°MAX
ASME-04B	380kg.cm max	340kg.cm max	0.5s/60°MAX



High torque servo series ASME-04 series

RC PULSE/Analog Voltage Control





INPUT

- Power steering line basis having indicated polarity wiring.
- Potentiometer A: used to adjust the servo motion sensitivity.
- Potentiometer B: used to adjust the rotation angle range of the steering gear shaft.
 Turn the steering angle and contraction ratio of the input signal.
- Turn the steering angle and contraction ratio of the input signal With mechanical steering midpoint symmetry contraction.

 4. position output: for external devices coarse detection steering angle
 - is actually running. Input voltage range of 0V ~ 5V.

 The effective operation of the correspondence between the angle and voltage is: 0 ° to 0.22V 300 ° to 4.78V
- 5. Indicator light: LED is flashing, servos work properly.
- 6, Mode settings: See description below.

WARNING: The power input reverse will burn servos directly, please check when wiring!

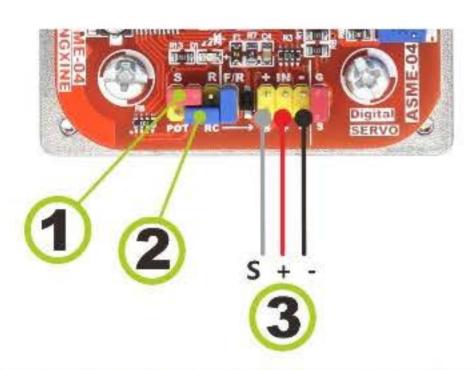
RC MODE ("1ms"Pulse Width Mode)

- 1, the jumper settings "NC" position.
- 2, the jumper settings "RC" position.
- 3, the jumper is set in "R" position.
- (1)"RC" pin is signal input.

(Servo controller "S" pin or RC receiver "S" pin, generally are used on model aircraft "S" indicates)

(2) "GND" pin connected to negative signal line. (Servo controller "-" foot or remote control receiver "-" feet, generally are used on model aircraft "-" indicates)

WARNING: The servo an independent power supply, so "+" does not require wiring.



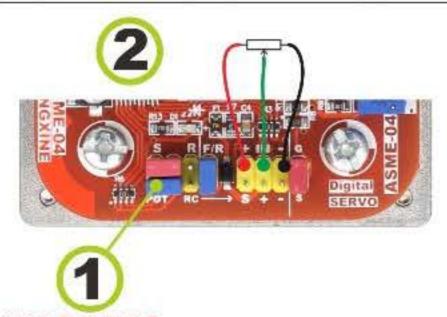
RC MODE ("2ms"Pulse Width Mode)

- 1, the jumper settings "NC" position.
- 2, the jumper settings "RC" position.
- 3, the jumper is set in "S" position.
- (1)"RC" pin is signal input.

(Servo controller "S" pin or RC receiver "S" pin, generally are used on model aircraft "S" indicates)

(2) "GND" pin connected to negative signal line.
(Servo controller "-" foot or remote control receiver "-" feet, generally are used on model aircraft "-" indicates)

WARNING: The servo an independent power supply, so "+" does not require wiring.



Voltage input or Potentiometer input MODE

- 1, the jumper settings "5V" position.
- the jumper settings "POT" position.
- (1) signal input terminal labeled "POT" pin is connected to the potentiometer wiper.
 - (2) labeled "5V" and "GND" pins are connected to the potentiometer two fixed ends.

If the input voltage directly controls the time to pick "5V" pin "the 1st position" jumpers set in the "NC" position, just pick "POT" and "GND" pin. Input voltage range of 0V to +5 V (DC).

WARNING: 1, the steering gear output "+5 V" power supply can only meet

the potentiometer, Do not use servos to supply power to other equipment.

2, the potential selection: 10k, 50k, 100k, potentiometer whith resistance greater than 10k.

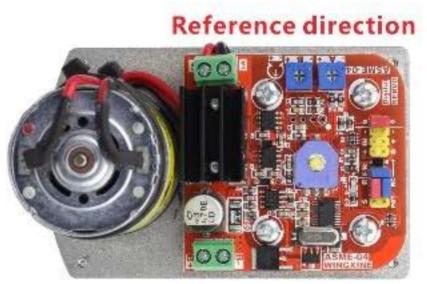
ALFS

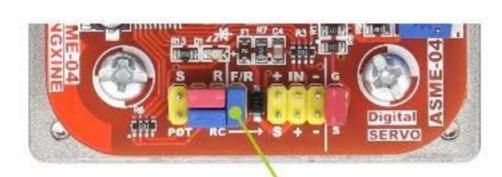


Set the direction of operation

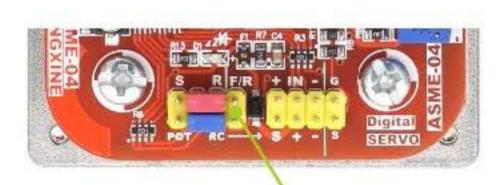
Change the direction of rotation by setting the F / R jumper. In the same input signal simply change the jumper setting to change the relative direction of rotation.

This mode applies to "RC" mode and "POT" mode.

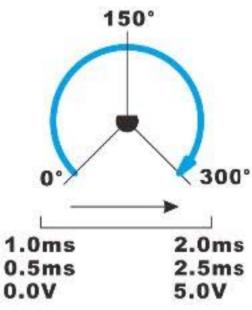


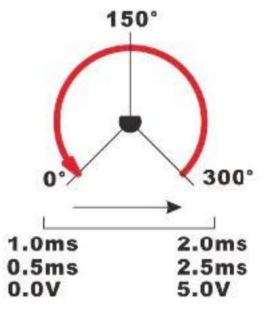


Short-circuit F / R jumper



Disconnect the F / R jumper





Set the rotation range



Change the range of the operating angle by adjusting the B potentiometer.
This acts as a constraint to the working angle. Reduce the working angle, still maintain the ratio with the input signal. The input signal is still set for the full stroke. This function is available for "RC" mode and "POT" mode.

The B potentiometer adjusts counterclockwise to the minimum, sevro limits the position at 150 degrees and stops working.

The B potentiometer counterclockwise adjustment constraint sevro working stroke 60%.

The B potentiometer counterclockwise adjustment constraint sevro working stroke 60%.

The angle shrink setting is linearly adjusted.

ALFS
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