# **Assembly Guide** HEW-DV4 robot arm



Hey There!

HEW your friendly desktop robot arm!



#### Welcome & Thank you!

Hey there nice to meet 'HEW' Thank you for purchasing one of our HEW friends, we hope you enjoy using him as much as we do!

This assembly guide will help you build your very own friendly robot arm in just 19 steps! Simply follow this easy-to-use guide through the visual steps and you'll be ready in no time.

Hand out your own business cards, pick and place objects, play a game of chess or make some music, what will you create?

If you require any support or have any issues regarding our products you can contact us via E-mail at enquiries@blueprintrobotics.co.uk

Thank you & welcome to the world of robotics.

#### Safety & Disclaimer Information

HEW might be a fun gadget to play with but he's still a machine! Please read all the instructions carefully and take note of all the important information and warnings.

This product is not a toy, follow all warnings and always wear the appropriate PPE (Personal Protective Equipment) when using tools or any other product that could cause harm.

- This product is not suitable for children under three years of age.
- To be used under direct supervision of an adult
- Warning: some parts may have sharp edges.
- For Domestic user only

In no event shall our company be liable for any direct, indirect, punitive, incidental, special consequential damages to property or life arising out of, or connected with, the use or misuse of our products.

Remember Safety First.





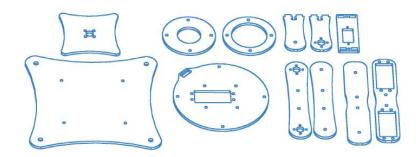






## **Parts List**

**X1** Coloured Acrylic Set





X4 11mm Nylon Standoffs



**X2** 27.5mm Nylon Standoffs



**X2** 51mm Nylon Standoffs



**M3** Nut

**X2** M2

Bolt

**X2** 

**M2** 

Nut

X46

Bolt

M3 x8mm

**Button Head** 

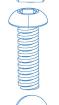


**X3 M3** Nylon Locking Nut

Aluminium

Servo bracket

**X1** 



**X3** M3 x10mm **Button Head** Bolt



Acrylic Lock Nut Spanner



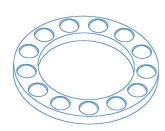
**X2** MG-946 Includes: Servo Arms & Screws (Shoulder Servo)



**X2** MG-995 Includes: Servo Arms & Screws (Base, Elbow & Wrist Pitch)



**X1 MG-90D** Includes: Servo Arms & Screws (wrist roll servo)



**X1** 27.3mm Thrusy Racer Bearing

X4 X4 X4 M3 x8mm 30 mm Nylon Standoffs



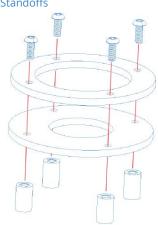
## Stage 2

X4 X4 X1 M3 x8mm M3 MG995
Bolts Servo

Tip: When mounting the servos loosley fit all bolts before tightening

## Stage 3

X4 X4 M3 x8mm Bolts X4 Nylon Standoffs

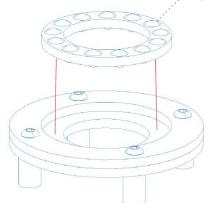


## Stage 4

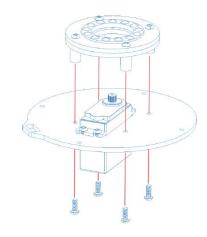
X1 27.3mm Thrusy Racer Bearing

Bearing should rotate

... freely and easily

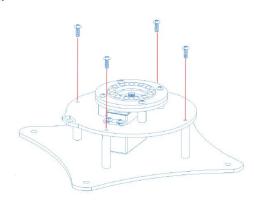


X4 M3 x8mm Bolts



## Stage 6

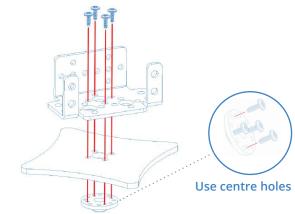
X4 M3 x8mm Bolts



## Stage 7

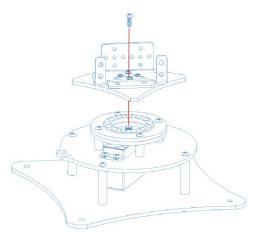
X4 X1 MG995 Se Screws

**X1** Servo Cam X1 Aluminium Servo bracket



## Stage 8

X1 M3 x8mm Bolt



Tip: Do not over tighten, but ensure the platform is flat against the bearings but can rotate easily

Set servo to 0 degrees, see page 16

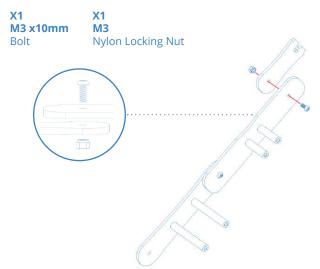
X2 M3 x8mm Bolts

X2 51 mm Nylon Standoffs

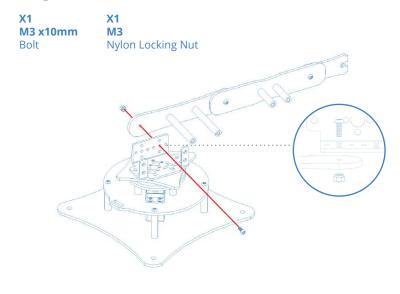
## Stage 10

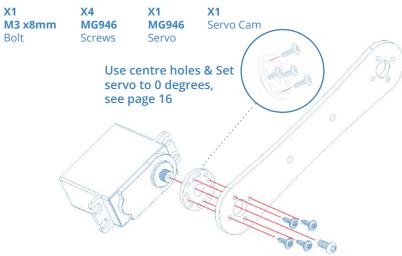
X2 X1 X2 X1 M3 x8mm Bolts Bolts Nylon Standoffs Nylon Locking Nut

## Stage 11



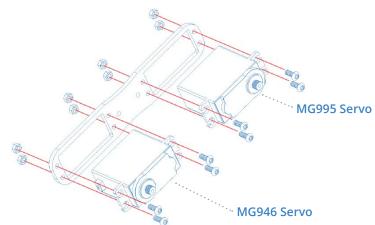
Stage 12



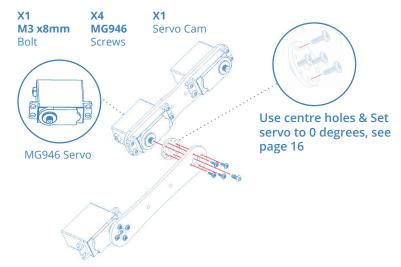


Stage 14

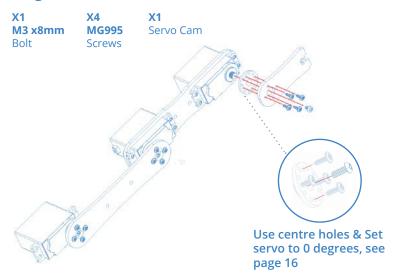




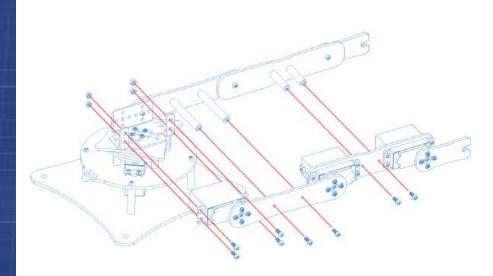
## Stage 15



Stage 16



X8 X4 M3 x8mm M3 Bolts Nuts

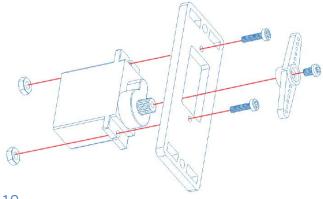


Stage 18

 X2
 X2
 X1
 X1

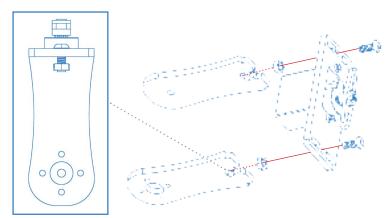
 M2
 MG90D
 MG90D

 Bolts
 Nuts
 Servo
 Screw



Stage 19

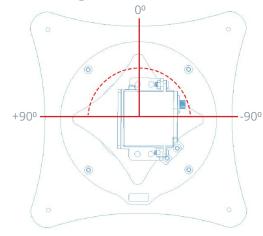
X2 X2 M3 x8mm M3 Bolts Nuts

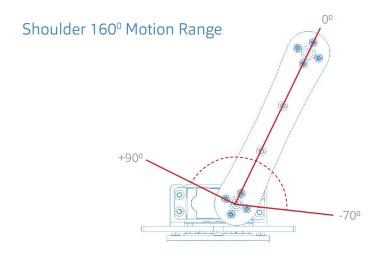


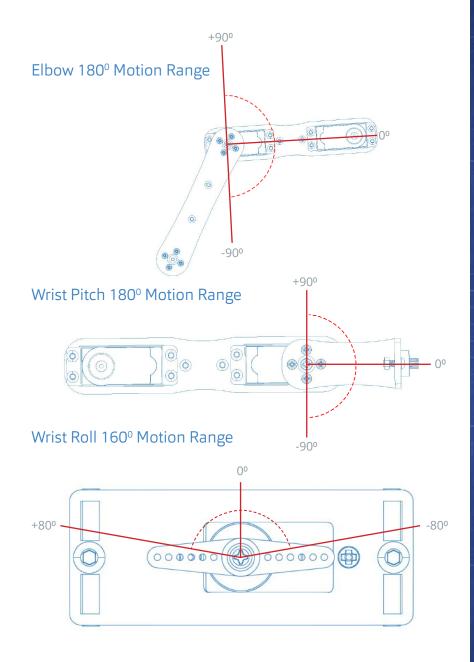
The nut sits inside the wrist LH & RH plates under a shoulder joint and the M3 bolt is fed through the top plate & between the shoulder joint.

## Servo Range Positions

## Base 180<sup>o</sup> Motion Range







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