Extra 300 EP (40)

450W Motor System

Requires: 4-channel radio w/ 4 mini servos, Outrunner Motor KM374810, w/ Propeller Adaptor HW2340102, 40A Brushless ESC with 11x8E proepller, 4 cells 14.8V 3200mAh Li - Po battery & charger.

Specifications

- Wing Span: 50.5 in / 1280 mm
- Wing Area: 450 sq in / 29 sq dm
- Flying Weight: 53.5 oz / 1510 g
- Fuselage Length: 42.5 in / 1100 mm

*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

Read through the manual before you begin, so that you can 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.
- Warning! Do not overlook this symbol!
Parts List

1. MAIN WING -- 1 pair

2. SCREW PB2x16mm -- 4 pcs
   CLEVIS PL4112105 -- 2 pcs
   STRAPER PL4112106 -- 2 pcs
   FUEL TUBE d2xD4x4mm -- 4 pcs
   HORN PL4112102 -- 2 sets
   PUSHROD Ø1.4x100mm w/ Threads (For Aileron) -- 2 pcs

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

4. VERTICAL FIN & RUDDER -- 1 set

5. TAIL LANDING GEAR PL3410031 -- 1 set
   TAIL WHEEL Ø23mm -- 1 pc.
   SCREW PA2.6x12mm -- 2 pcs
   SCREW PM2x10mm -- 1 pc.
   M2 NUT -- 1 pc.
   COLLAR Ø2.1mm w/ set screw -- 1 set
   STEERING BRACKET -- 1 pc.

6. SCREW PB2x10mm -- 2 pcs
   CLEVIS PL4112105 -- 1 pc.
   HORN PL4112102 -- 1 set
   FUEL TUBE d2xD4x4mm -- 1 pc.
   PUSHROD Ø1.4x5548mm w/ Threads (For Rudder) -- 1 pc.

7. SCREW PB2x10mm -- 4 pcs
   CLEVIS PL4112105 -- 2 pcs
   HORN PL4112102 -- 2 sets
   FUEL TUBE d2xD4x4mm -- 2 pcs
   PUSHROD Ø1.4x460mm w/ Threads (For Elevator) -- 2 pcs

8. COWLING -- 1 pc.
   SCREW PWA2x8mm -- 4 pcs
   SPINNER Ø57mm--1 set
   SOCKET HEAD SCREW M3x8mm -- 4 pcs
   WASHER d3xD7mm -- 4 pcs

9. MAIN LANDING GEAR -- 1 pc.
   MAIN WHEEL Ø40mm -- 2 pcs
   COPPER TUBE d3.1xD4x5mm -- 2 pcs
   SCREW PWA2x6mm -- 4 pcs
   SCREW PA2.6x10mm -- 3 pcs
   SCREW PM3x25mm -- 2 pcs
   M3 NUT -- 2 pcs
   WHEEL PANTS -- 1 pair
   WASHER d3xD7mm -- 4 pcs
   COLLAR Ø3.1mm w/ set screw -- 2 sets
   ALUMINUM PLATE 0.5mm -- 2 pcs

10. EYE SCREW PA2.5x10x23mm -- 2 pcs
    WING TUBE Ø14.5x397mm -- 1 pc.
    RUBBER BAND D30x1mm PT2112601 -- 2 pcs

11. STRAPER PL4112106 -- 2 pcs
    FUEL TUBE d2xD4x4mm -- 2 pcs
    BATTERY TIE 200mm--1 pc.
    DOUBLE-SIDED TAPE 30x35mm--1 pc.
    SPONGE 10x50x150mm -- 2 pcs
    PUSHROD Ø1.4x67mm (For Elevator) -- 1 pc.
    PUSHROD CONNECTOR 3.2x7.2x16mm (For Elevator) -- 1 set

12. COCKPIT -- 1 set
    PILOT PC001063B -- 1 pc.

13. DECALS: E271DEC -- 1 set

- COVERING:
  LIGHTEX SGX550 PEARL BLUE
  LIGHTEX SGX331 CUB YELLOW
1. **Main Wing**

- 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.

2. **Aileron Servo**

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

3. **Stabilizer & Elevator**

- 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 13 Wing Setting*
- Apply instant type CA glue to both sides of each hinge.
4 Vertical Fin & Rudder

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

3. Completed

5 Tail Landing Gear

- PA2.6x12mm Screw: 2
- PM2x10mm Screw: 1
- M2 Nut: 1
- 2.1mm Collar: 1

2.1mm Collar

Bottom View

- PM2x10mm
- M2 Nut
- Steering Bracket
- PA2.6x12mm
6. **Rudder Pushrod**

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

7. **Elevator Pushrod**

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

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

### Installation based on optional electric power package from World Models, parts no. E271 EPTS.

- Outrunner 37/48 Deluxe KM0374810
- Propeller Adaptor (D5mm) HW2340102
- Propeller 11x8 (Electric) PL6211108

### Optional Parts

- PM3x25mm Screw
- PA2.6x10mm Screw
- PA2.6x8mm Screw
- WA2x8mm Screw
- WA2x8mm Screw
- Ø57mm Spinner

### Main Landing Gear

- Ø1mm pilot holes are pre-drilled. Please look for pin-hole marks at under side of fuselage.

### Main Landing Gear Parts

- PA2.6x10mm Screw
- PM3x25mm Screw
- M3 Nut
- WA2x6mm Screw
- WA2x6mm Screw
- WA2x6mm Screw
- 3.1mm Collar
- d3xD7mm Washer
- d3xD7mm Washer
- Wheel Pant

### Bottom View
10 Main Wing

Eye Screw PA2.5x10x23mm

Wing Tube Ø14.5x397mm

Aileron Servo Lead

Rubber Band

Bottom View

Top View

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

- Elevator Servo
- Rudder Servo
- Receiver
- Sponge
- Battery Tie
- Battery
- 40A Brushless ESC
- Elevator Pushrod Ø1.4x67mm
- KA1.7x6mm
- Double-Sided tape
- Fuel Tube d2xD4x4mm
- Straper

12 Cockpit

- Pilot

- Completed
Adjust the wing and fuselage configuration as shown in the diagrams.
14 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.

15 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.

# Extra 300 EP (40) is specially designed to be powered by 450W 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.

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