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.
Read through the manual before you begin, so you will have an overall idea of what to do.

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.

Symbols used throughout this instruction manual comprise of the following:

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

1. MAIN WING—1 set
   WING JOINER Ø6x226mm—1 pc.
2. STABILIZER & ELEVATOR—1 set
3. VERTICAL FIN & RUDDER—1 set
4. PUSHROD Ø1.4x618mm w/ Threads (For Elevator)—1 pc.
   SCREW PB2x10mm—2 pcs
   FUEL TUBE d2xD4x4mm—1 pc.
   CLEVIS—1 pc.
   HORN—1 set
5. PUSHROD Ø1.4x563mm w/ Threads (For Rudder)—1 pc.
   SCREW PB2x10mm—2 pcs
   FUEL TUBE d2xD4x4mm—1 pc.
   CLEVIS—1 pc.
   HORN—1 set
6. SCREW PM3x6mm—4 pcs
   WASHER d3xD7mm—4 pcs
   FOLDING ROPPELLER SET PL6314020—1 set
   COWLING—1 pc.
   SCREW PWA2X8 mm—4 pcs
   SPINNER Ø45mm—1 set
7. SPONGE 10x50x150mm—2 pcs
   DOUBLE-SIDED TAPE (30x35mm)—1 pc.
   BATTERY TIE—1 pc.
   STRAPER—2 pcs
   FUEL TUBE d2xD4x4mm—2 pcs
8. PVC PLATE 0.8x25x55mm (Wing Protection)—1 pc.
   WASHER d2.5xD8mm—2 pcs
   SCREW PM2.5x16mm—2 pcs
9. CANOPY—1 set
10. DECALS DECE201—1 set
11. COVERING:
   LIGHTEX SGX 312 Bright Red
   LIGHTEX SGX 040 Transparent Green
   LIGHTEX SGX 100 White
   LIGHTEX SGX 330 Cadmium Yellow
   LIGHTEX SGX 000 Transparent
   LIGHTEX SGX 240 Green
1. **Main Wing**

   - Wing joiner Ø6x 226mm

   - Completed

2. **Stabilizer & Elevator**

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

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

   - *Also refer to step 10 Wing Setting*

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

Completed
4 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.

5 Rudder Pushrod

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

### Optional Parts

- PM3x6mm Screw: 4
- PM2x12mm Screw: 2
- PWA2x8mm Screw: 4
- d3xD7mm Washer: 4

1. Outrunner Motor 28/30 KM0283010
2. Propeller Adaptor (d3xD5) HW2340100
3. Don’t over-tighten the PM3 screws, too much stress on the screws could split the firewall.
4. PM3x6mm
5. d3xD7mm Washer
6. PM2x12mm
7. PM2x12mm

**Don’t over-tighten the PM2 screws, let the propeller blades align themselves when spinning.**
7 Radio Equipment

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

8 Main Wing

- PM2.5 x 16mm Screw 2
- d2.5 x D8mm Washer 2
- Peel off shaded portion covering film.

9 Canopy

- Completed
10 Wing Setting

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

A=A'  B=B'  C=C'

11 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

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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<tbody>
<tr>
<td>30mm</td>
<td>30mm</td>
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</table>

Elevator

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15mm</td>
<td>15mm</td>
</tr>
</tbody>
</table>
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.

# Thermal Rider EP is specially designed to be powered by geared speed 400 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.

# 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.

The ideal C.G. position is 75mm (2.95 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.

Warning!

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.
Optional Parts

(ACCESSORIES)

3 - Pin EZ Connector

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

-ideal for electric models

2 - Pin EZ Connector

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>KP0011210</td>
<td>40A Max. Current</td>
<td>1 set</td>
</tr>
</tbody>
</table>

-ideal for electric models

Clevis Wrench

<table>
<thead>
<tr>
<th>Code No.</th>
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<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI8210010</td>
<td></td>
<td>1 set</td>
</tr>
</tbody>
</table>

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

Propeller Adaptor

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>HW2340100</td>
<td>d3xD5</td>
<td>1 set</td>
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</tbody>
</table>

Outrunner 28/30

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>KM0283010</td>
<td>1 pc</td>
</tr>
</tbody>
</table>

- Max speed: 12000 rpm
- Kv (rpm/V): 1015
- Operating Power: 180W
- Operating Voltage: 6-12V
- Operating Current: 15A
- Peak Current: 20A (max 15 sec.)
- Internal Resistance: 95 m ohms
- Diameter: 28mm
- Length: 30mm
- Weight: 60g
- Shaft Diameter: 3mm
- Shaft Length: 14.8 mm
- Mounting Screw: M3
- Distance of Mounting Holes: Front (16mm and 19mm)

Brushless ESC

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>KC2025A02A</td>
<td>24x45x11mm</td>
<td>1 pc</td>
</tr>
</tbody>
</table>

- Voltage Range: 5.6 ~ 16.8V
- Current: 25A continuous
- Current (Burst, >10 seconds): 35A
- Weight: 24 g
  (with wires and connector)
- BEC: 5V / 2A
- Low Voltage Cut-off: /
- Light weight with low internal resistance for high current operation
- BEC function for Li-Ion / Li-poly
  2 – 4 cells; Nimh / Nicd 5 – 12 cells operation.
- Low battery voltage auto cut off to reserve power to the servos.
- Safe start up motor.
Ducted Fan Pattern

Warbirds Funfly

Scale Electric

Sports Glider

Trainer Boat

Accessories

Covering (Lightex / Toughlon)