The Big Wings

Requires: (Glider) 2-channel radio with Elevon mixing, 2 high torque standard size servos.
(EP Glider) 3-channel radio with Elevon mixing, 2 high torque standard size servos, EP package (6x225W outrunner motor, mounting brackets, propellers and electric wires), 6x25A ESC, 3x4000 mAh 11.1V Li-Po battery and charger.

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td>Wing Span</td>
<td>120 in / 3035 mm</td>
</tr>
<tr>
<td>Wing Area</td>
<td>2800 sq in / 180.6 sq dm</td>
</tr>
<tr>
<td>Flying Weight (Glider)</td>
<td>10 lb / 4600 g</td>
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<tr>
<td></td>
<td>(EP Glider)</td>
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<tr>
<td>Fuselage Length</td>
<td>42.5 in / 1075 mm</td>
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*Specifications are subject to change without notice.*

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 electric 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.
The Big Wings

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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.
- **P.** Ensure smooth non-binding movement while assembling.
- **T.** 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!
E268XMPO17220807

Parts List

1. MAIN WING -- 1 pair

2. SCREW PM4x50mm -- 2 pcs
   SCREW PWA2x8mm -- 8 pcs
   M4 NYLON INSERT LOCK NUT -- 2 pcs
   PUSHROD Ø2.3x93mm w/ Threads (For Aileron) -- 2 pcs
   HEAVY DUTY HORN BRACKET PL4112400 -- 2 sets
   HEAVY DUTY SERVOS HORN PL4120300 -- 2 sets
   SWIVEL CLEVIS HORN FAIRING PL4610010 -- 2 sets
   HEAVY DUTY HORN BRACKET PL4112400 -- 4 pcs

3. WING TUBE Ø32x900mm -- 1 pc.

4. SCREW PM3x35mm -- 2 pcs
   SCREW PM3x40mm -- 2 pcs
   WASHER d3xD12 -- 4 pcs

5. FRONT LANDING GEAR -- 1 pc.
   FUSELAGE -- 1 pc.
   SCREW PM2.5x12mm -- 2 pcs
   SCREW PM3x22mm -- 1 pc.
   M2.5 NUT -- 2 pcs
   M3 NYLON INSERT LOCK NUT -- 1 pc.
   WASHER d2.5xD8mm -- 2 pcs
   WASHER d3xD7mm -- 2 pcs
   WHEEL PL3114030 Ø30mm -- 1 pc.
   PLASTIC COLLAR d3xD6.5mm -- 1 pc.

6. LARGE SCALE TREADED INFLATABLE WHEELS
   PL3115140 Ø140mm -- 1 set
   WHEEL COLLAR Ø5.1mm w/ set screw -- 2 sets
   PLASTIC COLLAR d5.1xD9mm -- 1 pc.
   COPPER TUBE d5.3xD6.4x14mm -- 1 pc.
   WIRE Ø5x75mm -- 1 pc.

7. WIRE Ø2mm -- 2 pcs

8. SPONGE 60x70x122mm -- 1 pc.

9. PVC PLATE 118x40x1mm (Wing Protection) -- 1 pc.
   SCREW PM4x40mm -- 2 pcs
   WASHER d4xD12mm -- 2 pcs

10. COCKPIT -- 1 pc.
    CLIP PIN HW4201325 -- 1 pc.

11. DECALS: E268XMDEC -- 2 pcs

● COVERING:
   LIGHTEX STL 000 TRANSPARENT
   LIGHTEX STL 030 TRANSPARENT YELLOW
   LIGHTEX STL 060 TRANSPARENT PURPLE
   LIGHTEX STL 100 WHITE
   LIGHTEX STL 330 CADMIUM YELLOW
   LIGHTEX STL 561 PEARL PURPLE
   LIGHTEX STL 580 PEARL BRONZE
   LIGHTEX STL 413 CHECKER (FERRARI RED/ WHITE)
   LIGHTEX SGX 311 FERRARI RED
1 Main Wing

Bottom View

Aileron Servo Lead

AB

Pre-glued

L/R

2 Aileron Servo

PM4x50mm Screw 2
M4 Nylon Insert Lock Nut 2
PWA2x8mm Screw 8

PM2x12mm PL4120300

PM2x8mm

PWA2x8mm

1.5mm

Heavy Duty Horn Bracket

M4 Nylon Insert Lock Nut

Heavy Duty Clevis

M2 Nut

PM2x8mm

Pushrod PM4x50mm Ø2.3x93mm

PA1.7x8mm
3 Main Wing

- Wing Tube Ø32x900mm

- Top View

- Completed

4 Vertical Fin

- PM3x35mm Screw
- PM3x40mm Screw
- d3x12mm Washer

- Completed

5 Front Wheel

- PM2.5x12mm Screw
- PM3x22mm Screw
- M2.5 Nut
- M3 Nylon Insert Lock Nut
- d2.5x8mm Washer
- d3x7mm Washer
- d3x6.5 Plastic Collar

- Bottom View
6 Main Wheel

- 5.1mm Wheel Collar: 2
- d5.1xD9mm Plastic Collar: 1
- d5.3xD6.4x14mm Copper Tube: 1

7 Main Wing Wire

8 Radio Equipment

- This step is for Glider. Please follow step 8A & 8B & 8C & 8D & 8E if your model is electric powered.
- Install and arrange the equipment as shown in the diagram.
To complete The Big Wings (electric powered), you need to purchase The World Models E268XMEPTS.

- If you want to use electric power, please follow step 8A & 8B & 8C & 8D & 8E.

- Motor Mounting Bracket 2mm -- 6 pcs
- Outrunner 28/32 Deluxe KM02832R1 -- 6 pcs
- Radial Mount Adaptor Set HW2340200 -- 6 sets
- EP Spinner PL2FW0450 Ø45mm (white) -- 6 sets
- Folding Propeller Blade PL6314020 10x6mm -- 3 sets
- Battery Tie 250 mm -- 3 pcs
- Outrunner 28/32 Deluxe Screw PM3x6mm -- 24 pcs
- Propeller Screw PM2x12mm -- 12 pcs
- Motor Mounting Bracket-A Screw PM3x18mm -- 12 pcs
- Motor Mounting Bracket-B Screw PM3x25mm -- 12 pcs
- Motor Cover Screw PWA2.3x8mm -- 30 pcs
- Motor Cover(Left) -- 3 pcs
- Motor Cover(Right) -- 3 pcs
- Motor Cover Screw PM2x12mm -- 12 pcs
- Electric Wire AWG16 18m -- 1 pc.
- Outrunner 28/32 Deluxe Screw PM3x6mm -- 24 pcs
- Motor Mounting Bracket Washer d3x7mm -- 24 pcs
- Motor Mounting Bracket Washer d3x12mm -- 24 pcs
- Motor Mounting Bracket M3 Nylon Insert Lock Nut -- 24 pcs
8B Motor Mounting

- Template 842.7x117x3mm
- Washer d3xD12mm
- Washer d3xD7mm
- Washer d3xD12mm
- M3 Nylon Insert Lock Nut
- Completed
Electrical Wire

- PM2x8mm
- Washer d3xD7mm
- PM3x6mm Screw

Completed

- L/R
- PM2x12mm
- PM2x12mm

- Don't over-tighten the PM2 screws, let the propeller blades align themselves when spinning.

Completed

- L/R
- PWA2.3x8mm
- PWA2.3x8mm

- 1.5mm

- Spinner Ø45

- L/R
- Battery
- Receiver

- ESC

- PM2x8mm
- PL6314020
- PL6315020

- PM2x12mm
- PL6314020
- PL6315020

Warning

Completed
**8D Radio Equipment**

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

![Diagram showing radio equipment setup]

**8E Connection Diagram**

1. It is recommended to use one battery to supply outer/ middle/ inner pairs of Motors. With this power supply arrangement, any battery problem will affect pairs of Motor, not a single one which may result in uneven thrust and turning of the model.

2. To avoid any electronic interference amongst ESCs, it is recommended not to use BECs from the ESCs to supply power to the receiver. Use separate receiver battery for the receiver and servos. Most ESCs have the middle red wire BEC power supply to receiver, remove the middle red wire from the plug before plugging to receiver will work. Please refer to manual of the ESC for details.

3. With proper mixing function of your radio, you maybe able to mix the speed control of the outer pair motors with rudder channel to achieve turning of the model.
9 Main Wing

PM4x40mm Screw  2
d3xD12mm Washer  2

10 Cockpit

Cockpit

Clip Pin HW4201325

If you want to use electric powered. Please cut openings for improving cooling of Motor and battery.
11 Wing Setting

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

12 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.

Aileron/ Elevator

- Please note that the mixing function of your radio will add up the control throws of aileron and elevator input. A control throw of 15mm for the aileron or elevator alone will give you up to 30mm throw if you input aileron and elevator throw at the same time.
The ideal C.G. position is 240mm (9.45 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.

When taking off from ground, point the model towards the head wind. Apply power and let the model pick up ground speed. With enough speed, apply elevator gently and the model will be airborne. Don't pull up too much for a steep climb, as the propeller may hit the ground and get damaged.
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.

# The Big Wings (EP Glider) is specially designed to be powered by 6x225W Outrunner Motor System.

# Make sure the air field is spacious, never fly the plane too close to people and never get too close to a running propeller. Extreme caution should be exercised when working with electric powered models. Make sure the propeller is cleared of all objects, especially your hands before connecting the battery to the model. Make sure you understand the operation of the ESC (Electronic Speed Control) by studying the ESC manual. Once you plug in the battery for electric powered model, always treat the propeller as a rotating one, as accidental movement of the throttle stick will spin the propeller and could cause injuries.

# 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.

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, 2403 Research Drive, Livermore, CA 94550 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.
The World Models Manufacturing Co., LTD.

www.theworldmodels.com