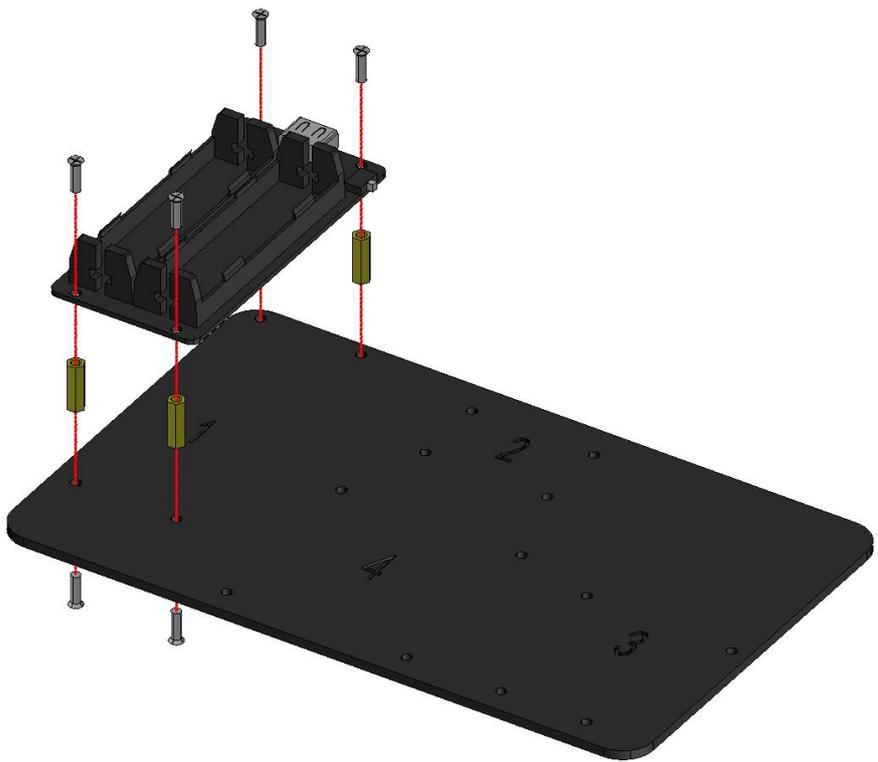
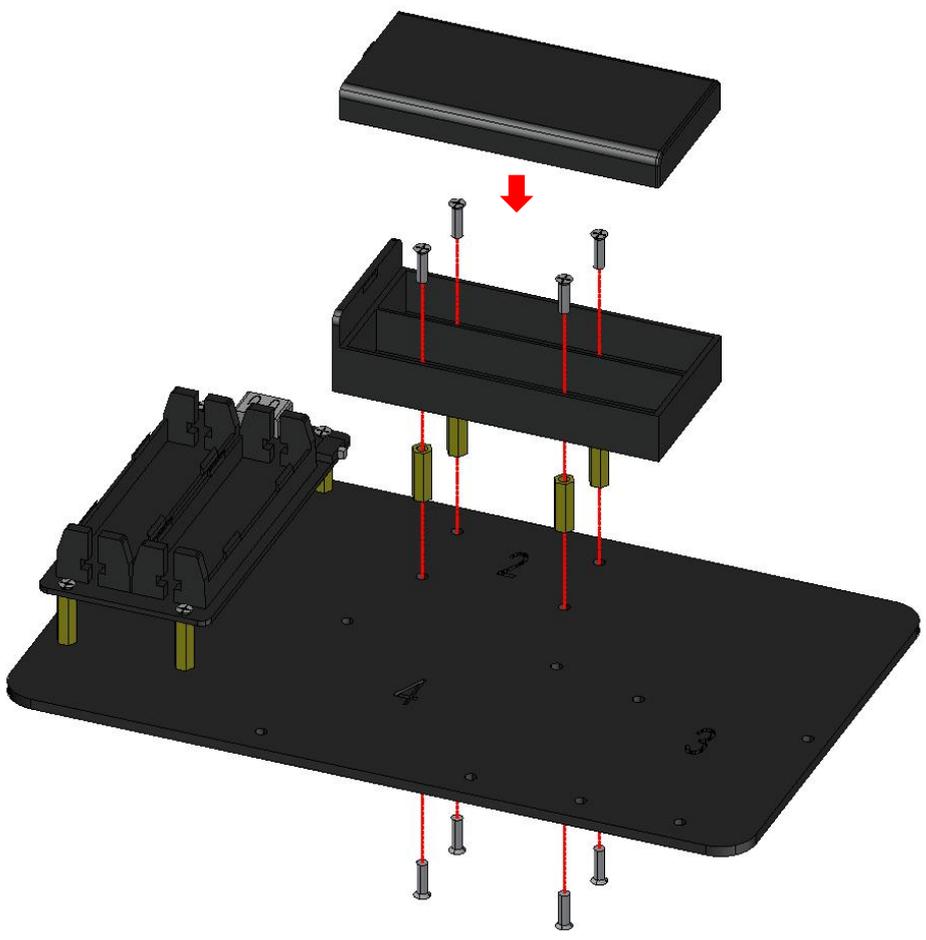
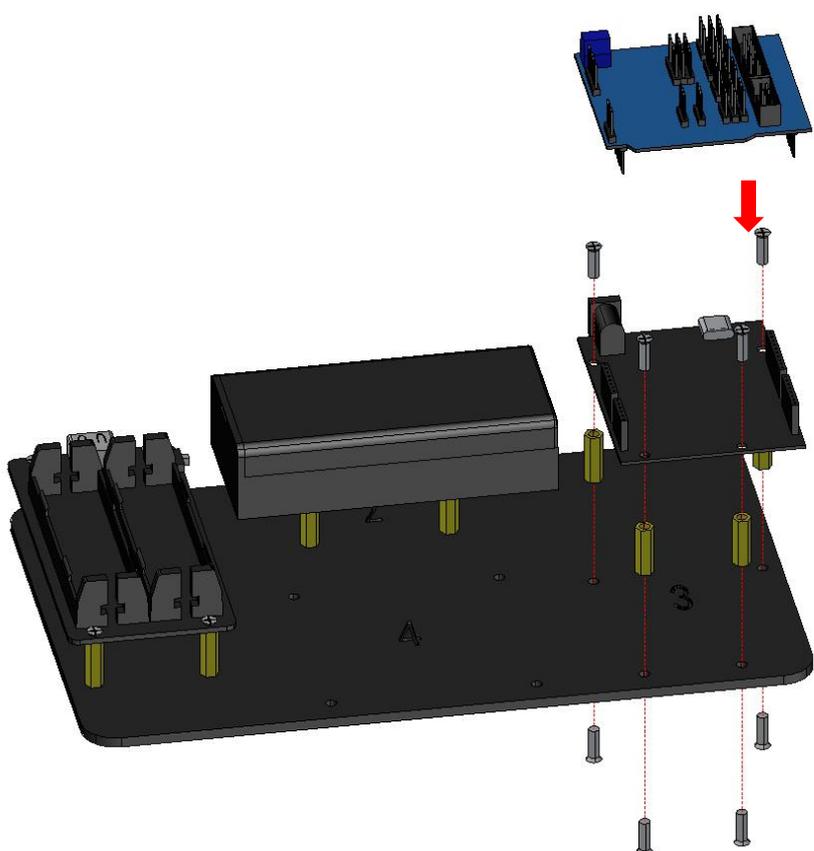


Step 1 Install The V3 Development Board			
Parts List	Acrylic Base Plate	M3*10 Countersunk Head Phillips Screws*8	18650 Mobile Power Board
	M3*15 Double Pass Copper Column*4		
Splicing Diagram			
Notes	<p>1. Pay attention to the position of the number "1" on the bottom board and the orientation of the V3 development board;</p> <p>2. Screw the copper column on the bottom plate first, then cover the V3 development board and tighten the screws.</p>		

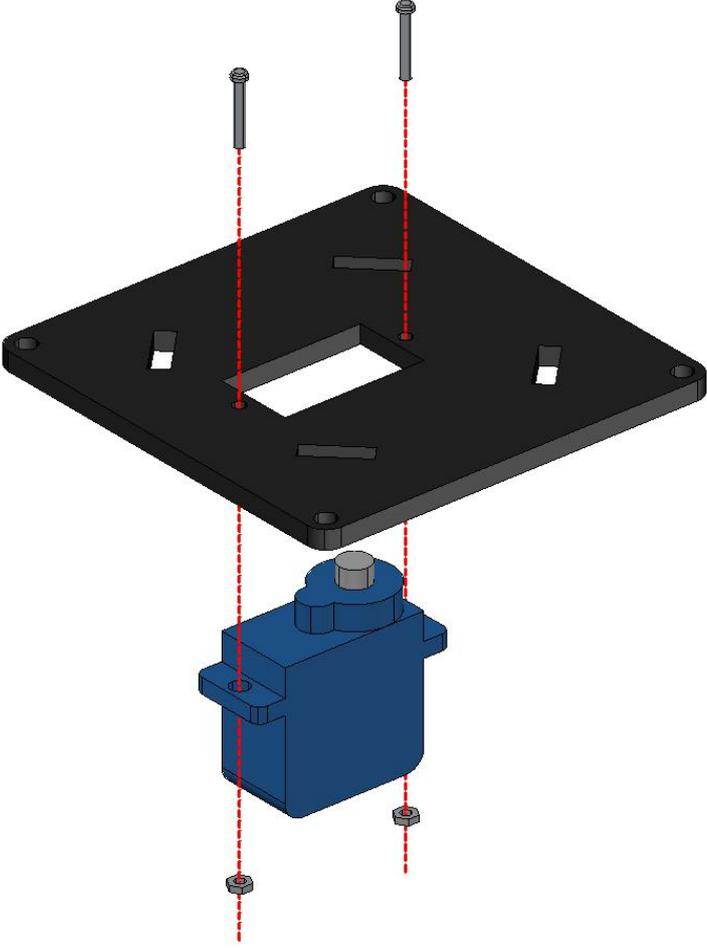
Step 2 Install Battery Case			
Parts List	Battery Case *1	M3*10 Countersunk Head Phillips Screws*8	M3*15 Double Pass Copper Column*4
Splicing Diagram			
Notes	<p>1. Pay attention to the number "2" on the bottom board and the orientation of the battery case;</p> <p>2. Screw the copper column on the bottom plate first, then cover the battery box and tighten the screws;</p> <p>3. Finally, put the battery cover on.</p>		

Step 3 Installing Motherboards And Expansion Boards

Parts List	Control Board *1	Expansion Board *1	M3*10 Countersunk Cross Screw *8
	M3*15 Double Pass Copper Column *4		
Splicing Diagram			
Notes	<p>1. Pay attention to the number "3" on the bottom board and the installation direction of the motherboard and expansion board, and do not blindly force when installing the expansion board, and do not insert it backwards;</p> <p>2. Screw the copper column on the bottom plate first, then cover the battery box and tighten the screws;</p> <p>3. If the screw of the motherboard is too difficult to screw on, you can not screw, 3 is also enough.</p>		

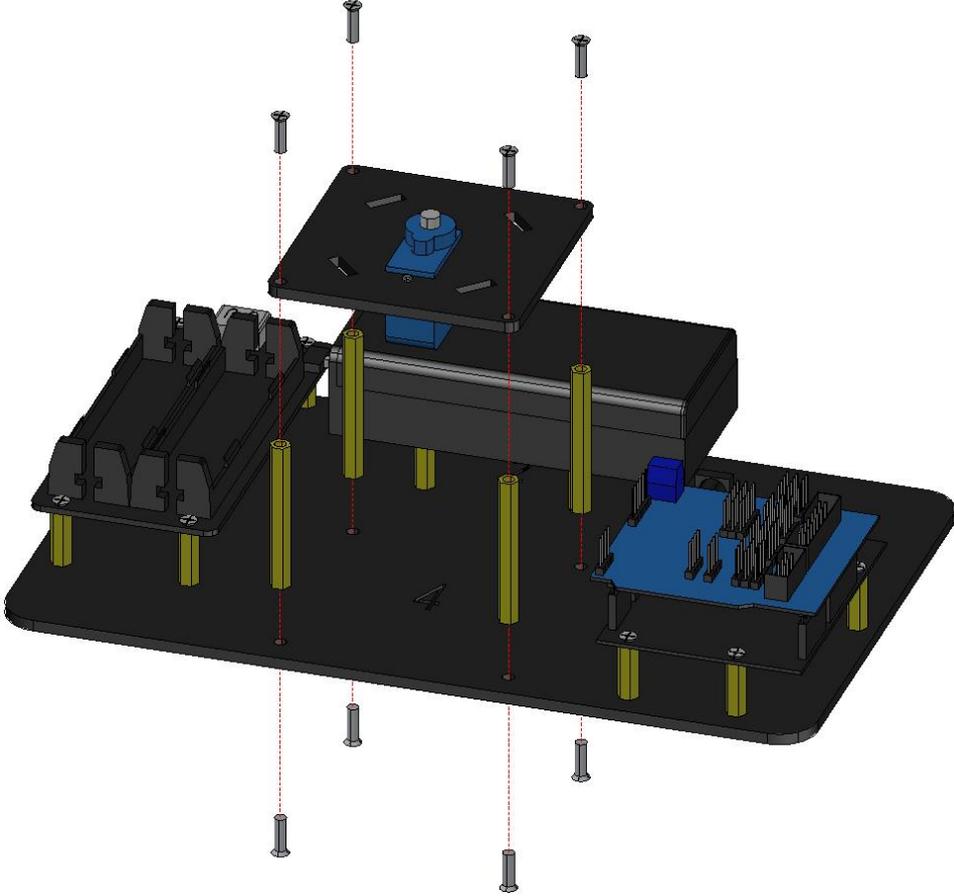
Step 4 Installation Of Chassis Servo

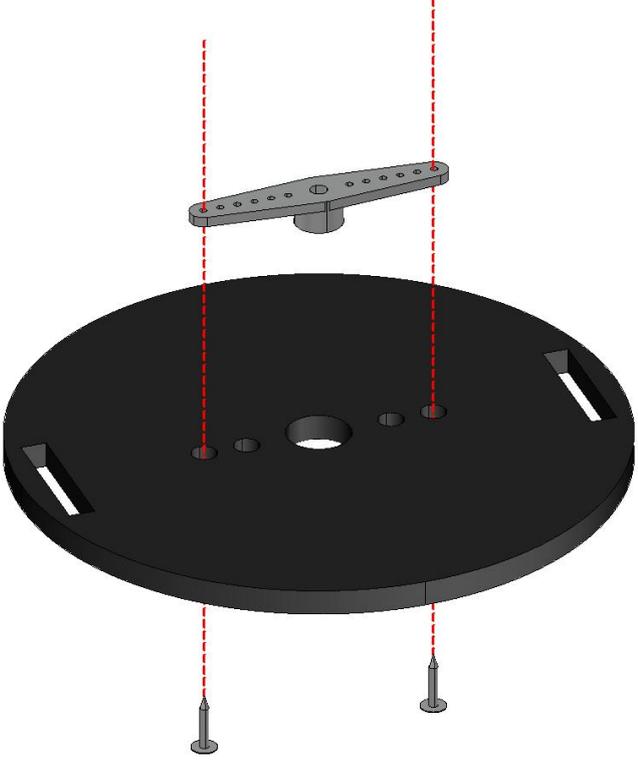
4.1

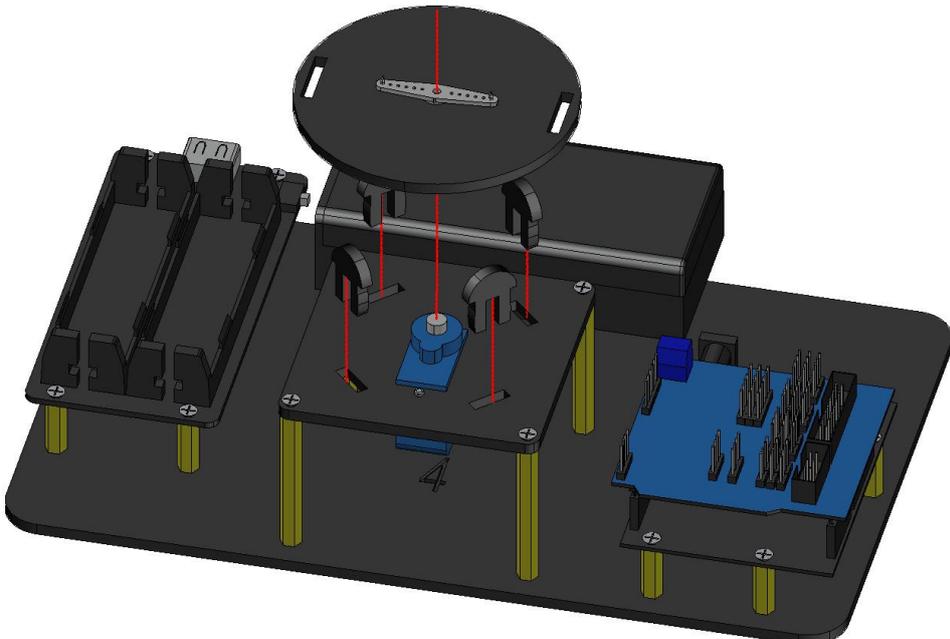
Parts List	Actuator Acrylic Bracket *1	Servo Motor*1	M2*14 Round Head Cross Screw *2
	M2 Nuts*2		
Splicing Diagram			
Notes	<ol style="list-style-type: none"> 1. Fix the servo on the servo bracket first; 2. Pay attention to the direction of the servo. 		

Step 4 install Chassis Servo Motor

4.2

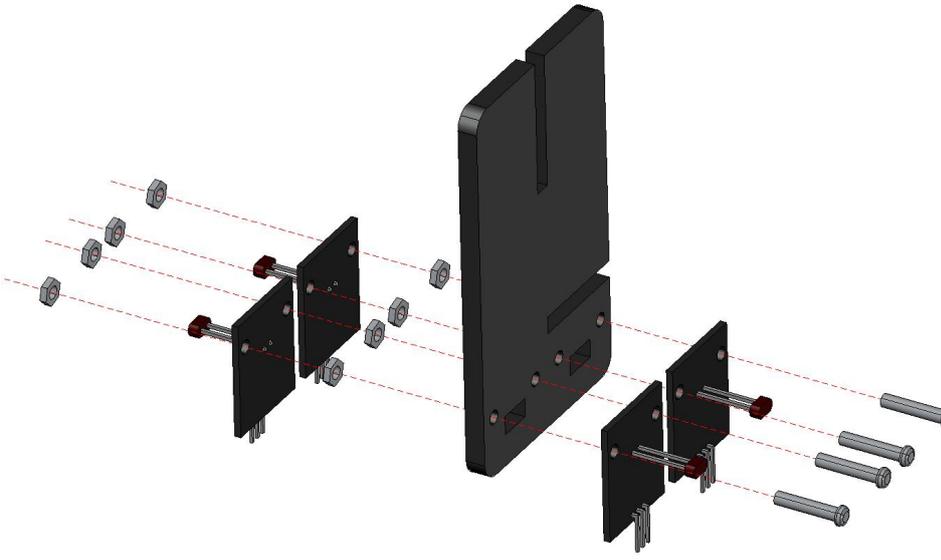
Parts List	Installed Servo Bracket *1	m3*40 Double Pass Copper Column *4	m3*10 Countersunk Cross Screw *8
Splicing Diagram			
Notes	<ol style="list-style-type: none"> 1. Pay attention to the direction of installation; 2. Screw the copper column on the bottom plate first, and then cover the steering gear acrylic support in the direction shown. 		

Step 5 Installation Of Disc Servo		
Parts List	Disc Acrylic Holder *1	"One" Shape Steering Wheel *1
	M1.4*5*4 Self-Tapping Screws *2	
Splicing Diagram		
Notes	1. Secure the helm to the bracket with 2 self-tapping screws.	

Step 6 Fixed Disk			
Parts List	Mounted Disk Bracket*1	Bolts *4	
Splicing Diagram			
Notes	<ol style="list-style-type: none">1. First insert the four pins into the corresponding four holes;2. Then insert the disk bracket into the servo.		

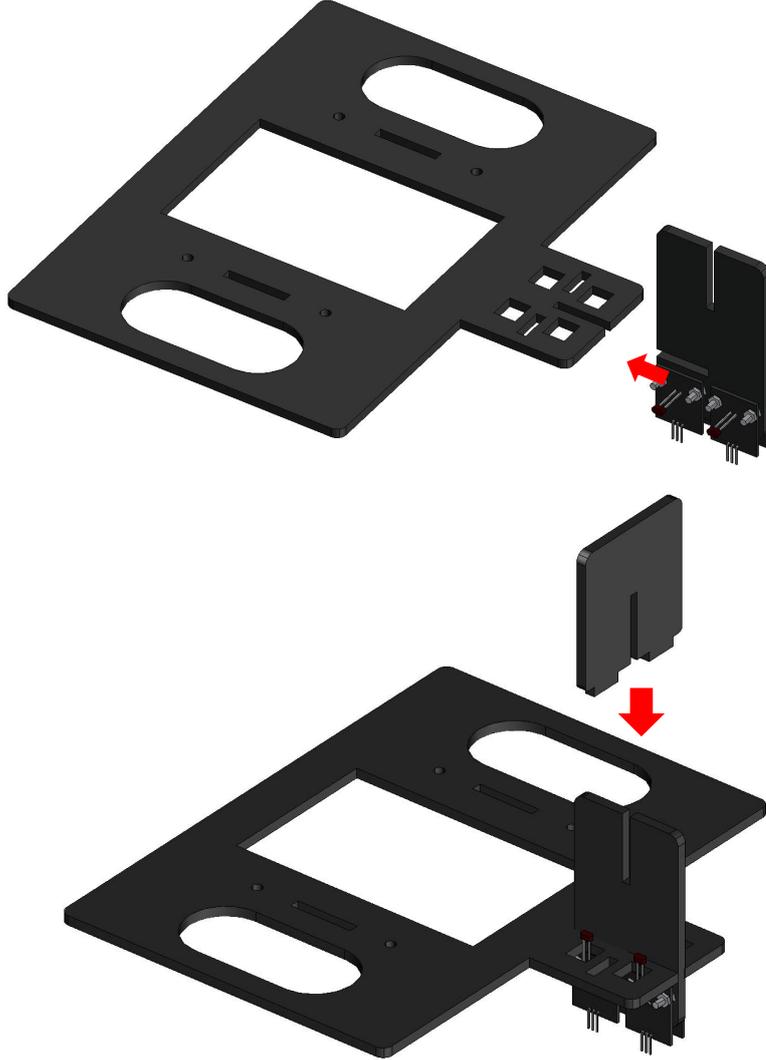
Step 7 Install Photosensitive Module

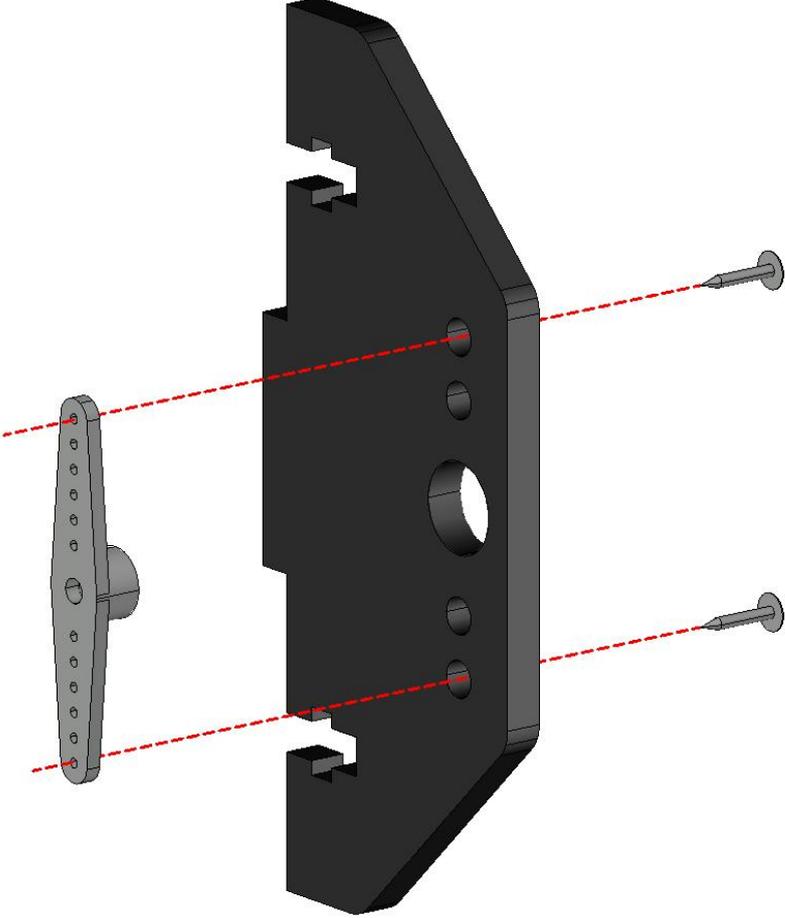
7.1

Parts List	Fixed Bracket For Photosensitive Module*1	M2*10 Round Head Screws*4	M2 Nuts*8
Splicing Diagram			
Notes	<ol style="list-style-type: none"> 1. Install the photosensitive module on one side first; 2. Note that an extra nut needs to be padded in the center; 3. Finally install the photosensitive module on the other side and lock the nut. 		

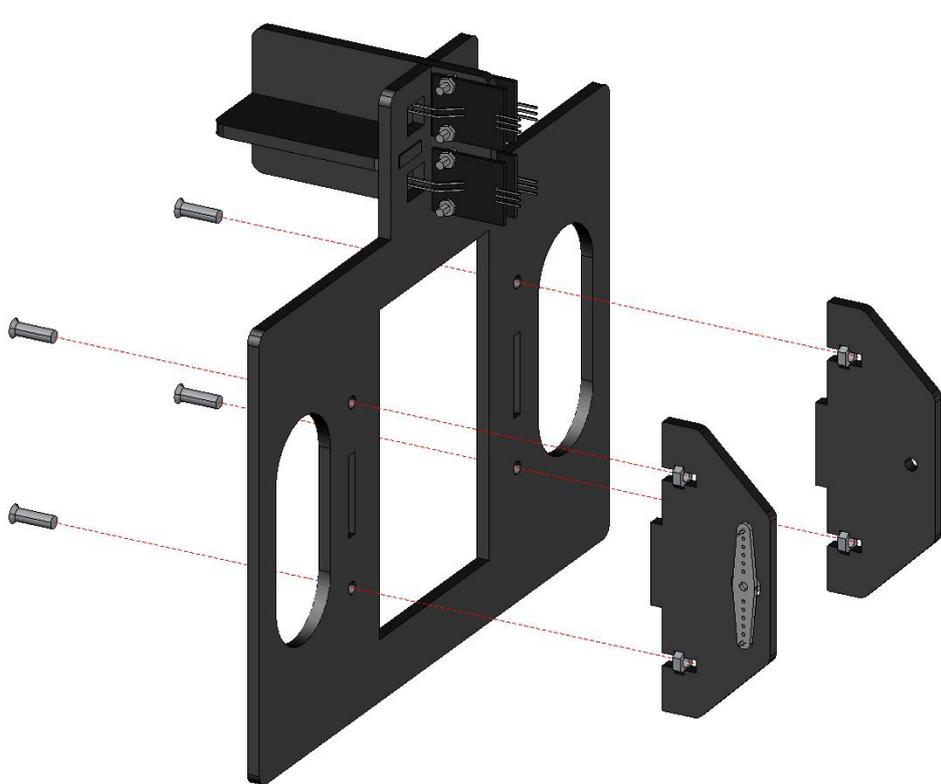
Step 7 Installation Of Photosensitive Modules

7.2

Parts List	Installed Photosensitive Fixing Bracket*1	Light-Sensitive Baffle*1	Solar Acrylic Base Plate *1
Splicing Diagram			
Notes	<ol style="list-style-type: none"> 1. First snap the mounted bracket into the corresponding position; 2. Take care to break and bend the probe of the photosensitive module and then pass it through the four corresponding holes; 3. Finally insert the photosensitive baffle. 		

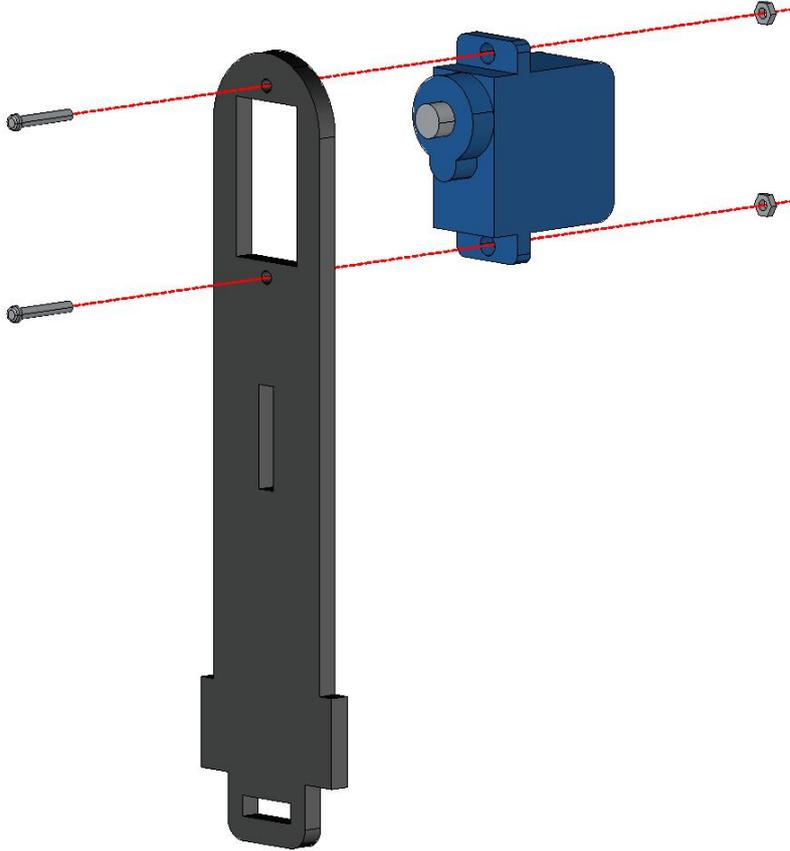
Step 8 Install Servo Motor		
Parts List	Solar Panel Rotating Support Bracket*1	"One" Shape Steering Wheel *1
	M1.4*5*4 Self-Tapping Screws *2	
Splicing Diagram		
Notes	1. Secure the helm to the bracket with 2 self-tapping screws.	

Step 9 Installation Of Solar Panel Rotating Bracket

Parts List	Solar Panel Rotating Support Bracket*2	M3*10 Countersunk Head Phillips Screws*4	M3 Nut*4
Splicing Diagram			
Notes	<p>1. First snap the nut to the corresponding hole of the support bracket;</p> <p>2. Then snap it to the hole position of the base plate, hold the nut with one hand and lock the screw with the other hand</p>		

Step 10 Installation Of Support Bracket

10.1

Parts List	Servo Motor	M2*10 Round Head Phillips Screws *2	M2 Nuts *2
	Support Frame With Steering Gear Hole *1		
Splicing Diagram			
Notes	1. Note the orientation of the rudder.		

Step 10 Installation Of Support Bracket			
10.2			
Parts List	Support Bracket*1	Round Acrylic Spacer*1	M3*12 Round Head Phillips Screw*1
	M3 Anti-Loosening Nut*1		
Splicing Diagram			
Notes	1. Note that the anti-loosening nut used here is not an ordinary nut.		

Step 10 Installation Of Support Bracket

10.3

Parts List

Installed Servo
Support Bracket*1

Splicing
Diagram



Notes

1.Note the orientation of the board.

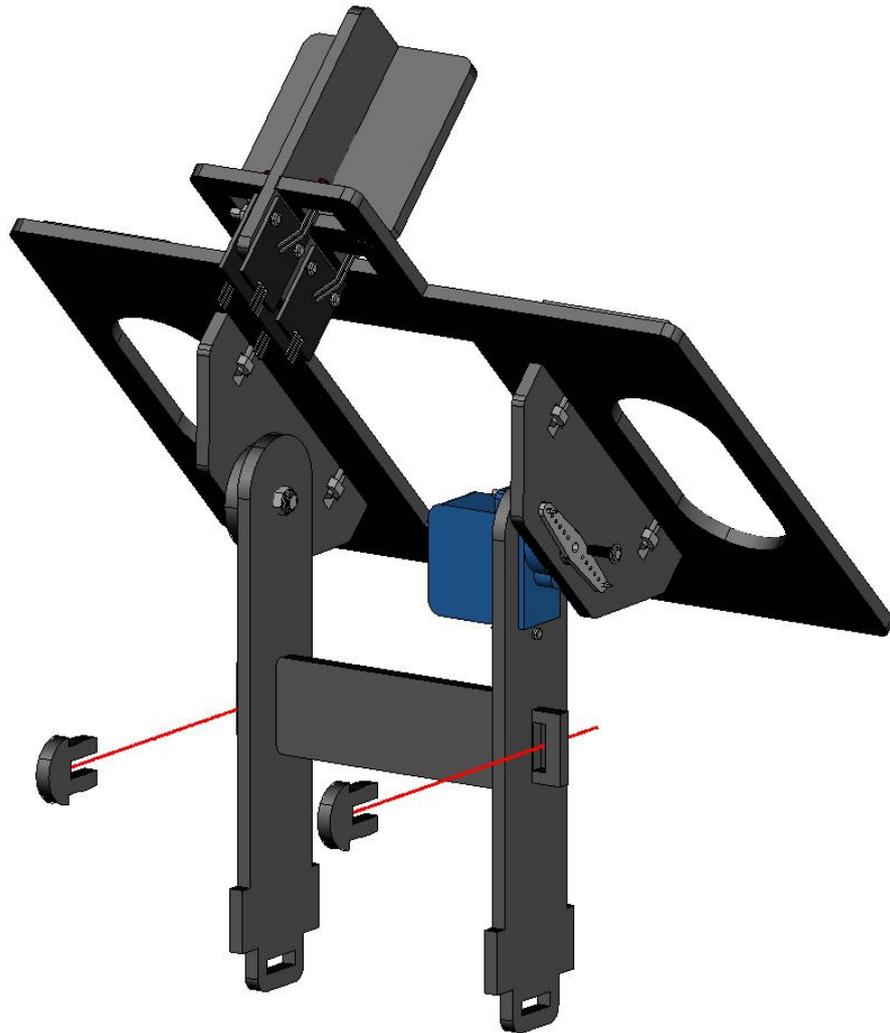
Step 10 Installation Of Support Bracket

10.4

Parts List

Support Beam Rack *1

Bolts*2

Splicing
Diagram

Notes

1. Snap the beam between the two holes first, then insert the pins.

Step 11 Install Solar Panel

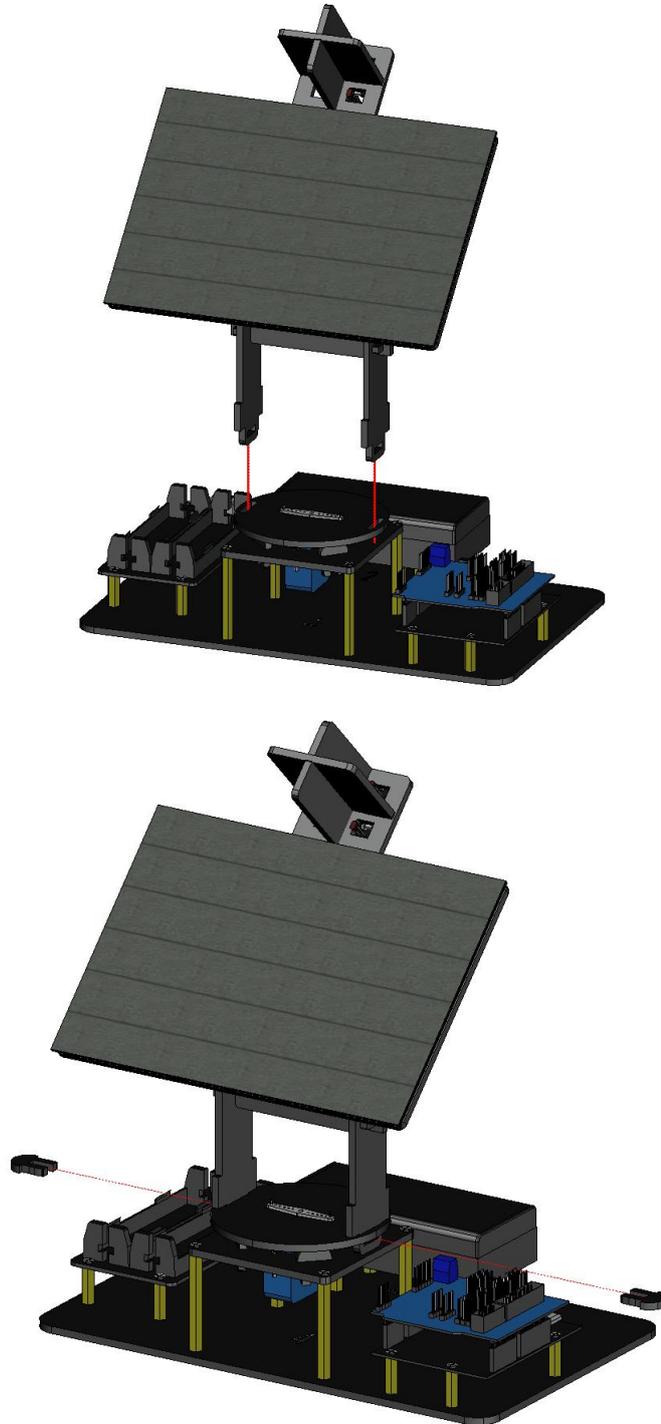
Parts List	Solar Panel*1	Hook And Loop Fastener*4	
Splicing Diagram			
Notes	<ol style="list-style-type: none"> 1. First rip the Velcro tape, and then attach it to the back of the solar panel and the top four corners of the acrylic bracket; 2. Finally, the solar panel is fixed on the acrylic bracket. 		

Step 12 Fixing Support Bracket

Parts List

Bolts*2

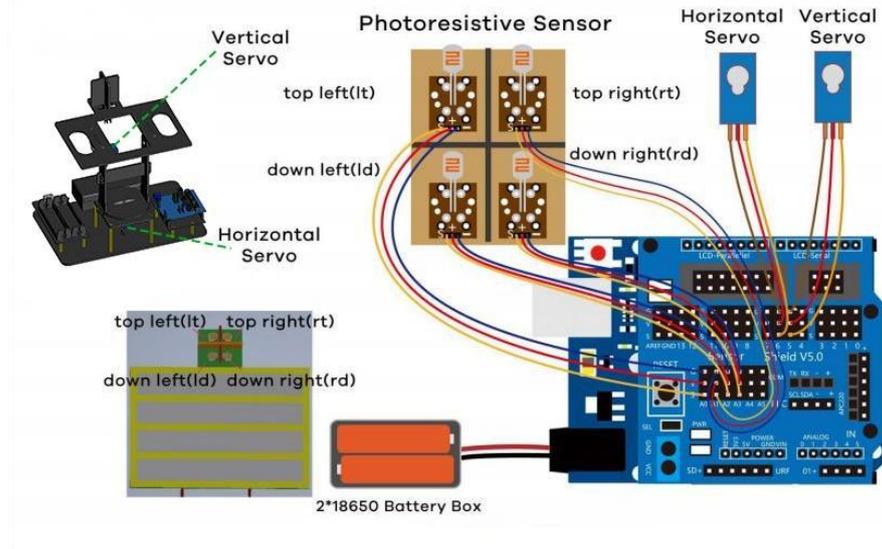
Splicing
Diagram



Step 13 Wiring

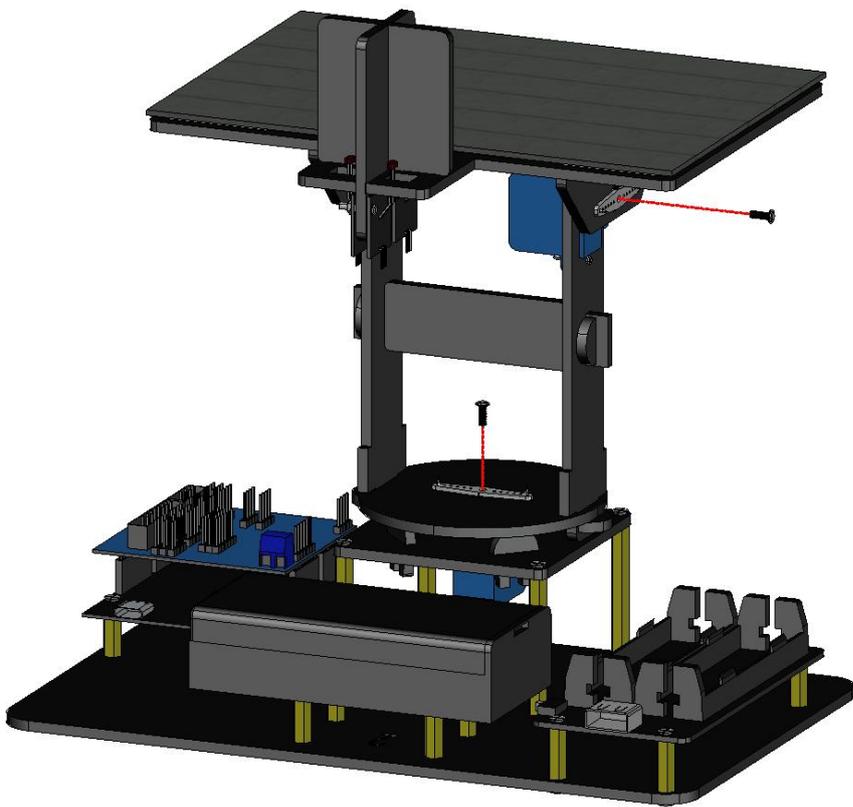
Parts List

3Pin Dupont Cable*4

Splicing
Diagram

Notes

1. The blue line of the 3pin dupont line is connected to the corresponding signal position of the row S on the photosensitive module and the row S on the extension board, and the black line is connected to the row "-" on the photosensitive module and the row "G" on the extension board
2. Note that orange is the signal line, connected to S, and brown is the ground line, connected to G

Step 14 Tiller Angle Calibration			
Parts List	Reinforcement Screws For Servo Bag *2		
Splicing Diagram			
Notes	<p>1. This step needs to upload the program, it will be talked about in the tutorial of uploading the program, just take a look at the steps here, no need to operate;</p> <p>2. After the assembly is completed, brush in the program, the program will turn the servo to the specified angle;</p> <p>3. At this time, remove the rudder, dial the rudder to the specified position and then put it back;</p> <p>4. Then fix the small screws.</p>		