

# Description

- Versatile 12DoF Hexapod Walking Robot
- Control the robot via Bluetooth using FlowBotics Studio
- MH2 project within FlowBotics Studio with pre-written walking algorithms
- Robot supports forward, reverse and in place turning

The Lynxmotion Mini-Hex Hexapod Kit MH2F (FlowBotics Studio) is a versatile 12DoF hexapod walking robot. The kit includes a full version of FlowBotics Studio and includes the SSC-32 as well as a serial to Bluetooth board and Bluetooth module which allows for remote control from the computer. This approach offloads the higher level calculations to the computer. FlowBotics Studio includes a demo project for the MH2 with pre-written walking algorithms. The hexapod robot is designed around a simple mechanical leg design with all metal brackets. This leg design minimizes the number of parts required to make a two DOF (degree of freedom) leg and allows this robot to be steered like a tank. Forward, reverse and in place turning is supported. The robot uses standard sized Hitec servos for the legs. The combo kit includes everything you need to make a functional robot except batteries and optional PS2 controller.

#### The Mechanics

The body of the hexapod is made from ultra-tough laser-cut PVC structural components while the legs are made from high-quality aluminum Servo Erector Set brackets. The kit includes 12 servos; six HS-422 and six 645MG. The hexapod is able to adjust its height, walk forward and in reverse, as well as rotate clockwise and counter-clockwise, tit forward and backward, left and right and more.





## Features:

- Versatile 12DoF hexapod walking frobot
- Control the robot via Bluetooth using FlowBotics Studio
- MH2 project within FlowBotics Studio with pre-written walking algorithms
- This kit is available with black anodized brackets and a black lexan body
- Optional Battery, charger and USB PS2 controller (sold separately)

Specifications

Hexapod Robot

- Servo Motion Control: Local Closed Loop
- Steering: Differential
- Number of Legs: 6
- Degrees of Freedom per Leg: 2
- Motion Speed: Up to 10"/S
- Height (Body): 3.00"
- Height (Overall): Up to 6.00"
- Width (Body): 3.50"
- Width (Overall): 7.00" (Legs Straight)
- Length (Body): 13.00"
- Length (Overall): 14.50"
- Weight (w/out Batteries): 3lb 5oz.
- Ground Clearance: Up to 4.00"

### What's Included

- Hexapod Body Kit Mini
- 3 x 2DOF Alum. Leg Pair (Black)
- 6 x HS-422 (57 oz. in.) Standard Servo
- 6 x HS-645MG (76 oz. in.) Standard Sized Servo
- Bluetooth Module & USB Bluetooth
- SSC-32U Servo Controller
- 1x USB cable
- Includes FlowBotics Studio Software

# **Useful Links**

PDF File

Datasheet

### Multimedia

The following video shows aspects of construction relevant to the MH2 hexapod walking robot. https://www.youtube.com/watch?v=nv89C9aUdJQ&feature=emb\_title