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

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing Span</td>
<td>63.0 in / 1600 mm</td>
</tr>
<tr>
<td>Wing Area</td>
<td>620 sq in / 40 sq dm</td>
</tr>
<tr>
<td>Flying Weight</td>
<td>5.5 lbs / 2500 g</td>
</tr>
<tr>
<td>Fuselage Length</td>
<td>47.0 in / 1200 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.
- ****: Pierce the shaded portion covering film.
- **3mm**: Drill holes with the specified diameter (here: 3mm).
- ****: Pay close attention here!
- **Warning **: Do not overlook this symbol!
# Parts List

1. **MAIN WING** -- 1 pair
2. **SCREW PWA2x8mm** -- 8 pcs
   - PLYWOOD 2x52x80mm (For Aileron Servo) -- 1 pair
   - BALSA 8x18x21mm (For Aileron Servo) -- 4 pcs
3. **SCREW PB2x16mm** -- 6 pcs
   - FUEL TUBE Ø6x5mm -- 4 pcs
   - CLEVIS (L) -- 2 pcs
   - STRAPER (L) -- 2 pcs
   - TRI-HORN M3x14mm (S) -- 2 sets
   - PUSHROD Ø1.8x100mm w/ Threads (For Aileron) -- 2 pcs
4. **PLYWOOD 2x30x120mm (Wing Protection)** -- 1 pc.
   - WING TUBE Ø9.6x246mm -- 1 pc.
5. **SCREW HM3x18mm** -- 4 pcs
   - MAIN WING STRUTS -- 1 pair
6. **FUSELAGE** -- 1 pc.
   - VERTICAL FIN & RUDDER -- 1 set
   - STABILIZER & ELEVATOR -- 1 set
7. **SCREW PA3x12mm** -- 2 pcs
   - TAIL LANDING GEAR -- 1 set
   - TAIL WHEEL Ø25mm -- 1 pc.
   - COLLAR Ø2.1mm w/ set screw -- 1 set
   - SCREW PM2x12mm -- 1 pc.
   - M2 NUT -- 1 pc.
   - ALUMINUM PLATE 0.5mm -- 1 pc.
8. **ENGINE MOUNT PL5111050** -- 1 set
   - SOCKET HEAD SCREW M4x25mm -- 4 pcs
   - WASHER d4xD9mm -- 4 pcs
9. **SOCKET HEAD SCREW M3x25mm** -- 4 pcs
   - WASHER d3xD7mm -- 8 pcs
   - M3 NUT -- 8 pcs
   - THROTTLE PUSH WIRE Ø1.2x340mm -- 1 pc.
   - Plastic Tube d2xD3x250mm -- 1 pc.
10. **FUEL TANK 260cc** -- 1 set
    - CABLE TIE (For Fuel Tank) 1.5x4x400mm -- 1 pc.
    - DOUBLE-SIDED TAPE 40x80mm -- 1 pc.
11. **SCREW HM3x16mm** -- 2 pcs
    - SCREW PA3x8mm -- 6 pcs
    - WASHER d3xD7mm -- 2 pcs
    - M3 NUT -- 2 pcs
    - ALUMINUM PLATE 1.5mm -- 2 pcs
    - MAIN LANDING GEAR -- 1 set
    - MOUNTING PLATE 12x20mm -- 4 pcs
12. **SCREW PA1.7x8mm** -- 6 pcs
    - MAIN WHEEL PL3112080 -- 2 sets
    - COLLAR Ø3.3mm w/ set screw -- 4 sets
    - SCREW PM2x8mm -- 6 pcs
    - WASHER d2xD5mm -- 6 pcs
    - M2 NUT -- 6 pcs
    - COPPER PLATE 0.5mm -- 6 pcs
    - BALSA 2x102x113mm (Main Landing Gear Cover) -- 1 pair
13. **SCREW PWA2.3x8mm** -- 4 pcs
    - WIND SHIELD -- 1 pc.
    - SILICON GROMMET Ø1.5x6.5mm -- 4 pcs
    - SIDE WINDOWS -- 1 pair
14. **COWLING** -- 1 pc.
    - TRANSPARENT 3D TEMPLATE -- 1 pc.
    - SCREW PWA2.6x12mm -- 4 pcs
    - SILICON GROMMET Ø1.5x6.5mm -- 4 pcs
    - DUMMY ENGINE COVER -- 1 pair
15. **LINKAGE CONNECTOR Ø2.1mm** -- 1 set
16. **SCREW PB2x12mm** -- 9 pcs
    - FUEL TUBE Ø6x5mm -- 3 pcs
    - CLEVIS (L) -- 3 pcs
    - TRI-HORN M3x14mm (S) -- 3 sets
    - PUSH ROD Ø1.8x735mm w/ Threads (For Rudder) -- 1 pc.
    - PUSH ROD Ø1.8x645mm w/ Threads (For Elevator) -- 2 pcs
17. **PUSH ROD Ø1.8x115mm** (For Elevator) -- 1 pc.
    - PUSH ROD CONNECTOR 4x9x20mm -- 1 set
    - SPONGE 70x90x105mm -- 1 pc.
    - PLYWOOD 3x57x115mm (For Fuselage Servos) -- 1 pc.
    - BALSA 6x8x108mm (For Fuselage Servos Stand) -- 2 pcs
    - STRAPER -- 2 pcs
    - FUEL TUBE Ø6x5mm -- 2 pcs
18. **PILOT (PC001063B)** -- 1 pc.
    - BALSA 3x45x108mm (For Pilot) -- 1 pc.
    - BALSA 6x8x45mm (For Pilot Stand) -- 2 pcs
    - SCREW PWA2x8mm -- 4 pcs
19. **SCREW HM4x30mm** -- 2 pcs
    - WASHER d4xD15mm -- 2 pcs
    - SCREW HM3x10mm -- 2 pcs
    - M3 NYLON INSERT LOCK NUT -- 2 pcs
20. **DECALS:** A001CDEC -- 1 set

---

**COVERING:**
- TOUGH LON STL251 SKY BLUE
- TOUGH LON STL312 BRIGHT RED
- LIGHTEX SGX100 WHITE
1 Main Wing

Aileron Servo Lead

Pre-glued

Bottom View

2 Main Wing

PWA2X8mm Screw

8

PWA2x8mm

Balsa 8x18x21mm

Make a slot into the hatch for the servo horn to come out.

Plywood 2x50x80mm

Bottom View

3 Main Wing

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

PB2x16mm Screw

6

PB 2x16mm

Clevis

Fuel Tube Ø6x5mm

Tri-horn M3x14mm

Straper

Bottom View

TWM PL8210010 CLEVIS WRENCH

Aileron Servo Lead

Bottom View

L/R

Bottom View

L/R

Bottom View

L/R

P.3
Join the wing halves by using the aluminium tube supplied. Strengthen both holes for the screws with a piece of plywood.

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

Make sure vertical fin and stabilizer are at right angles.
7 Tail Landing Gear

- PA3x12mm Screw: 2
- 3mm Set Screw: 1
- 2mm Collar: 1
- PM2x12mm Screw: 1
- M2 Nut: 1

8 Engine Mount

- M4x25mm Socket Head Screw: 4
- d4xD9mm Washer: 4

9 Engine

- M3x25mm Socket Head Screw: 4
- d3xD7mm Washer: 8
- M3 Nut: 8

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

Top View

Installed Engine position

M3 x 25mm Washer

d3xD7mm Washer
**13 Canopy**

- PWA2.3x8mm Screw: 4
- d1.5x6.5mm Silicon Grommet: 4

- Securely glue the windows to the fuselage.

**14 Cowling**

- PWA2.6x12mm Screw: 4
- d1.5x6.5mm Silicon Grommet: 4

- Trim the cowling for the engine head to project.

**15 Servo Set**

- 3x3mm Set Screw: 1
- Linkage Connector: 1
- M2 Nut: 1
- 2mm Washer: 2

- Please refer to attached sheet for linkage connector installation.

- 3x3mm Set Screw: Included with the radio Set.
16 Rudder & Elevator Pushrod

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

Set the pushrods as shown in the diagram.

17 Radio Equipment

- Install and arrange the servos as shown in the diagram.
18 Cockpit

PWA2x8mm Screw

1.5mm

PWA2x8mm

PC001063B

Balsa
3x45x108mm

1.5mm

18

PWA2x8mm Screw

PWA2x8mm

1.5mm

18

PWA2x8mm Screw

Balsa
6x8x45mm

19 Main Wing/Wing Struts

HM x 30mm Screw

d4xD15mm Washer

2

HM x 30mm Screw

d4xD15mm Washer

2

HM x 10mm Screw

M3 Nylon Insert Lock Nut

2

M3 Nylon Insert Lock Nut

Balsa
3x45x108mm

Balsa
6x8x45mm

P.9
**20 Wing Setting**

In order to obtain the wing and fuselage configuration as in the diagrams, insert shim plates between the wing and fuselage if necessary.

- **C = C’**
- **D = D’**

![Diagram showing wing setting](image)

![Diagram showing main wing attachment](image)

**21 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.

- **Rudder**
  - 25mm
  - 25mm

- **Elevator**
  - 20mm
  - 20mm

- **Aileron**
  - 10mm
  - 10mm

![Diagram showing control throws](image)

**22 C.G.**

The ideal C.G. position is **70mm (2.76 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.

![Diagram showing C.G. position](image)
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.

#CLIPPED WING CUB - 48C is specially designed to be powered by 2C 40-46 or 4C 52-56 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 necessary.
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.

A001CPO23321005
Usage of the transparent 3D template

This transparent 3D template is used for position guidance of the actual cutting of the pre-painted cowling.

1. 
2. 
3. 
4. 

Simply cut the transparent 3D template to fit your engine and exhaust pipe, then slide onto the actual cowling and use as template to mark the openings required for final cutting.
Optional Parts

(ACCESSORIES)

180mm Extension

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>KW0011800</td>
<td>180mm</td>
<td>1 set</td>
</tr>
</tbody>
</table>

180mm Y-Cord

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>KW0021800</td>
<td>180mm</td>
<td>1 pc</td>
</tr>
</tbody>
</table>

Clevis Wrench

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL8210010</td>
<td>1 set</td>
<td></td>
</tr>
</tbody>
</table>

Special tool for clevis installation. Suitable for standard and small (EP) clevis.

Field Stand

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS9111450</td>
<td>600X240X350mm</td>
<td>1 pc</td>
</tr>
</tbody>
</table>

Charge Receptacles

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>KP0041300</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Ducted Fan

Pattern

Warbirds

Funfly

Scale

Electric

Sports

Glider

Trainer

Boat

Accessories

Covering

(Lightex /oughlon)