



# Predator Sport Jet 90”

## USER MANUAL

WINGSPAN:2076mm

LENGTH:2286mm



# Introduction

- Thank you for purchasing our Predator Sport Jet plane. we strive to achieve a good quality quick build ARF aircraft .
  - It requires the least amount of assembly of any ARF kit to obtain the maximum performance.
  - Both the design and manufacturing have been undertaken to the highest standards, using best quality hardware, covering, wood & glue during factory construction stage.
  - By optimal weight and balance along with reliable construction, you will find this plane ideal for flying.
- We hope that every effort and service we offer will, in turn, give you confidence using PILOT Models.
- Have a wonderful time flying your aircraft in a suitable safe space!

## Warranty

- All Pilot-RC products are guaranteed against defects for 30 days of receiving your airplane. This warranty is limited to construction or production defects in both material and workmanship , it does not cover any component parts damaged through use or modification .
- The manufacture cannot supervise the assembly, operation or maintenance, and is not responsible for radio malfunctions. Please ensure your radio system is in good condition. **We are not responsible for any accident or damage while using this product.** It is impossible to determine for certain whether crash damage was the result of improper installation of our products, a radio system failure, or pilot error. Model airplane owners use our products at their own risk.
- Pilot-RC will not be liable for any costs, unless agreed and proved beyond doubt the failure was due to faulty materials or fabrication. Any agreed cost will not exceed the cost of the airframe and not include engine, radio equipment or third party claims.
- Should you wish to return a product or receive replacement parts, all shipping cost must be paid by the customer.

## Attention

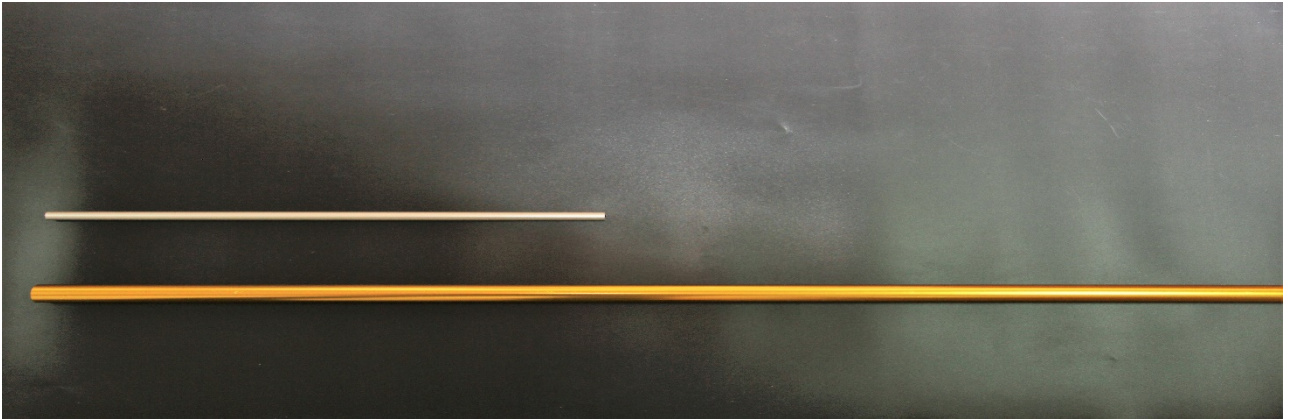
1. **Do not regard this plane as a toy!**
  2. To ensure safety, please read the instruction manual thoroughly before assembly.
  3. Building and operating an RC Plane of this nature requires previous experience and competence to an experienced level. This plane is not for a beginner!
  4. If you are in doubt have an experienced pilot at hand. Diligent practicing and correct guidance is essential, accidents can cause bodily harm and property damage.
  5. Seek assistance from an experienced person or airplane model clubs in assembly, operation and maintenance to ensure successful training.
  6. **Fly only in a registered RC model club airfield** that is approved by your local Academy of Model Aeronautics (AMA).
- Pilot-RC has the right to revise the plane, the instructions and the limited warranty without notice.
- If you have any problems and questions please contact Pilot –RC:
- Email: pilot-rc@139.com , info@pilot-rc.com  
Phone: +86 760 88781293  
FAX: +86 760 88780293  
Address: No.34, Chengnan Er Road , Zhongshan city, 528400, Guangdong Province, China

## Install kit contents

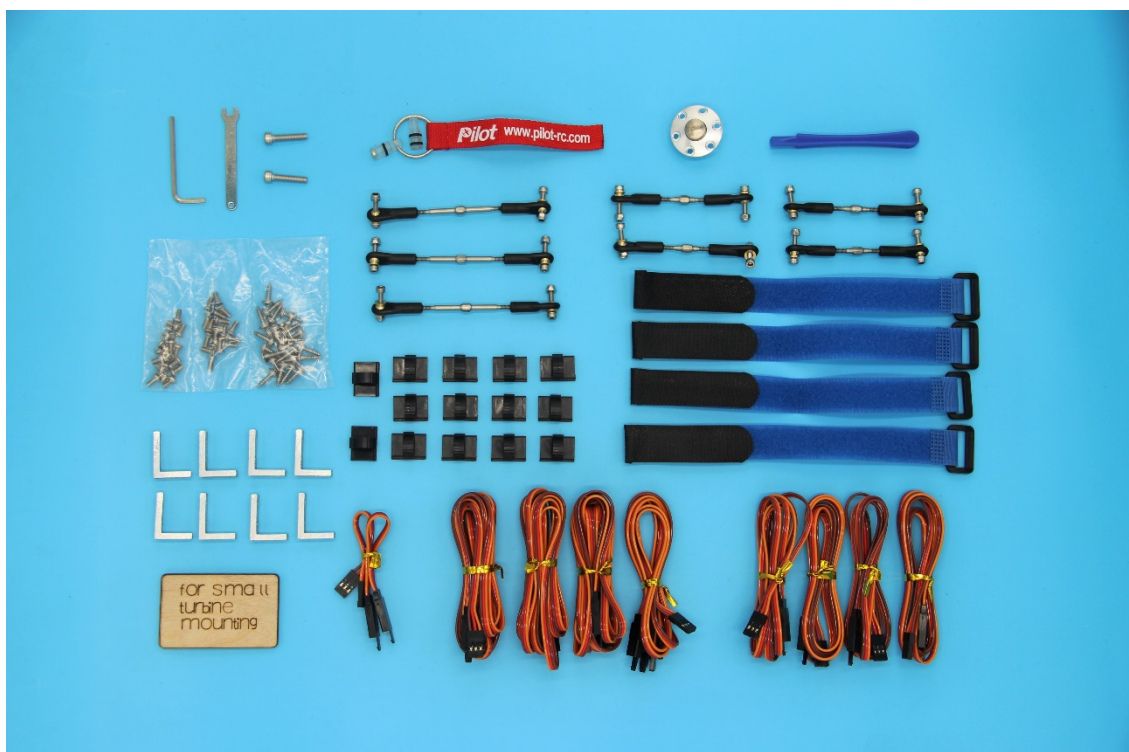
## Install kit contents:

(Some contents like fuel tank etc... has already installed in fuselage)

**Aluminum tube:**



**Accessories pack:**



## ***Install kit contents***

### **Accessories pack includes:**

Socket head cap screws

Counterstunk cross screws

Cross round head with medium screws

Tapping screws

Hexagon screw in metric system(SHCS)

Battery bandage

Servo aluminum angle

Metric Allen Wrench

Push rot wrench

Wring clamp

Crowbar

Push rot:

Oil nipple suit

Extension cord:

**(Some of accessories like screw/cord etc... isn't in this accessories pack)**

## ***Other Accessories Need To Complete:***

Epoxy Adhesives

Cyanocrylate adhesives

X-Acto and Saw knives

Sandpaper

Thread lock

Aircraft stand or support



## Install kit contents

### Landing gear module(optional):

Landing gear(accessories included):

Landing gear

Pilot landing gear controller



# Install kit contents

## Servo module(optional):

Servo:

PY20AH 8

Servo arm:

Pilot Futaba aluminum alloy 0.8" 1

Pilot Futaba aluminum alloy 1.2" 7



## *Landing gear assembly*

### **Landing gear assembly:**

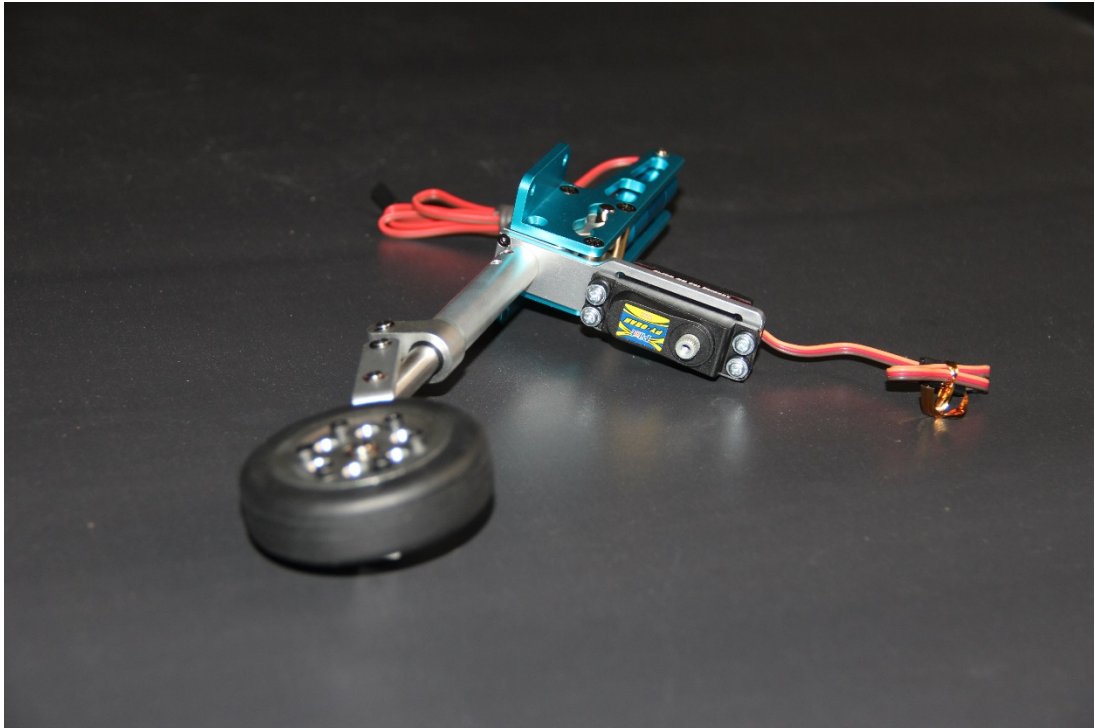
**Retract Landing Gear Installation, Predator Jet come with electric-landing gear and brakes.**



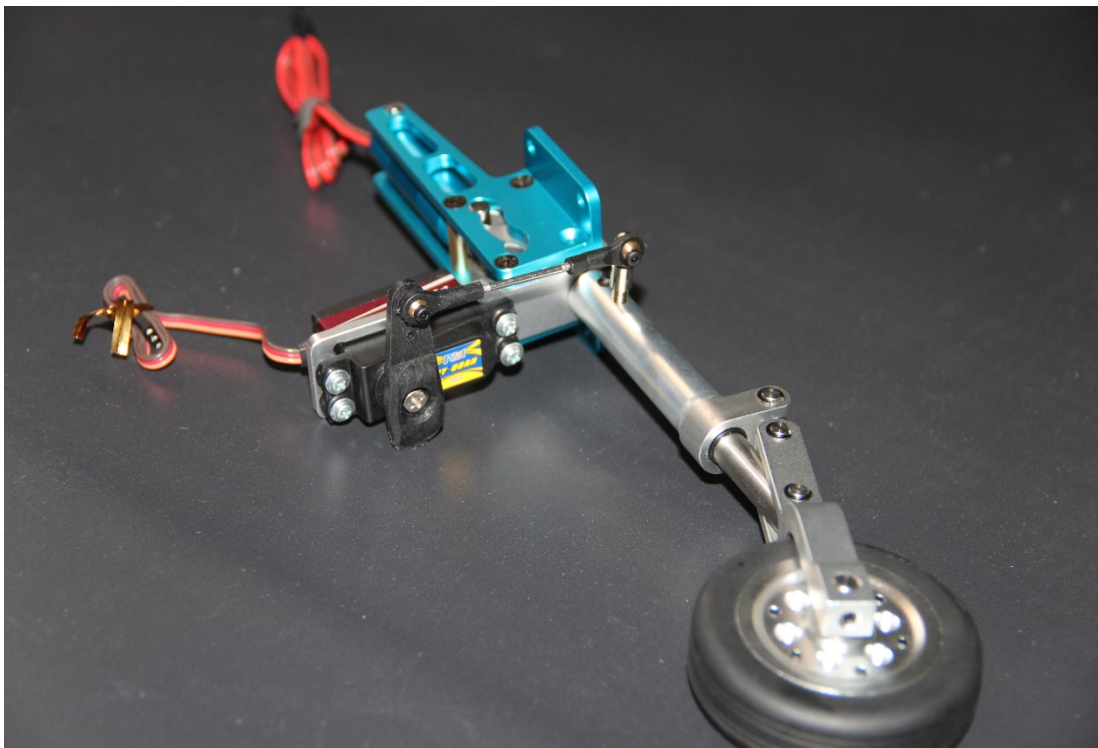


## ***Landing gear assembly - nose***

Install the servo to the nose landing gear.



Install the servo arm and the push rod. Adjust it to make sure the plane can go straight approx. You still can adjust by radio after install it.





## ***Landing gear assembly - nose***

Place the nose gear to the mounting and adjust it to the correct position, then mark the 4 mounting screws hole.

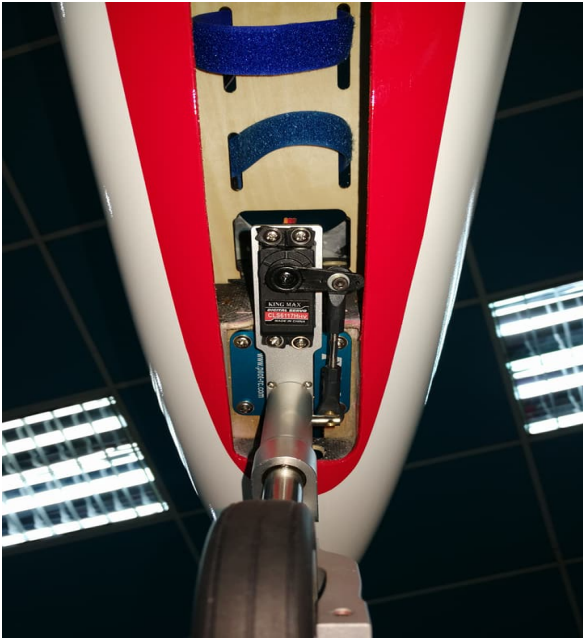


Before you drilling the mounting screws hole , please make sure there is nothing to get stuck when it open and close.

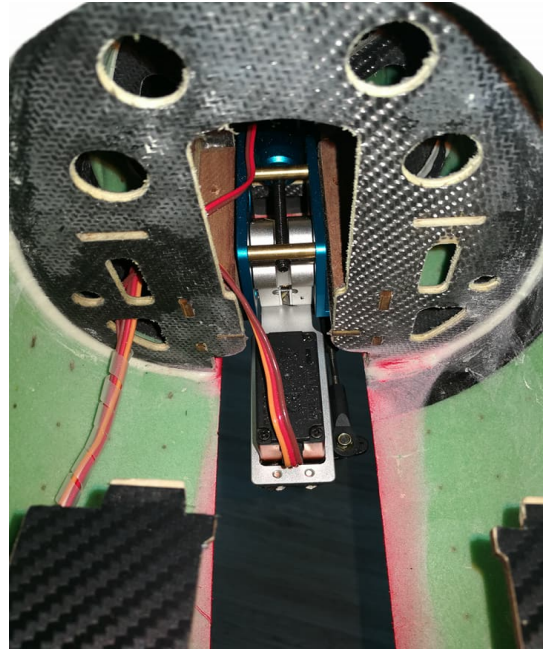


## Landing gear assembly - nose

After installation



Carefully arrange the nose gear retract wire lead and the steering wire as well ...



Install the nose retract gear to the fuselage.

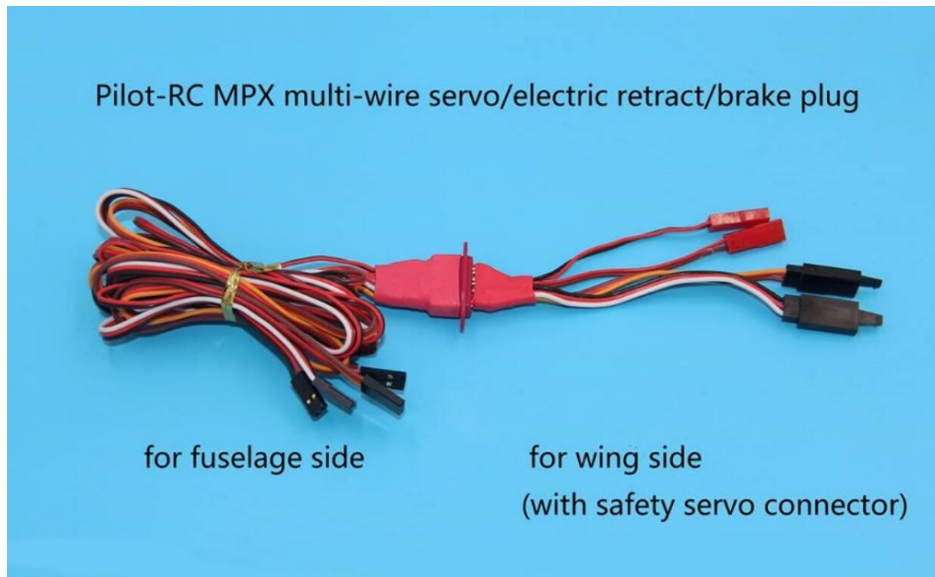


Thanks to the "Test" function of the Pilot-Rc controller unit, you can test the correct and free working of the system without the need for your transmitter or receiver, just connect a battery direct to the controller.



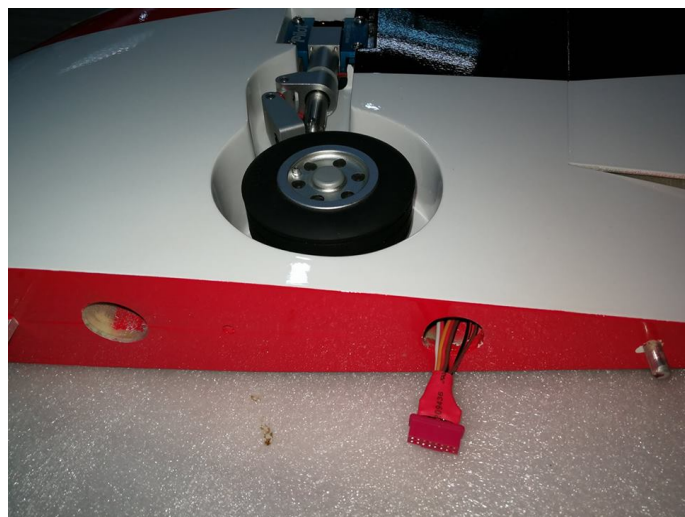
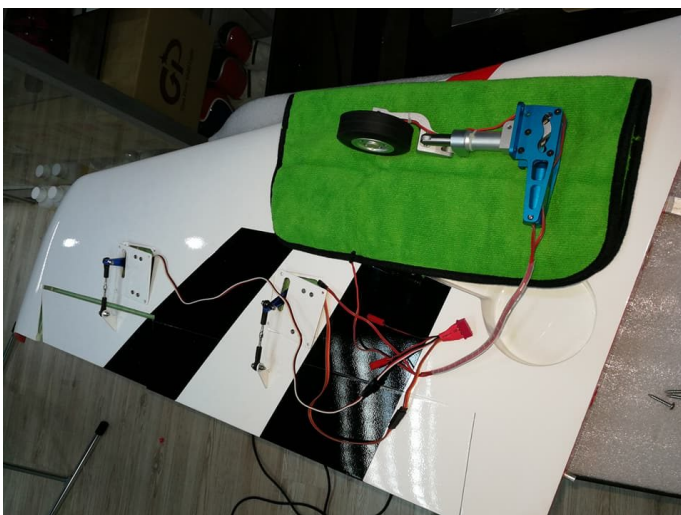
## Landing gear assembly - main

Recommend to use this 4 in 1 MPX style connector from Pilot-RC. It's an optional parts.



1. Connect all servo / landing gear / brakes wire.

2. The multi connector 4 in 1 out from the opening hole...





# Wing Servo/Flaps Assembly

The control horns are pre-installed at the factory, ready for use.

1. Take out the aileron / flaps plating from the wing.



With the wings upside down, position the gear in inside the wing on the mounting brackets and mark the location for the screws.

Double check the positioning of your gear before drilling any holes. Make sure that the gear movement is free of any obstacles.

Please take care when drilling not to drill through the wood and out through the composite shell of the wing.



2. Use the supply L-shape aluminium bracket to install the servo.

Use 1.2 inch servo arm, install the servo arm to the servo and mark the drilling hole... Refer to pic below.

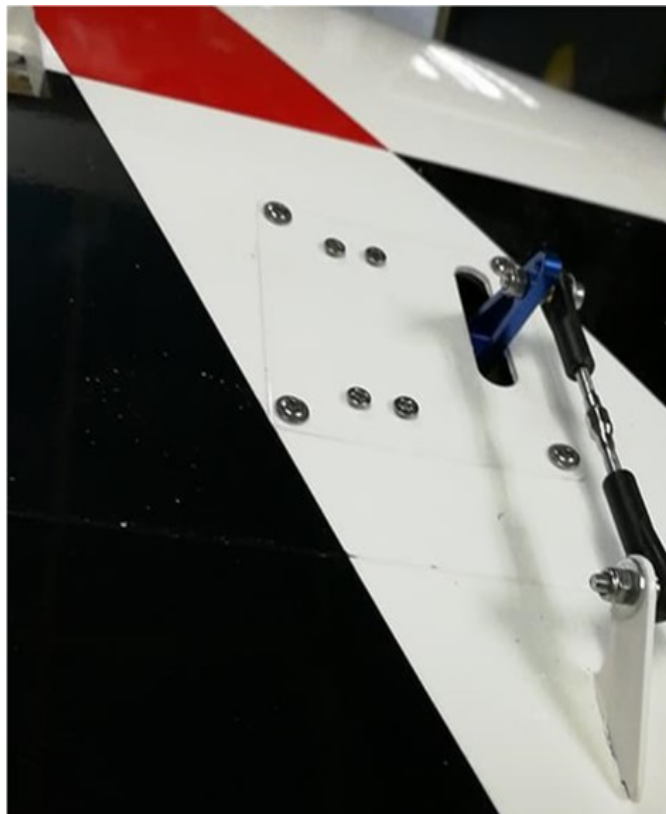


## Wing Servo/Flaps Assembly

3. Attach the included pushrods and ball links between the servo arm and the control horn.

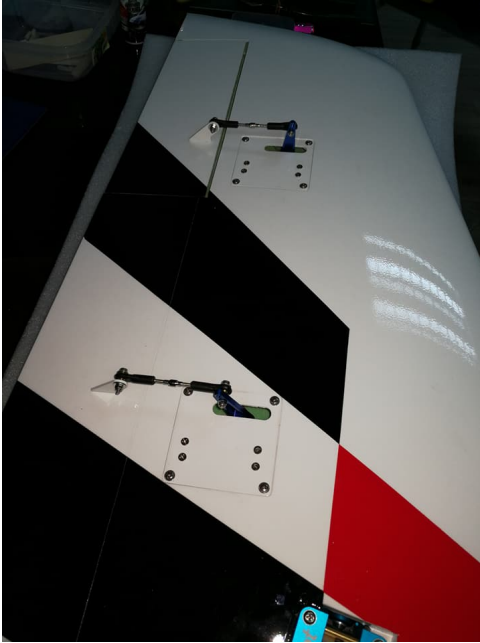


4. Servo and servo arm installed

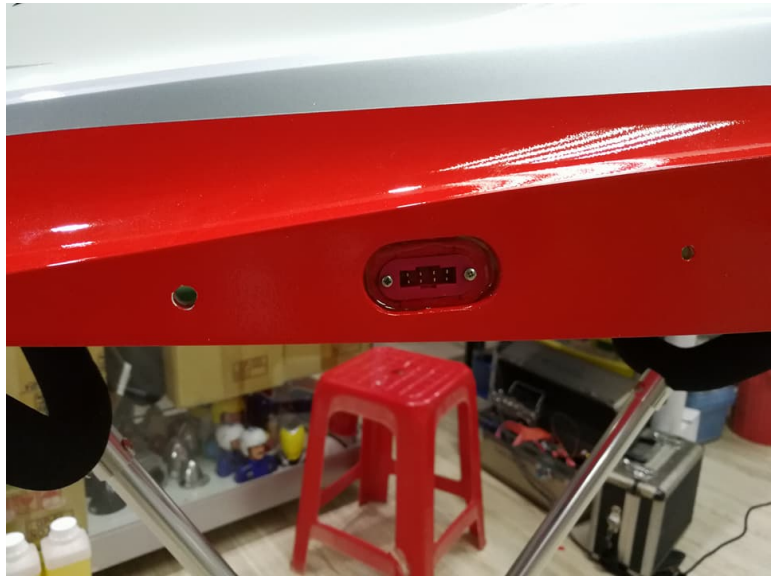


## Wing Servo/Flaps Assembly

5. Aileron servo / Flaps servo installed.



6. Use a thin ply as a back plate and installed the 4 in 1 connector, use 5 min epoxy to glue it from inside of the fuselage.



7. Just one connector for aileron/flaps/landing gear/brakes.

One side of the connector can be screwed to the fuselage, while the other is left inside the wing, loose, for easy connections.



# Elevator/ Rudder Servo Assembly

Rudder servo assembly

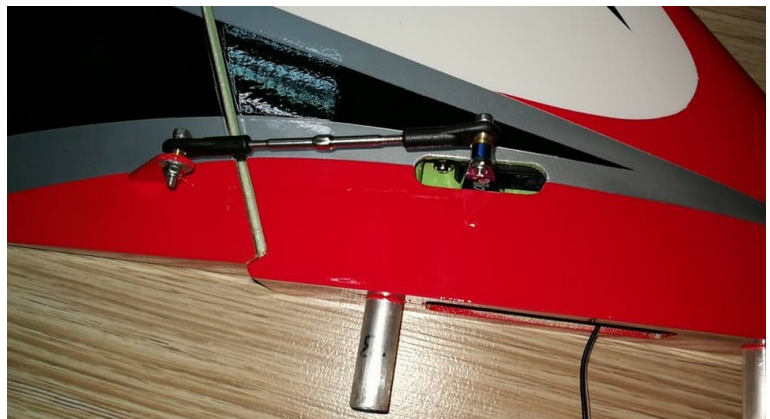


The control horns are pre-installed at the factory, ready for use.

2. Insert the servo into the rudder, in its allocated slot, with the servo shaft closest to the rudder.



3. Screw the servo in place, and then install the servo arm on to the servo, making sure that this is centred. Attach the included pushrods and ball links between the servo arm and the control horn.





## Elevator/ Rudder Servo Assembly

1. The rudder extension wire connector.



2. Find the 2 pcs M4 cap screws to tighten it. It will hold the rudder position





# Elevator/ Rudder Servo Assembly

## Elevators



1.Put in the servo to the precut slot in the elevator.

2.Screw the servo in place, and then install the servo arm on to the servo, making sure that this is centred



3: The other side of the servo connector glue at the side of the fuselage, just a drop of CA or 5 min epoxy to glue it.



## Servo Wire Arrangements

1. You will find a top tube in the top section of the fuselage! Servo wire will slide in from the plastic tube all the way out from the tube.



2. You can use a fire proof tubing to keep the wire all isolate from heat.



3. To keep all the wire away from heat best...

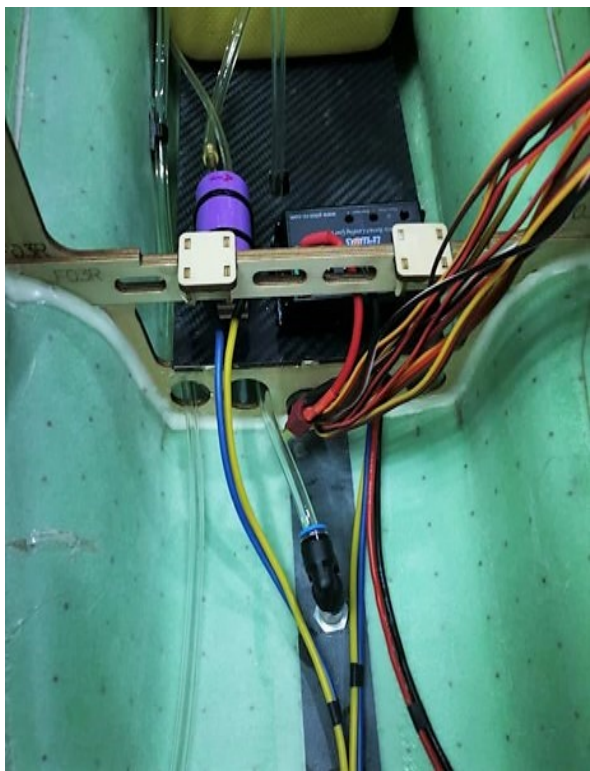
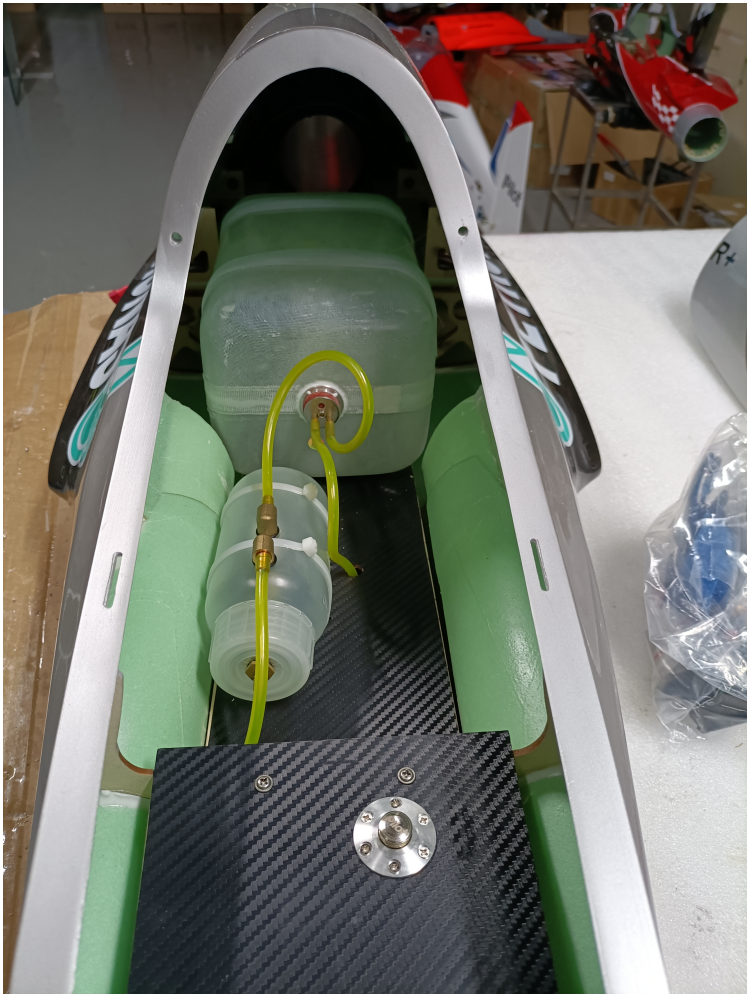


# Servo Wire Arrangements

1.Next step is to get all servo wire go through the tube under the fuel tank...showed as the picture below.

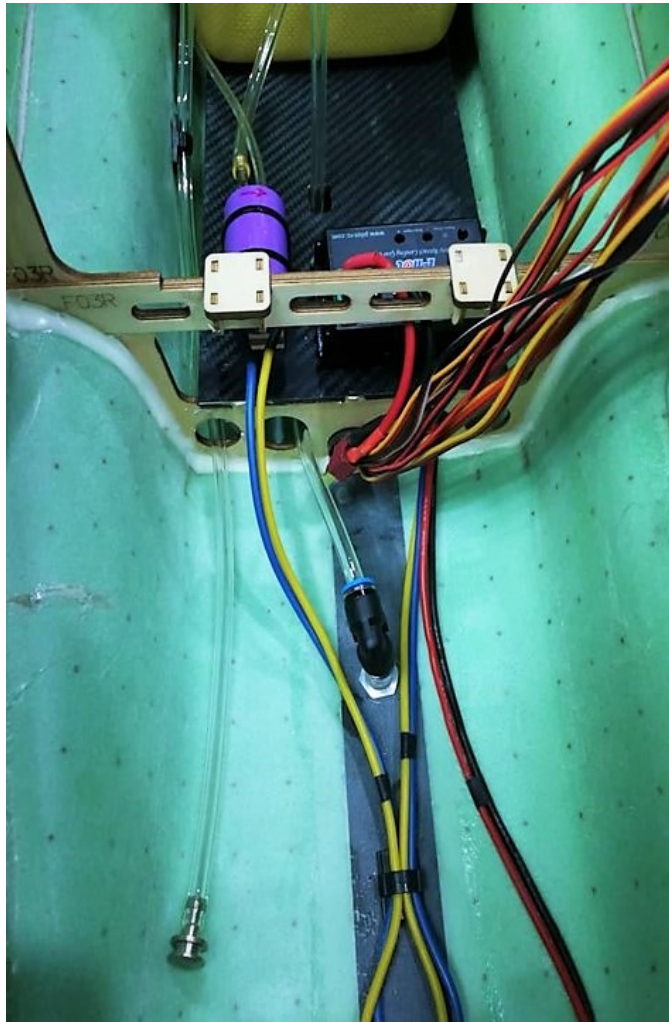


2. Example of provided fuel tank



# Fuel Tank Installation

1.The over flow vent installation



2.Bottom view of the over flow vent, you can connect a taxi tank if you wish to.





## Electronic parts Installation

1. Electric landing gear / brake control box placement.



2. Receiver / Dual BEC Pro installation and placement.



## Battery Installation

Battery install placement. On top of the nose gear.





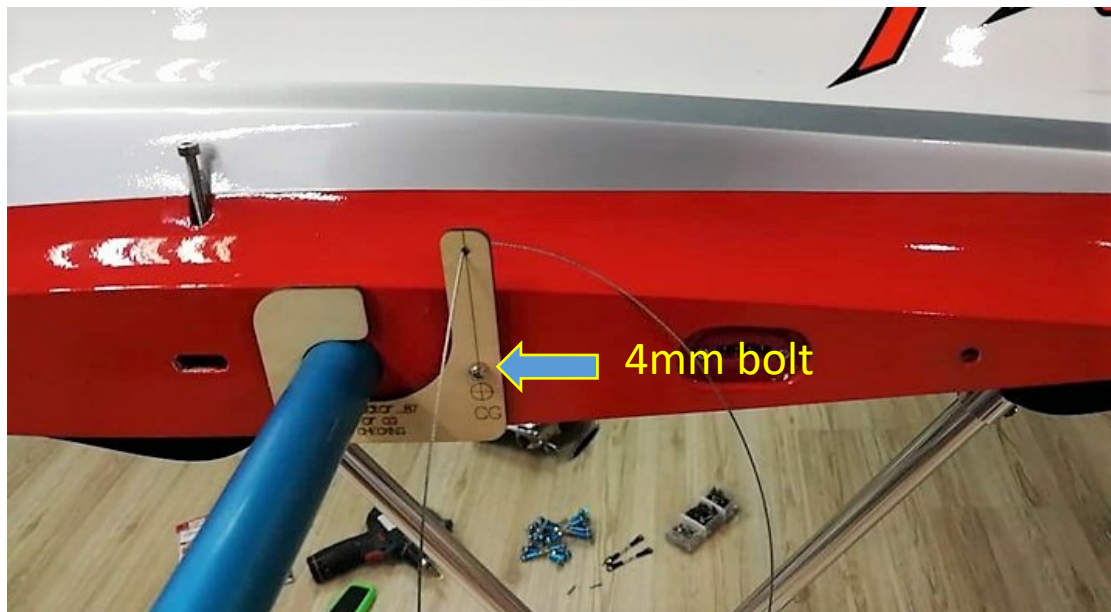
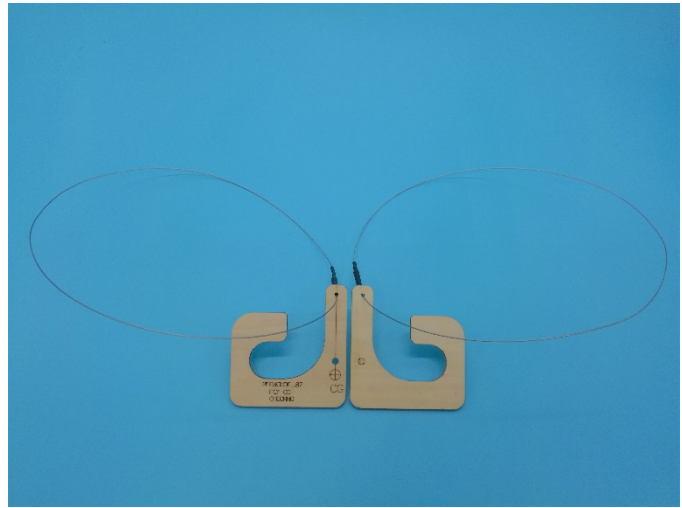
## Checking CG

The predator jet comes with CG measuring tools , very handy to check CG

Please keep no fuel to check the CG.

Click here for the video:  
[https://](https://www.facebook.com/khaitang.wong/videos/1875569852454736/)

[www.facebook.com/khaitang.wong/videos/1875569852454736/](https://www.facebook.com/khaitang.wong/videos/1875569852454736/)



## Flying Setting

**Aileron:** 17mm

**Rudder:** 25mm

**Elevator:** 13mm

**Flaps:**

46mm for **take off**

78mm for **landing**.

**CG:** The CG is 275-283mm from the front leading edge on the root of the wing.



## ***Flight Preparation***

- Make sure you have the right model programmed into your transmitter
- Check the direction of each surface not and also right before you take off .
- Remember nothing wrong on the ground ever improves in the air
- Check the air plane with the engine running and do a range check with
- your body between you and the plane at least 150 feet.
- Check your battery voltage after each flight, in case one servo is draining your battery
- Recheck all screws ,horns and linkages for slop after your maiden flight and check for damage if you made a bad landing you first time
- Have an experienced pilot fly it for you the first time if you have any doubts in your mind about the maiden flight
- Take a break after you first flight and let the adrenaline burned off by bragging to your fellow members how good it flies
- Fly low and at a medium speed on your first few flight
- Listen to your engine run and have an observer with you to remember what you talked about during the flight or if you get into trouble . Always balance your props, vibration is a killer.
- Remember nose heavy airplanes fly all the time, tail heavy airplanes fly only once. Be on the CG!
- Flying two mistakes: high in the beginning and not close to people, planes or runways. Being a center of the runway hog does not endear you to many modelers.

## ***Double Check***

Double check that all screws are installed, all components tightly secured, batteries and or fuel tank are full, all surfaces are working in the correct directions, balance is correct and range test passed before performing your maiden flight.

**WE WISH YOU A SUCCESSFUL MAIDEN AND MANY HAPPY FLIGHTS WITH YOUR  
NEW MODEL**

**Tony Tan, Pilot-RC**

## ***Please note:***

At Pilot-RC we are constantly improving, updating and refining our products and reserve the right to do so without prior notice, always with the best intention to improve our models and accessories.

We do our best to assure that all pictures and descriptions on our website and manuals show the latest version being produced by our factory, however in some cases minor upgrades and changes may not be immediately reflected.

As such we kindly advise to confirm with your dealer the specific details, color scheme and features of the package they have available prior to your purchase.



**Pilot-RC Co, Ltd.**

Address: No.1, Liye Road, Zhongshan city, 528455, Guangdong Province, China

Web: [www.pilot-rc.com](http://www.pilot-rc.com)

Email: [jeane@pilot-rc.com](mailto:jeane@pilot-rc.com)