BEFORE YOU FLY
YOU WILL NEED TO CALIBRATE

Steps on how to calibrate

Place the drone on a FLAT LEVEL surface.
Turn on the controller THEN connect the drone battery.
Bind the controller by moving the left joystick up THEN down, controller will beep.
Move the right joystick to the bottom right for 2 sec. LED on the drone will flash.

PERFORM AS NEEDED OR AFTER ANY CRASH
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IMPORTANT NOTICE:

Important Statement:
(1) This product is not a toy but a piece of complicated equipment which is integrated with professional knowledge by mechanic, electronic, air mechanics, high-frequency emission etc. It should be installed and adjusted correctly to avoid accidents. The user must always operate in a safe manner. We undertake no liability for human injury or property damage caused by improper operation, as we have no control over setup, use and operation of this drone.

(2) This drone is suitable for experienced RC drone users aged 14 years or above. Not safe for users under the age of 14 to use.

(3) The flying field must be legally approved by your local government.

(4) UDI RC has entrusted the distributor to provide technical support and after-sale service. If you have any questions about use, operation, repair etc., please contact your local distributor.

Safety Precautions:
Improper assembly, broken main frame, defective electronic equipment, or unskilled operation may cause unpredictable accidents such as drone damage or human injury. Please pay special attention to the following safety procedures:

(1) Keep away from obstacles and crowds
   The speed and status of a flying RC drone is uncertain and it may cause potential danger. The user must keep away from crowds, tall buildings, power lines etc. when operating a flying RC drone. Do not fly a RC drone in wet or storm/thunder conditions

(2) Keep away from humid environment
   The drone is made of precise electronic components. Humidity or water vapor may damage electronic components causing accidents.

(3) Safe operation
   Please operate the RC drone in accordance with your flying skills. User fatigue, listlessness, and improper operation may increase the rate of accidents.

(4) Keep away from rotating parts
   Rotating parts can cause serious injury and damage. Keep face and body away from rotating motors.

(5) Keep away from heat
   The RC drone is made of metal, fiber, plastic, electronic components etc. Keep away from heat and direct sunshine to avoid distortion and damage.

(6) If you’re about to crash into something, turn the throttle down to zero.

(7) If you’re a beginner learning to fly indoors, tie the drone down or surround it by a cage.
   Due to the size of the drone it is not advisable to fly it indoors unless there is sufficient open space that allows for unobstructed operation of the drone.
1. Drone

![Diagram of Drone]

**Front**
- LED Light

**Clockwise Motor**
- A1
- B1

**Counterclockwise Motor**
- Counter clockwise Motor

**Left**
- Clockwise Motor

**Right**
- Counterclockwise Motor

**Back**
- Picture 1

**NOTE:** (Red LED lights for the two back motors)
(Blue LED lights for the two front motors)

2. Transmitter

![Diagram of Transmitter]

- Mobile Phone Screen (not included)
- Power Indicator Light
- Throttle/Rudder Stick
- Non-working Switch
- Power Switch
- Left/Right Rudder Trim
- Headless Mode
- High/Low Speed Mode
- Lens Hood
- Forward/Backward/Left/Right Flying Stick
- Forward/Backward Trim
- Left/Right Trim
- Flip
- Return Home
- LCD
- Power On Direction

**Picture 2**

For technical support please visit: www.FLYKOLIBRI.com
TRANSMITTER SETUP

Battery Installation: Open the battery cover at the back of the transmitter and install 4 AA alkaline batteries (not included) in accordance with electrode instructions.

Loosen the screw using the enclosed screwdriver and open the battery cover. Tighten the screw after installing the batteries.

Picture 3

Caution:
1. Make sure the batteries are installed correctly by matching the electrodes.
2. Do not mix new and old batteries.
3. Do not mix different kinds of batteries.

Attaching your Mobile Phone to Transmitter

1. Press the self-locking switch on the top right side of the mobile holder and push the holder to a fully open position (Picture 4).

2. Place the mobile phone facing frontward position, pull the mobile phone holder down, and press tightly as possible to secure the mobile phone and transmitter (Picture 5).

Picture 4

Picture 5

3. Insert the lens hood into the slot and make sure the lower edge of the lens hood is as close to the mobile phone as possible (Picture 6).

Picture 6

For technical support please visit: www.FLYKOLIBRI.com
CHARGING INSTRUCTIONS

1. Connect the USB charging cable to any available USB port, then connect the drone battery to the USB charging cable.
2. After connecting the USB charging cable to the USB port, the USB indicator light will turn green. After connecting the USB charging cable to the drone battery, the USB indicator light will turn red.
3. When fully charged, the light will switch to a solid green.
4. Average charging time: 50 minutes

Note:
* To avoid damage and explosions, never place the batteries on a high temperature surface or close to fires or heating devices.
* Never use the batteries for any purpose other than with the drone.
* Never place batteries in water. Keep in a dry place only.
* Never attempt to open the batteries
* Never leave the batteries unsupervised during charging.

NOTE: For faster charging, it is recommended to use a 5V 2A AC Adapter (not included) to charge the battery.

Li-Po Battery Disposal & Recycling
Wasted Li-Po batteries must not be placed with household trash. Please contact your local environmental or waste agency or your nearest Li-Po battery recycling center.

CALIBRATION INSTRUCTIONS

To ensure control of your drone, it is important to always calibrate your drone with your transmitter before flying. Re-calibrating is necessary in the case of difficult operation after take off.

1. Turn off the drone switch and then turn off the transmitter power switch.
2. Turn on the transmitter switch, push the Throttle Stick all the way up, then all the way down (Picture 7 and 8), and the transmitter enters pairing mode.

3. Power on the drone and place it on a flat surface in a horizontal position. The back of the drone should face the user and the front of the drone should face forward. You will hear a “di, do, di” beeping noise three seconds later, which indicates successful code pairing. The drone light will turn solid.
4. Do not move the Throttle Stick before successful calibration. Push the Forward/Backward/Left/Right Stick as shown below (See Picture 9). The drone light will flash, which indicates that the drone is calibrating. When the drone light remains solid, your drone is ready to fly.

![Picture 9](Image)

**IMPORTANT PRE-FLIGHT INSTRUCTIONS**

Checklist Before Flight:
1. Flying area must be spacious. We suggest at least 26Ft (length)*8M (width)*5M (height) of flying space.
2. Make sure the battery of the drone and the transmitter are fully charged.
3. Make sure the Throttle Stick of the transmitter is in the lowest position.
4. Make sure your transmitter and drone are calibrated.

**Pre-Flight Operations:**

1. Turn on the transmitter switch (Picture 10), it’s indicator light with flash quickly. Push the Throttle Stick all the way up then all the way back down (shown Picture 11/12). The indicator will slowly flash which indicates the transmitter entered frequency pairing.
2. Put the battery into the drone battery box, and then connect the battery with the drone. The front light will flash slowly. (Picture 13)
3. Place the drone on a flat surface. The indicator light will turn solid which indicates successful frequency pairing and the drone is ready to be controlled.

*Important:* For better flight control, please make sure the gyro of the receiving board is placed in a horizontal position after powering the drone for better flight control.
TAKE OFF INSTRUCTIONS

To get your drone in the air, the only control you need is the Throttle Stick.

1. Push the Throttle Stick (left stick) up very slowly, just to get the propellers going. Then stop.
2. To get comfortable with the Throttle Stick’s sensitivity, repeat the first step a couple of times.
3. Slowly push the Throttle Stick up further than before until the drone lifts up. Pull the throttle back down to zero to land the drone.

BASIC FLIGHT CONTROLS

1. To fly left or right

![Diagram of drone with throttle stick to the left or right]

Push the Forward/Backward/Left/Right Flying Stick to the left or right.

2. To fly up or down

![Diagram of drone with throttle stick up or down]

Push the Throttle Stick up or down.

3. To rotate the drone left or right

![Diagram of drone with throttle stick to the left or right]

Push the Throttle Stick to the left or right.

4. To fly forward or backward

![Diagram of drone with throttle stick up or down]

Push the Forward/Backward/Left/Right Stick up or down.
5. If the drone rotates to the left or right when taking off

**Left/Right Rudder Trim**
Adjust the Left/Right Rudder Trim to the right if the drone rotates to the left when taking off, and adjust trim to the left if drone rotates to the right.

6. If the drone drifts forward or backwards when taking off

**Forward/Backward Trim**
Adjust the Forward/Backward Trim backwards if the drone drifts forward when taking off, and adjust trim forwards if drone drifts backwards.

7. If the drone drifts to the left or right when taking off

**Left/Right Flying Trim**
Adjust the Left/Right Flying Trim to the right if the drone drifts to the left when taking off, and adjust to the left if drone drifts to the right.

8. High/Low Speed Mode

**1. MODE 1: Low speed mode.**
Suitable for beginners to practice in windless conditions.

**2. MODE 2: High speed mode.**
Suitable for experienced drone users.
GETTING TO KNOW YOUR DRONE FEATURES

HEADLESS MODE

Drones generally have a front and back indicated by LED lights or colored propellers. Before take off, users are instructed to position the head of the drone away from the user. When flown in daylight or at a far distance, determining which side is the front or back becomes difficult.

What is Headless Mode?
The Headless Mode feature allows the user to operate the drone without worrying about the orientation. This feature is great for beginners as it reduces the steepness of learning curve. By default, drone’s are in Non-Headless Mode.

How does Headless Mode work?
The algorithms inside of the drone’s micro-controller ensure that every turning change is compensated. For example, with Headless Mode turned ON, after proper take off, if the user turns the drone 90 degrees to the left, it’ll still go forward when you push the rudder (right stick) forward. NOTE: When headless mode is OFF, this would make the drone go left.

To turn on Headless Mode:
Prerequisite: Position your drone so it’s front is your front.
• Press the Headless Mode button. The LED light of your drone will turn OFF signaling that the Headless Mode is ready.

To turn off Headless Mode:
• Press the Headless Mode button again. The LED light of your drone will turn ON, signaling the Headless Mode is now off.

NOTE: When the Headless Mode is on and the direction and angle of the drone is imbalanced, you can turn off the headless mode, restart it, and the direction and angle will recover to its normal status.
RETURN HOME FUNCTION

What is the Return Home Function?
The Return Home Functions allows users to bring their drone back home automatically by pressing and holding the Return Home button.

IMPORTANT: The Return Home Function is only available when the drone is in Headless Mode.

How Does the Return Home Function Work?
When the Return Home button is held down, the drone will recognize the signal from the transmitter and start making it’s way back toward the transmitter.

How to use the Return Home Function?
Prerequisites: Put the drone in Headless Mode (front white light is OFF) and make sure when flying, the drone is within range of the transmitter. Do not move from the launch point.
• To automatically bring home your drone home, press and HOLD the Return Home button until your drone has returned.
• To stop the drone from returning, move the sticker forward/backward and left/right.

IMPORTANT: Make sure that the Return Home button is held down until your drone has returned. If the Return Home button is simply pressed and released, the Return Home function will not work. There is a possibility that the drone will continue on its course or may fly away in a different direction.

GRAVITY INDUCTION MODE

Gravity Induction Mode is a feature available on the udirc-FPV app that allows you to fly your drone without touching your mobile screen. Turning on Gravity Induction Mode will allow you to fly the drone forward/backward left/right in correspondence to the angle of the mobile phone. For example, if you tilt your mobile phone forward, the drone will fly forward, if you tilt your mobile phone to the left, the drone will fly left. Refer to page 16 for additional instructions.

360° STUNTS

Whenever your drone is about 10 feet or higher in the air, you can hit the Flip Button and the quadcopter will automatically do a flip in the air. Be ready to use your Throttle Stick right after, otherwise it will run itself into the ground.

NOTE: Drone tricks and stunts can take time and practice before mastering. Please familiarize yourself with basic flying techniques before attempting tricks.

DO NOT ATTEMPT ANY STUNTS INDOORS OR WHEN THERE ARE OTHER PEOPLE CLOSE BY.
MOBILE PHONE WIFI APP

Download and Install the our app: Fly Kolibri
The APP is suitable for mobile phone with iOS and Android system, please download from the mobile phone software store:
1. For mobile phone with iOS system, please search Fly Kolibri in APP Store.
2. For mobile phone with Android system, please search Fly Kolibri in Google Play.

AVAILABLE ON THE APP STORE
Fly Kolibri App
# TROUBLESHOOTING GUIDE

<table>
<thead>
<tr>
<th>No.</th>
<th>Problem</th>
<th>Possible Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The transmitter indicator light is off</td>
<td>1. The transmitter battery is too low.</td>
<td>1. Replace the battery.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. The battery’s positive pole and negative pole are in reverse order.</td>
<td>2. Install the battery in accordance with the user manual.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Poor connection.</td>
<td>3. Clean any dirt between the battery and drone connectors.</td>
</tr>
<tr>
<td>2</td>
<td>Failure to pair the drone with transmitter</td>
<td>1. Indicator light is off.</td>
<td>1. The same as above (1.2.3.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. There is interfering signal nearby.</td>
<td>2. Restart the drone and power on the transmitter.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Misoperation.</td>
<td>3. Operate the drone step by step in accordance with the user manual.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. The electronic component is damaged.</td>
<td>4. Visit <a href="http://www.FLYKOLIBRI.com">www.FLYKOLIBRI.com</a></td>
</tr>
<tr>
<td>3</td>
<td>The drone is underpowered or cannot fly</td>
<td>1. The blades are deformed / damaged.</td>
<td>1. Replace the blades.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Drone battery is low.</td>
<td>2. Recharge the drone battery.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Incorrect installation of blade.</td>
<td>3. Install the blade in accordance with user manual instruction.</td>
</tr>
<tr>
<td>4</td>
<td>The drone doesn’t hover and tilts to one side</td>
<td>1. The blades are deformed / damaged.</td>
<td>1. Replace blade.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. The motor holder may be deformed.</td>
<td>2. Replace the motor holder.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. The gyro did not reset after a crash.</td>
<td>3. Put the drone on the flat ground for about 10s or restart the drone to calibrate again.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. The motor is damaged.</td>
<td>4. Replace motor.</td>
</tr>
<tr>
<td>5</td>
<td>The drone indicator light is off</td>
<td>1. The drone battery is too low.</td>
<td>1. Recharge the drone battery.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. The battery is expired or over charge protection.</td>
<td>2. Replace with a new battery.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Poor connection.</td>
<td>3. Disconnect the drone power connector then re-connect.</td>
</tr>
<tr>
<td>6</td>
<td>Cannot see pictures or videos</td>
<td>1. Camera box is poorly connected.</td>
<td>1. Check the wire and re-connect if needed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Damaged camera.</td>
<td>2. Visit <a href="http://www.FLYKOLIBRI.com">www.FLYKOLIBRI.com</a> for all your replacement part needs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. SD card needs to be reformatted.</td>
<td>3. Try reformattting your SD card, if that doesn’t work, replace the SD card.</td>
</tr>
</tbody>
</table>
11. Spare Parts

For convenience, the spare parts are listed for you to choose, which can be purchased from the local seller.

- XK2150-01 Main Frame
- XK2150-02 Propeller
- XK2150-03 Housing
- XK2150-04 Landing Gear
- XK2150-05 Carbon Fiber Tube and Tooth Gear
- XK2150-06 Clockwise Motor (Red and Blue Wire)
- XK2150-07 Counterclockwise Motor (Black and White Wire)
- XK2150-08 Clockwise Motor Parts (Blue Light)
- XK2150-09 Clockwise Motor Parts (Red Light)
- XK2150-10 Counterclockwise Motor Parts (Blue Light)
- XK2150-11 Counterclockwise Motor Parts (Red Light)
- XK2150 H-12 Receiving Board
- XK2150-13 Camera
- XK2150-14 TF Card
- XK2150-15 Battery
- XK2150-16 USB Cable
- XK2150-17 Card Reader
- XK2150 H-18 Transmitter