

# SYNTHIAM

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## **Roli / Rover 5 Chassis, Upgrade To 4wd :)**

Hello Community, Do you want to add a few pounds of batteries or maybe a cool arm to Roli, but still want that power to tackle uneven terrain? Yea me too!  
I am bringing you great news on upgrades for the coming Roli Robot kit and this also applies to the Rover 5 Dagu chassis sold separately in the store.  
The chassis uses two right angle gearboxes , there are 4 "legs" on the chassis. I found the part...

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## Step 1

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part DG01D 4.5v Gearhead Motor Pair , manufacturer: Dagu

These are the same gearboxes already found in the "legs" of the rover. Two legs are empty.

Removing the legs is simple , there is a metal bracket st the connection point and you will need to remove two screws. This releases the leg from the chassis. Pull it out and you have a empty leg by itself. There are 3 to 4 screws to remove so that the two halves come apart. This is where you can insert your new gearbox. Repeat this for the other side and reassemble. This will double your torque and reduces the possibility of track derailment if you weight it down.  
Turn this.....

Into a little payload monster!

You have other options too , you could get the full chassis like I did when testing and swap out the two legs with motors already in them and also have encoders as well if that's something you want. You would have spares if you ever have a oops moment too. Point is you can make your Roli have more torque and even swap to the dagu off-road wheels if you would like.