# **6-DOF Square Robotic Arm**

# **Installation Instructions**



2016-8-(V2.0)

## **Preface**

#### 1. Install the tool

Before installing the robot, you need to prepare the necessary installation tools, a cross screwdriver, a pair of needle-nosed pliers,

A pair of tweezers. If possible, users can prepare an electric screwdriver, which is convenient and efficient.

As shown in the reference figure below.



#### 2. Precautions for use

- (1) There is a platform space large enough to install the robot;
- (2) Avoid mechanical damage during operation, keep away from infants and young children, and do not leave the machine unattended.

In such cases, improper operation may cause harm to people;

(3) The wiring and debugging of electronic accessories requires personnel with certain electronic knowledge and basic skills.

Do not plug in wires without understanding them, as this may cause short circuit or burn of accessories.

(4) Do not disassemble the battery. If the robot fails, please cut off the power supply immediately.

During use, charge frequently and avoid over-discharging. Do not short-circuit the positive and negative poles of the battery.

The consequences are very serious. Do not let young children charge, discharge or use the battery alone.

# (5) Handle the robot with care during use. Do not drop it.

Measures to prevent robots from falling frequently, because this can easily cause the robot structure to deform, thus causing work

Not normal.

## 1. Connection and installation between metal structural parts

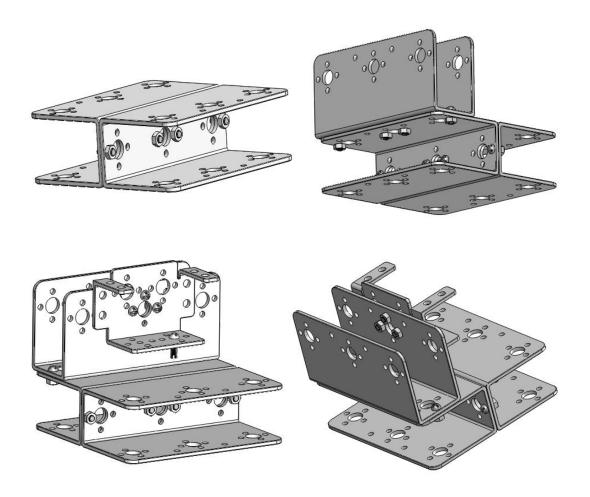
## 1.Installation of the base bracket

Quantity: Installation1set

Requirements: Install in parallel, without tilting.

Accessories:UType Bracket31. Multifunctional bracket1Round headM3\*7screw11indivual,

# M3Nuts11Round headM3\*10screw1indivual.

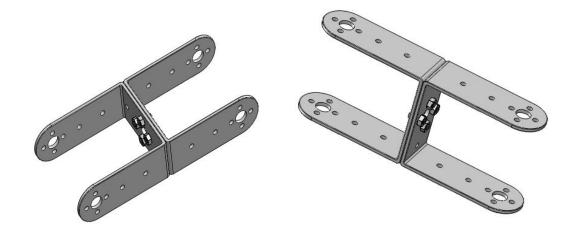


# 2.bigUbigUParallel mounting of brackets

Quantity: Installation1set

Requirements: Install in parallel, without tilting.

Accessories: LargeUBracket2Round headM3\*7screw4indivual,M3Nuts4indivual



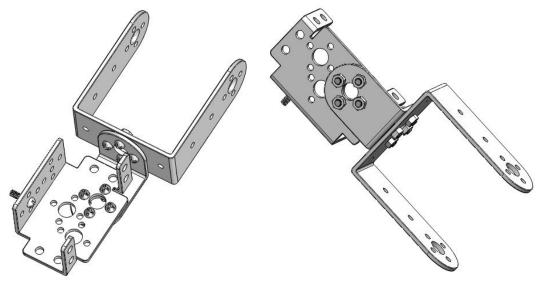
# 3.Installation of arm joint bracket

Quantity: Installation1set

Requirements: Install vertically, without tilting.

 $Accessories: Large UB racket 11.\ Multifunctional\ bracket 1 indivual, LB racket 1 Round\ head M3*7 screw$ 

Silk8indivual,M3Nuts8Round headM3\*10screw1indivual



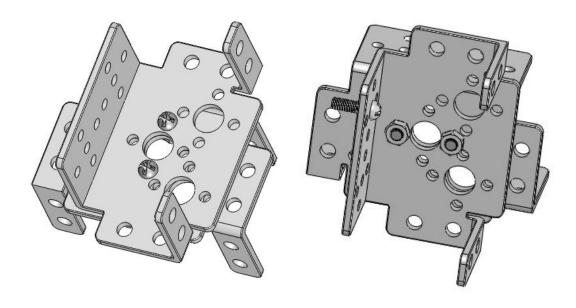
## 4.Installation of the arm end joint bracket

Quantity: Installation1set

Requirements: Install vertically, without tilting.

Accessories: Multifunctional bracket1Round headM3\*7screw2indivual,M3Nuts2Round head

M3\*10screw1indivual.



#### 2. Installation and fixation of each component servo

Before installation, all servos should be adjusted to the specified angles for each joint using the controller.

Position, and then install the steering wheel. When installing the steering wheel of the servo, you should repeatedly rotate the steering wheel to select the steering wheel.

The most suitable starting position for installation is: the steering wheel is installed on the steering gear output shaft.

The four holes are horizontal or vertical to the servo housing, as shown in the figure below.

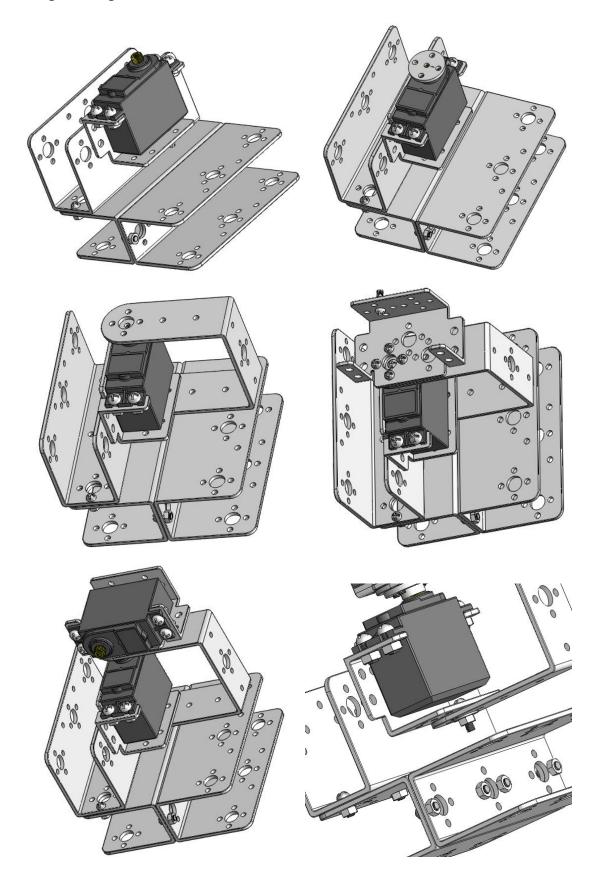
#### 1.Installation of base servo

Quantity: Installation1set

Requirements: No skew (bottom servo angle1500, the upper servo angle1700).

Accessories: LargeUBracket11. Multifunctional bracket1Steering gear21. Metal steering wheel2indivual,

Flange bearings2Round headM4\*8screw8indivual,M4Nuts8indivual,M3Nuts2indivual.



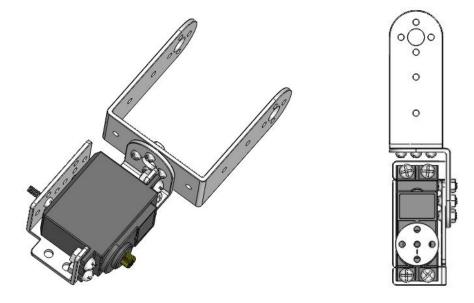
# 2.Installation of arm joint servo

Quantity: Installation1set

Requirements: Vertical installation, no tilt (servo angle1100).

Accessories: Servo11. Metal steering wheel1Round headM4\*8screw8indivual,M4Nuts8

indivual.



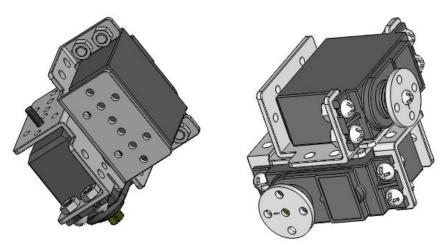
# 3.Installation of the servo at the end joint of the $\mbox{\sc arm}$

Quantity: Installation1set

 $Requirements: Vertical\ installation,\ no\ tilt\ (the\ angle\ of\ the\ servo\ below 1100,\ the\ upper\ rotating\ servo 1500).$ 

Accessories: Servo21. Metal steering wheel2Round headM4\*8screw8indivual,M4Nuts8

indivual.



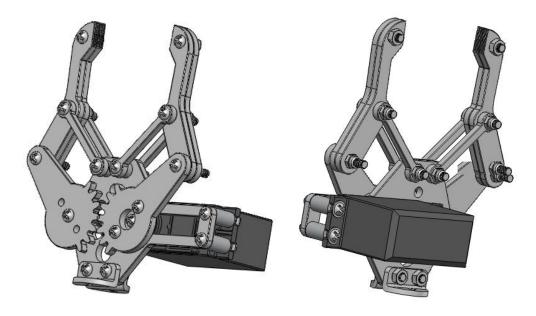
#### 4.Installation of the claw servo

Quantity: Installation1set

Requirements: Vertical installation, no tilt (servo angle1500).

Accessories: Servo11. Metal steering wheel1Round headM3\*5screw3, with round head

# M4\*8screw4indivual.



# 3. Assembly and installation of components

#### 1.Vertical installation

