

Skeleton Bot - 4WD hercules mobile robotic platform

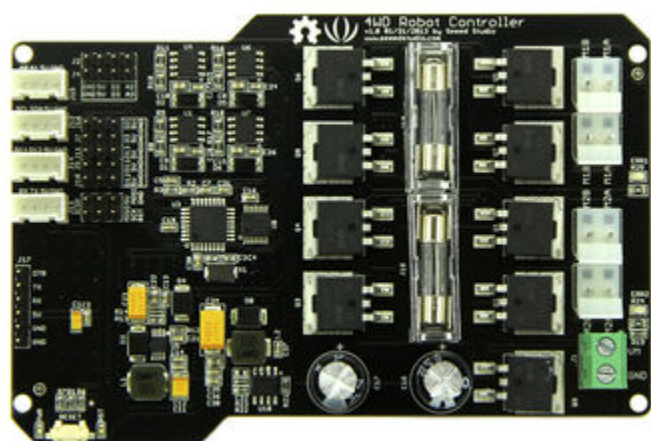
Introduction

4WD Hercules Mobile Robotic Platform adheres to the spirit with strong power and complete function, and it is a companion for you to enter into the robot world where you can make your own robot mobile platform. Hercules, the Titan in Greek mythology, is widely known for his strength and spirit of adventure.

It consists of the component of Hercules motor controller, Hercules skeleton, gear motor etc. The Hercules motor controller can consistently support the current up to 15A and driving voltage in the range of 6V-20V, thus, it can supply strong motive power to the whole platform. The Hercules skeleton is made up of aluminium alloy plate with firm but pliable texture which can carry, display and connect sorts of accessories in your project. Its 4 powerful gear motors, especially a couple of them from Sseed's original encipheror can monitor the running speed of your platform and amend the process parameter by the shaped closed-loop control. This provides a possibility to control precise process. Besides, other accessories such as wheels, cooper cylinder and acrylic guard plate that make the platform to be a completely mobile platform.

Hercules is a suite of open-platform. It is convenient for users to install all kinds of components through the hole sites on the board. In addition, the Grove connector reserved on the board can help the inventor input several sorts of sensor data into system. What's more, Hercules controller is Arduino compatible, so you can freely alter the device drives and programs.



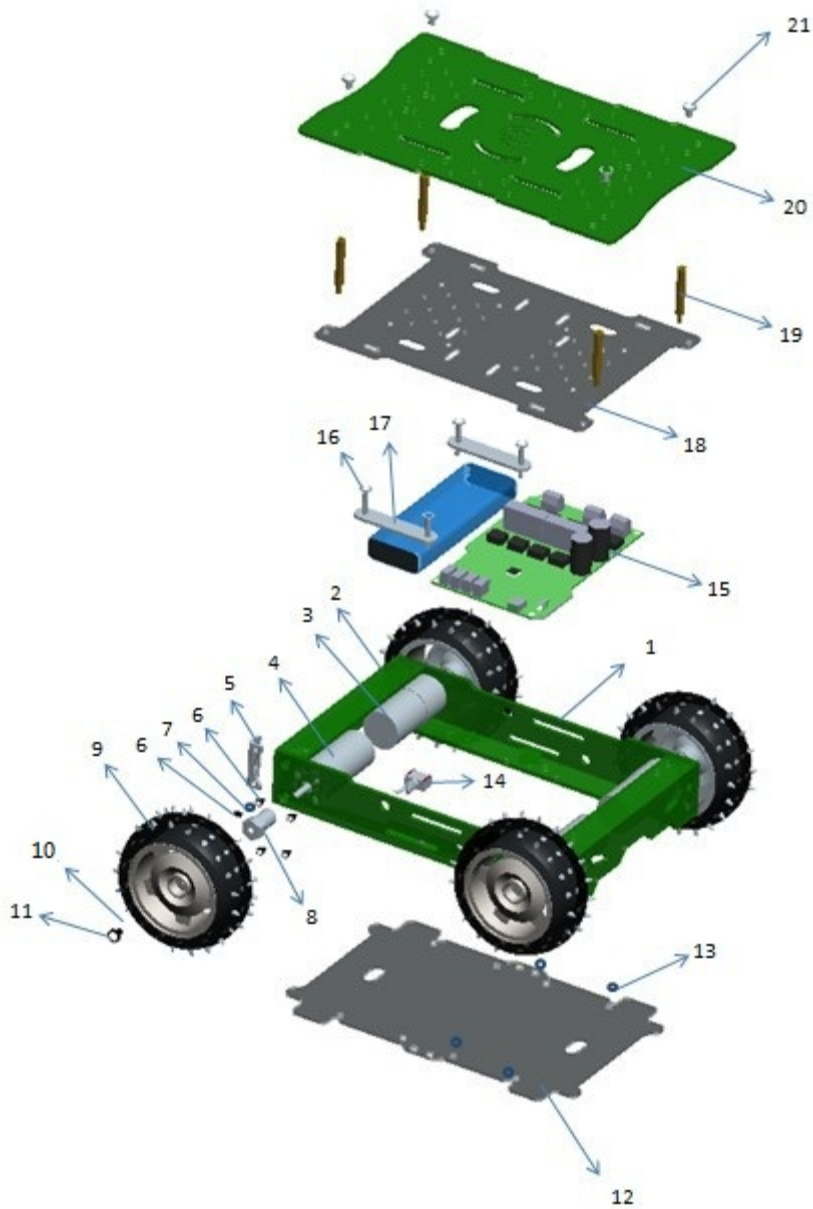




Features

- Strong motive power
- Solid shell, awesome profile
- close-loop control system
- Arduino compatible board
- Open and expandable, free to place other components into circuit to make a personal mobile platform.

Parts List



	Parts Name	Specification	Material	Quantity
1	Bracket-1	200*35*20mm*3.0mm	L Aluminum extrusion 6061	2 pcs
2	Bracket-2	135*35*20mm*3.0mm	L Aluminum extrusion 6061	2 pcs
3	Reducing-Motor	25GA-370	310rpm DC6V stalling torque : 70kg	2 pcs
4	Reducing-Motor with encoder	25GA-370	310rpm DC6V stalling torque : ≥ 7.0 Kg.cm	2 pcs
5	Bracket Adapter Plate	29*12*2.0mm	cold rolled plate	4 pcs
6	Screw	3*10mm	Metal	30 pcs
7	nut	M3*2.5mm	Metal	4 pcs
8	Motor-connector	$\Phi 4$ mm*W12mm*L18mm	Metal	4 pcs
9	Wheel	$\Phi 85$ mm*W31mm	plastic+rubber	4 pcs
10	Spring Shim	$\Phi 7$ mm* $\Phi 4$ mm	Metal	4 pcs

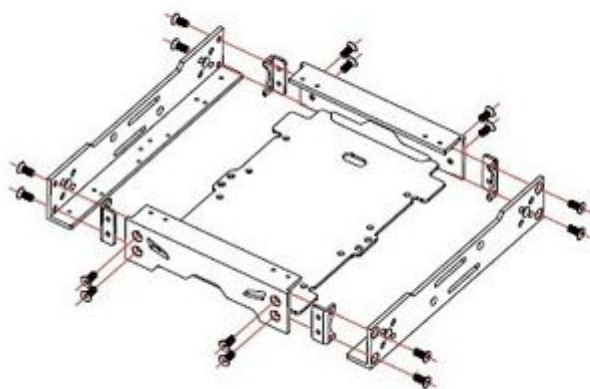
11	Screw	M4*8mm	Metal	4 pcs
12	Under-plate	199*129*2.0mm	Tea black Acrylic	1 pcs
13	washer	Φ5.0*Φ3*5mm	PA	4 pcs
14	power swith	/	/	1 pcs
15	Hercules Dual 15A 6-20V Motor Controller			1 pcs
16	Screw	M3*21mm	Metal	4 pcs
17	Acylic-plate	53*12*2.0mm	Transparent Acrylic	2 pcs
18	cover-plate	184*132*2.0mm	Tea black Acrylic	1 pcs
19	Cu pillar	M3*30mm-6mm	signal stud	4 pcs
20	Top-plate	216*138*1.5mm	AL plat	1 pcs
21	Screw	M3*21mm	Metal	4 pcs
22	Screw-driver	M3-85mm	/	1 pcs
23	Screw-driver	2.5-53mm	/	1 pcs
24	Power cable	150mm	/	1 pcs
25	wire	160mm	/	1 pcs

Note:

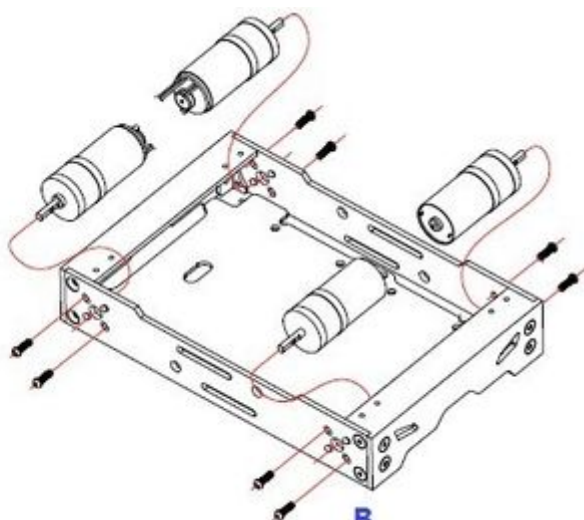
- 1) For details about the control panel, please refer [here](#)
- 2) The product specification of 25GA-370 Reducing-Motor.

Item		Parameter
Working Voltage		4.0-7.0 DCV
Rotation		CCW
No Load	Current	280mA
	Speed	310±12% r/min
Load	Current	1600mA(max)
	Speed	260±12% rpm
Rotation		CCW
Startup Voltage		≤1.2V
Load Torque		1500.0 g.cm
stalling torque		≥7.0 Kg.cm
Stalling Current		≤9.0A

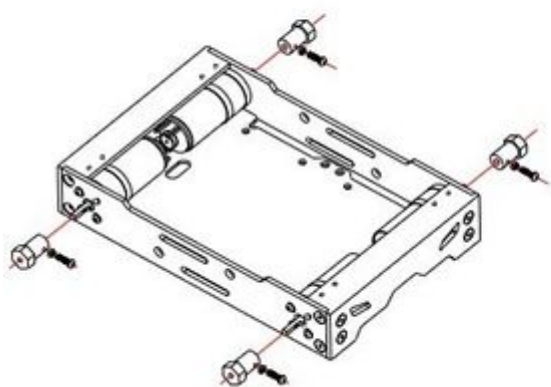
Assemble diagrams



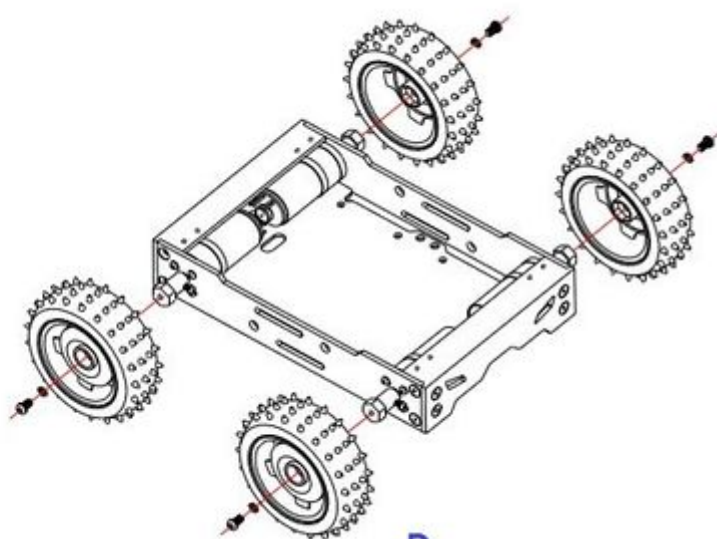
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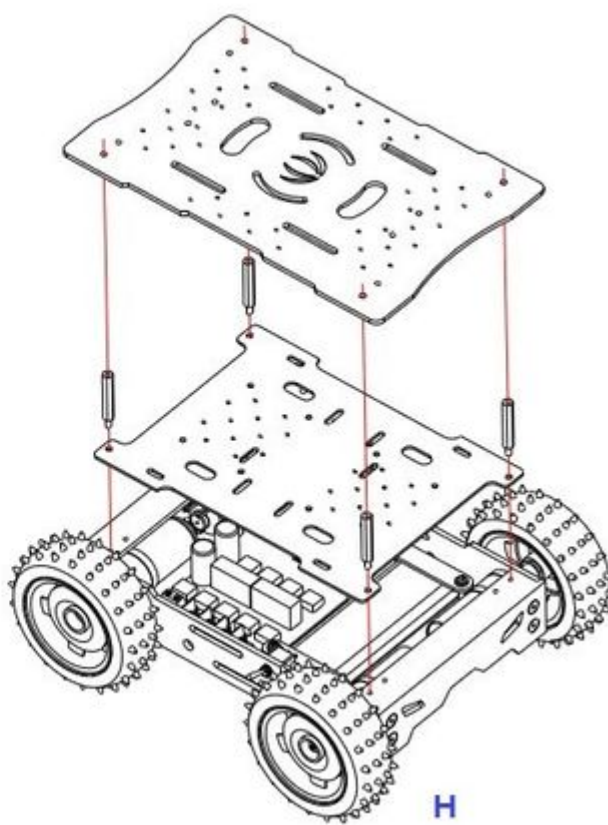
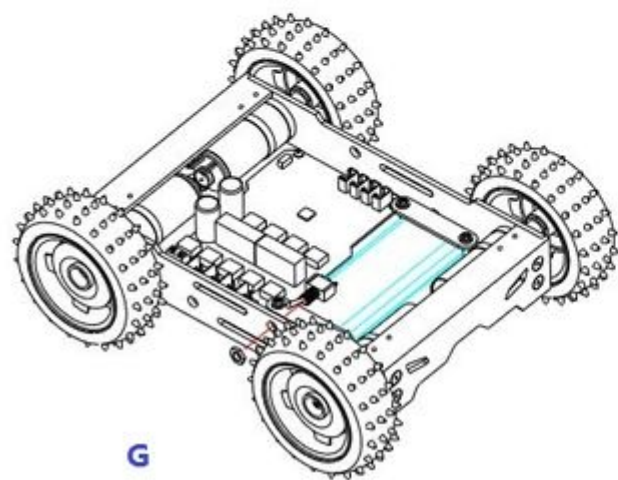
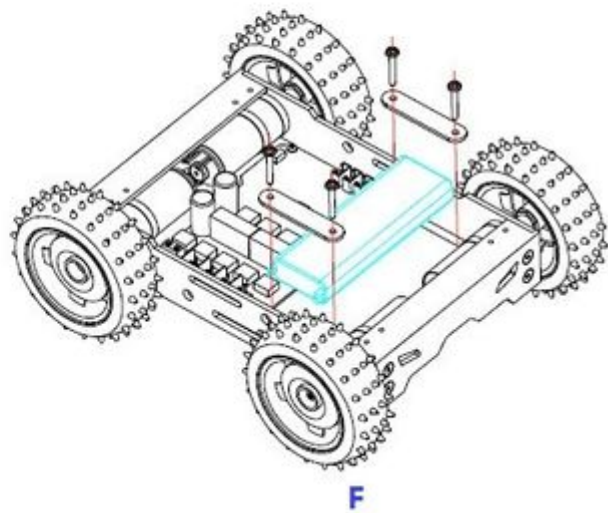
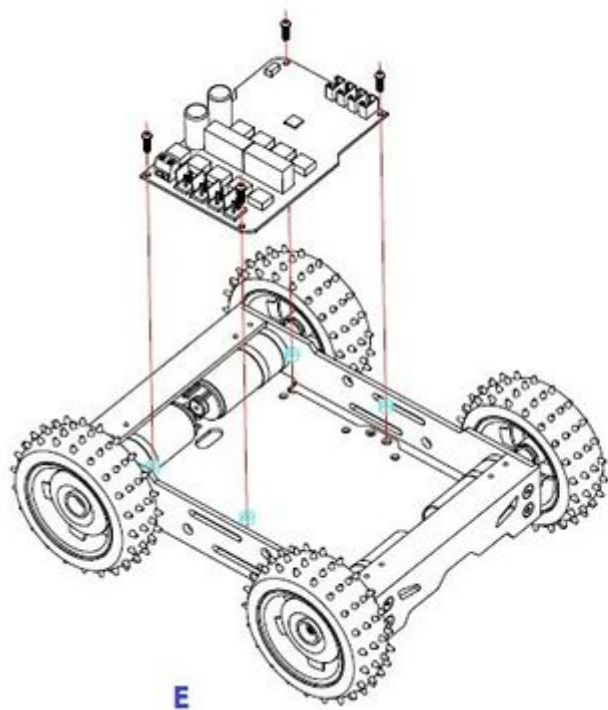
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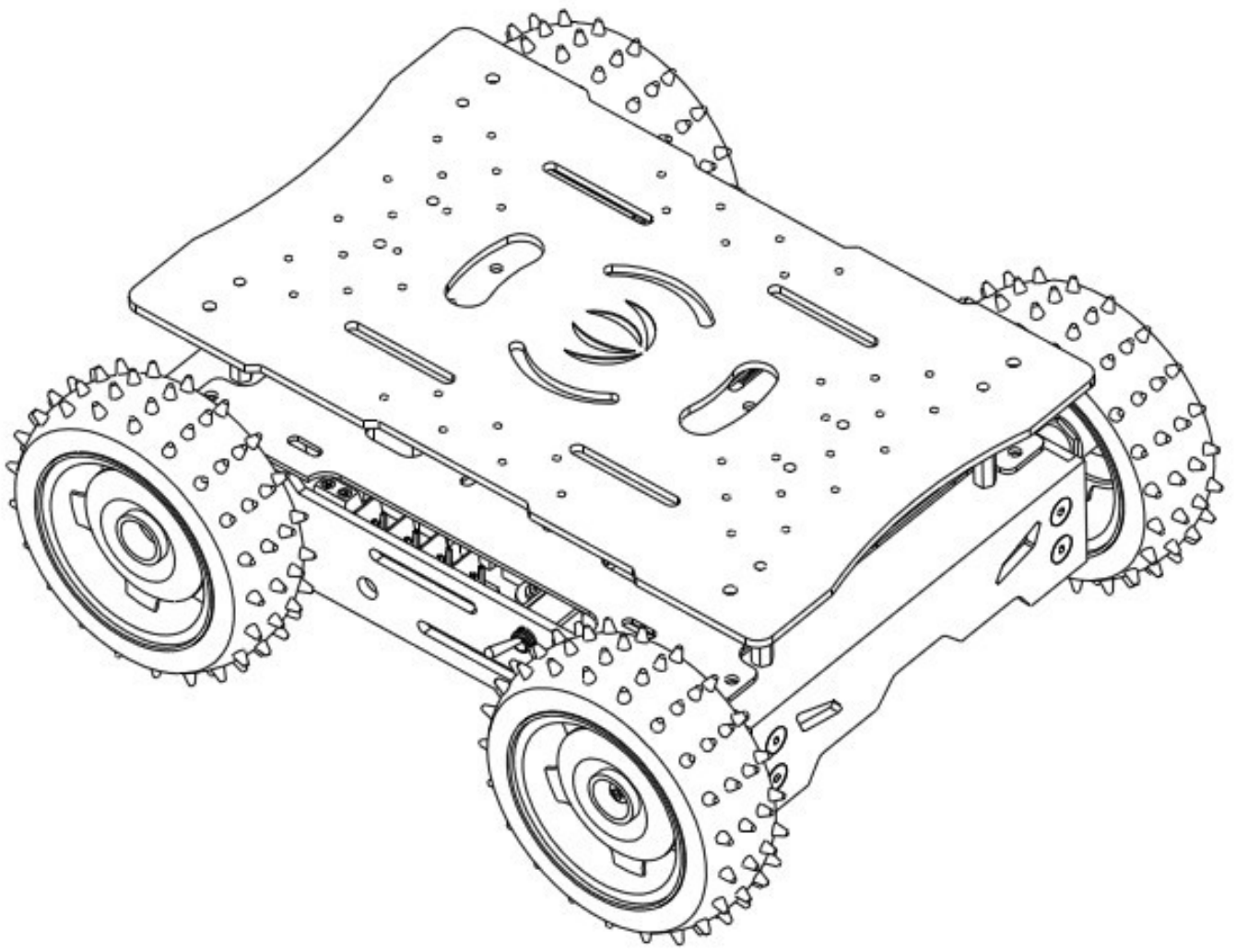


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