

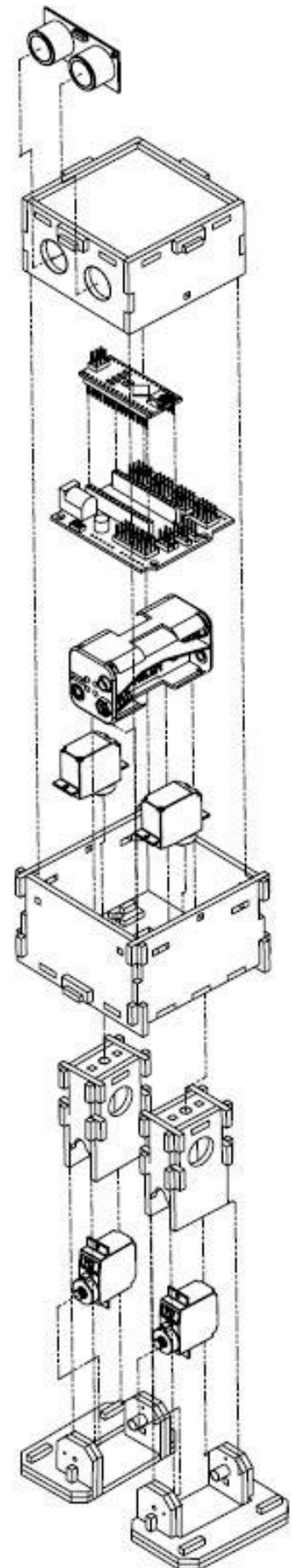
# MIIA ASSEMBLY INSTRUCTIONS

## WELCOME

Congratulations! You are now the proud new owner of your own MiiA robot. These instructions will take you through everything you need to know on how MiiA is put together and what makes her tick. MiiA is built in the form of a 3D puzzle, so the fun begins immediately. So without further ado, let's jump in!


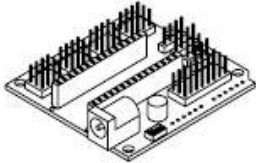
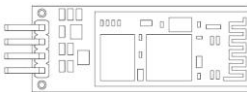
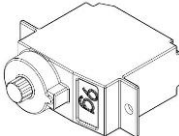
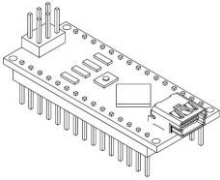
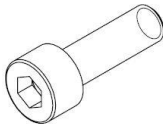


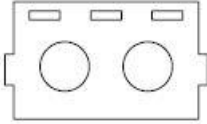
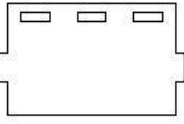
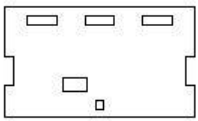
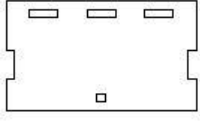
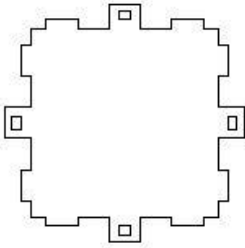
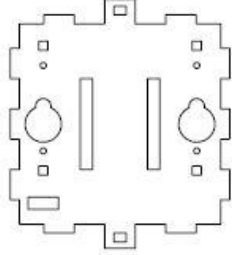
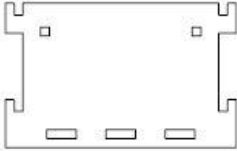
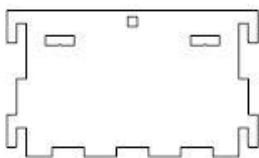


## Contents




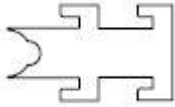
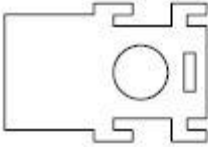
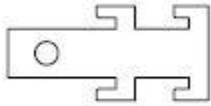




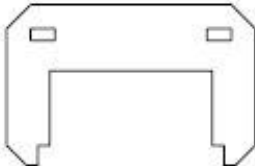
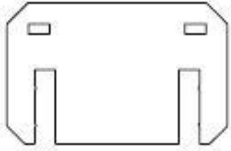



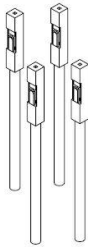
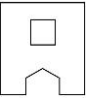
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## What's in the Box

All parts included in the kit are shown in this section.

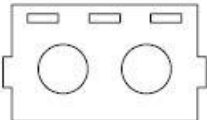
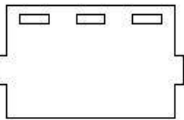
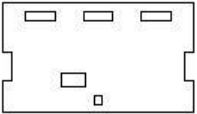
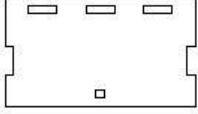

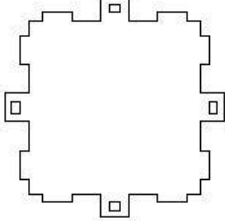
Part	Preview	Part	Preview
<b>Battery holder</b> <b>(1x)</b>		<b>Arduino shield</b> <b>(1x)</b>	
<b>HC06 Bluetooth transceiver</b> <b>(1x)</b>		<b>Servo Motor</b> <b>(4x)</b>	
<b>Arduino Nano</b> <b>(1x)</b>		<b>M2 cap screw</b> <b>(8x)</b>	
<b>Ultrasonic sensor</b> <b>(1x)</b>		<b>M2 nut</b> <b>(4x)</b>	
<b>Head – front</b> <b>(1x)</b>		<b>Head - back</b> <b>(1x)</b>	
<b>Head - left</b> <b>(1x)</b>		<b>Head-right</b> <b>(1x)</b>	
<b>Head - top</b> <b>(1x)</b>		<b>Body - base</b> <b>(1x)</b>	
<b>Body - front and back</b> <b>(2x)</b>		<b>Body - sides</b> <b>(2x)</b>	
<b>Body - corners</b> <b>(4x)</b>		<b>Head and body pin</b> <b>(6x)</b>	

General pin (12x)		Leg - top (2x)	
Leg - bottom plate (2x)		Leg - front (2x)	
Leg - sides (4x)		Leg - back (2x)	
Foot - back (2x)		Foot - back (2x)	
Foot - front (2x)		Foot - front (2x)	
Foot - top (2x)		Foot - base (2x)	
Foot pin (4x)		Foot - axle (2x)	
USB mini cable (1x)		Jumper cables (8x)	
Nut holder (4x)			

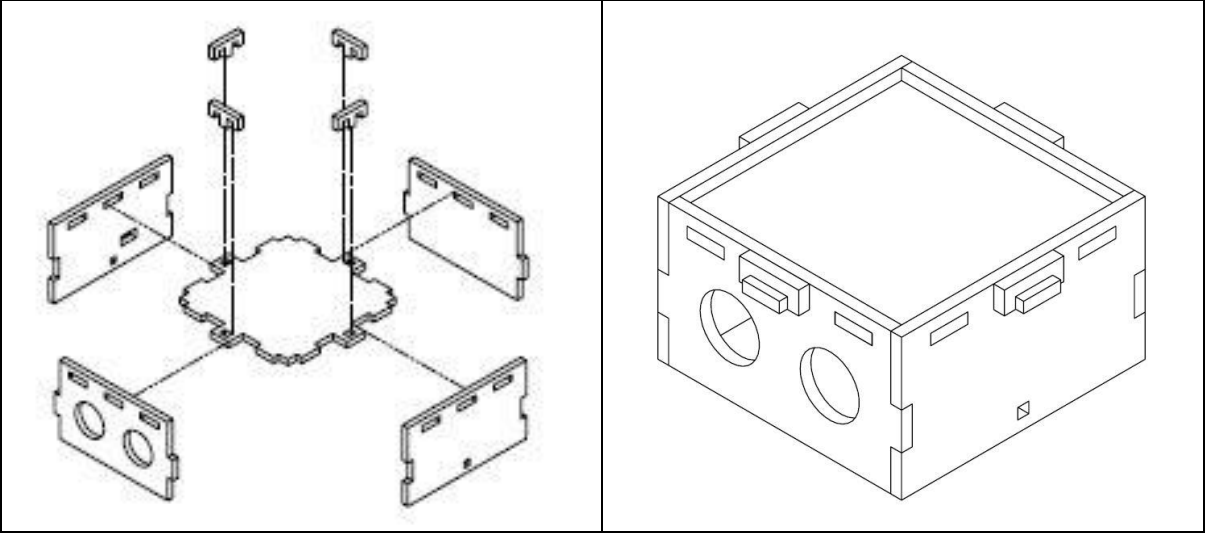
# Putting MiiA Together

This section describes how to assemble the individual parts that make up MiiA.

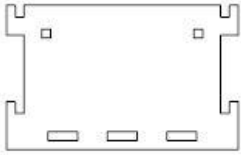
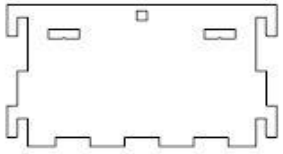
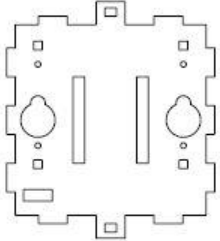




## Head

Part	Preview	Part	Preview
Head – front (1x)		Head - back (1x)	
Head - left (1x)		Head - right (1x)	
Head and body pin (4x)		Head - top (1x)	

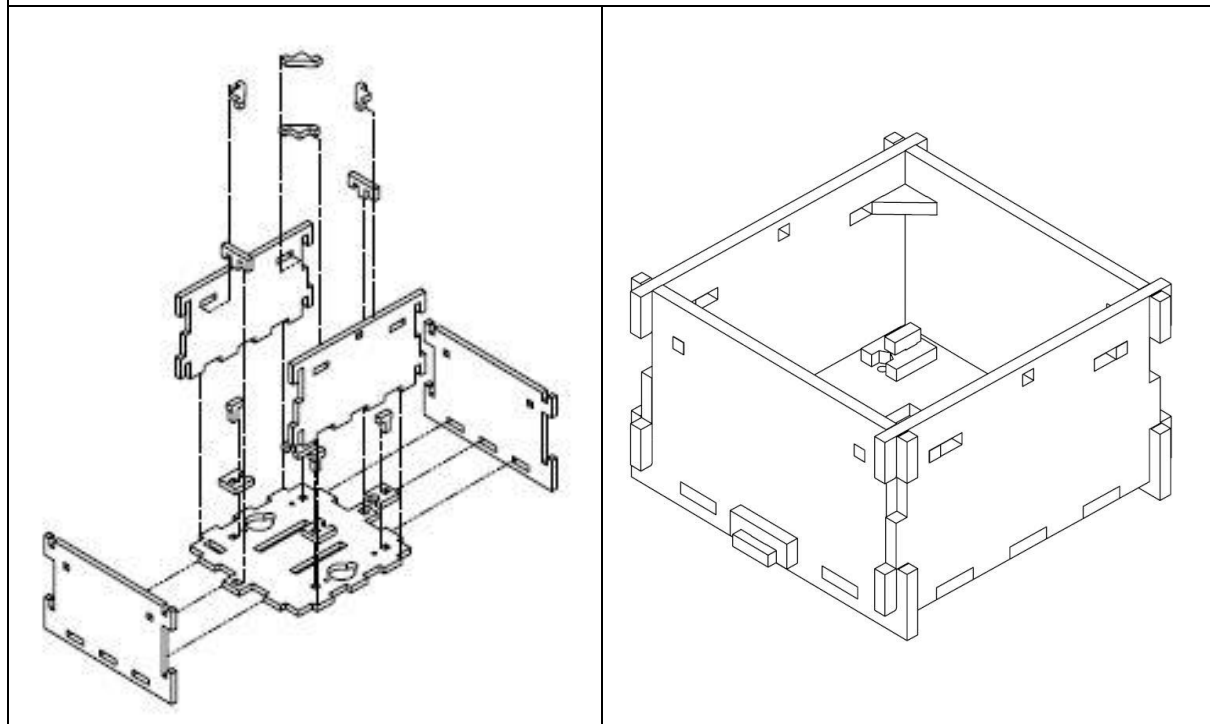
### How to assemble




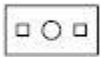

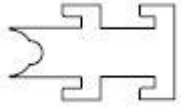
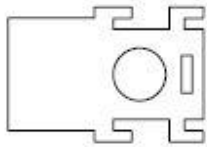
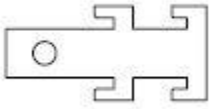
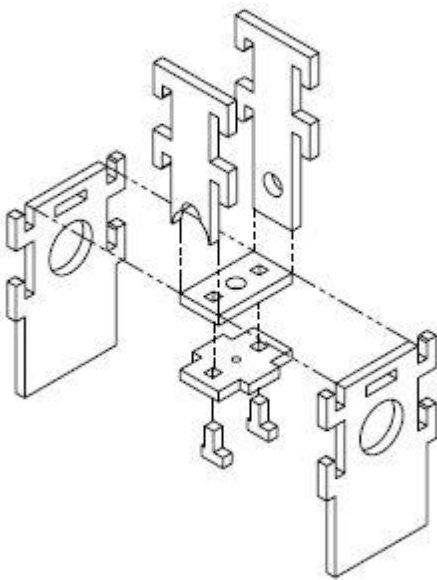
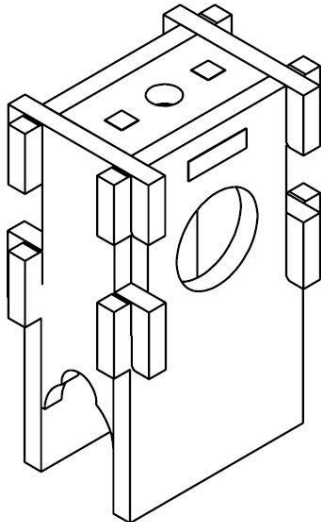
## Body

Part	Preview	Part	Preview
Body - front and back (2x)		Body – sides (2x)	
Body - base (1x)		Head and body pin (2x)	
Body - corners (4x)		Nut holder (4x)	
General pin (4x)			





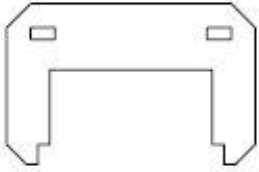
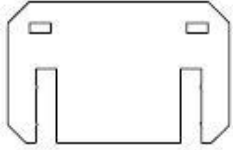



### How to assemble



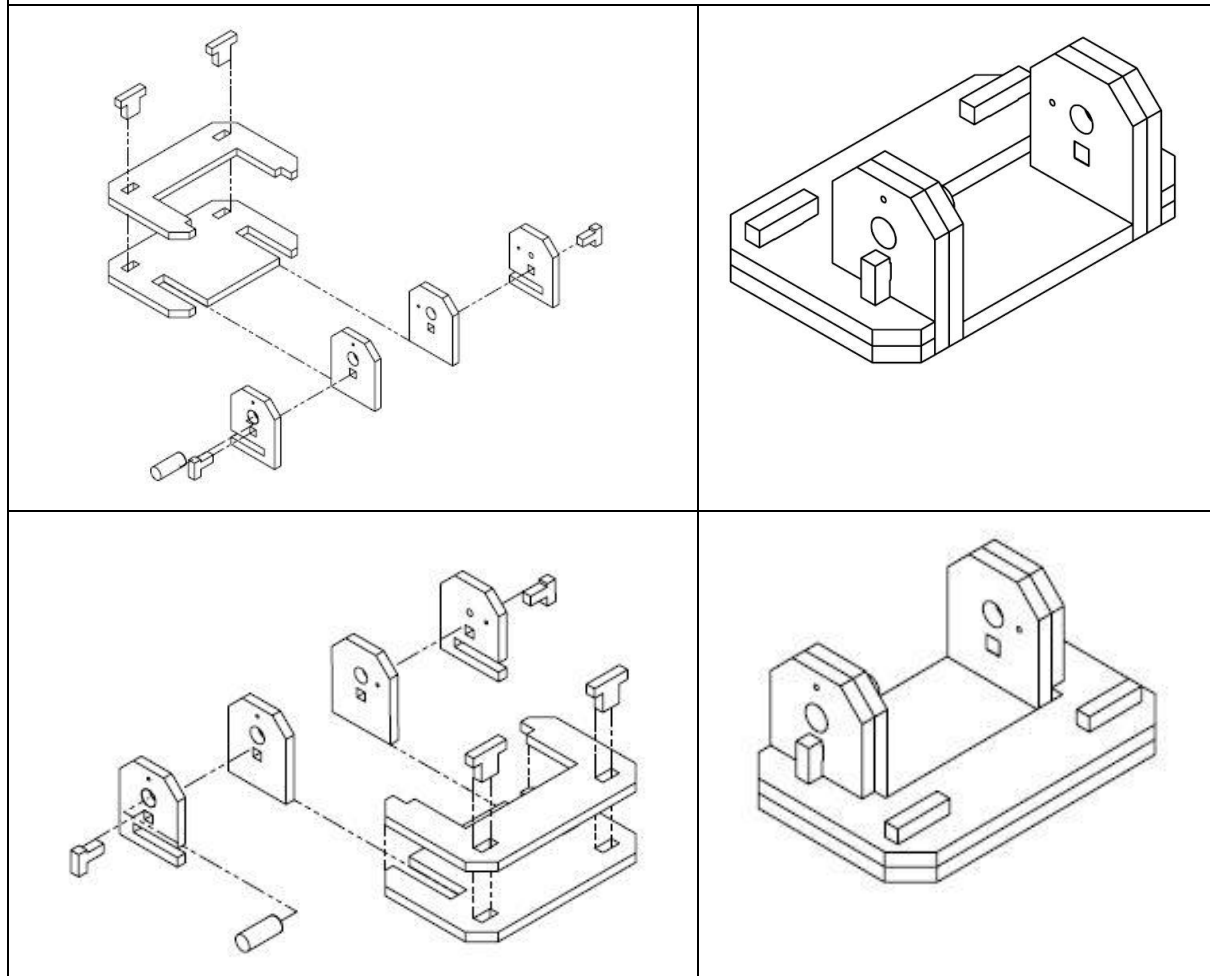
## Legs

Part	Preview	Part	Preview
General pin (4x)		Leg - top (2x)	
Leg - bottom plate (2x)		Leg - front (2x)	
Leg - sides (4x)		Leg - back (2x)	
How to assemble			
			

## Feet

Part	Preview	Part	Preview
Foot - back (2x)		Foot - back (2x)	
Foot - front (2x)		Foot - front (2x)	
Foot - top (2x)		Foot - base (2x)	
Foot pin (4x)		Foot - axle (2x)	
General pin (4x)			

### How to assemble



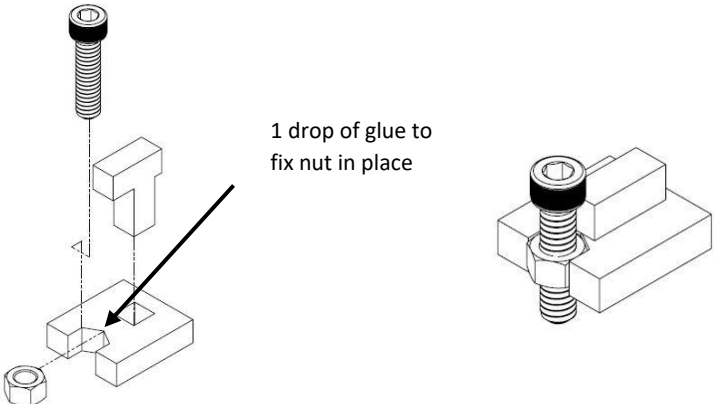


## Motor Calibration

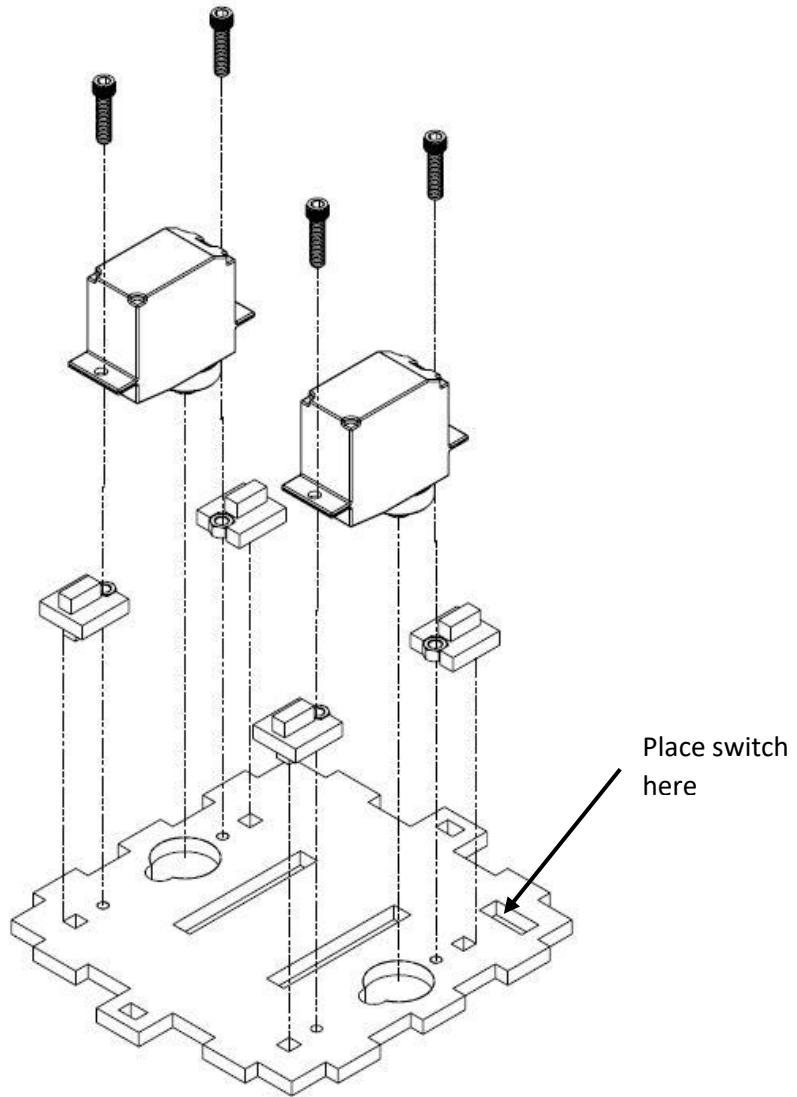
When inserting motors into the robot, please ensure that the servo motors have been set to 90 degrees. Have a look at our calibration video [here](#). You can also find our calibration code [here](#).

## Assembly

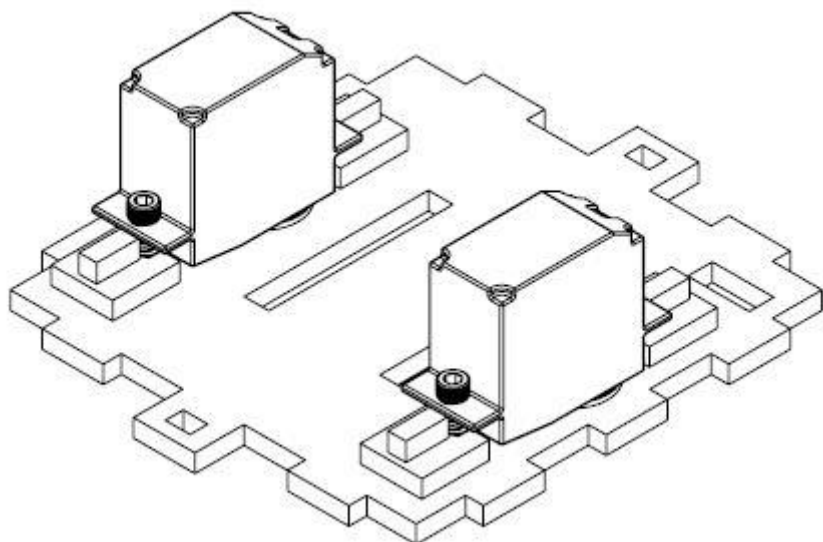
This section shows how to install the motors that make MiiA move.

Description	Assembly Instruction
Nut holder assembly	

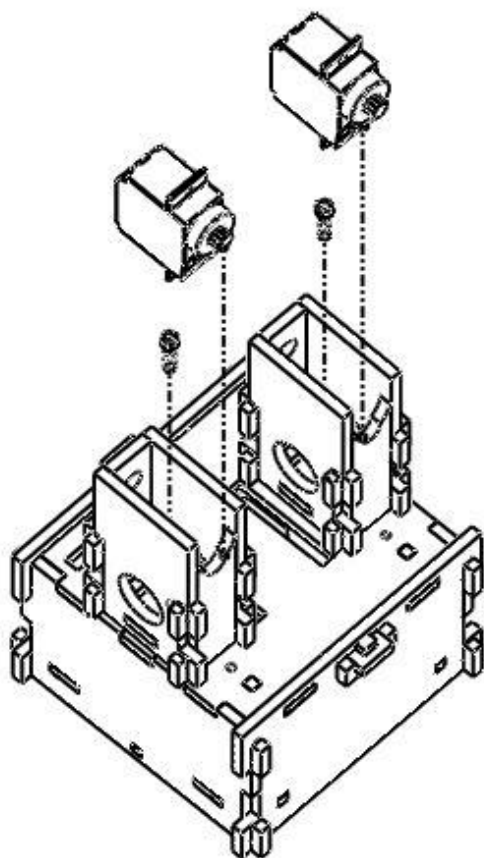
Motor plate assembly



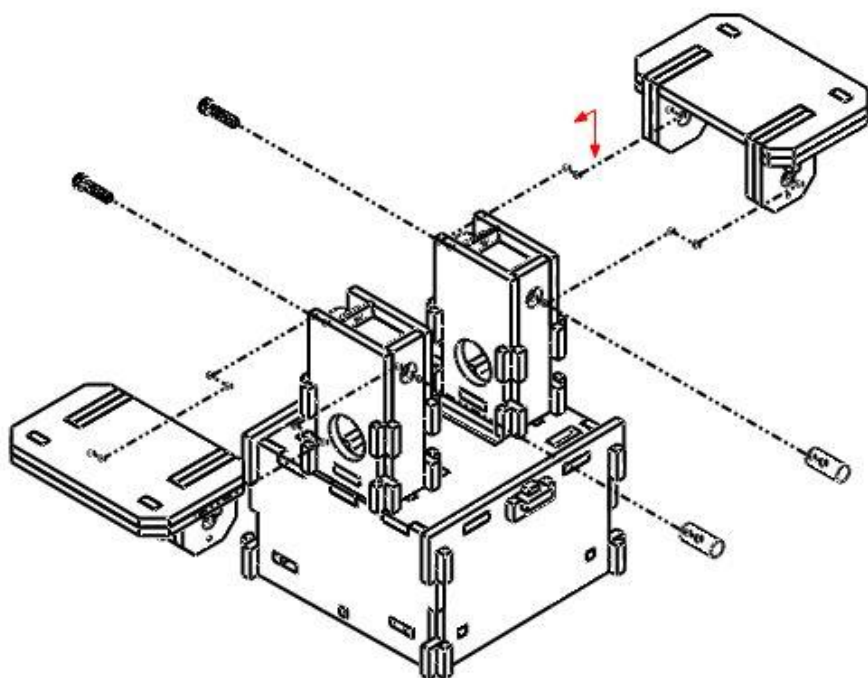
Motor plate assembly



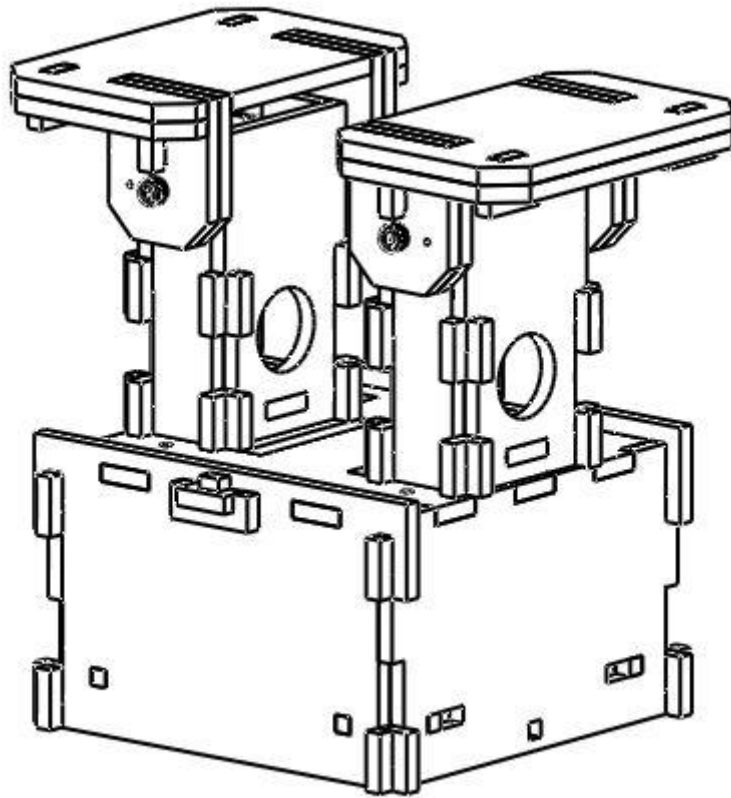
Leg plate assembly



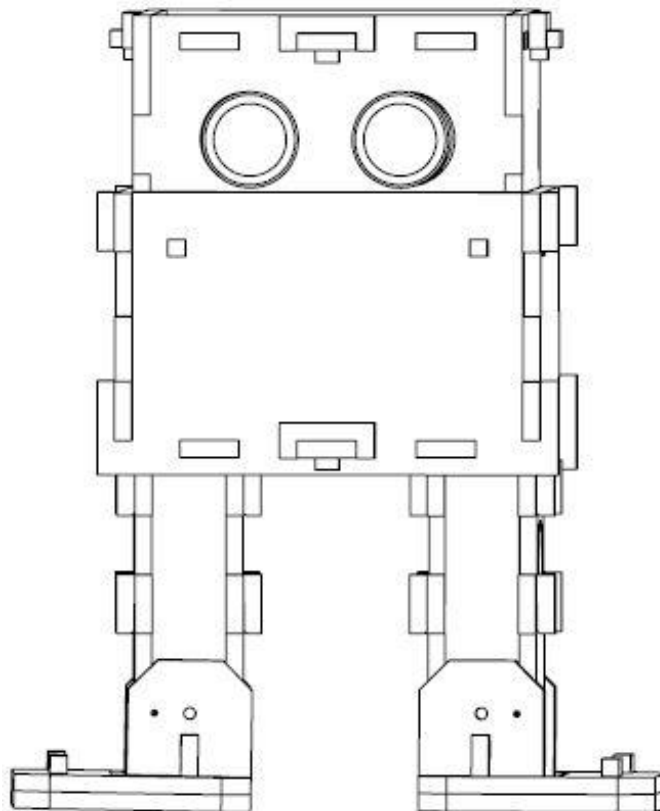
Feet assembly



Complete bottom  
body assembly

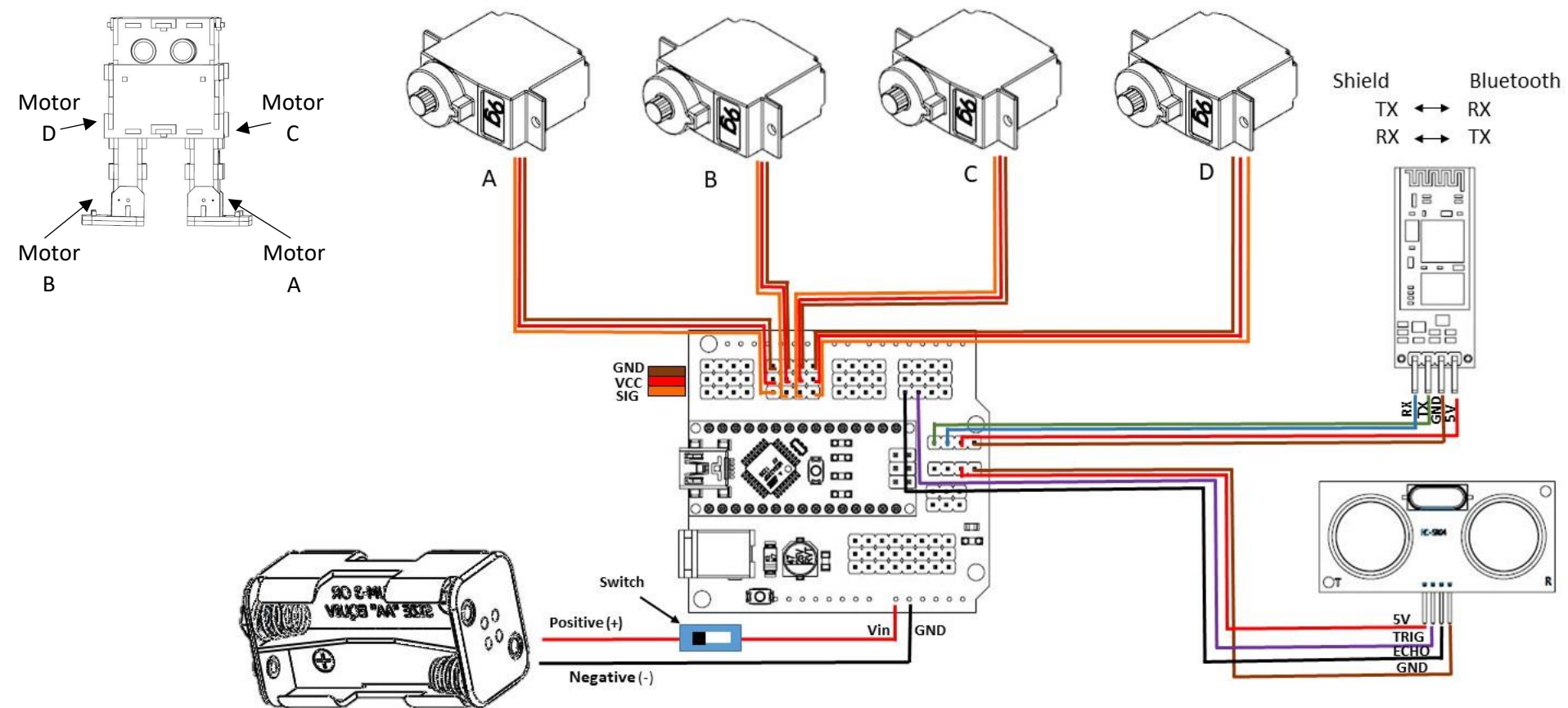


Complete assembly

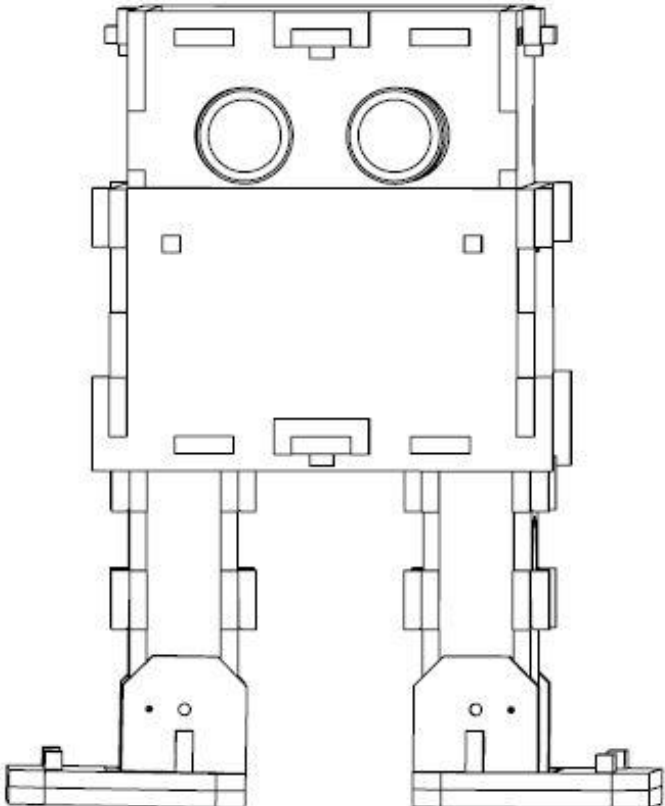
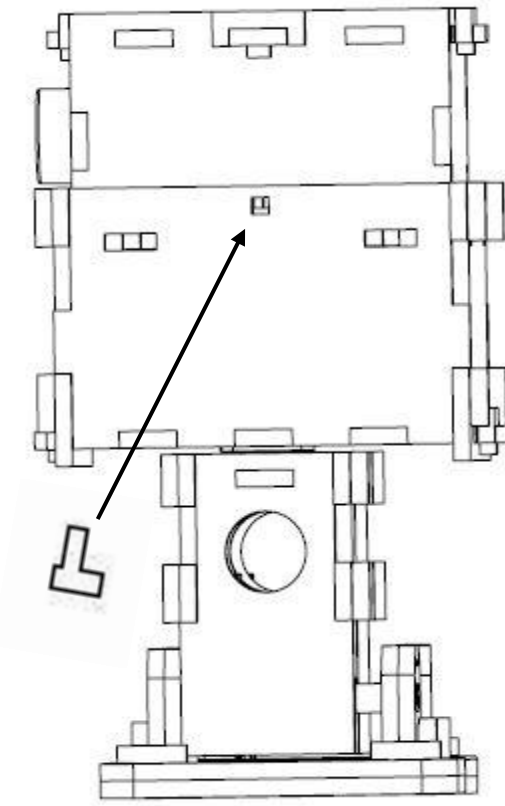
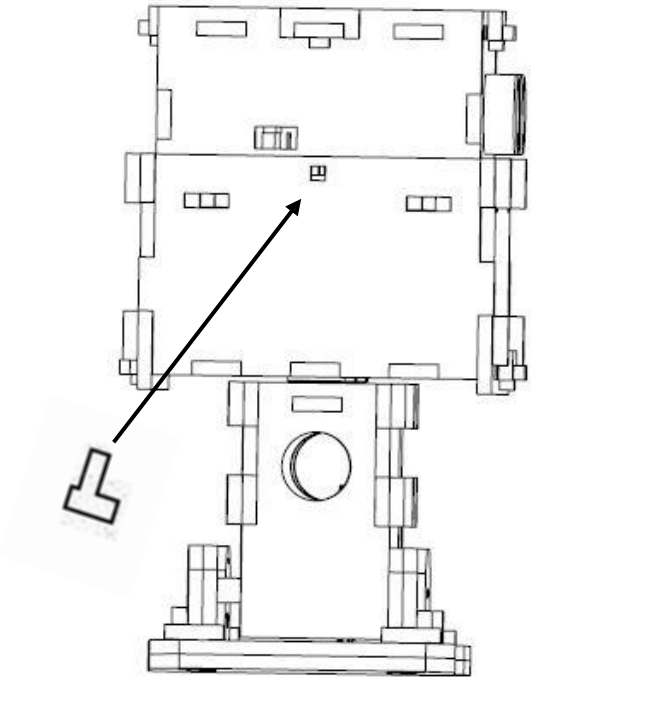
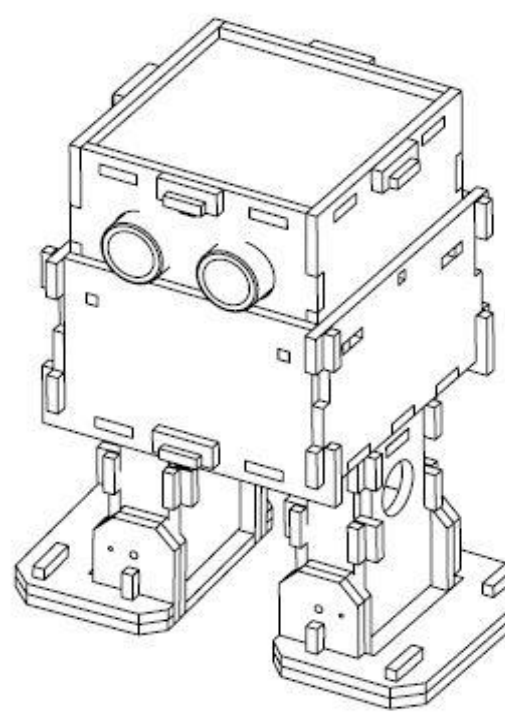


## Electrical Connections

By connecting all the electrical component as shown below, MiiA will be able to be programmed and controlled to move.



## Final Assembly

Front View and Left View	Right View and Isometric View
 <p>This panel shows the front and left orthographic views of a mechanical assembly. The front view (top) features a rectangular upper section with two large circular openings and a lower section with two vertical supports. The left view (bottom) shows the side profile of the assembly, highlighting the vertical supports and the internal structure. A small L-shaped component is shown separately with an arrow pointing to its location on the left side of the assembly.</p>	 <p>This panel shows the right and isometric orthographic views of the same mechanical assembly. The right view (top) shows the side profile from the opposite side, with an L-shaped component shown separately and an arrow pointing to its location. The isometric view (bottom) provides a 3D perspective of the entire assembly, showing the rectangular upper section, the two vertical supports, and the internal structure.</p>
 <p>This panel shows the left and isometric orthographic views of the mechanical assembly. The left view (top) shows the side profile from the left, with an L-shaped component shown separately and an arrow pointing to its location. The isometric view (bottom) provides a 3D perspective of the entire assembly, showing the rectangular upper section, the two vertical supports, and the internal structure.</p>	 <p>This panel shows a single isometric view of the mechanical assembly, providing a 3D perspective of the entire structure, including the rectangular upper section, the two vertical supports, and the internal components.</p>

Well Done! MiiA is now complete and ready to be programmed.

To start your robotics journey please go to our [website](#) for instructions on getting started with programming her.

If you are having any issues with the kits, please do not hesitate to contact us at [info@rd-9.co.za](mailto:info@rd-9.co.za)

