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

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing Span</td>
<td>67 in / 1700 mm</td>
</tr>
<tr>
<td>Wing Area</td>
<td>854 sq in / 55.1 sq dm</td>
</tr>
<tr>
<td>Flying Weight</td>
<td>8.2 lbs / 3700 g</td>
</tr>
<tr>
<td>Fuselage Length</td>
<td>67.5 in / 1710 mm</td>
</tr>
</tbody>
</table>

* 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:

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

1. **MAIN WING** -- 1 pair
   - **WING TUBE Ø16x479mm** -- 1 pc.

2. **WING TUBE Ø16x479mm** -- 1 pc.
   - **SCREW PM2x22mm** -- 4 pcs
   - **PUSHROD Ø1.8x140mm w/ Threads (For Aileron)** -- 2 pcs
   - **HORN** -- 2 sets
   - **CLEVIS** -- 2 pcs
   - **STRAPER** -- 2 pcs
   - **FUEL TUBE Ø6x5mm** -- 4 pcs

3. **LINKAGE CONNECTOR Ø2.1mm** -- 2 sets
   - **STABILIZER & ELEVATOR** -- 1 set
   - **STABILIZER TUBE Ø9.5x345mm** -- 1 pc.
   - **SCREW PA3x12mm** -- 2 pcs
   - **WIRE Ø3x180mm** -- 1 pc.

4. **VERTICAL FIN & RUDDER** -- 1 set
   - **TAIL LANDING GEAR Ø2.5mm** -- 1 set
   - **SCREW PA3x12mm** -- 2 pcs
   - **COPPER TUBE d2.5xD3.2x8mm** -- 2 pcs
   - **SPOON 60x70x90mm** -- 1 pc.
   - **FUEL TUBE Ø6x5mm** -- 1 pc.
   - **STRAPER** -- 1 pc.

5. **FUSELAGE** -- 1 set
   - **SPOON 60x70x90mm** -- 1 pc.
   - **FUEL TUBE Ø6x5mm** -- 1 pc.
   - **STRAPER** -- 1 pc.

6. **Belly Pan** -- 1 pc.
   - **SCREW PM2x20mm** -- 2 pcs
   - **COPPER TUBE d2.5xD3.2x8mm** -- 2 pcs

7. **FUSELAGE** -- 1 set
   - **FUEL TUBE Ø6x5mm** -- 1 pc.
   - **WINCH** -- 1 pc.
   - **PUSHROD Ø1.8x900mm w/ Threads (For Elevator)** -- 1 pc.

8. **ENGINE MOUNT (PL511080)** -- 1 set
   - **SCREW PM4x25mm** -- 4 pcs
   - **FUEL TANK 380CC** -- 1 set
   - **Balsa 8x8x92mm (For Fixing Fuel Tank)** -- 1 pc.

9. **COWLING** -- 1 pc.
   - **UNDER COWLING** -- 1 pc.
   - **SPINNER (w/alu.back plate Ø70mm)** -- 1 set

10. **DECALS** -- 1 set
    - **TOUGHLON STL 313 PINK**
    - **TOUGHLON STL 330 ORANGE YELLOW**
    - **TOUGHLON STL 201 BLACK**
    - **TOUGHLON STL 311 CUB YELLOW**
    - **TOUGHLON STL 100 WHITE**

11. **COVERING**
    - **TOUGHLON STL 204 CREAM**
    - **TOUGHLON STL 201 BLACK**
    - **TOUGHLON STL 100 WHITE**

12. **THROTTLE PUSHWIRE Ø1.2x530mm** -- 1 pc.
    - **PLASTIC TUBE d2x3x150mm** -- 1 pc.
    - **ALUMINUM PLATE (For Engine Mount)** -- 1 pc.
    - **ANTI-VIBRATION MOUNT 4C-91** -- 1 set
    - **INCLUDE: SOCKET HEAD SCREW M4x35mm** -- 4 pcs
    - **SCREW KM3x20mm** -- 8 pcs
    - **WASHER d4x12mm** -- 8 pcs
    - **M3 NYLON INSERT LOCK NUT** -- 8 pcs
    - **M4 NYLON INSERT LOCK NUT** -- 4 pcs

13. **LINKAGE CONNECTOR Ø2.1mm** -- 1 set
    - **FUEL TUBE Ø6x5mm** -- 1 pc.
    - **STRAPER** -- 1 pc.

14. **CANOPY** -- 1 pc.
    - **SCREW PWA2.3x8mm** -- 6 pcs
    - **SILICON GROMMET d1.5xD6.5mm** -- 6 pcs

15. **DECALS** -- 1 set
    - **A247DEC**

16. **COVERING**
    - **TOUGHLON STL 313 PINK**
    - **TOUGHLON STL 330 ORANGE YELLOW**
    - **TOUGHLON STL 201 BLACK**
    - **TOUGHLON STL 311 CUB YELLOW**
    - **TOUGHLON STL 100 WHITE**

17. **LINKAGE CONNECTOR Ø2.1mm** -- 2 sets
    - **FUSELAGE** -- 1 set
    - **STABILIZER & ELEVATOR** -- 1 set
    - **STABILIZER TUBE Ø9.5x345mm** -- 1 pc.
    - **SCREW PA3x12mm** -- 2 pcs
    - **WIRE Ø3x180mm** -- 1 pc.

18. **DECALS** -- 1 set
    - **A247DEC**

19. **COVERING**
    - **TOUGHLON STL 313 PINK**
    - **TOUGHLON STL 204 CREAM**
    - **TOUGHLON STL 330 ORANGE YELLOW**
    - **TOUGHLON STL 201 BLACK**
    - **TOUGHLON STL 311 CUB YELLOW**
    - **TOUGHLON STL 100 WHITE**
1 Main Wing

- Apply instant type CA glue to both sides of each hinge.

2 Main Wing

- Please apply glue to all surfaces of wing tube.

Wing Tube $\Omega 16 \times 479 \text{mm}$

Completed
3 Aileron Servo

- PM2 x 22mm Screw (4)
- L/R

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

4 Retractable Landing Gear Servo

- Adjuster
  - 3 x 3mm Set Screw (4)
  - Linkage Connector (2)
  - M2 Nut (2)
  - 2mm Washer (4)

- To L-side
- To R-side
- Wheels down Position
- Wheels up position

5 Stabilizer / Elevator

- PA3 x 12mm Screw (2)
- d3 x D7mm Washer (2)

- Apply instant type CA glue to both sides of each hinge.
6 Vertical Fin / Rudder

- Apply instant type CA glue to both sides of each hinge.

7 Tail Landing Gear

PA3x12mm Screw 2
2.6mm Collar 1

8 Rudder Pullwire

PM2x20mm Screw 2
M2 Nut 2

ø1mm pilot holes for World Models tri-horn are pre-drilled. Please look for pin-hole marks at side of control surfaces.
9 Elevator Pushrod

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

PM 2 x18 mm Screw (4)

10 Engine Mount

- Apply thread locker to screws

- Blind nuts are off-centered to keep the spinner at the fuselage axis.

PM4 x25mm Screw (4)

11 Fuel Tank

- Bottom View

- Install Balsa 8x8x92mm (For fixing fuel tank)
12 Engine

ANTI-VIBRATION MOUNT INSTALLATION

KM3x20mm

Make sure the rounded edges are facing the shock absorbing SILICON PAD.

M3 Nylon Insert Lock Nut

• Install Engine position

137mm 5.39 in.

M3 Nylon Insert Lock Nut

13 Servo Set

3 x 3mm Set Screw 1
Linkage Connector 1
M2 Nut 1
2mm Washer 2

3x3mm Set Screw

Included with the radio Set.

Throttle Pushwire

2mm Washer

2mm Washer

M2 Nut

Throttle Servo.

N.I.

N.I.

Please refer to attached sheet for linkage connector installation.
Install and arrange the servo as shown in the diagram.

14 Radio Equipment

PM4 x45mm Screw 2
2 x 14.5mm Washer 2

15 Main Wing

Press down the center 1/3 portion.
16 Canopy

- First insert the grommet to the canopy then apply screw.

- Apply double-sided tape

PWA2.3 x 8mm Screw
- 6

d1.5 x D6.5 mm Silicon Grommet
- 6

L/R

17 Cowling

- First insert the grommet to the cowling then apply screw.

- Apply double-sided tape

PWA2.6 x 12mm Screw
- 6

PWA2.3 x 8mm Screw
- 6

d1.5 x D6.5 mm Silicon Grommet
- 12

L/R

Completed

Silicon Grommet
d1.5xD6.5mm

PWA2.3 x 8 mm

Silicon Grommet
d1.5xD6.5mm

PWA2.6 x 12mm

Spinner

Completed

L/R
18 Wing Setting

- Adjust the wing and fuselage configuration as shown in the diagrams.

<table>
<thead>
<tr>
<th>A = A'</th>
</tr>
</thead>
<tbody>
<tr>
<td>B = B'</td>
</tr>
<tr>
<td>C = C'</td>
</tr>
</tbody>
</table>

TO INCREASE INCIDENCE ANGLE, LOOSE BOTTOM SET SCREW AND THEN TIGHTEN TOP SET SCREW. TO REDUCE INCIDENCE ANGLE, LOOSE TOP SET SCREW AND THEN TIGHTEN BOTTOM SET SCREW. DON'T OVER TIGHTEN SET SCREWS AS THE INCIDENCE ANGLE ADJUSTER ARE MADE OF PLASTICS.

Stabilizer Setting

M3X6mm Set Screw

TO INCREASE INCIDENCE ANGLE, LOOSE BOTTOM SET SCREW AND THEN TIGHTEN TOP SET SCREW. TO REDUCE INCIDENCE ANGLE, LOOSE TOP SET SCREW AND THEN TIGHTEN BOTTOM SET SCREW. DON'T OVER TIGHTEN SET SCREWS AS THE INCIDENCE ANGLE ADJUSTER ARE MADE OF PLASTICS.
**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.

# **AeroPet 90** is specially designed to be powered by 4c 0.91–1.10 engine, using a more powerful engine does not mean better performance. In fact, over powered engine may cause severe 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.
After fastening the round nut, make sure that the linkage connector can rotate freely.

Drill 2mm hole at servo horn.

Insert linkage connector into servo horn.

Make sure shoulder of screw is cleared from servo horn. Add washer to reduce play if necessary.

Tighten up the round nut against the shoulder. Apply CA or permanent thread locker.

Product Registration Form (US Customers)
We would like to share with you any relevant information regarding your model, including product news and free upgrade parts when applicable. Please fill in the following and send to AirBorne Models, 4749-K, Bennett Drive, Livermore, CA 94551 USA.

1. Name:

2. Address:

3. Phone #: E-mail:

4. Model:

   Wing QC# _______ Fuselage QC# ______________________
   (QC numbers are stamped on wing and fuselage)

5. Date of Purchase:

6. Store Name:

Please call AirBorne Models at 925 371 0922 for any assistance in filling this form. Thank you very much for purchasing our product.
Ducted Fan Pattern
Warbirds Funfly
Scale Electric
Sports Glider
Trainer Boat
Accessories
Covering
(Lightex / Toughlon)