29% Katana

Requires: 50 - 60 c.c. engine, 4 - channel radio w/ 8 high torque servos.

Specifications

- Wing Span: 84 in / 2130 mm
- Wing Area: 1131 sq in / 73 sq dm
- Flying Weight: 16-18 lbs / 7264-8172 g
- Fuselage Length: 75.5 in / 1920 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 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.
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 -- 16 pcs
2. **Heavy Duty Servo Horn** PL4120300 -- 4 sets  
   - Screw PM4x75mm -- 2 pcs
   - Screw PM4x65 -- 2 pcs
   - M4 Nylon Insert Lock Nut -- 4 pcs
   - Heavy Duty Horn Bracket PL4112400 -- 4 pcs
   - Swivel Clevis Horn Fairing PL4610010 -- 4 sets
   - Pushrod 2.5x57mm w/ Threads (For Aileron) -- 4 pcs
3. **Stabilizer & Elevator** -- 1 set  
   - Metal Hinges -- 10 pcs
   - Pushrod 2.5x65mm w/ Threads (For Elevator) -- 2 pcs
   - Heavy Duty Servo Horn PL4120300 -- 2 sets
   - Heavy Duty Clevis PL4112200 -- 4 sets
   - Swivel Clevis Horn Fairing PL4610010 -- 2 sets
   - Screw PM4x65mm -- 2 pcs
   - M4 Nylon Insert Lock Nut -- 2 pcs
   - Wood 6x10x22mm (For Elevator Servo) -- 4 pcs
4. **Stabilizer Tube** 16x403mm -- 1 pc.
5. **Vertical Fin & Rudder** -- 1 set  
   - Copper Tube d2.5x3.2x8mm (For Rudder) -- 2 pcs
   - Heavy Duty Clevis PL4112200 -- 2 pcs
   - Heavy Duty Horn Bracket PL4120300 -- 2 sets
   - Swivel Clevis Horn Fairing PL4610010 -- 1 set
   - Screw PM4x75mm -- 2 pcs
   - M4 Nylon Insert Lock Nut -- 2 pcs
6. **Tail Gear Assembly** 13-22LBS PL3410021 -- 1 set
7. **Fire Wall** 9x120x132.2mm (F12) -- 1 pc.
   - Engine Box Side Plate 5x97x266.5mm (F10) -- 1 pc.
   - Engine Box Side Plate 5x97x259.6mm (F11) -- 1 pc.
   - Lower Plate 3x126x131mm (F13) -- 1 pc.
   - Balasa 7x7x97mm (F23) -- 1 pc.
   - Balasa 7x7x97mm (F24) -- 1 pc.
   - Balasa 7x7x121mm (F25) -- 1 pc.
   - Balasa 7x7x97mm (F26) -- 2 pcs
   - Balasa 7x7x78mm (F26D) -- 4 pcs
   - Balasa 10x10x97mm (F23A) -- 1 pc.
   - Balasa 10x10x97mm (F24A) -- 1 pc.
   - Balasa 10x1x121mm (F2A) -- 1 pc.
8. **Main Landing Gear** -- 1 pc.
   - Main Wheel 76mm -- 2 pcs
   - Axle Shaft 4.5x54mm -- 2 pcs
   - M8 Nylon Insert Lock Nut -- 2 pcs
   - Screw PA3x14mm -- 4 pcs
   - Socket Head Screw M5x16mm -- 4 pcs
   - Collar 4.6mm w/ set screw -- 4 pcs
   - Wheel Pants -- 1 pair
9. **Eye Screw** M2.5x8x35mm w/ Theads (For Rudder) -- 2 pcs
   - Wire 1x900mm (For Rudder) -- 2 pcs
   - Copper Tube d2.5x3.2x8mm (For Rudder) -- 2 pcs
   - Heavy Duty Clevis PL4112200 -- 2 pcs
   - Heavy Duty Horn Bracket PL4112400 -- 2 pcs
   - Swivel Clevis Horn Fairing PL4610010 -- 1 set
   - Screw M4x100mm -- 1 pc.
   - M4 Nylon Insert Lock Nut -- 2 pcs
   - Screw PWA2.6x12mm -- 1 pc.
   - Plastic Tube d2x300mm -- 1 pc.
   - Sponge -- 2 pcs
   - Linkage Connector 2.1mm -- 1 set
   - Heavy Duty Servo Horn PL4120300 -- 1 set
   - Heavy Duty Clevis PL4112200 -- 2 pcs
   - Copper Tube d2.5x3.2x8mm (For Rudder) -- 2 pcs
10. **Wing Tube** 25.5x914mm -- 1 pc.
    - Screw PM3x25mm -- 1 pc.
    - Screw PWA3x25mm -- 1 pc.
    - Washer d3xD7mm -- 2 pcs
    - Wing Fairing -- 1 pair
11. **Cockpit** -- 1 pc.
    - Canopy -- 1 pc.
    - Pilot PC001102B -- 1 pc.
    - Screw PWA2.3x12mm -- 6 pcs
    - Screw PM3x20mm -- 2 pcs
    - Silicon Grommet d1.5xD6.5mm -- 6 pcs
    - Washer d3xD7mm -- 2 pcs
12. **Cowling** -- 1 pc.
    - Spinner 89mm (w/ alu. back plate) -- 1 set
    - Screw PA3x12mm -- 6 pcs
    - Silicon Grommet d2.5xD8.5mm -- 6 pcs
    - Washer d3xD7mm -- 6 pcs
13. **Decals** -- 1 set
14. **Hand Tap** M4 -- 1 pc.
15. **Covering:**
   - TOUGH LON STL 330 Cadmium Yellow
   - TOUGH LON STL 550 Pearl Blue
   - TOUGH LON STL 511 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 hardwood blocks pre-installed in the ailerons.

PM4x75mm Screw 2
PM4x65mm Screw 2
M4 Nylon Insert Lock Nut 4

Locate hardwood blocks pre-installed in the ailerons.

PM4x65mm Pushrod 2.5x57mm
PM4x75mm (PM4x65mm)

Heavy Duty Clevis

PM2x8mm

M2 Nut

Heavy Duty Horn Bracket

M4 Nylon Insert Lock Nut

Attention 1mm

Drill and tap the swivel clevis horn locations for M4 machine screw.

PM2x8mm

M2 Nut

Heavy Duty Clevis

PM4x65mm

PM4x75mm
3 Stabilizer & Elevator Pushrod

- Replace CA hinges by metal hinges. Glue the metal hinges to stabilizer and elevator by epoxy.

4 Stabilizer & Elevator

- Locate hardwood blocks pre-installed in the elevator.

- Drill and tap the swivel clevis horn locations for M4 machine screw.

- Locate hardwood blocks pre-installed in the elevator.
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

Please note right thrust angle of firewall.

8 Main Landing Gear

- 4.5x54mm Axle Shaft
  - M5x16mm SOCKET HEAD SCREW
  - PA3x14mm Screw
  - 4.6mm Collar
  - M8 Nylon Inert Lock Nut

Use epoxy to glue all parts together.

L/R
9 Rudder Pushrod

- PM4x65mm Screw: 1
- PWA2.6x12mm Screw: 1
- M4 Nylon Insert Lock Nut: 1

10 Fuel Tank

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

- Cable Tie
- Fuel Tank 650cc

11 Engine

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

12 Radio Equipment
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 PM3x25mm 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 setup is for future removal of the wing.

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.

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 PA3 X25mm 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.
Wing Setting

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

# 29% Katana is specially designed to be powered by 50-60cc 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.

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

The ideal C.G. position is 185mm (7.28 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.
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.
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