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.

50cc gasoline engine

Requires: 6-channel radio w/ 9 high torque servos

Specifications

- Wing Span: 108 in / 2745 mm
- Wing Area: 1575 sq in / 101.6 sq dm
- Flying Weight: 21 lb / 9.5 kg
- Fuselage Length: 84.5 in / 2145 mm

*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.)
- Apply thread locker
- Must be purchased separately!
- 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).
- Pierce the shaded portion covering film.
- Pay close attention here!
- Do not overlook this symbol!
Parts List

1. MAIN WING -- 1 pair

2. SOCKET HEAD SCREW M4x60mm -- 4 pcs
   SCREW PWA2x8mm -- 24 pcs
   M4 NYLON INSERT LOCK NUT -- 4 pcs
   PUSHROD M3x95mm w/ Threads(For Aileron) -- 2 pcs
   PUSHROD M3x86mm w/ Threads(For Flap) -- 2 pcs
   HEAVY DUTY CLEVIS PL4112200 -- 8 sets
   HEAVY DUTY SERVO HORN BRACKET PL4120300 -- 4 sets
   HEAVY DUTY HORN BRACKET PL4112400 -- 2 sets
   SWIVEL CLEVIS HORN FAIRING PL4610010 -- 4 sets
   SERVO MOUNTING PANEL PL5310010(For Aileron) -- 1 pair
   SERVO MOUNTING PANEL PL5310010(For Flap) -- 2 pcs
   WASHER d5xD12mm -- 4 pcs
   WASHER d5xD12mm -- 4 pcs
   M5 NYLON INSERT LOCK NUT -- 4 pcs
   PUSHROD Ø1.8x480mm (For Throttle) -- 1 pc.
   PLASTIC TUBE d2xO3x160mm (For Throttle) -- 1 pc.
   WASHER d5xD12mm -- 4 pcs
   M5 BLIND NUT -- 4 pcs
   PUSHROD Ø1.6x480mm (For Throttle) -- 1 pc.
   PLASTIC TUBE d2xO3x160mm (For Throttle) -- 1 pc.
   WASHER d5xD12mm -- 4 pcs

3. STABILIZER & ELEVATOR -- 1 set

4. SOCKET HEAD SCREW M4x55mm -- 2 pcs
   M4 NYLON INSERT LOCK NUT -- 2 pcs
   PUSHROD M3x185mm w/ Threads(For Elevator) -- 2 sets
   HEAVY DUTY CLEVIS PL4112200 -- 4 sets
   HEAVY DUTY SERVO HORN PL4120300 -- 2 sets
   SWIVEL CLEVIS HORN FAIRING PL4610010 -- 2 sets
   HEAVY DUTY HORN BRACKET PL4112400 -- 2 sets

5. VERTICAL FIN & RUDDER -- 1 set

6. SOCKET HEAD SCREW M4x60mm -- 1 pc.
   M4 NYLON INSERT LOCK NUT -- 1 pc.
   SWIVEL CLEVIS HORN FAIRING PL4610020 -- 1 set
   HEAVY DUTY CLEVIS PL4112200 -- 2 sets
   HEAVY DUTY SERVO HORN PL4120300 -- 1 set
   HEAVY DUTY HORN BRACKET PL4112400 -- 1 set
   SERVO MOUNTING PANEL PL5310010(For Rudder) -- 1 pc.
   PUSHROD M3x45mm w/ Threads(For Rudder) -- 1 pc.
   SCREW PWA2x8mm -- 4 pcs
   SCREW PWA2x12mm -- 4 pcs
   SCREW PA2x12mm -- 4 pcs
   SCREW PM2x14mm -- 8 pcs
   SCREW PM3x16mm -- 4 pcs
   SCREW KA2.3x8mm -- 10 pcs
   SPINNER Ø82mm -- 1 set
   SCREW PWA2.3x12mm -- 4 pcs
   AIR SCOOP -- 1 set
   WING TUBE Ø25.4x917mm -- 1 pc.
   WING TUBE Ø14.5x907mm -- 1 pc.
   SELF-TIGHTENING LATCHING PIN PL9120010 -- 2 pcs
   SELF-TIGHTENING LATCHING PIN PL9120020 -- 2 pcs
   WIRE Ø0.8mm -- 2 pair
   SET SCREW M3x8mm -- 4 pcs
   SELF-TIGHTENING LATCHING PIN PL9120010 -- 2 pcs
   SELF-TIGHTENING LATCHING PIN PL9120020 -- 2 pcs
   WIRE Ø0.8mm -- 2 pair
   SET SCREW M3x8mm -- 4 pcs
   SELF-TIGHTENING LATCHING PIN PL9120010 -- 2 pcs
   SELF-TIGHTENING LATCHING PIN PL9120020 -- 2 pcs
   WIRE Ø0.8mm -- 2 pair
   SET SCREW M3x8mm -- 4 pcs

7. FRONT LANDING GEAR -- 1 set

8. MAIN LANDING GEAR -- 1 pair
   MAIN LANDING GEAR COVER -- 1 pair
   SOCKET HEAD SCREW M5x25mm -- 6 pcs
   SOCKET HEAD SCREW M5x65mm -- 2 pcs
   LARGE SCALE THREADED INFLATABLE WHEELS Ø118mm -- 1 pair
   SOCKET HEAD SCREW M3x10mm -- 4 pcs
   WASHER d5xD12mm -- 10 pcs
   COLLAR Ø5.1mm w/ set screw -- 4 sets
   M5 NYLON INSERT LOCK NUT -- 4 pcs
   M5 BLIND NUT -- 4 pcs
   PLATE 26x64x1mm -- 2 pcs
   SCREW PWA3x8mm -- 4 pcs
   PLATE 26x64x1mm -- 2 pcs
   SCREW PWA3x8mm -- 4 pcs

9. SOCKET HEAD SCREW M5x50mm -- 4 pcs
   SOCKET HEAD SCREW M5x50mm -- 4 pcs
   PUSHROD Ø1.6x480mm (For Throttle) -- 1 pc.
   PLASTIC TUBE d2xO3x160mm (For Throttle) -- 1 pc.
   WASHER d5xD12mm -- 4 pcs
   M5 BLIND NUT -- 4 pcs

10. FUEL TANK 800cc PL1111810G -- 1 set
    CABLE TIE (For Fuel Tank) 1.5x8x500mm -- 1 pc.
    DOUBLE-SIDED TAPE 40x160mm -- 1 pc.
    INSTRUMENT PANEL -- 1 pc.

11. LINKAGE CONNECTOR Ø2.1mm -- 2 sets

12. SPONGE 10x80x200mm (For Radio Equipment) -- 2 pcs

13. WIND SHIELD & SIDE WINDOWS -- 1 set

14. PILOT PC001102A -- 2 sets
    SCREW PM2x12mm -- 8 pcs
    M2 NYLON INSERT LOCK NUT -- 1 pc.
    MOUNTING PLATE PL4114015 -- 1 pc.
    SEAT -- 4 pcs
    BALSA 245x239x3mm (For Pilot Stand) -- 1 pc.

15. COWLING -- 1 set
    TRANSPARENT 3D TEMPLATE -- 1 pc.
    QUICK RELEASE NYLON RIVET PL1208042 -- 10 pcs
    SCREW KA2.3x8mm -- 10 pcs
    SCREW PA3x12mm -- 8 pcs
    GROMMET d2.5x8.5mm PL1285035 -- 8 pcs
    WASHER d3xD7mm -- 8 pcs
    SPINNER Ø82mm -- 1 set
    SCREW PWA2.3x12mm -- 4 pcs
    AIR SCOOP -- 1 set

16. PILOT PC001102A -- 2 sets

17. MAIN WING STRUT -- 1 pair
    SCREW PM3x16mm -- 4 pcs
    SCREW PM2x14mm -- 8 pcs
    M2 NYLON INSERT LOCK NUT -- 8 pcs
    WASHER d3xD7mm -- 12 pcs
    MAIN WING STRUT COVER -- 1 set

18. ANTENNA -- 1 pair
    ORNAMENT -- 1 set
    SCREW PA2x12mm -- 4 pcs

19. DECALS: A306DEC -- 1 set

COVERING:

TOUGHON STL100 WHITE
LIGHTEX SGX 201 BLACK
LIGHTEX SGX 580 PEARL BRONZE
LIGHTEX SGX 350 CORSAIR BLUE
LIGHTEX SGX 100 WHITE

P.2
1. Main Wing

Aileron Servo Lead

Bottom View

2. Aileron & Flap Servos

M4x60mm Socket Head Screw 4
PWA2x8mm Screw 24
M4 Nylon Insert Lock Nut 4

M2 Nylon Insert Lock Nut

Heavy Duty Clevis

M2 x 10mm

Pushrod

Heavy Duty Horn Bracket

M2 Nylon Insert Lock Nut

Heavy Duty Clevis

Pushrod

M4 x 60mm

Pushrod w/ Threads M3x86mm

Lamp Cover

Lamp

M4x60mm Socket Head Screw
PL4120300

M2 x 10mm

Signal Lamp Wire Lead

M2 Nut

M2 Nut

PL4120300

Lamp Cover

M2 x 8mm

Socket Head Screw

M2 x 8mm

Socket Head Screw

Completed
### 3 Stabilizer & Elevator

**Screw**
- PA3x12mm
- d3xD7mm

**Washer**
- 2

**Completed**

### 4 Elevator Pushrod

**Socket Head Screw**
- M4x55mm
- M4 Nylon Insert Lock Nut

**M4 Nylon Insert Lock Nut**
- 2

**Heavy Duty Horn Bracket**

**Heavy Duty Clevis**

**M2 Nylon Insert Lock Nut**

**Elevator Pushrod**
- M3 x 185mm
- M2 x 10mm
- M4 x 55mm
- PA1.7 x 8mm

**Heavy Duty Clevis**

**M2 x 10mm**

**M2 Nylon Insert Lock Nut**

**Bottom View**

---

**The World Models Manufacturing Co., LTD.**

www.theworldmodels.com
5 Vertical Fin & Rudder

6 Rudder Pushrod

- PWA2x8 mm Screw
- M4x60 mm Socket Head Screw
- M4 Nylon Insert Lock Nut

C = C'

M2 x 10 mm
PWA2 x 8 mm
M2 x 8 mm
Socket Head Screw
M2 Nut
M2 Nylon Insert Lock Nut
M2 x 10 mm
Heavy Duty Clevis
M2 x 10 mm
PA1.7 x 8 mm
M4 x 60 mm
M4 Nylon Insert Lock Nut

Rudder Pushrod M3 x 45 mm

- Remove coverings for all surfaces in contact before applying A/B epoxy glue.

N.I. Signal Lamp Wire Lead
Vertical Fin’s Wing 6x65x85 mm

N.I. Signal Lamp

Completed
## Front Landing Gear

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
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</thead>
<tbody>
<tr>
<td>5.6 mm Collar</td>
<td>4</td>
</tr>
<tr>
<td>M4x4mm Set Screw</td>
<td>9</td>
</tr>
<tr>
<td>PA3x25mm Screw</td>
<td>4</td>
</tr>
<tr>
<td>PA3x30mm Screw</td>
<td>4</td>
</tr>
</tbody>
</table>

1. Assembly of the Front Landing Gear components.

2. Installation of M4x4mm Set Screws.

3. Assembly of the steering arm with PA3x25mm and M4x4mm Set Screws.

4. Connection of the steering pushrod with M4x4mm Set Screws.

5. Installation of the nose wheel steering pushrod with 5.6 mm Collar and PA3x30mm Screws.

6. Completed installation of the Front Landing Gear.
8 Main Landing Gear

- **M5x25mm Socket Head Screw**: 6
- **M5x65mm Socket Head Screw**: 2
- **M3x10mm Socket Head Screw**: 4
- **PWA3x8mm Screw**: 4
- **d5xD12mm Washer**: 10
- **5.1mm Collar**: 4
- **M5 Nut**: 2

Front View

- **M5 x 25 mm**: 4
- **d5 x D12 mm Washer**:

Bottom View

- **Wheel Ø118mm**:
- **M3x3mm Set Screw**:
- **M5x65mm**:
- **Plate 1mm**:
- **M5 Nut**: 5.1mm

Completed View

- **M3x 10 mm**:
- **PWA3x 8 mm**:

9 Engine

- **M5x50mm Socket Head Screw**: 4
- **d5xD12mm Washer**: 4
- **M5 Blind Nut**: 4

Engine View

- **d5xD12mm Washer**:
- **M5 Blind Nut**:
- **Plastic Tube d2xD3x160mm**:
- **Throttle Pushrod Ø1.8x480mm**
10 Fuel Tank

Fuel Tank 800cc

11 Servo Set

3x3mm Set Screw 2
Linkage Connector 2
M2 Nut 2
2mm Washer 4

3x3mm Set Screw
Throttle Pushwire

N.I.

Throttle Servo.

Please refer to the attached sheet for linkage connector installation.

12 Radio Equipment

Install and arrange the servos as shown in the diagram.

Front

Nose Wheel Servo N.I.
Sponge
Battery N.I.
Receiver N.I.

Plastic Tube d2.5xD4x160mm

Nose Wheel Steering Pushrod Ø1.8x285mm

Throttle Pushrod Ø1.8x480mm

Throttle Servo N.I.
13 Canopy

First insert the grommet to the cowling then apply screw. Please refer to the attached sheet for usage of the transparent 3D template.

14 Pilot

15 Cowling
16 Main Wing

- **M3 x 8mm Set Screw**: 4

Wire Ø0.8mm
Set Screw M3x8mm

Self Tightening Wing Latch
Set Screw M3x8mm

Wing Tube Ø25.4 x 917mm
Lead to Aileron Servo

17 Wing Struts

- **M3x16mm Socket Head Screw**: 4
- **PM2x14mm Screw**: 8
- **M2 Nylon Insert Lock Nut**: 8
- **d3xD7mm Washer**: 12

Socket Head Screw M3x16mm
PM2x14mm
Antenna & Ornament

PA2x12mm Screw

Completed

Aileron

Ornament

Elevator

L/R
19 Decals

20 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

Elevator

Flaps (near fuselage)

Ailerons (away from fuselage)

The ideal C.G. position is 120mm (4.72 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.

If you are converting this model to electric, please move the C.G. forward 5% of current C.G. distance from leading edge to compensate for weight of fuel.

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.

# **50CC SKY LINK** is specially designed to be powered by **50 c.c. gasoline** engine, 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. Don't use hot iron near the seams or edges, hot iron will melt the glue and shrink the covering at the same time, causing the seams to pull away.

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

<table>
<thead>
<tr>
<th>Part Description</th>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
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</thead>
<tbody>
<tr>
<td>180mm Extension</td>
<td>KW0011800</td>
<td>180mm</td>
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<tr>
<td>180mm Y-Cord</td>
<td>KW0021800</td>
<td>180mm</td>
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<tr>
<td>Charge Receptacles</td>
<td>KP0041300</td>
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<tr>
<td>Clevis Wrench</td>
<td>PL8210010</td>
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<tr>
<td>Field Stand</td>
<td>MS9111430</td>
<td>600 x 240 x 310mm</td>
<td>1 pc</td>
</tr>
</tbody>
</table>

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

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A306PO31741705
Ducted Fan
Pattern

Warbirds
Funfly

Scale
Electric

Sports
Glider

Trainer
Boat

Accessories

Covering
(Lightex / Toughlon)