# ()) seeed

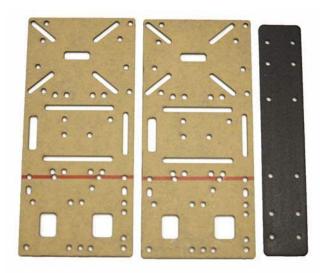


## Two Wheels Balance Car Chassis with JGA25 Motor Kit

**SKU** 110090264

The kit uses JGA25 DC geared motors and optical encoders for higher motor control accuracy and double-layer acrylic plates for easy placement of sensors and development boards.

With this kit, you can DIY assemble the balance car, mini Segway, select the right sensor and development board, and maintain the balance of the body by controlling the rotation of the motor. In this process, you can learn the PID algorithm and learn how to control the motor. Of course, you must first have a balanced car chassis and assemble it.





### The Motor parameters:

**Encoders Magnetic Series** 

Magnetic Encoders Two Channel Optical Encoder

Two	o Channel Encoder Connection:
1.B	lack:-Motor
2.R	ed :+Motor
3.G	reen:Hall Sensor GND
4.B	lue :Hall Sensor VCC
5.Y	ellow:Hall Sensor A OUT
6.W	hite:Hall Sensor B OUT



#### **Electrical Characteristics**

Characteristics	Symbol	Test conditions	Min.	Ref.	Max.	Units		
Supply voltage	Vcc		2.7		5.5	v	Output circuit	
Output saturation voltage	Vce (sat)	Vcc = 14V ; 1C = 20mA	-	300	700	mV		-K ogne
Output leakage current	Icex	Vcc = 14V ; Vcc = 14V	•	< 0.1	10	μΑ		
Supply current	Ice	Vcc = 20V Output open	•	5	10	mA	Output wave	<u> </u>
Output rise time	tr	$Vcc$ = 14V ; RL = 820 $\Omega$ ; CL = 20pF	•	0.3	1.5	μs	output mare	
Output fall time	tr	$Vcc$ = 14V ; $R_L$ = 820 $\Omega$ ; $C_L$ = 20pF	=	0.3	1.5	μs		90°± 1/6 T

20%~85%RH Operating relative humidity -10'C~+60'C
Operating temperature range

## Part List

- 1 x Car chassis (metal)
- 2 x Car extension chassis (acrylic)
- 2 x JGA25 motor
- 2 x 17-4MM Coupling
- 2 x Motor bracket (metal)
- 2 x 72MM wheel
- 4 x 12 MM copper column
- 4 x 30 MM copper column

## ECCN/HTS

ECCN	ERA99
HSCODE	9023009000
USHSCODE	90230000
UPC	



