Before commencing assembly, please read these instructions thoroughly.

**Specifications**

Wing Span: 52 in / 1320 mm  
Wing Area: 497 sq in / 32 sq dm  
Flying Weight: 62 oz / 1760 g  
Fuselage Length: 53 in / 1345 mm  
Requires: 4-channel radio w/ 4 mini servos. Outrunner Motor KM0374811 w/ Propeller Adaptor HW2340102  
40A Brushless ESC, 11x8E Propeller, 4 cells 14.8V 3200 mAh Li-Po battery & charger.

⚠️ 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.

*Specifications are subject to change without notice.*
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. For pre-assembled kits, please check proper functions of all servos on the ground before flying. Servo gears could be damaged when control surfaces are hit during transportation of models. The manufacturer will replace any servos due to manufacturer’s defect, but will not cover plane crashes due to damaged servos not detected before flying.

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 pair
   CLEVIS PL4112103 -- 2 pcs
   STRAPER PL4112102 -- 2 pcs
   FUEL TUBE D2.5xD6x5mm -- 4 pcs
   HORN PL4113103 -- 2 pcs
   PUSHROD Ø1.8x71mm w/ Threads (For Aileron) -- 2 pcs
   SERVO MOUNTING PANEL PL5310030 -- 1 pair
   SCREW PA1.7x8mm -- 8 pcs
   Plywood 50x50x2mm -- 2 pcs
   Hinges PL4115050 -- 8 pcs

2. FUSELAGE -- 1 set
   STABILIZER & ELEVATOR -- 1 set
   HORN PL4113103 -- 1 pc.
   Hinges PL4115050 -- 4 pcs

3. VERTICAL FIN & RUDDER -- 1 set
   Plywood 50x50x2mm -- 1 pc.
   HORN PL4113103 -- 1 pc.
   Hinges PL4115050 -- 3 pcs

4. TAIL LANDING GEAR PL3410031 -- 1 set
   SCREW PA2.6x8mm -- 2 pcs
   COLLAR Ø2.1mm w/ Set Screw -- 1 set
   Plywood 50x50x2mm -- 1 pc.

5. MAIN LANDING GEAR -- 1 set
   FOAM 78x25x25mm -- 1 pc.
   COLLAR Ø3.1mm w/ Set Screw -- 4 sets
   MAIN WHEEL Ø50mm PL3111500 -- 2 pcs
   SOCKET HEAD SCREW M3x12mm -- 4 pcs
   WHEEL PANTS -- 1 pair
   WASHER d3xØ7mm -- 8 pcs
   SCREW PM3x35mm -- 2 pcs
   M3 NUT -- 2 pcs
   ALUMINUM PLATE 1mm -- 2 pcs
   QUICK RELEASE NYLON RIVET PL1208042 -- 4 pcs
   SCREW 2.3x8mm -- 4 pcs

6. SCREW PA1.7x8mm -- 4 pcs
   FUEL TUBE D2.5xD6x5mm -- 2 pcs
   CLEVIS PL4112103 -- 1 pc.
   STRAPER PL4112102 -- 1 pc.
   SERVO MOUNTING PANEL PL5310030(L) -- 1 pc.
   PUSHROD Ø1.8x152mm w/ Threads (For Elevator) -- 1 pc.

7. SCREW PA1.7x8mm -- 4 pcs
   FUEL TUBE D2.5xD6x5mm -- 2 pcs
   CLEVIS PL4112103 -- 1 pc.
   STRAPER PL4112102 -- 1 pc.
   SERVO MOUNTING PANEL PL5310030(R) -- 1 pc.
   PUSHROD Ø1.8x171mm w/ Threads (For Rudder) -- 1 pc.

8. SOCKET HEAD SCREW M3x10mm -- 4 pcs
   WASHER d3.2xØ12mm -- 4 pcs
   SPINNER Ø62mm -- 1 set

9. WING TUBE Ø12x646mm -- 1 pc.
   RUBBER BAND D4x30mm -- 2 pcs

10. BATTERY TIE 200mm -- 2 pcs
    BATTERY MAT 2x50x150mm -- 2 pcs
    DOUBLE-SIDED TAPE 30x35mm (For Brushless ESC) -- 1 pc.

11. CANOPY 0.8PVC -- 1 pc.
    MOUNTING PLATE PL4114015 -- 1 pc.
    SCREW PM2x30mm -- 1 pc.
    M2 NYLON INSERT LOCK NUT -- 1 pc.
    WASHER d2.5x8mm -- 1 pc.

12. DECALS: GM049 DEC -- 1 set
1 Aileron Servo

PA1.7x8mm Screw

Plywood 50x50x2 mm

PA1.7x8mm Screw

Hinge Setting

Aileron Servo Lead

Fuel Tube d2.5xD6x5mm

Hinge Setting

Fuel Tube d2.5xD6x5mm

Clevis

Fuel Tube d2.5xD6x5mm

Straper

Pushrod Ø1.8x71mm

Hinge

Section View

Completed

Horn

GM049XMPO29851309
2 Stabilizer & Elevator

Joining surfaces should be clean and dry. Slightly roughen surfaces with sandpaper for best results.

3 Vertical Fin & Rudder

Joining surfaces should be clean and dry. Slightly roughen surfaces with sandpaper for best results.

4 Tail Landing Gear

Joining surfaces should be clean and dry. Slightly roughen surfaces with sandpaper for best results.
**5 Main Landing Gear**

- M3x12mm Socket Head Screw — 4
- PM3x35mm Screw — 2
- KA2.3x8mm Screw — 4
- M3 Nut — 2
- 3.1mm Collar — 4
- d3xD7mm Washer — 8
- Quick Release Nylon Rivet d2xD8mm — 4

**1 Bottom View**

- M3x12mm
- Washer d3xD7mm
- Landing Gear

**2 Bottom View**

- Wheel Ø50mm
- d3xD7mm Washer
- PM3x35mm
- 3mm Set Screw
- M3 Nut
- Plate 1mm
- 3.1mm Collar
- Completed

**6 Elevator Pushrod**

- PA1.7x8 mm Screw — 4

**1 Bottom View**

- Pushrod Ø1.8x162mm
- Clevis
- Fuel Tube d2.5xD6x5mm
- Horn

**2 Bottom View**

- Clevis
- Pushrod
- Fuel Tube
- Horn
- Slapar
- Fuel Tube d2.5xD6x5mm

Completed

---

GM049XMPO29851309 P.5
7 Rudder Pushrod

- Pushrod Ø1.8x171mm
- Clevis
- Fuel Tube d2.5xD6x5mm

8 Outrunner Motor / Spinner

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

Optional Parts

- Brushless ESC
- EZ Connector
- Solder Solder
- ESC Motor
- Ø62mm Spinner

Completed

- Fuel Tube d2.5xD6x5mm
- M3x10mm Socket Head Screw
- d3xD12mm Washer
- d6xD15mm Washer
- M5 Nut
- PA3x12mm Screw
- PA1.7x8mm Screw
- Straper
- TWM PL8210100 CLEVIS WRENCH
- TWM HW3111700 PROPELLER ADAPTOR WRENCH

Don’t over-tighten the M3 screws, too much stress on the screws could split the firewall.
9 Main Wing

- Rubber Band
- Aileron Servo Lead
- Wing Tube Ø12x647mm

10 Radio Equipment

- Install and arrange the equipment as shown in the picture.
- Outrunner Motor
- Brushless ESC
- Battery Mat 50x150mm
- Battery Tie
- Double Sided Tape
- Receiver
- Fuselage Bottom
- Front
- Battery

11 Canopy

- PM2x30mm Screw
- d2.5xD8mm Washer
- M2 Nylon Insert Lock Nut

- Completed
Decals

GM049XMPO29851309
# 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.

# **AIRMasters** (40) is specially designed to be powered by KM0374811 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.

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

---

[Diagram: 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.

---

[Diagram: C.G.]

The ideal C.G. position is 114mm (4.5 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

---

[Diagram: C.G.]

C.G.

114mm

4.5 in.

C.G.

---

[Diagram: Control Throws]

---


---

GM049XMPO29851309 P.9
Optional Parts

( ACCESSORIES )

3 - Pin EZ Connector

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

Propeller Adaptor Wrench

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>HW3111700</td>
<td>1 pc</td>
<td></td>
</tr>
</tbody>
</table>

40A Brushless ESC

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>KC2040A02</td>
<td>55 x 28 x12mm</td>
<td>1 pc</td>
</tr>
</tbody>
</table>

-Current : 40A continuous
-Burst current ( < 10 seconds) : 55A
-Weight : 33g (with wires)
-BEC output : 3A
-Input :
 Li - ion / Li - poly 2 - 5 cells;
 Nimh / Nicd 5 - 15 cells

Clevis Wrench

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL8210010</td>
<td></td>
<td></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>HW2340102</td>
<td>d5xD6</td>
<td>1 set</td>
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</tbody>
</table>

Outrunner 37 / 48 Deluxe

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>KM0374811</td>
<td></td>
</tr>
</tbody>
</table>

-Kv (rpm / V): 750
-Operating Power: 450 W
-Operating Voltage: 8.5 - 18V
-Operating Current: 30A-45A
-Peak Current: 65A (max.20 sec.)
-Internal Resistance: 24 m ohms
-Diameter: 37.2 mm
-Length: 48.5 mm
-Weight: 190g
- Shaft Diameter: 5 mm
- Shaft Length: 21 mm
-Mounting Screw:
- M3 (Front) and M2.5 (Back)
-Distance of Mounting Holes:
 25mm (Front) and 15.5mm (Back)