36% Katana

ReQUIRES: 100 c.c. engine, 6-channel radio w/ 9 high torque servos.

**Specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Measurement</th>
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<tbody>
<tr>
<td>Wing Span</td>
<td>106 in / 2690 mm</td>
</tr>
<tr>
<td>Wing Area</td>
<td>2100 sq in / 135.5 sq dm</td>
</tr>
<tr>
<td>Flying Weight</td>
<td>26-28 lbs / 11800-12710 g</td>
</tr>
<tr>
<td>Fuselage Length</td>
<td>93 in / 2360 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 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.
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.)
- **L/R**: 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).**
- **Must be purchased separately!**
- **Pay close attention here!**
- **!!! Warning!!!** Do not overlook this symbol!
- **Pierce the shaded portion covering film.**
- **Apply thread locker**
### Parts List

1. **Main Wing** -- 1 pair  
   - **Metal Hinges** -- 18 pcs

2. **Heavy Duty Servo Horn** PL4120300 -- 4 sets  
   - **Screw PM4x35mm** -- 2 pcs  
   - **Screw PM4x75mm** -- 2 pcs  
   - **M4 Nylon Insert Lock Nut** -- 4 pcs
   - **Heavy Duty Hinge Bracket** PL4112200 -- 8 sets  
   - **Swivel Clevis Hinge Fairing** PL4610010 -- 4 sets  
   - **Pushrod Ø2.5x80mm w/ Threads (For Aileron)** -- 4 pcs

3. **Stabilizer & Elevator** -- 1 set  
   - **Metal Hinges** -- 12 pcs  
   - **Pushrod M3x35mm w/ Threads (For Elevator)** -- 2 pcs
   - **Swivel Clevis Hinge Fairing** PL4610010 -- 2 sets  
   - **Screw PM4x85mm** -- 2 pcs

4. **Stabilizer Tube Ø22x615mm** -- 1 pc.  
   - **Screw PA3x36mm** -- 2 pcs  
   - **Washer d3xD7mm** -- 2 pcs  
   - **Fuselage** -- 1 pc.

5. **Vertical Fin & Rudder** -- 1 set  
   - **Metal Hinges** -- 5 pcs

6. **Tail Gear Assembly 20-28LBS** PL3410020 -- 1 set  
   - **Fire Wall 12x125x164.2mm (F12)** -- 1 pc.
   - **Engine Box Side Plate 6x98x330mm (F10)** -- 1 pc.
   - **Engine Box Side Plate 6x98x321.7mm (F11)** -- 1 pc.
   - **Lower Plate 3x159x165mm (F13)** -- 1 pc.
   - **Balsa 10x10x98mm (F23)** -- 1 pc.
   - **Balsa 10x10x98mm (F24)** -- 1 pc.
   - **Balsa 10x10x153mm (F25)** -- 1 pc.
   - **Balsa 10x10x98mm (F23A)** -- 1 pc.
   - **Balsa 10x10x98mm (F24A)** -- 1 pc.
   - **Balsa 10x10x153mm (F24A)** -- 1 pc.
   - **Wood 10x10x98mm (F26)** -- 6 pcs

7. **Main Landing Gear** -- 1 pc.  
   - **Main Wheel Ø102mm** -- 2 pcs  
   - **Axle Shaft Ø5x54mm** -- 2 pcs
   - **M8 Nylon Insert Lock Nut** -- 2 pcs  
   - **Socket Head Screw M6x20mm** -- 4 pcs
   - **Collar Ø5.2mm w/ set screw** -- 4 pcs
   - **Wheel Pants** -- 1 pair

8. **Pushrod Ø2x615mm** -- 1 pc.  
   - **Screw PA3x14mm** -- 2 pcs  
   - **Washer d3xD7mm** -- 2 pcs  
   - **Fuselage** -- 1 pc.

9. **Eye Screw M2.5x8x25mm w/ Threads (For Rudder)** -- 2 pcs  
   - **Heavy Duty Clevis PL4112200** -- 2 sets
   - **Swivel Clevis Hinge Fairing** PL46100120 -- 1 set
   - **Screw M4x130mm** -- 1 pc.
   - **M4 Nylon Insert Lock Nut** -- 2 pcs  
   - **Swivel Clevis Hinge Support** PL46102020 -- 1 set
   - **Screw PM2.5x35mm** -- 1 pc.
   - **M2.5 Nylon Insert Lock Nut** -- 4 pcs
   - **Wire Ø1x1100mm (For Rudder)** -- 2 pcs
   - **Copper Tube d2.5xD3.2x8mm (For Rudder)** -- 2 pcs

10. **Fuel Tank 1100cc PL112110G** (Gasoline Fuel) -- 1 set  
    - **Cable Tie (Fuel Tank)** -- 2 pcs

11. **Plywood 3x108x190mm** -- 1 pc.  
    - **Screw PWA2.6x12mm** -- 4 pcs
    - **M6 Blind Nut** -- 4 pcs
    - **Socket Head Screw M6x50mm** -- 4 pcs
    - **Washer d6xD15mm** -- 4 pcs

12. **Eye Screw M2.5x8x25mm w/ Threads (For Rudder)** -- 2 pcs  
    - **Pushrod M3x35mm w/ Threads (For Rudder)** -- 2 pcs
    - **Heavy Duty Servo Horn** PL4120600 -- 2 sets  
    - **Swivel Clevis Hinge** PL4112200 -- 6 sets
    - **Copper Tube d2.5xD3.2x8mm (For Rudder)** -- 2 pcs
    - **Throttle Pushwire Ø1.2x580mm** -- 1 pc.
    - **Pipe Tube d2xD3x350mm** -- 1 pc.
    - **Sponge** -- 2 pcs
    - **Linkage Connector 2.1mm** -- 1 set

13. **Wing Tube Ø38x1150** -- 1 pc.  
    - **Screw PM3x30mm** -- 1 pc.
    - **Screw PA3x30mm** -- 1 pc.
    - **Washer d3xD7mm** -- 2 pcs
    - **Wing Fairing 67x120x330mm** -- 1 pair

14. **Cockpit** -- 1 pc.  
    - **Canopy** -- 1 pc.
    - **Pilot (PC101110F)** -- 1 pc.
    - **Screw PWA2.3x12mm** -- 6 pcs
    - **Screw PM3x20mm** -- 6 pcs
    - **Silicon Grommet d1.5xD6.5mm** -- 6 pcs
    - **Washer d3xD7mm** -- 2 pcs

15. **Cowling** -- 1 pc.  
    - **Transparent 3D Template** -- 1 pc.
    - **Spinner Ø102mm (w/ alu. back plate)** -- 1 set
    - **Screw PA3x12mm** -- 6 pcs
    - **Silicon Grommet d2.5xD8.5mm** -- 6 pcs
    - **Washer d3xD7mm** -- 6 pcs

16. **Decals** -- 1 set

### Covering:  
- **Tooughlon STL 330 Cadmium Yellow**  
- **Tooughlon STL 550 Pearl Blue**  
- **Tooughlon STL 511 Pearl Ferrari Red**
1 Main Wing

- Replace CA hinges by metal hinges. Glue the metal hinges to wing and aileron by epoxy.

2 Aileron Servos

- Locate pre-threaded hard wood blocks installed in the ailerons.
3 Stabilizer & Elevator Pushrod

- Locate pre-threaded hard wood blocks installed in the elevators.

4 Stabilizer & Elevator

- Replace CA hinges by metal hinges. Glue the metal hinges to stabilizer and elevator by epoxy.
5 Vertical Fin & Rudder

Replace CA hinges by metal hinges. Glue the metal hinges to vertical and rudder by epoxy.

6 Tail Landing Gear

- PA3x14mm Screw: 3
- PWA2x12mm Screw: 3

Bottom View
7 Engine Box

- Use epoxy to glue all parts together.

Please note right thrust angle of firewall.

8 Main Landing Gear

- Ø5x54mm Axle Shaft 2
- M6x20mm Socket Head Screw 4
- PA3x14mm Screw 4
- 5.2mm Collar 4
- M8 Nylon Inert Lock Nut 2
**9 Rudder Pushrod**

- Locate pre-threaded hard wood block installed in the rudder.

![Diagram of rudder pushrod installation](image)

**10 Fuel Tank**

- Tank installation
  - Tank is sitting on high-density foam with nylon ties to hold to floor

![Diagram of fuel tank installation](image)
11 Engine

- PWA2.6x12mm Screw 4
- M6 Blind Nut 4
- M6x50mm SOCKET HEAD SCREW 4
- d6xD15mm Washer 4

Center line of firewall

- Engine thrust line

12 Radio Equipment

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

- Heavy Duty SERVO HORN PL4120600
- Copper Tube d2xD3x8mm
- Press down the center 1/3 portion
- M3x35mm
- WIRE Ø1x1100mm
- Eye Screw M2.5x8x25mm
13 **Main Wing**

**Step 1.** Insert the aluminum wing tube with the pre-drilled hole end into the right wing. Align the lines marked at the wing root and wing tube, then apply the PM3x30mm machine screw through the pre-drilled hole on top of the wing. (Please confirm the alignment of the hole by putting a 2.5mm diameter rod through the pre-drilled wing hole before applying the screw.) The hole on the wing tube is pre-threaded, do not over tighten the PM3 screw, the set up is for future removal of the wing.

![Diagram of Main Wing](image1)

**Step 2.** Install the right wing to the fuselage by inserting the wing tube (now attached to the right wing) through the fuselage, then install the left wing.

![Diagram of Wing Installation](image2)

**Step 3.** Make sure the wings are resting against the fuselage tightly. Locate the pre-drilled 2.5mm hole at top of left wing, and drill along with 2.5mm drill bit until it passes through the wing tube. Apply the PA3x30mm self-tapping screw.

**Note:** It is recommended that the wing tube stays with the left wing. Removal of the wings could be achieved by removing the right wing machine screw, the right wing then the left wing with wing tube. If removal of wing tube from left wing is also required, it is recommended that instead of applying self-tapping screw in step 3, you pre-tap with M3 thread cutter and apply M3 machine screw.
14 Canopy

- First insert the grommet to the canopy then apply screw.

15 Cowling & Spinner

- First insert the grommet to the cowling then apply screw.
16 Wing Setting

- Adjust the wing and fuselage configuration as shown in the diagrams.
17 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.

- Elevator: 50mm 50mm
- Rudder: 80mm 80mm
- Ailerons: 30mm 30mm

18 C.G.

The ideal C.G. position is 216mm (8.50in.) 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.

- Elevator: 50mm
- Rudder: 80mm
- Ailerons: 30mm

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.
- 36% Katana is specially designed to be powered by 100cc gasoline 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.
- Check and re-tighten up all factory assembled screws, use thread locker if applicable.
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.

Shoulder

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.