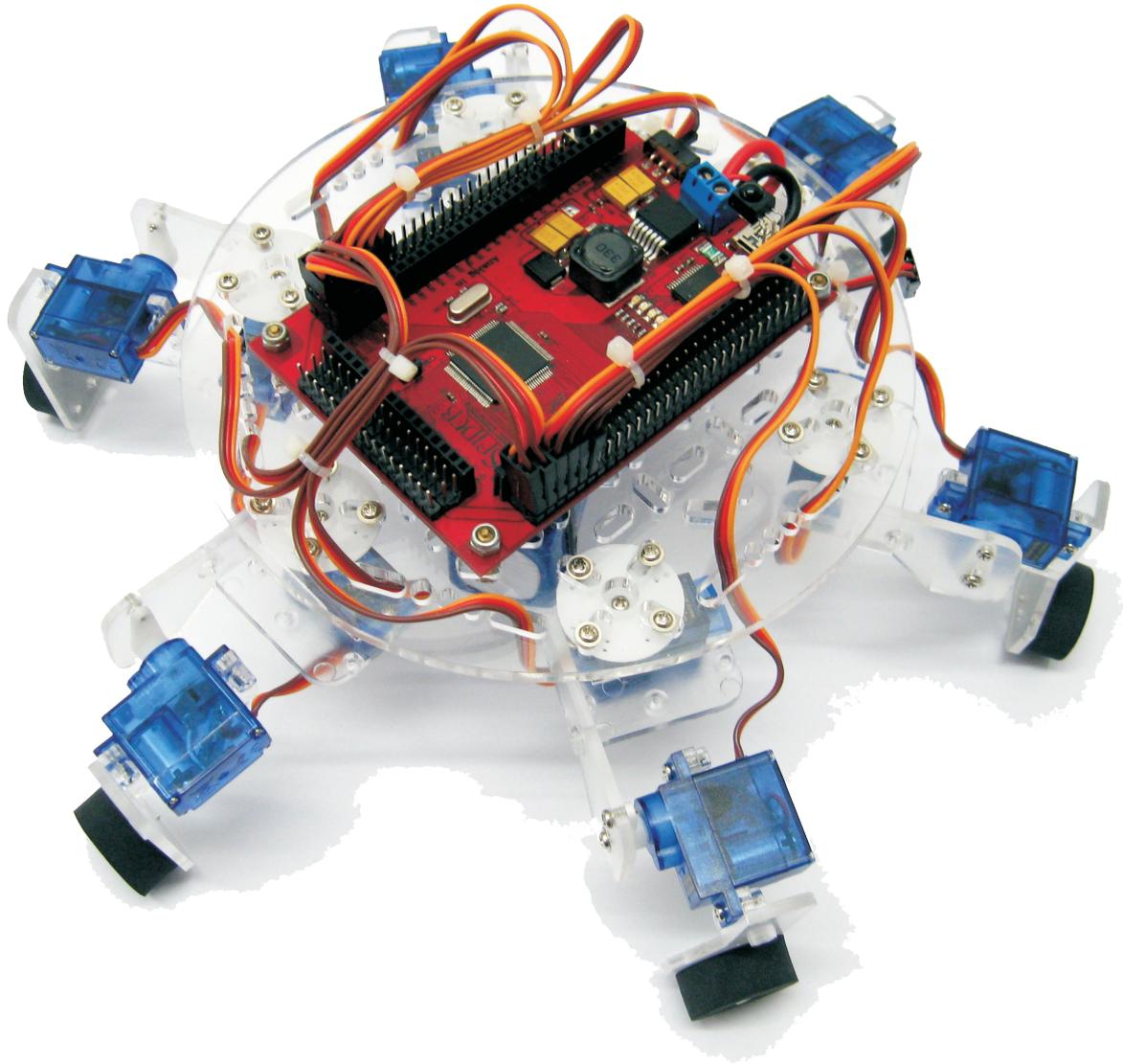


# 12 Servo Hexapod

# ROBOT CHASSIS



RS024



The 12 DOF Hexapod robot chassis from DAGU is a simple, low cost robot chassis designed for students and novices. Simple sample code for Arduino compatible controllers allows the chassis to be driven in any direction using common TV remotes.

#### The kit includes:

- 1x laser cut, 4mm thick, acrylic base plate
- 12x ABS leg segments
- 6x Foam rubber feet
- 12x 9g miniature servos
- Screws needed for assembly

#### Recommended controller:

Although any controller can be used with this chassis we recommend the DAGU Spider controller. This controller eliminates the need for additional power supply or servo interface circuitry.

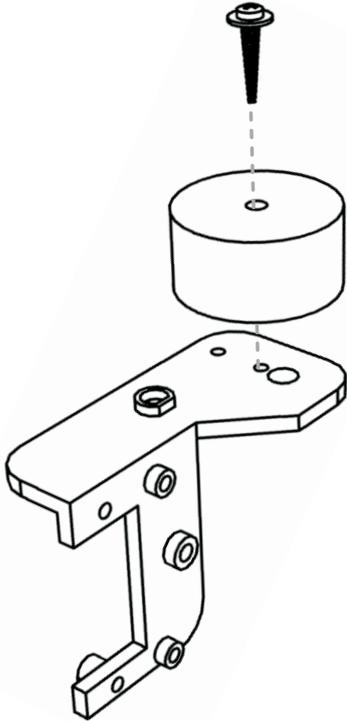
- Arduino Mega compatible with 6 timers, 128K FLASH, 8K SRAM and 4K EEPROM.
- Capable of driving up to 48 servos with all 70 I/O pins terminated with a 3 pin servo header.
- 3A, high efficiency DC-DC converter with 7V-32V input, 5V output.



# ASSEMBLY INSTRUCTIONS

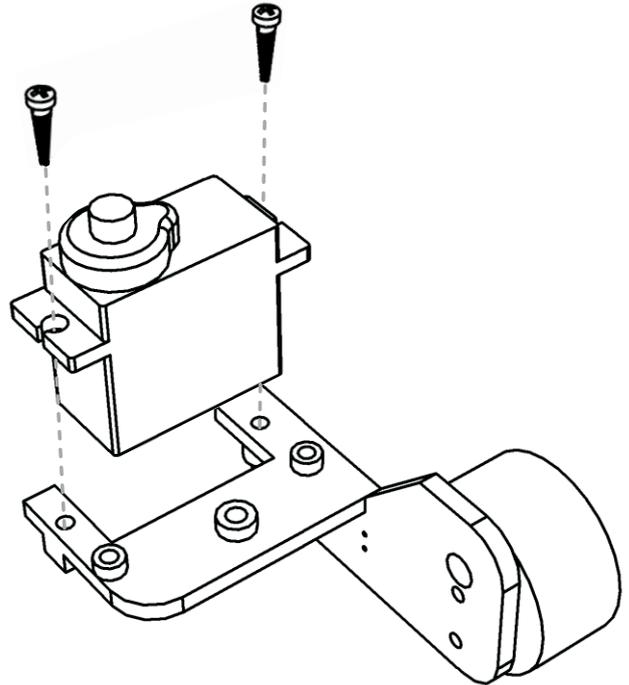
## Step 1:

Mount the 6x foam rubber feet to leg segments as shown using 3mm x 12mm pan head self-tapping screws.



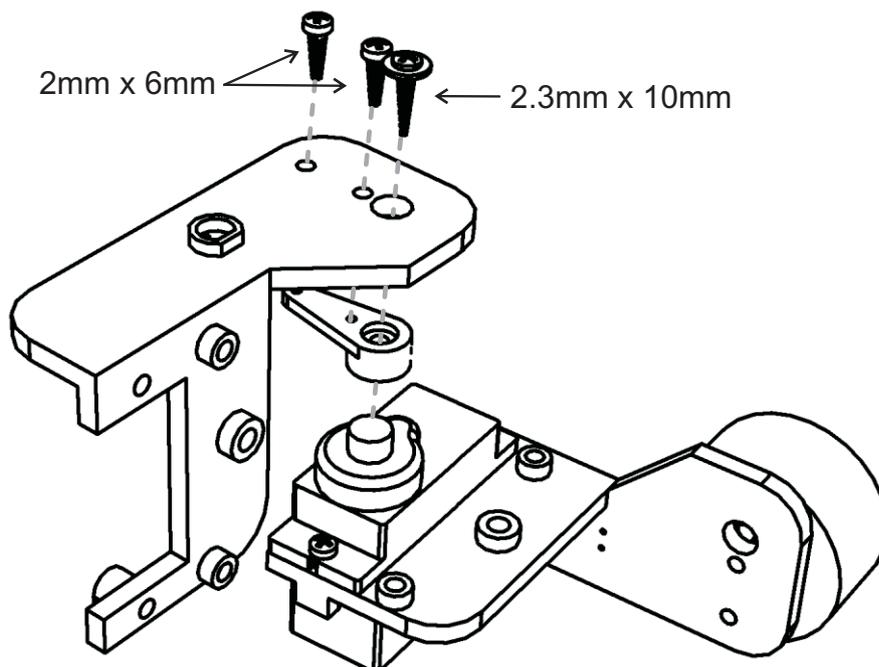
## Step 2:

Mount a servo on each of the leg segments fitted with a foot as shown using 2.3mm x 8mm self-tapping screws.



## Step 3:

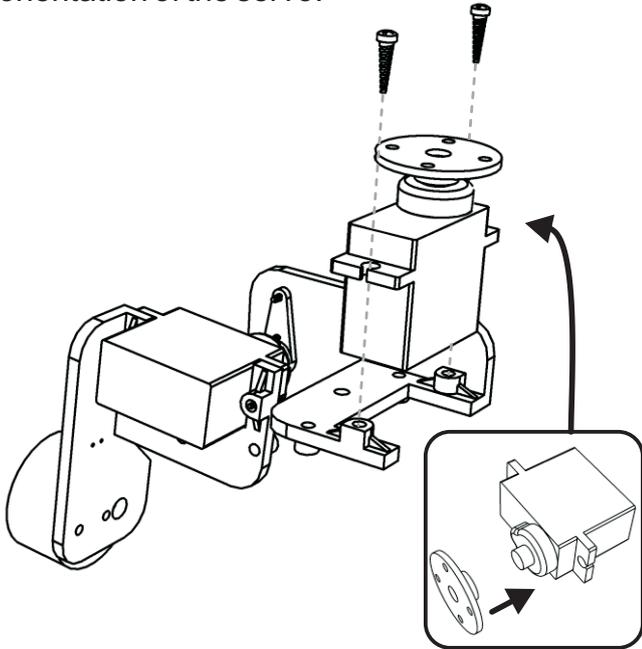
Mount a servo horn to six unused leg segments as shown using 2mm x 6mm self-tapping screws. Centre the servo and then fit the leg segment to the servo using a 2.3mm x 10mm pan head screw as shown. Gently turn the servo by hand to check the range of movement and adjust if necessary.



# ASSEMBLY INSTRUCTIONS

## Step 4:

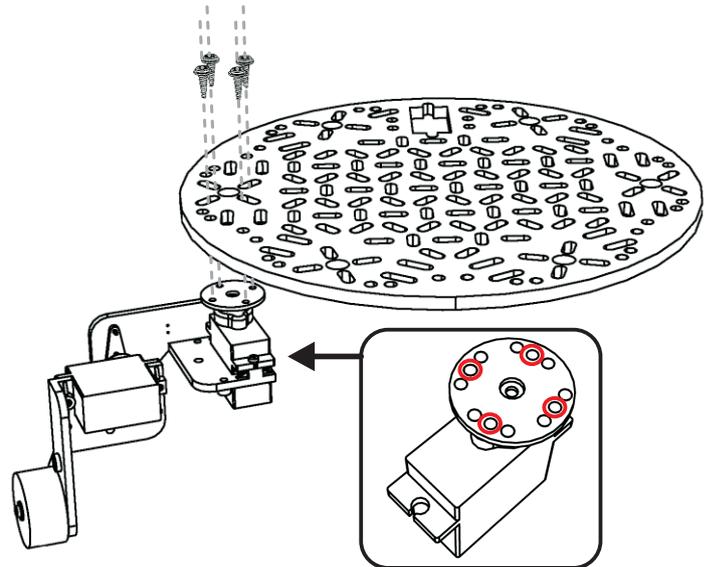
Mount six servos as shown in the diagram with 2.3mm x 8mm self-tapping screws. Note the orientation of the servo.



Fit a round servo horn to each of the six servos using a 2x6mm screw.

## Step 5:

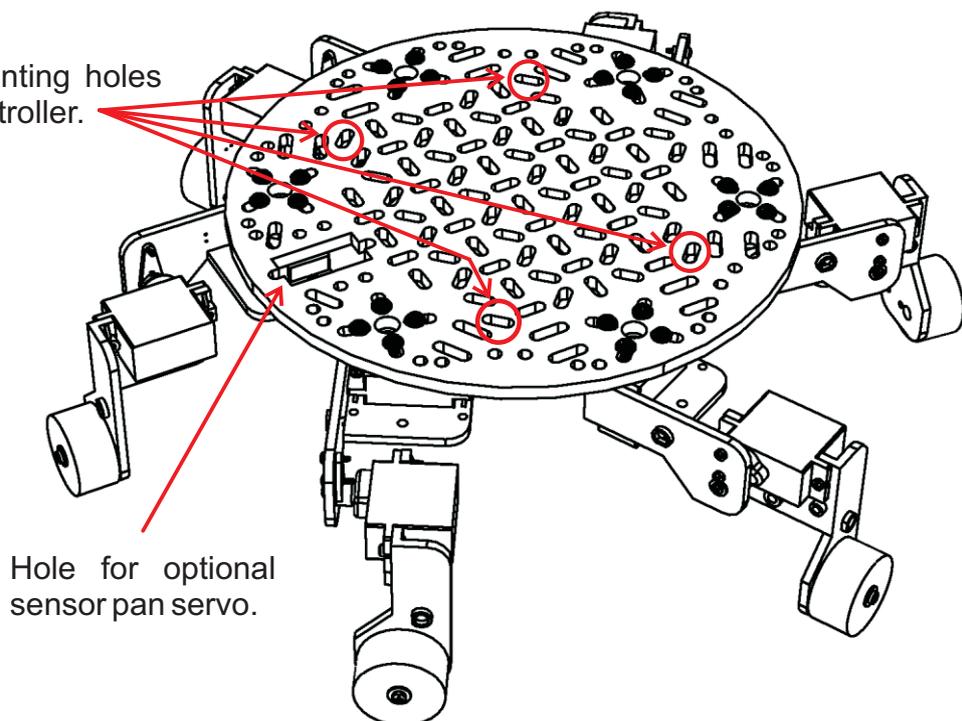
Center your servos and mount the legs onto the mounting plate using 2.3mm x 8mm pan head screws.



## Step 6:

Once all your legs are mounted the chassis is finished. A rectangular hole in the base plate allows you to mount a DAGU pan / tilt kit for adding a small camera or range finding sensor.

Recommended mounting holes for DAGU Spider controller.



Hole for optional sensor pan servo.