Warning! This model is not a toy.
It is designed for maximum performance. Please seek advice if one is not familiar with this kind of engine powered precision model. Operating this model without prior preparation may cause injuries. Remember, safety is the most important thing. Always keep this instruction manual at hand for quick reference.

* Specifications are subject to change without notice.*
BEFORE YOU BEGIN

1. Read through the manual before you begin, so you will have an overall idea of what to do.

2. Check all parts. If you find any defective or missing parts contact your local dealer. Please DRY FIT and check for defects for all parts that will require CA or Epoxy for final assembly. Any parts you find to be defective after the gluing process may be difficult to remove for warranty replacement. The manufacturer will replace any defective parts, but will not extend to the parts that are good before gluing to defective parts during assembly. Warranty will not cover any parts modified by customer.

3. Symbols used throughout this instruction manual comprise of the following :-

- **Apply epoxy glue.**
- **Apply instant glue (C.A.glue, super glue.)**
- **Assemble left and right sides the same way.**
- **Ensure smooth non-binding movement while assembling.**
- **Peel off shaded portion covering film.**
- **Cut off shaded portion.**
- **Drill holes with the specified diameter (here: 3mm)**
- **Must be purchased separately!**
- **Pay close attention here!**
- **Warning! Do not overlook this symbol!**
- **Pierce the shaded portion covering film.**

P.1
Parts List

1. MAIN WING -- 1 pair

2. RING Ø2.3mm -- 2 pcs
   WING TUBE Ø9.5x184mm -- 1 pc.

3. PLYWOOD 3x30x94mm (Wing Protection) -- 1 pc.

4. FUEL TUBE Ø6x5mm -- 4 pcs
   CLEVIS -- 2 pcs
   PUSHROD Ø1.8x150mm w/ Threads (For Aileron) -- 2 pcs
   STRAPER -- 2 pcs
   PLYWOOD 3x31x32mm (For Aileron Servo Stand) -- 2 pcs
   PLYWOOD 3x32x60mm (For Aileron Servo) -- 1 pc.

5. FUSELAGE -- 1 pc.
   MAIN LANDING GEAR -- 1 set
   SCREW PM3x10mm -- 3 pcs

6. WHEEL PANTS -- 1 pair
   MAIN WHEEL Ø58mm -- 2 pcs
   SCREW PM3.5x35mm -- 2 pcs
   WASHER d3.5xD8mm -- 4 pcs
   M3.5 NUT -- 6 pcs
   SCREW PAX8mm -- 2 pcs

7. STBAILZER & ELEVATOR -- 1 set

8. SCREW PM2x12mm -- 2 pcs
   HORN -- 1 set

9. VERTICAL FIN & RUDDER -- 1 set

10. TAIL LANDING GEAR -- 1 set
    ALUMINIUM PLATE (For Tail Landing Gear) -- 1 pc.
    TAIL WHEEL Ø23mm -- 1 pc.
    SCREW PM2x12mm -- 3 pcs
    SCREW PA3x12mm -- 2 pcs
    M2 NUT -- 1 pc.
    HORN -- 1 set
    COLLAR Ø2.1mm w/ set screw -- 1 set

11. ENGINE MOUNT 5111030 -- 1 set
    SCREW PM3x22mm -- 4 pcs
    WASHER d3xD7mm -- 4 pcs

12. FUEL TANK 200cc -- 1 set
    BALSA 6x12x113mm (For Fixing Fuel Tank) -- 1 pc.

13. SCREW PM3x25mm -- 4 pcs
    WASHER d3xD7mm -- 8 pcs
    M3 NUT -- 8 pcs
    THROTTLE PUSHWIRE Ø1.2x335mm -- 1 pc.
    w/ Plastic Tube d2xD3x300mm -- 1 pc.

14. COWLING -- 1 set
    TRANSPARENT DUMMY COWLING -- 1 pc.
    SCREW PWA2.6x12mm -- 4 pcs
    SILICON GROMMET d1.5xD6.5mm -- 4 pcs
    SPINNER Ø52mm -- 1 set

15. LINKAGE CONNECTOR Ø2.1mm -- 1 set

16. PLYWOOD 3x8x109.1mm (For Throttle Servo Stand) -- 1 pc.
    SPONGE 10x8x200mm -- 2 pcs
    PLYWOOD 3x8x112mm (For Throttle Servo Stand) -- 1 pc.
    PLYWOOD 3x8x118mm (For Throttle Servo) -- 1 pc.
    PLYWOOD 3x8x106.6mm (For Fuselage Servos Stand) -- 1 pc.
    PLYWOOD 3x8x112.6mm (For Fuselage Servos) -- 1 pc.
    BALSA 6x7x58mm (For Throttle Servo Stand) -- 2 pcs
    BALSA 6x8x58mm (For Fuselage Servos Stand) -- 2 pcs
    FUEL TUBE Ø6x5mm -- 2 pcs
    STRAPER -- 2 pcs
    PUSHROD Ø1.8x335mm w/ Threads (For Elevator & Rudder) -- 2 pcs

17. FUEL TUBE Ø6x5mm -- 2 pcs
    CLEVIS -- 2 pcs

18. SCREW PM4x30mm -- 2 pcs
    WASHER d4xD9mm -- 2 pcs

19. SCREW PWA2.3x8mm -- 4 pcs
    COCKPIT -- 1 pc.
    SILICON GROMMET d1.5xD6.5mm -- 4 pcs

20. SCREW PWA2.3x8mm -- 4 pcs
    SILICON GROMMET d1.5xD6.5mm -- 4 pcs
    CANOPY -- 1 pc.
    DOUBLE-SIDED TAPE Ø8x80mm -- 1 pc.
    PILOT -- 1 pc.

21. DECALS -- 1 set

COVERING:
- TOUGHLON STL100 WHITE
- TOUGHLON STL12 BRIGHT RED
- TOUGHLON STL330 CADMIUM YELLOW
- TOUGHLON STL350 CORSAIR BLUE

P.2
Apply glue to both sides of all surfaces in contact. Use a stick to apply glue to inner side of wing joiner sleeve, and apply glue to wing joiner before putting them together. Wing joiner not glued properly will lead to wing failure and plane crash.

Securely glue together. If coming off during flights, you lose control of your airplane which leads to accidents!

Apply glue to both sides of all surfaces in contact. Use a stick to apply glue to inner side of wing joiner sleeve, and apply glue to wing joiner before putting them together. Wing joiner not glued properly will lead to wing failure and plane crash.

Peel off shaded portion covering film.
4 Ailero Servo

- PM3x10mm Screw
- PM3.5x35mm Screw
- PA3x6mm Screw
- 3.5mm Washer
- M3.5 NUT
- Fuel Tube Ø6x5mm
- Straper
- Clevis Ring

5 Main Landing Gear

- PM3x10mm Screw 3
- Peel off shaded portion covering film.

6 Main Landing Gear

- PM3.5x35mm Screw 2
- PA3x6mm Screw 2
- 3.5mm Washer 4
- M3.5 NUT 6
7 Stabilizer

Temporary install the main wing, adjust leveling of the stabilizer to make it as parallel to the main wing as possible.

8 Elevator

- Ø1mm pilot holes for The Wings Maker tri-horn are pre-drilled. Please look for pin-hole marks at under side of control surfaces.

9 Vertical Fin

Peel off shaded portion covering film.

Securely glue together. If coming off during flights, you lose control of your airplane which leads to accidents!
**10 Rudder**

- **PM2x12mm Screw**: 3
- **PA3x12mm Screw**: 2
- **3mm Set Screw**: 1
- **2.1mm Wheel Collar**: 1
- **M2 NUT**: 1

![Rudder Diagram]

- **PM2x12mm**
- **2.1mm Collar**
- **PA3x12mm**

- Ø1mm pilot holes for The Wings Maker tri-horn are pre-drilled. Please look for pin-hole marks at side of control surfaces.

**11 Engine Mount**

- **PM3x32mm Screw**: 4
- **d2xD4mm Washer**: 4

![Engine Mount Diagram]

- **PM3x32mm**
- **d2xD4mm Washer**
- **Engine Mount PL5111030**

Find the holes for mounting the engine. At the same time determine also the position of the engine mounts on the fuselage, with the engine temporarily mounted.

- **Align the center of the engine with the center of both marks.**

- **With 4-cycle engines, determine the position of the engine mounts ensuring the muffler does not contact the plastic cover.**

**12 Fuel Tank**

- **Install Basla 5x12x113mm (For fixing fuel tank)**
- **Fuel Tank 200cc**

![Fuel Tank Diagram]

With 4-cycle engines, determine the position of the engine mounts ensuring the muffler does not contact the plastic cover.
13 Engine

PM3x25mm Screw (4) 3mm Washer (8) 3mm Nut (8)

Lead the 1.2mm throttle rod through the plastic tube and attach the throttle rod to the throttle lever on the engine.

14 Cowling

PWA2.6x12mm Screw (4) d1.5xD6.5mm Silicon Grommet (4)

Trim the cowling so it will match your engine.

15 Servo Set

LINKAGE CONNECTOR
3x3mm Screw (1) Linkage Connector (1) 2mm Nut (1) 2mm Washer (2)

Included with the radio Set.

Please refer to attached sheet for linkage connector installation.
16 Radio Equipment

- Install and arrange the servo as shown in the diagram.

17 Linkage

- Bottom View

18 Main Wing

- PM4x30mm Screw
- 4mm Washer

P.8
Adjust the wing and fuselage configuration as shown in the diagrams.
Control Throws

Adjust the control throws as shown in the diagram. These throws are good for general flying. You can adjust according to your personal preference.

- **Elevator**: 20mm to 20mm
- **Rudder**: 25mm to 25mm
- **Aileron**: 10mm to 10mm

C.G.

The ideal C.G. position is 80mm (3.15 in) behind the leading edge measured at where the wing meets the fuselage. In order to obtain the C.G. specified, add weight to the fuselage or move the battery position. Check the C.G. before flying.

80mm  
3.15 in

C.G.

Warning!

Important Safety Precautions

# First time flyer should never fly by himself / herself. Assistance from experienced flyer is absolutely necessary.

# Pre-flight adjustment must be done before flying, it is very dangerous to fly a badly pre-adjusted aircraft.

# **EXTRA 300 - 30** is specially designed to be powered by **4C 0.48-0.52 engine (Glow)**, using a more powerful engine does not mean better performance. In fact, over powered engine may cause structural damage and injuries.

# Make sure the air field is spacious, never fly the plane too close to people and never get too close to a running propeller.

# If you find wrinkles on the covering as a result of weather changes, you can use hot iron to remove the wrinkles. Please begin with lower temperature setting and gradually raise the temperature until the wrinkles are gone. Too hot an iron may damage the covering.

# Check and re-tighten up all factory assembled screws, use thread locker if applicable.