Thanks to your choice of our factory remote world products, and grateful. Before you enter the remote world, to telling you a number of related knowledge and precautions to ensure that you can in the process of learning more Handy. Before operation, be sure to read this manual, I believe we can take you a great help, also please keep this manual for further reference.

承蒙阁下选用本厂遥控世界系列产品，谨表谢意。进入遥控世界之前必须告诉您许多相关的知识与注意事项，以确保您能够在学习的过程中获得心应手。在开始操作之前，请务必详阅本说明书，相信一定能够给您带来相当大的帮助，也请妥善保管这本说明书，以作为日后参考。
1. FOREWORD 前言

Thank you for choosing Our product! This is a stunt aircraft suitable for indoor, in order to bring more convenience and easy to use, please carefully reading this manual before operating this aircraft, you properly preserved this manual, adjustment and maintenance for reference in the future.

Greeting your purchase this product! This is a plane in the small space of the aircraft, the stunt level of flight. For your convenience, this manual explains the operation of this aircraft, proper preservation of the manual, maintenance and adjustment and maintenance for reference in the future.

WARNING LABEL MEANINGS 警告标签意义

WARNING 警告

Can be hurt because of negligence of these instructions and wrong using. 因为疏忽这些说明, 从而造成人员伤害。

CAUTION 注意

Can be hurt because of the negligence of these instructions and wrong using. 因为疏忽这些说明, 从而造成人员伤害。

CAUTION 警备

Do not attempt under any circumstances 在任何情况下, 不得尝试使用。

The product is a sophisticated hobby product but not a toy. Although small, it still poses certain risk factors that should not be overlooked. Please follow safety and operation recommendation to ensure correct operation of this helicopter. The use of this helicopter beyond intended purposes and disassembly may cause unforeseen danger, and should be avoided.

Manufacturer and dealer assume no liability for accidental damages by abnormal wear to parts, improper assembly, operation or in unsafe manners. This product is intended for use by age 14 years or older. Please ensure the product under safe environment.

Manufacturer and dealer assume no liability for accidental damages by abnormal wear to parts, improper assembly, operation or in unsafe manners. This product is intended for use by age 14 years or older. Please ensure the product under safe environment.

Proper level of stunt aircraft. Stunt aircraft are prone to accidents, fatalities, and responsible for their actions and damage or injury occurred during pilot error, radio control pilots, are responsible for their actions and damage or injury occurred during the operation or as a plane of R/C aircraft models.

Remote control model, flying sort operation of the aircraft, the flight time to avoid collision, do not fly in the crowd, and electronic equipment, for the operation of the remote control operations, may cause damage to the device, the damage caused by people, the avoid damage.

SAFETY NOTE FOR NH3 BATTERIES 氨电池使用安全

Safety note before using batteries. It is imperative to follow its usage instructions. Manufacturer and dealer assume no liability for accidental damages caused by improper usage. Do not use charger other than the factory supplied.

SAFETY NOTE ON Li-Po BATTERIES 锂电池使用安全

Li-Po batteries poses higher operational risks compared to other battery chemistry, thus is imperative to follow its usage instructions. Manufacturer and dealer assume no liability for accidental damages caused by improper usage. Do not use charger other than the factory supplied.

KEEP AWAY FROM HEAT 避开高温

R/C models are made of various forms or plastic. Plastics are susceptible to damage or deformation due to extreme heat and cold climate. Make sure not to store the model near any source of heat such as an oven or heater. It is best to store the model indoors.

SAFETY NOTE ON BATTERY CHARGING 电池充电安全

Do not charge batteries other than the factory supplied. Please follow the usage instructions. Manufacturer and dealer assume no liability for accidental damages caused by improper usage. Do not use charger other than the factory supplied.

FLYING IN INDOOR 室内飞行

For indoor flight, please keep the aircraft away from obstacles and people. Do not operate stunt aircraft within the vicinity of crowds or people. Please follow safety and operation recommendation to ensure correct operation of this helicopter. The use of this helicopter beyond intended purposes and disassembly may cause unforeseen danger, and should be avoided.
3. STANDARD ACCESSORIES  标准配件

- USB Charger
- USB充電器
- BladeX4
- 4片電動

4. MAMES OF AIRCRAFT 飛行器各部位名称

- Styrofoam shell
- 泡沫壳
- Receiver board
- 接收板
- Motor
- 电机
- Carbon fiber
- 碳纤维
- Motor block
- 电机座

5. NAMES OF CONTROLLER 遙控器各部位名称

- Throttle Trim
- 油门微调
- Throttle-Left/Right Rotation Trim
- 油门左/右旋转
- Left/Right Rotation Trim
- 左右旋转微调
- Power switch
- 电源开关

6. CONTROLLER BATTERY INSTALLATION 遥控器电池安装

- Correct Disposal of this product. This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

- USB Charger
- 充电器
- Battery
- 电池
7. CHARGING 电池的充电

Charge of the factory and distribution of the flying saucer special charger. Plane power switch to position "C". Connect the charger into a power outlet. When the USB connect the power source. After connect the battery, the red lighting will be gone. When the battery charging is finish, the USB will be red lighting as shown.

WARNING 警告
For safety concerns, battery charging must be done under supervision at all times. Do not plug the battery plug is not pulled out, will cause the battery to excessive discharge, and even cause a risk of fire.

CAUTION 注意
Battery type 充电器类型

<table>
<thead>
<tr>
<th>Battery Type</th>
<th>Battery Specification</th>
<th>Usage Duration</th>
<th>Charge Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Li-Po Battery</td>
<td>3.7V500mAh</td>
<td>Aircraft flight time 5-7 minutes</td>
<td>About 1.0 hours</td>
</tr>
<tr>
<td>Carbon-Zinc (Non Rechargeable) Battery</td>
<td>1.5V (GP 15G R6P)</td>
<td>Transmitter Operation Time 18 hours</td>
<td>Non Rechargeable</td>
</tr>
</tbody>
</table>

8. BATTERY AND CHARGER SPECIFICATION 电池与充电器相关规格

8.1 Charging Method 充电方法

- Use the charger to the vehicle battery. Align the USB port to the battery. The charger is red lighting when the USB connect the power source.

8.2 Charge Completion 充电完成

Red light 充电中
The red light out 关闭电源

Input 输入
Charging Current 充电电流
Full Voltage 充电电压

110-240V
500MA
4.2 ± 0.03V

9. BINDING OF RADIO TRANSMITTER AND RECEIVER 遥控器与接收器的对频

Step 1
Aircraft placed in a flat position, the batteries according to the diagram shown in direction pushed into the electrical outlet. Do not move the the body, so that the remote control on the frequency and gyroscope read the neutral point.

Step 2
The throttle stick to lowest power on the remote control.

Step 3
When the end of the flight, unplug power cord.

Step 4
Power down the remote control. If transmitter is not to be used for a long duration, please remove the battery for storage.

WARNING 警告
Battery plug is not pulled out, will cause the battery to excessive discharge, and even cause a risk of fire.

Warming: Battery plug is not pulled out, will cause the battery to excessive discharge, and even cause a risk of fire.

Note: Powering down the transmitter, if not being used for a long duration, please remove the battery for storage.
**10. FLIGHT ADJUSTMENT AND SETTING 飞行动作调整与设定**

**PLEASE PRACTICE SIMULATION FLIGHT BEFORE ACTUAL FLYING “飞行器试飞前模拟飞行”**

**Before you are familiar with the flight vehicle, please don’t set it fly, read the instruction carefully. Get familiar with all kinds of direction control and keep repeating until you can play as you perform your wishes.**

1. Place the flight vehicle a clear open field and the tail of helicopter point to yourself.
2. Practice to operate the throttle stick (as below illustration) and repeat practicing.
3. The simulation flight practice is very important, please keep practicing until the fingers move naturally when you hear operation orders being called out.

**Check if the screws are firmly tightened. Check if the transmitter and receivers are fully charged.**

**When arriving at the flying field, please in no person or obstruction nearby.**

**You must first practice hovering for flying safety. This is a basic flight action.**

(Hovering means keeping the flight vehicle in mid air in a fixed position)

**Please stand approximately 2 m diagonally behind the flight vehicle.**

When the flight vehicle begins to lift-off the ground, slowly reduce the throttle to bring the flight vehicle back down. Keep practicing this action until you control the throttle smoothly.

**STEP 1: THROTTLE CONTROL PRACTICE (油门控制练习)**

1. Raise the throttle stick slowly.
2. Move the nose of the flight vehicle to right or left, and then slowly move the rudder stick in the opposite direction to fly back to its original position.

**STEP 2: AILERON AND ELEVATOR CONTROL PRACTICE (副翼与升降舵控制练习)**

1. Slowly raise the throttle stick.
2. Move the nose of the flight vehicle to right or left, and then slowly move the rudder stick in the opposite direction to fly back to its original position.

**STEP 3: ASCENT AND DESCENT CONTROL PRACTICE (爬升与下降控制练习)**

1. When the flight vehicle begins to lift-off the ground, slowly reduce the throttle to bring the flight vehicle back down.
2. Keep practicing this action until you control the throttle smoothly.

**STEP 4: ASPECT CONTROL PRACTICE (旋转控制练习)**

1. Move the flight vehicle in any direction back, forward, left and right, slowly move the aileron and elevator sticks in the opposite direction to fly back to its original position.

When you want to change the aircraft of the blade, you can see the picture as above. Please pay attention on the picture of the letter which consistent with the blade of the letter. To avoid the aircraft can not fly.

[Diagram of flight vehicle and control options]
**STEP 4**

After you are familiar with all actions from step 1 to 3, circle on the ground and practice within the circle to increase your accuracy.

* You can reduce the size of the circle as you become familiarized with the control reflexes.

1. When rotation left, adjust the trim to fight rotation.
2. When rotation right, adjust the trim to left rotation.

**ADJUSTMENT OF GEAR TRIM: PART 1**

Slowly raise the throttle stick and just as the flight vehicle lift-off the ground, you can use the trim to correct the cation if the flight vehicle leans in a different direction.

1. Rotation around Trim:
   - Just before the flight vehicle lift-off, the nose lean left/right...
     - When rotation right, adjust the trim to left rotation.
     - When rotation left, adjust the trim to right rotation.
   - If the flight vehicle leans forward, adjust the trim to backward.
   - If the flight vehicle leans backward, adjust the trim to forward.

1. Rotation around Trim:
   - Just before the flight vehicle lift-off, the nose lean left/right...
     - When rotation right, adjust the trim to left rotation.
     - When rotation left, adjust the trim to right rotation.
   - If the flight vehicle leans forward, adjust the trim to backward.
   - If the flight vehicle leans backward, adjust the trim to forward.

**STEP 4: DIRECTION CHANGE AND HOVERING PRACTICE**

After you are familiar with step 1 to 4, stand at side of the flight vehicle and continue practicing step 1 to 4. Then repeat the step 1 to 4 by standing in front of the flight vehicle.

* You can increase the accuracy by practicing within the circle as you become familiarized with the control reflexes.

**11. RULE OUT TROUBLE DURING FLIGHT**

<table>
<thead>
<tr>
<th>Situation</th>
<th>Cause</th>
<th>Way to deal with</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The receiver light keeps flashing operation</td>
<td>Unable to bind to transmitter.</td>
<td>Repeat the power up initializing process.</td>
</tr>
<tr>
<td>2. The aircraft not any reaction</td>
<td>1. Power to transmitter and receiver.</td>
<td>1. Turn on transmitter and ensure flight vehicle battery is inserted properly.</td>
</tr>
<tr>
<td></td>
<td>2. Check transmission and receiver voltage.</td>
<td>2. Use fully charged batteries.</td>
</tr>
<tr>
<td></td>
<td>3. Poor contact on battery terminals.</td>
<td>3. Re-reat the battery and ensure good contact between battery contacts.</td>
</tr>
<tr>
<td>3. Motor does not respond to throttle stick, receiver LED flashes.</td>
<td>WHEN Lipo battery power not enough.</td>
<td>Fully charge the battery or replace with a fully charged battery.</td>
</tr>
<tr>
<td>4. Main rotor spins but unable to takeoff.</td>
<td>1. Deformed main blades.</td>
<td>1. Replace main blades.</td>
</tr>
<tr>
<td></td>
<td>2. Flight vehicle battery depleted.</td>
<td>2. Charge or replace with fully charged battery.</td>
</tr>
<tr>
<td></td>
<td>3. Not detected horizontal point.</td>
<td>3. Place on the flat ground and reboot.</td>
</tr>
<tr>
<td></td>
<td>1. Lip groove fitting.</td>
<td>1. Adjust main blades.</td>
</tr>
<tr>
<td></td>
<td>2. Lip groove closing.</td>
<td>2. Adjust the lip groove.</td>
</tr>
<tr>
<td></td>
<td>3. Lip groove out.</td>
<td>3. Adjust the lip groove.</td>
</tr>
<tr>
<td></td>
<td>4. Not detected horizontal point.</td>
<td>4. Place on the flat ground and reboot.</td>
</tr>
<tr>
<td></td>
<td>5. Strong vibration of flight vehicle</td>
<td>5. Replace main blades.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. Replace the main rotor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7. Replace the main motor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8. Place on the flat ground and reboot.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9. Replace the lip groove.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10. Replace the lip groove.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11. Replace the lip groove.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12. Replace the lip groove.</td>
</tr>
</tbody>
</table>

**12. X-31 ATTENTION BEFORE CONTROL**

X-31操作前注意事项
# 12. PARTS LIST

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Name</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Styrofoam shell</td>
<td>泡沫壳</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Receiver board</td>
<td>接收板</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Frame</td>
<td>机架</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Battery</td>
<td>电池</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Battery Box</td>
<td>电池盒</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>The blades A</td>
<td>A风叶</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>The blades B</td>
<td>B风叶</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Motor block</td>
<td>电机座</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>Motor</td>
<td>电机</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>Motor cover</td>
<td>电机壳</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>Carbon fiber</td>
<td>碳纤</td>
<td>4</td>
</tr>
<tr>
<td>12</td>
<td>The front wheel component</td>
<td>前轮组件</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>The rear wheel component</td>
<td>后轮组件</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>Ten type fixed frame</td>
<td>X型固定架</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>LED Light</td>
<td>LED灯</td>
<td>4</td>
</tr>
</tbody>
</table>

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