













FCCESO & Z



NO	PART NAME	QUANTITY
1	Gift box	1
2	PVC base	1
3	PVC cover	1
4	Instruction manual	1
5	Helicopter	1
6	Transmitter	1
7	USB cable	1
8	XC-1S2 charger	1
9	Li-po battery	2
10	Phillips screwdriver	1
11	1.5 hex wrench	1
12	Main blade	1 Se
13	Tail	1
14	Gear	1
	1	

	1	6
SHANIA	2049400	BIVADE
Part No: XK.2.K123.015 Part Name: Battery pack	Part No: XK.2.K110.003 Part Name: Governor group	Part No: XK.2.K123.016 Part Name: Landing gear group
SILVEN	ENVENTS	
Part No: XK.2.K123.018 Part Name: Head group	Part No: XK.2.K123.019 Part Name: Tail group	Part No: XK.2.K123.020 Part Name: Tail Motor group
DATE:	SINTEN	EIVROS
Part No: XK.2.K123.022 Part Name: Rotor Clip Set 2	Part No: XK.2.K123.023 Part Name: Linkage	Part No: XK.2.K123.024 Part Name: Link axle group
	<b>777</b>	111
Part No: XK.2.K123.026 Part Name: Metal swashplate group	Part No: XK.2.X6.001 Part Name: Remote control group	Part No: XK.2.K100.026 Part Name: Charging group
		201-001/0
	Part No: XK.2.K123.018 Part No: XK.2.K123.022 Part Name: Rotor Clip Set 2  Part No: XK.2.K123.022	Part Name: Battery pack  Part Name: Governor group  Part No: XK.2.K123.018 Part No: XK.2.K123.018 Part Name: Head group  Part No: XK.2.K123.022 Part Name: Rotor Clip Set 2  Part No: XK.2.K123.023 Part Name: Linkage  Part No: XK.2.K123.026  Part No: XK.2.K123.026

# 4. The action of inverted flight still also be practiced around the hovering, for you can make more wonderful 5.6channel model helicopter is not a toy. In order to reduce unnecessary damage, pls practice within the computer simulator before into the 3D practice. Flying after you are familiar with it.

1. Pls fly under the experience's direction when you are introduced to the helicopter model in the first time. 2: The beginner should know about the functions of transmitter on the background and shake the reaction

3. Don't hurry with 3Dflight, keeping in practice mode to step by step. The aeroplane is flying all around the

hovering. You can be flying around the hovering after you are very familiar with it. Above two model ,you can take the practice of inverted flight under the experience's direction after you are familiar with it.

of rocker helicopter appears fully understand before they can fly.

The notice for the beginner:

**ACCESSORIES LIST** Part No: XK.2.K123.001 Part No: XK.2.K123.002 Part No: XK.2.K123.003 Part No: XK.2.K123.004

Fait Name. Rotor flead group	Fait Name. Florizontal group	Fait Name. Bearing group	Fait Name. Sciews
2710909	A A A	© ©	IN AND IN
Part No: XK.2.K123.005 Part Name: Rotor group	Part No: XK.2.K123.006 Part Name: Rotor clip set	Part No: XK.2.K123.007 Part Name: Spindle group	Part No: XK.2.K123.008 Part Name: Swashplate
SHOREM	<b>1</b>	201/2016	SHARK
Part No: XK.2.K123.009 Part Name: Limit seat	Part No: XK.2.K123.010 Part Name: Linkage	Part No: XK.2.K100.011 Part Name: Rudder unit	Part No: XK.2.K123.011 Part Name: Servo stent group
ETICHEN .	A A A BENNESH	DIAMAN.	₩ man

# **WARNING**

■ All instructions, warranties and other collateral documents are subject to

visit Our website site.

traffic and people.

NO

3

4

6

■ Read the ENTIRE instruction manual to become familiar with the features of

the product before operating. Failure to operate the product correctly can

### result in damage to the product, personal property and cause serious injury. This is a sophisticated hobby product. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate

this Product in a safe and responsible manner could result in injury or damage

**NOTICE** 

change at the sole discretion of our company. For up-to-date product literature,

to the product or other property. This product is not intended for use by children without direct adult supervision. This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury. **ADDITIONAL SAFETY PRECAUTIONS AND WARNINGS** 1. Age Recommendation: Not for children under 14 years. This is not a toy. 2. Always operate your model in open spaces away from full-size vehicles,

### 3. Always carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.). 4. Always keep all chemicals, small parts and anything electrical out of the reach of children. 5. Always avoid water exposure to all equipment not specifically designed and

- protected for this purpose. Moisture causes damage to electronics. 6. Never place any portion of the model in your mouth as it could cause serious injury or even death. 7. With low voltage of transmitter batteries.

**PARTS LIST** 

QUANTITY

3

2

23

3

15

PARA NAME

Rotor head group

Horizontal group

Bearing group 1

Screws

Rotor group

Rotor clip set 1

for beginners flight. ■ After flying this mini helicopter, you will find that the miniature helicopter you played before will be eclipsed by this model. It is the unmatched helicopter model, which is very popular. The beginners will find that it is easy to play, and the flying experts will find that it is fun to play it. ■ Pls read this manual carefully before the flight. It will help you learn more about the product, with a detailed description of the product features.

**INTRODUCTION** 

■This is the company introduced a high simulation helicopter, fine appearance, mini painting. Three unique paddle design, high efficiency brushless motor, citing

protocol, signaling moreStable. Using new gyroscope, 3-axis set with six-axis

gyroscope mode for one, give you more fun flying, especially 3-axis mode Flying

skills, you can easily make a variety of stunts, 6-axis mode ultra-stable, especially

aerodynamic blade design, provide a strong impetus. Using 2.4GHZ communication

- **TABLE OF CONTENTS** Notice Warning
- Helicopter parameters Warning and the guide of using battery .... Battery charging First flight preparation caution Binding TX and RX Binding TX and RX Throttle curve and pitch curve set Gyro parameter setting ana 3D/6G flight transform ... First flight instruction Receiver interface diagram .....

Additional safety precautions and warnings

Introduction . Table of contents

Transmitter chart ... Transmitter chart Installing the flight Battery ..... Trouble shotting guide .... Trouble shotting guide .... Exploded view 13 Parts list 14 Accessories list 15 Accessories list **EXPLODING VIEW** 

7 Spindle group 1					
8	Swashplate	2			
9	Limit seat	1			
10	Linkage	6			
11	Rudder unit	1			
12	Servo stent group	1			
13	Bearing group 2	2			
14	Motor group	2			
15					
16 Receiver seat 1					
17	Base group	1			
18	Battery pack	1			
19	Governor group	1			
20	Landing gear group	1			
21	Gear	1			
22	Head group	12			
23	Tail group	13			
24	Tail motor group	4			
25	Tail group	2			
26	Rotor clip group 2	3			
27	Rods	3			
28	Link axle group	3			
31	Metal clip wing group	15			
32	Metal swashplate group	12			
Note novice flight  1: Please first contact with model helicopters under the guidance of an experienced flight.  2: Novice flight should all understand the function of the remote control on the ground and shake the joystick response after the aircraft appeared to flight after fully understood.  3 can not be anxious and 3D action flight, should be gradual and is now under the 6G model is flying the plane surrounded by hovering practice to master and then perform 3D is flying four hover, after both modes skilled hands of people under the guidance of experienced inverted exercises.  4 inverted still be surrounded by hovering exercises you can do even more beautiful action after laying the foundation.  5 6 through model aircraft is not a toy, to reduce unnecessary damage, when you enter the 3D exercises, you can first enter in the computer simulator Line exercises, proficiency before actual flight.					
14					
	14				
	8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 31 32 Note novice the joys 3 can not flying the 3D is flying inverted 4 inverted the found 5 6 through 5 6 throug	8 Swashplate 9 Limit seat 10 Linkage 11 Rudder unit 12 Servo stent group 13 Bearing group 2 14 Motor group 15 Receiving unit 16 Receiver seat 17 Base group 18 Battery pack 19 Governor group 20 Landing gear group 21 Gear 22 Head group 23 Tail group 24 Tail motor group 25 Tail group 26 Rotor clip group 2 27 Rods 28 Link axle group 31 Metal clip wing group 32 Metal swashplate group Note novice flight 1: Please first contact with model helicopters under the guidance of an experienc 2: Novice flight should all understand the function of the remote control on the group inverted exercises. 2 Inverted still be surrounded by hovering practice to master and then perform 3D is flying four hover, after both modes skilled hands of people under the guidance. 5 6 through model aircraft is not a toy, to reduce unnecessary damage, when you exercises, you can first enter in the computer simulator Line exercises,			

**HELICOPTER PARAMETERS** 275 mm 80 mm Height 78 g Propeller length 276 mm

57 mm

5-7min

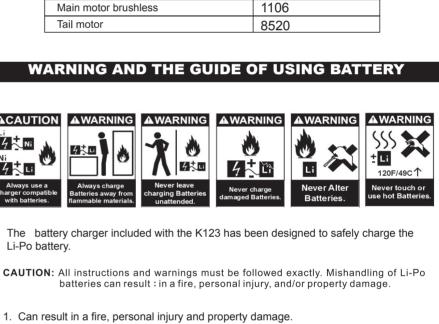
3.7v 500mah 20c

Tail rotor blade diameter

Battery specification

Flight time

# WARNING: Only use the charger supplied by our company. Do not use a 12V power supply or property damage and injury could occur. Notice: When a Li-Po battery is discharged below 3.7 V, the battery may be damaged and may no longer accept a charge. Please land the helicopter immediately and recharge the flight battery. **BATTERY CHARGING**



Possible Cause

Lateral axis is bent

debris in the servo,

swashplates.

causing shakes. The loose between the

Deformed or damaged t ail rotor blades.

Low battery voltage

Failure of binding

Swashplate servos not g

yrus or damage

of helicopter.

Latreral axis screw is not tight .There are some

Solution

Bearing.

Compress the

Replace the lateral axis.

Tighten the lateral axis screw. Change the

Remove the servo, and clear debris.

swash plates. change the tail rotor

Charge the battery or change a fully charged battery.

Rebind the helicopter and transmitter, make

helicopter static level next to the transmitter.

Length adjustment rod,

swashplate

so thatthe vertical spindle

sure you place the

charger may cause fire resulting in personal injury and/or property damage.

Never exceed the recommended charge rate.
 Never cover warning labels with hook and loop strips.

Problem

Main rotor blades are

The sound of the main

rotor becomes smaller.

Helicopter has no reaction or can not

3D/6G model helicopter

fly smoothly.

appeared yaw

shaking in flying

2. By handling, charging or using the included Li-Po battery you assume all risks associated with lithium batteries. 3. If at any time the battery begins to balloon or swell, discontinue use immediately. If charging or discharging, discontinue and disconnect. Continuing to use, charge or discharge a battery that is ballooning or swelling can result in fire.
4. Always store the battery at room temperature in a dry area for best results. Always transport or temporarily store the battery in a temperature range of 40–120° F. Do not store battery or model in a car or direct sunlight. If stored in a hot car, the battery can be damaged or even catch fire.

6. Never use a Ni-CD or Ni-MH charger. Failure to charge the battery with a compatible

Notice: Use only factory supplied charger Notice: Never attempt to power the charger from an AC outlet without the use of a proper AC to DC adapter/power supply.

FIRST FLIGHT PREPARATION CAUTION

1 Use standard charger and USB power cord to connect, and then connect to

3 is connected to the battery charger, the red light is charging, the red light goes

1-cell 3.7V Variable Rate DC Li-Po Charger

2 Afterlamp will flash into your computer charger

4 The charger can charge two batteries simultaneously

off said it had the battery is fully charged.

the computer.

LED on receiver flashes

batteries to transmitter.

The helicopter do not

batteries to receiver.

When push the throttle

pole, the rotor do not

rotate and the LED on

Helicopter takes off

immediately, once the batteries and receiver connected.

3 Receiver flashes

response after connecting

constantly and operating no function after connecting

## 2. Before open the power of TX, please make sure the TH. Stick at the bottom and the switch of TH.HOLD and 3D mode in back position (back cover 3. Make sure the TX is binding with helicopter ,or please rebind them. 4. Please open TX first, then connect the battery with the RX board on helicopter to bind with TX. When close, please cut the power of helicopter first, and then 5. Flying in a suitable area, away from people, cars, electric pylon, pool and so

1. Make sure the battery power is full both for TX and helicopter

TROUBLESHOOTING GUIDE Problem Possible Cause Solution

Transmitter is not bound

Check whether the

receiver connecting

to power: check the voltage of transmitter

and receiver; Battery

pole flake contact is not good.

Low battery voltage;

batteries connection

Didn't put the throttle to

is not good.

transmitter and

Bind transmitter to

Transmitter)

receiver(Refer to P.6, Programming your

Open the transmitter,

Replace and charge

transmitter batteries

Make sure the battery pole flake contact is good.

Replace and charge the

batteries to the receiver

Put the throttle pole at

the lowest position

transmitter.

board

make sure the batteries connecting is good

11 mo	elicopter yaw occurs in 6G ode,	Helicopters hover need to	Reference helicopter 6G
		reconfigure	mode setting
12	elicopter took off spin the left.	Tail motor power shortage loose blades Tail motor damage	Check with the tail rotor blad and the motor shaft, If loos replacement tail rotor blad Motor damage Replace the tail motor.
sup	elicopter power is turned preme speed governor ectric sound	Brushless speed governor fault or poor contact	Check the connectors repla speed governor

	5	binding propelle	successfor er rotate c helicopter	onstantly	Low charge in batteries or m gear loose.		Replace and charge the batteries; press the spindle with gear tightly.
	6		oter vibra in flight.		Damaged rot and lateral as blade grips to causing the n of the main rosmooth.	tis oo tight novement	Change the main rotor blades, and lateral axis Loosen the blade grips properly.
					11		
:	will be 2. Turn o will iss 3. Turn o remote	you turn or issued Did n the remo ue reported n the remo	i alarm sour te control w d drops Offi te control w	nd, you should hen, 3D switch beat, you shoul hen the throttle	le hold switch is ON, switch back to the O in the ON state, the Id switch back to the e stick is not in its low nd, you should leave	FF position. remote controller OFF position. est position, the	21
		TH	ROTT	TLE CU	RVE AND	PITCH C	URVE SET
ī		Position	Normal	3D Idle	<b>A</b> .		
	Throttle	1	0	100	Position	Normal	3D Idle
	Curve	2	45	100			
		3	65	100		/	
		4	80	100	<del>/                                      </del>	<u> </u>	
L		5	100	100	ı z 3 4 5	1 2 3	4 5 1 2 3 4 5
Γ		Position	Normal	3D Idle			
	Pitch	1	40	25	Normal 🕇	3D Idle	
	Curve	2	40 45	25 38			
		3	50	50			<del></del>
- 1		4	62	62			

For convenience of user operation, reduce the setting steps, through 5channel switch to set value, then

1. The RTF products have already set 3D and 6G switch mode, does not support gyro switch change. If the user need to transform the position of 3D and 6G switch, referring to X6 instruction manual into the gyroscope parameters settings and according to your own needs to set value of the switch 2. Using FUTABA original remote controller, please first set 5 channel gyro switch in accordance with the manual, then according to own needs to set value of 3D locked mode and 6G pose mode.

Flying rings

LED display

Gyro switch button up, becoming 6G pose mode when the gyro setting value is between 70-100. Gyro switch button down, becoming 3D locked mode when the gyroscope setting value is between 0-30.

cut 3D locked mode and 6G pose mode.

12	Helicopter took off spin to the left.	Tail motor power shortage loose blades Tail motor damage	Check with the tail rotor blades and the motor shaft, If loose replacement tail rotor blade. Motor damage Replace the tail motor.
13	Helicopter power is turned supreme speed governor electric sound	Brushless speed governor fault or poor contact	Check the connectors replace speed governor
		12	
to ro	buy the original model, the code, press one steps. It is open the remote control of IDLE switch in the OFF pake down the canopy for to harge the helicopter, the recond, then the red lamp go omplete the binding of codine determination of when the urn around, so as not to import of the product is common to the common to the code in the transmitter throttle is cots switch in the open state ble to enter the code programments.	I, make sure the throttle stitution uching the code switch. Idlamp flashes slowly, presto out and into a state of bine when red and blue lamp are code is not the same typoact on the code.  I all FUTABA 2.4GHZ S-FHS not at its lowest position, emitting the opportunity of	oleted on the code, if you need ick in the bottom position, as the code button for 1 ding of code. are brighten for long time. So remote control to the throttle hold switch and 3D
When use the The help follow 1.Ope Pls 2.Cha bott flas 3.Pus 4. Pla	rcraft hovering mode settings you buy products factory has been et following steps to set. elicopter has been set up on fac ving these steps to set up: en the TX, make sure that the gyr set the position of the FUTABA Targing the helicopter, put the throtom after the gyro finish self-che h slowly and into 6G hover flight th throttle rocker to flying, controce the throttle stick and lift rocker onds to save the data, After the I	tory, if it cannot be in hover flight o(3D/6G) switch is on 6G OFF point X switch by yourself. Xttle rocker and lifting rocker to cking. Then, red lamp of TX will debugging mode. If the rocker to hovering and lane ar at the lowest position for 3	nt, pls osition.

Aircraft factory has passed the flight testing, gyroscope go awry in individual cases, by calibrating the 1. Open the remote control, make sure the throttle stick at the lowest position, 3D switch is in the OFF

4. Move the throttle stick to the bottom left corner of breaking while breaking into the lower right corner of the lift rocker 3-4 seconds, then flash lights appeared to enter the gyroscope calibration. The lights

11	6
Notice:  1. When you turn on the remote control, throttle hold switch is ON, the remote control will be issued Didi alarm sound, you should switch back to the OFF position.  2. Turn on the remote control when, 3D switch in the ON state, the remote controller will issue reported drops Offbeat, you should switch back to the OFF position.  3. Turn on the remote control when the throttle stick is not in its lowest position, the remote control will be issuedDidi alarm sound, you should leave the throttle stick lowest position.	Right hand throttle  Mode 1 Forward Fly left side Fly right side Fly right side Left Steering Right Steering Fly left side Fly right side Left Steering Right Steering Fly left side Backward  Right Steering Fly left side Backward
THROTTLE CURVE AND PITCH CURVE SET    Position   Normal   3D Idle     1   0   100	2. Which remote control helicopter support CCPM120 degree dedicated remote control, switch the size of the rudder with 3D 6G convert four kinds of joystick mode, Flameout switch (TH.HOLD) and other models, large screen LCD display multi-function remote control.
3 65 100 4 80 100 5 100 100	1.Open the remote control and the throttle stick or leave the lowest position.  2.Remove the engine hood, insert the battery into the battery compartment, and properly connected to the aircraft power.  3.aircraft flat, self-test receiver lights flashing until the receiver lights long bright, self-test is
Pitch Curve 1 40 25 2 3D Idle Normal 3 D Idle	complete, install the Canopy You can fly.  Note: To install the battery in place, cable power cord would like to be placed on both sides, so as not to affect the Canopy Installation
The above information is for your reference only, you can set freely according to your demand  GYRO PARAMETER SETTING AND 3D/6G FLIGHT TRANSFORM	

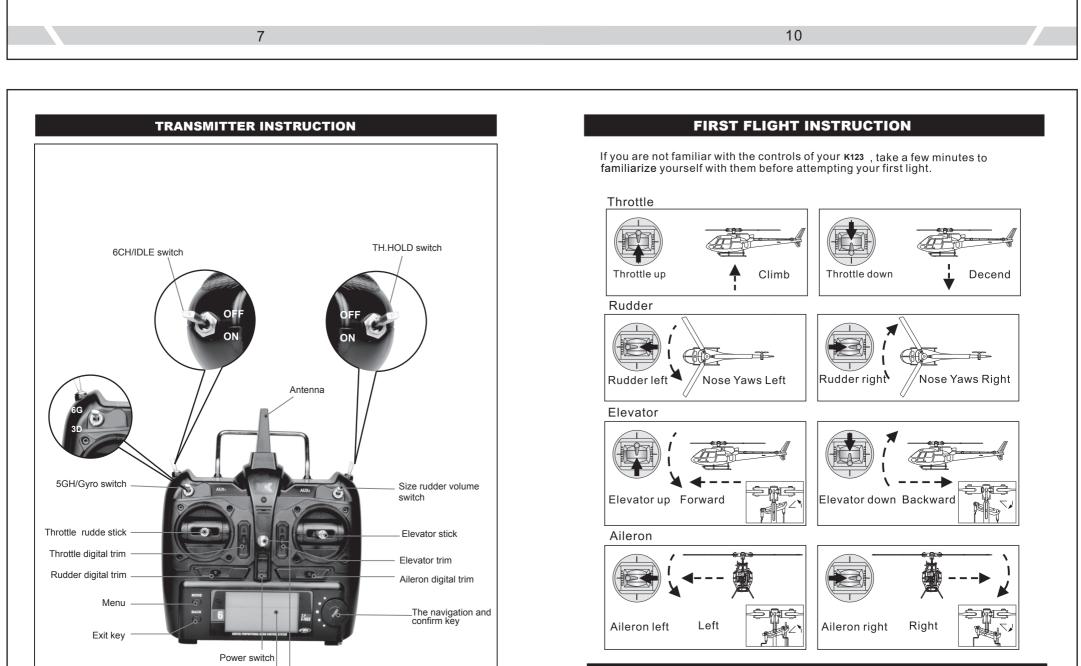
**Gyroscope** calibration

position.

2. Power to the plane, to be self-test is complete, the lights lit.

stay lit after the self-test is complete, you can fly.

3. Push the throttle rocker, by the hovering of rocker control, the plane landed.



**RECEIVER INTERFACE DIAGRAM** 

8

Brushless ESC Interface

Aileron channel plug