Thermal Sailor

Requires: 3-channel radio w/ 2 standard / mini servos, Outrunner Motor KM28321030 w/ Propeller Adaptor HW2340100 20A brushless ESC, 3 cells 11.1V 2100mAh Li-Po battery & charger.

<table>
<thead>
<tr>
<th>Specifications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing Span</td>
<td>90.5 in / 2300 mm</td>
</tr>
<tr>
<td>Wing Area</td>
<td>874 sq in / 56.4 sq dm</td>
</tr>
<tr>
<td>Flying Weight</td>
<td>39 oz / 1100 g</td>
</tr>
<tr>
<td>Fuselage Length</td>
<td>46 in / 1175 mm</td>
</tr>
</tbody>
</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.
Motor Setting

<table>
<thead>
<tr>
<th>Component</th>
<th>Size</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>PWA2.3x8mm</td>
<td>Screw</td>
<td>4</td>
</tr>
<tr>
<td>PA2.6x8mm</td>
<td>Screw</td>
<td>2</td>
</tr>
<tr>
<td>PM2x12mm</td>
<td>Screw</td>
<td>2</td>
</tr>
<tr>
<td>M3x6mm</td>
<td>Socket Head Screw</td>
<td>4</td>
</tr>
<tr>
<td>M3x7mm</td>
<td>Washer</td>
<td>4</td>
</tr>
</tbody>
</table>

- **Don't over-tighten the M3 screws**, too much stress on the screws could split the firewall.

Optional Electric Power Package

- PM2x12mm

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

Ballast weight

- Double-sided Tape 50x30mm
- Iron

1. N.J.

2. Brushless ESC

3. 10x6 Propeller PL6314020
   - Propeller Adaptor HW2340100
   - PM2x12mm
   - PWA2.3x8mm
   - TWM HW311400
   - PROPELLER ADAPTOR WRENCH

4. Ø45mm Spinner
   - PA2.6x8mm
   - Battery
   - Battery Tie
   - Battery Tie
   - Receiver
   - Mini Servo
   - Plywood 3x59.4x61mm
   - Brushless ESC
Thermal Sailor

Speed 550 motor

Requires: 3-channel radio w/ 2 servos, 25A speed controller with brake and 8 cells 1800 mAh battery.

<table>
<thead>
<tr>
<th>Specifications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing Span</td>
<td>90.5 in / 2300 mm</td>
</tr>
<tr>
<td>Wing Area</td>
<td>874 sq in / 56.4 sq dm</td>
</tr>
<tr>
<td>Flying Weight</td>
<td>52.6 oz / 1490 g</td>
</tr>
<tr>
<td>Fuselage Length</td>
<td>46 in / 1175 mm</td>
</tr>
</tbody>
</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.

E2310612
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.)
- **Pencil**: Apply thread locker
- **Ensure smooth non-binding movement while assembling.**
- **L/R**: Assemble left and right sides the same way.
- **Cut off shaded portion.**
- **Peel off shaded portion covering film.**
- **Must be purchased separately!**
- **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 set
   WING JOINER Ø6x260mm -- 1 pc.

2. STABILIZER & ELEVATOR -- 1 set

3. VERTICAL FIN & RUDDER -- 1 set

4. PUSHROD Ø1.4x670mm
   w/Threads(For Elevator) -- 1 pc.
   SCREW PM2x12mm -- 2 pcs
   FUEL TUBE d2xD4x4mm -- 1 pc.
   CLEVIS -- 1 pc.
   HORN -- 1 set

5. PUSHROD Ø1.4x620mm
   w/Threads(For Rudder) -- 1 pc.
   SCREW PM2x12mm -- 2 pcs
   FUEL TUBE d2xD4x4mm -- 1 pc.
   CLEVIS -- 1 pc.
   HORN -- 1 set

6. SPEED 550 MOTOR -- 1 set
   COWLING -- 1 pc.
   SCREW PWA2.3x8mm -- 4 pcs
   GEARBOX -- 1 set
   FOLDING PROPPELLER SET -- 1 set
   SPINNER Ø45mm -- 1 set

7. SPONGE 10x50x150mm -- 1 pc.
   DOUBLE-SIDED TAPE -- 1 pc.
   BATTERY TIE -- 1 pc.
   STRAPER -- 2 pcs
   FUEL TUBE d2xD4x4mm -- 2 pcs

8. PLASTIC PLATE 0.8x25x61mm
   (Wing Protection) -- 1 pc.
   WASHER d2.5xD8mm -- 2 pcs
   SCREW PM2.5x16mm -- 2 pcs

9. CANOPY -- 1 set

10. DECALS -- 1 set

11. COVERING :-
   LIGHTEX SGX 571
   LIGHTEX SGX 100
   LIGHTEX SGX 204
   LIGHTEX SGX 311
   LIGHTEX SGX 000
   LIGHTEX SGX 201
   LIGHTEX SGX 060
   LIGHTEX SGX 040
1 Main Wing

Wing joiner Ø6x260mm

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
3 Vertical Fin & Rudder

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

Peel off shaded Portion covering film.

B = B'

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.
To allow for backlash of matching gear, put a piece of thin paper between the gears and then tighten the M3x8mm screws. Remove the paper before flying.
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

---

9 Canopy

- Peel off shaded portion covering film.

---

Completed
10 Wing Setting

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

30mm
30mm

Elevator

15mm
15mm

12 C.G.

The ideal C.G. position is 80mm (3.15 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!

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 Sailor** is specially designed to be powered by speed 550 geared 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.
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

Warbirds

Scale

Sports

Trainer

Pattern

Funfly

Electric

Glider

Boat

Accessories

Covering

(Lightex / Toughlon)