Super Chipmunk-90 RF

0.60-0.75 cu. in. displacement 2-stroke
0.91 cu. in. displacement 4-stroke

Requires: 5-channel radio w/ 6 standard servos
(Optional inboard flap)

Specifications

<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Wing Span</td>
<td>64.0 in / 1620 mm</td>
</tr>
<tr>
<td>Wing Area</td>
<td>682 sq in / 44.0 sq dm</td>
</tr>
<tr>
<td>Flying Weight</td>
<td>7 lbs / 3300 g</td>
</tr>
<tr>
<td>Fuselage Length</td>
<td>53.0 in / 1340 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 engine 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.

A004NPO31351603
Super Chipmunk-90 RF

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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 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!
- Warning! Do not overlook this symbol!
- Apply instant glue (C.A.glue, super glue.)
- Ensure smooth non-binding movement while assembling.
- Cut off shaded portion.
- Must be purchased separately!
- Pierce the shaded portion covering film.
Parts List

1. MAIN WING -- 1 pair
2. MAIN LANDING GEAR -- 1 pair
   MOUNTING PLATE 12x20mm -- 4 pcs
   SCREW P A2.6x10mm -- 8 pcs
   SCREW PM2x8mm -- 8 pcs
   MAIN LANDING GEAR COVER -- 2 sets
   WASHER 2mm -- 16 pcs
   M2 NUT -- 8 pcs
3. SCREW PA2.6x10mm -- 4 pcs
   COLLAR Ø4.1mm set/screw -- 4 sets
   WHEEL Ø76mm -- 2 pcs
   WHEEL PANTS -- 1 pair
   MOUNTING PLATE 12x20mm -- 2 pcs
4. SCREW PA2.6x6mm -- 8 pcs
   SERVO MOUNTING PANEL (For Aileron) -- 1 pair
5. SCREW P8x16mm -- 2 pcs
   SCREW P8x20mm -- 4 pcs
   FUEL TUBE Ø6x5mm -- 4 pcs
   STRAPPER -- 2 pcs
   CLEVIS -- 2 pcs
   TRI-HORN M2x9mm (L) (For Aileron Servo) -- 2 sets
   PUSHROD Ø1.8x100mm w/ Threads (For Aileron) -- 2 pcs
6. WING JOINER 9x24x223mm -- 1 pc.
7. RING Ø2.3mm PL4112023 -- 2 pcs
8. STRAPPER -- 1 pc.
   CLEVIS -- 2 pcs
   FUEL TUBE Ø6x5mm -- 3 pcs
   T-TYPE PUSHROD Ø1.8x126mm w/ Threads (For Flap) -- 1 pc.
9. COVERING 20x50mm -- 1 pc.
   RUSELAGE -- 1 pc.
10. STABILIZER & ELEVATOR -- 1 set
11. VERTICAL FIN & RUDDER -- 1 set
    TAIL LANDING GEAR -- 1 set
    SCREW PA3x12mm -- 2 pcs
    COLLAR Ø2.1mm set/screw -- 1 set
    WHEEL Ø23mm -- 1 pc.
    BALSA 8x20x247.5mm -- 1 pc.
12. FUEL TANK 380cc PL1111380 -- 1 set
    DOUBLE-SIDED TAPE -- 40x100mm -- 1 pc.
    CABLE TIE 1.5x6x400mm -- 1 pc.
13. ENGINE MOUNT PL5111070 -- 1 set
    SOCKET HEAD SCREW M4x20mm -- 4 pcs
    WASHER 4x0.9mm -- 4 pcs
14. SCREW P4x30mm -- 4 pcs
    WASHER 4x0.9mm -- 8 pcs
    M4 NUT -- 8 pcs
    SPINNER Ø57mm -- 1 pc.
    THROTTLE PUSHWIRE Ø1.2x450mm -- 1 pc.
    PLASTIC TUBE Ø6x3x250mm -- 1 set
15. COWLING -- 1 pc.
16. FUEL TUBE Ø6x5mm -- 2 pcs
   SCREW PA2.6x12mm -- 6 pcs
   SILICON GROMMET d1.5xD6.5mm -- 6 pcs
17. FUEL TUBE Ø6x5mm -- 1 pc.
18. LINKAGE CONNECTOR Ø2.1mm -- 1 set
19. STRAPPER PL4112012 -- 2 pcs
   FUEL TUBE Ø6x5mm -- 2 pcs
   SPONGE 10x80x200mm -- 2 pcs
   FUEL TUBE Ø6x5mm -- 2 pcs
   CLEVIS -- 2 pcs
20. CANOPY -- 1 pc.
    PILOT PC001085A -- 1 set
    SCREW PWA2.3x8mm -- 4 pcs
    SILICON GROMMET d1.5xD6.5mm -- 4 pcs
    COCKPIT -- 1 pc.
21. SCREW HM4x40mm -- 2 pcs
    CLEVIS -- 2 pcs
    FUEL TUBE Ø6x5mm -- 2 pcs
    SPONGE 10x80x200mm -- 2 pcs
    PUSHROD CONNECTOR PL4410010 (For Elevator) -- 1 set
    PUSHROD Ø1.8x70mm (For Elevator) -- 1 pc.
22. DECALS A004RFDEC -- 1 set

TOUGHON--
TOUGHON STL 100 WHITE
TOUGHON STL 312 BRIGHT RED
TOUGHON STL 350 CORSAIR BLUE
TOUGHON STL 004RWIG
TOUGHON STL 004REUS

A004NP31351603
1 Aileron

Aileron Servo Lead

Bottom View

2 Main Landing Gear

PA2.6x10mm Screw — 8
PM2x8mm Screw — 8
2mm Washer — 16
2mm Nut — 8

Bottom View

3 Landing Gear

PA2.6x10mm Screw — 4
3mm Set Screw — 4
4.1mm Collar — 4

Wheel Ø76mm

Completed

L/R

A004NPO31351603 P.3
4 Aileron Servo

Wing joiner
9x24x223mm

Aileron Servo

PWA2 x 8mm Screw 8

PB2x16mm Screw 2
PB2x20mm Screw 4

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

P.4

5 Aileron Servo

Fuel Tube
Tri-Horn M3x9mm

PB2x16mm Screw 2
PB2x20mm screw 4

6 Main Wing

● Please dry fit wing joiner into left and right wing to make sure they fit with the proper dihedral angle, mark the wing joiner if necessary. Apply epoxy glue to both sides of all surfaces in contact. Use a stick to apply the glue to inner side of wing joiner sleeve, and apply the glue to wing joiner before putting them together. Wing joiner not glued properly will lead to wing failure and plane crash.

Wing joiner 9x24x223mm
For Flap Servo
Lead to Aileron Servo
10 Stabilizer & Elevator

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

11 Vertical Fin & Rudder

PA3x12mm Screw  2
3mm Set Screw  2
2.1mm Collar  2

12 Fuel Tank

Fuel Tank 380cc

Double-sided Tape 40x100mm
Cable Tie 1.5x5x400mm
13 Engine Mount

- Apply thread locker to screws.

! Blind nuts are off-centered to keep the spinner at the fuselage axis.

14 Engine

- Please refer to the attached sheet for usage of the transparent 3D template.

15 Cowling

- First insert the grommet to the cowling then apply screw.
16 Elevator Pushrod

**PB2x16mm Screw**

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

17 Rudder Pushrod

**PB2x16mm Screw**

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

18 Servo Set

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>3x3mm Set Screw</td>
<td>1</td>
</tr>
<tr>
<td>Linkage Connector</td>
<td>1</td>
</tr>
<tr>
<td>M2 Nut</td>
<td>1</td>
</tr>
<tr>
<td>2mm Washer</td>
<td>2</td>
</tr>
</tbody>
</table>

Please refer to the attached sheet for linkage connector installation.
19 Radio Equipment

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

20 Canopy

- PWA2.3 x 8mm Screw
- d1.5 x D6.5mm Silicon Grommet
23 Control Throws

Adjust the control throws as shown in the diagram. Throws are good for general flying. You can adjust according to your personal preference.

- Elevator: 25mm, 25mm
- Rudder: 50mm, 50mm
- Flap: 20mm
- Aileron: 13mm, 13mm
The ideal C.G. position is 105mm (4.13in) 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. If you are converting this model to electric, please move the C.G. forward 10% of current C.G. distance from leading edge to compensate for weight of fuel.

**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.

- *Super Champark-90 RF* is specially designed to be powered by 2C 0.60-0.75 or 4C 0.91 engine, using a more powerful engine does not mean better performance. In fact, over powered engine may cause severe damage and injuries.

- 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. 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.
Drill 2mm hole at servo horn.

Insert linkage connector into servo horn.

Make sure shoulder of screw is cleared from servo horn.
Add washer to reduce play if necessary.

Tighten up the round nut against the shoulder. Apply CA or permanent thread locker.

After fastening the round nut, make sure that the linkage connector can rotate freely.
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.
Usage of the transparent 3D template

This transparent 3D template is used for position guidance of the actual cutting of the pre-painted cowling.

Simply cut the transparent 3D template to fit your engine and exhaust pipe, then slide onto the actual cowling and use as template to mark the openings required for final cutting.