Sky Runner

Requires: 4-channel radio w/ 4 micro servos, Outrunner Motor w/ Propeller Adaptor
20A Brushless ESC, 3 cells 11.1V
2100mAh Li-Po battery & charger.

Specifications

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Wing Span</td>
<td>49 in / 1240 mm</td>
</tr>
<tr>
<td>Wing Area</td>
<td>336 sq in / 21.7 sq dm</td>
</tr>
<tr>
<td>Flying Weight</td>
<td>23.7 oz / 670 g</td>
</tr>
<tr>
<td>Fuselage Length</td>
<td>33 in / 835 mm</td>
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</table>

*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.
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!**
- **Warning! Do not overlook this symbol!**
Parts list

1. MAIN WING -- 1 pc.
   WING JOINER Ø4.5x110mm -- 1 pc.

2. SCREW PB2x12mm -- 4 pcs
   STRAPER PL4112106 -- 2 pcs
   FUEL TUBE d2xD4x4mm -- 4 pcs
   CLEVIS PL4112105 -- 2 pcs
   HORN PL4113102 -- 2 sets
   PUSHROD Ø1.4x63mm w/ Threads (For Aileron) -- 2 pcs

3. STABILIZER & ELEVATOR -- 1 set
   FUSELAGE -- 1 pc.

4. VERTICAL FIN & RUDDER -- 1 set

5. SCREW PB2x8mm -- 2 pcs
   CLEVIS PL4112105 -- 1 pc.
   FUEL TUBE d2xD4x4mm -- 1 pc.
   HORN PL4113102 -- 1 set
   PUSHROD Ø1.4x486mm w/ Threads (For Elevator) -- 1 pc.

6. SCREW PB2x10mm -- 2 pcs
   CLEVIS PL4112105 -- 1 pc.
   FUEL TUBE d2xD4x4mm -- 1 pc.
   HORN PL4113102 -- 1 set
   PUSHROD Ø1.4x432mm w/ Threads (For Rudder) -- 1 pc.

7. SOCKET HEAD SCREW M3x6mm -- 4 pcs
   WASHER d3xD7mm -- 4 pcs
   SPINNER Ø36 -- 1 set
   FOLDING PROPELLER SET -- 1 set
   COWLING -- 1 pc.
   SCREW PWA2x8mm -- 4 pcs

8. FUEL TUBE d2xD4x4mm -- 2 pcs
   STRAPER PL4112106 -- 2 pcs
   SPONGE 10x50x150mm (For Battery) -- 1 pc.
   DOUBLE-SIDEDTAPE 30x35mm -- 2 pcs
   BATTERY TIE -- 1 pc.

9. NYLON BOLT M2.5x16mm -- 2 pcs
   NYLON WASHER d2.6xD9mm -- 2 pcs
   PLASTIC PLATE 0.8x20x42mm (Wing Protection) -- 1 pc.

10. COCKPIT -- 1 pc.

11. DECALS: E240RXMDEC -- 1 set

● COVERING:

  LIGHTEX SGX 050 TRANSPARENT BLUE
  LIGHTEX SGX 100 WHITE
  LIGHTEX SGX 250 BLUE
  LIGHTEX SGX 312 BRIGHT RED
  LIGHTEX SGX 330 CADMIUM YELLOW
  LIGHTEX SGX 331 CUB YELLOW
**Main Wing**

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

- Wing Joiner Ø4.5x110mm

- Aileron Servo Lead

**Aileron Servos**

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

- PB2x12mm Screw 4

- Bottom View
3 Stabilizer & Elevator

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

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

4 Vertical Fin & Rudder

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

- Completed
5 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.

6 Rudder Pushrod

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

- Make sure rotating motor casing is not in contact with wirings or anything.

### Optional Parts

- Outrunner Motor 28/ 30 KM0203800
- Propeller Adaptor (d3xD5) HW2340101

### Steps

1. **M3x6mm Socket Head Screw** 4
   **d3xD7mm Washer** 4
   **PWA2x8mm Screw** 4
   **PA2.6x8mm Screw** 2

2. **d3xD7mm Washer**
   **M3x6mm Socket Head Screw**

   - Don't over-tighten the PM3 screws, to much stress on the screws could split the firewall.

3. **M5 Nut**
   **TWM HW3111400**
   **PROPELLER ADAPTOR WRENCH**

4. **PA2.6x8mm**
   **PWA2x8mm**

   - Completed

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

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

9 Main Wing

- Nylon Bolt M2.5x16mm
- Nylon Washer d2.6xD9mm

10 Cockpit

- Peel off shaded portion covering film.
- Completed
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.

**13 C.G.**

The ideal C.G. position is 52mm (2.0 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.

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**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.

# *skyRunner* is specially designed to be powered by **KM0203800 Outrunner Motor**.

# 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, 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)
Optional Parts

ACCESSORIES

3 - Pin EZ Connector

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
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</thead>
<tbody>
<tr>
<td>KP0011310</td>
<td>40A Max. Current</td>
<td>1 set</td>
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</tbody>
</table>
-ideal for electric models

Propeller Adaptor Wrench

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
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</thead>
<tbody>
<tr>
<td>HW3111400</td>
<td></td>
<td>1 pc</td>
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Propeller Adaptor

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<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>HW2340101</td>
<td>d3xD5</td>
<td>1 set</td>
</tr>
</tbody>
</table>

Clevis Wrench

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

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

Outrunner 28/26

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>KM0203800</td>
<td></td>
<td>1 pc</td>
</tr>
</tbody>
</table>

- Max speed: 26500 rpm
- Kv (rpm/V): 2145
- Operating Power: 180W
- Operating Voltage: 6-12V
- Operating Current: 15A
- Peak Current: 20A (max. 15 sec.)
- Internal Resistance: 72 m ohms
- Diameter: 28mm
- Length: 26mm
- Weight: 50g
- Shaft Diameter: 2.3mm
- Shaft Length: 14.8 mm
- Mounting Screw: M2.6
- Distance of Mounting Holes: Front (16mm and 19mm)