



## **Lynxmotion Cell Phone Pan Tilt Kit Assembly Guide**

Mechanical Assembly Guide Revision 1.0 (June 2014)

This manual is offered in English only.

www.lynxmotion.com

## Introduction

The Lynxmotion cell phone pan and tilt kit allows you to add pan and tilt functionality to almost any smart phone. The base uses two standard Hitec RC servos (a 645MG for tilting and a 422 for panning) and Lynxmotion SES brackets for the frame. The system is meant to be mounted to a Lynxmotion frame such as the A4WD1, Tri-Track or multi-legged robot and is not free-standing.

The Silicon cell phone pad used was designed to allow a smart phone to be mounted to the ARF-01 bracket. The silicon is incredibly sticky and can support a smart phone very well when adhered properly. For cleaning, or when the pad seems to be less sticky, run the pad under water at room temperature. The pad should be used between 10C and 25C. At temperatures above 25C (for example if left in a hot car), the pad more easily deforms and may not be able to return to its original shape. Before any fast motion, ensure the phone is well adhered to the pad.

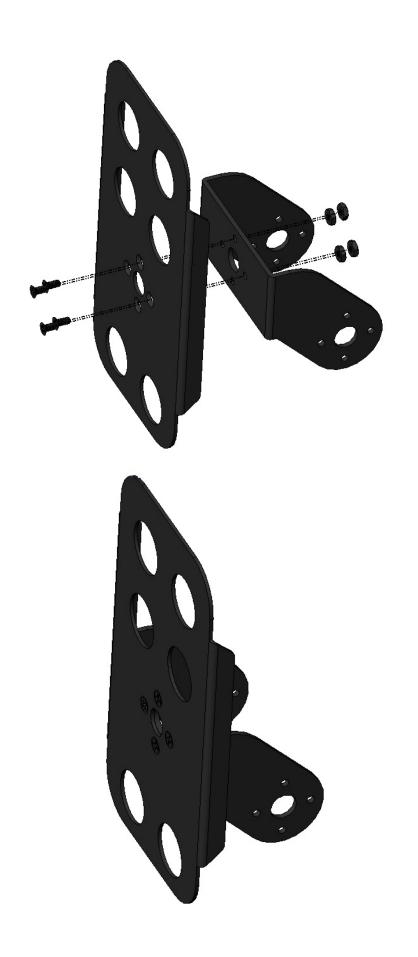
To create a stand-alone mount (for example to use on a desktop), we suggest purchasing 1x ASBI-04 (RB-Lyn-391) and using two wood screws to fix to a wood base.

In order for the cell phone to control the pan/tilt, we suggest using BlueTooth and a servo controller. For example, consider using the BotBoarduino and a Bluetooth shield. You will need to create an App which runs on the cell phone to send commands via Bluetooth to the BotBoarduino which then controls the servos.

## **Package Contents**

RB-Lyn-813	PT-CP-KT	Lynxmotion Cell Phone Pan and Tilt Kit (No Servos)
1x RB-Fsp-01	CPP	12cm x 6cm x 2mm Anti-slip mat for cell phones
1x RB-Kcp-01	ARF-01	Single servo bracket
1x RB-Kcp-13	ASB-04BA	Single bracket
1x RB-Kcp-19	ASB-11BA	Single bracket
1x RB-Mxx-01	HMSH-02	Hitec spline metal servo horn
1x RB-Onl-18	PB-01	Ball bearing mounting hardware
1x RB-Onl-20	PB-02	Hardware bag
1x RB-Onl-21	HDW-02	Servo attachment hardware bag
1x RB-Pyc-01	BB-03	Bearing 3x8x4mm w/flange
1x RB-Tex-54	PH-10	2-56 x 3/16" Pan head machine screw

The complete kit requires 1x Hitec 645MG servo for tilting and 1x Hitec 422 servo for panning



Replace the plastic horn on the Hitec HS-422 servo with the metal servo horn

