2.4G remote control instructions

Installation of receiver: (it is recommended to install it on the controlled model after code alignment)

1. The receiver shall be as far away from the engine, motor, electric regulator, battery or other metal parts as possible;

2. The receiver antenna shall not be shielded or covered by metal, carbon fiber material or other conductive shielding materials. The antenna shall not be bent to 90 degrees.
3. After selecting the installation position, fix or bind the receiver in the position. Do not use metal materials or materials containing metal materials or materials with conductive capacity.
4. Connect all controlled equipment and components to the corresponding channel port: note that the direction of 3p signal line must be correct.

2、 Pairing instructions

1. When using for the first time, please turn the accelerator of the remote control to the lowest accelerator position.
2. When using the remote control, please point the transmitting antenna to the outside of the model.
3. Connect the receiver to the power supply, press the accessory switch on the receiver and wait for the blue light to flash; Then turn on the power of the remote control, and the blue light on the receiver changes from flashing to normally on. (if the code alignment is not successful, please repeat this step).
4. The receiver can only be paired with one remote control at a time. Re pairing will invalidate the last paired remote control of the receiver.
5. If it is necessary to re pair the receiver that has completed the pairing setting to other remote control modules, repeat the operation steps described in (4.3).
6. The remote controller can be paired with multiple receivers. When pairing the next receiver, the remote controller needs to be powered off and reopened, and then repeat the operation steps described in (4.3).
7. After pairing, your remote control system can be officially put into use. There is no need to pair each time, and it can be used immediately after starting up.

III Safety and operation precautions

This 2.4GHz remote control system is only designed and manufactured for civil remote control model. Please ensure that the radio control equipment will not be used on manned aircraft and other manned machines.

The radio wave propagates in an approximate straight line mode in the 2.4GHz frequency band. When using, please ensure that there is no shielding between the transmitting antenna of the remote control and the controlled model, that is, it remains visible. In order to ensure effective control, the transmitting antenna should face the controlled model and ensure that the receiver and transmitter are not covered by conductive materials.

The management requirements of remote control model movement are also different all over the world. Therefore, please consult the local management organization before use to ensure compliance with the relevant laws and regulations of the local government, and operate your remote control model under the condition of ensuring safe use.
The 2.4GHz module system is a part of the remote control model system. Assembling and using the remote control model also requires other functional components. Please strictly implement the requirements of the installation and operation procedures of each equipment component. In addition, there are also some general specifications in the field of remote control model. For example, it is forbidden to power on or start the engine before the completion of system inspection, and it is not allowed to have obstacles in front of remote control aircraft, propeller and other moving parts. Before use, it is necessary to detect the effective distance and range of remote control, and ensure a safe clearance or clean environment.

The 2.4GHz remote control system is a precision electronic product, which is prohibited to be used in humid, high temperature, dust and high-voltage electric field environment. The electronic product does not have the function of application in the above environment. It also needs to be stored in room temperature, dry and static free conditions and environment.
In case of crash, collision, rollover and other extreme situations during the operation of the remote control model, please do not continue to use it without comprehensive detection.
Although we have considered and adopted a number of powerful protective measures when designing and manufacturing this 2.4GHz remote control system, all protective measures work only under "normal" use conditions. Therefore, please use it in strict accordance with the safety requirements and user manual.

3.1. Precautions during pairing:
Since the 2.4GHz transmission system supports multi receiver operation and long-distance pairing, please ensure that only when the receiver you want to control is powered on and in the state of waiting for pairing (the blue light of the receiver flashes quickly), then turn on the power source of the remote controller to be paired.
If someone else uses the 2.4GHz remote control system on site, it may lead to pairing failure. Please pair it after other users complete pairing (the blue light is on) or when other 2.4GHz remote controls are not powered on.

3.2. Control distance check:
The effective control range of radio remote control equipment is different on the ground and in the air, on the water and on the ground. There are great differences between complex terrain and simple terrain, sunny and rainy days, and the external electromagnetic environment is also complex and changeable. All remote control models have the requirements of effective control distance, especially some models that need long-distance control, such as large fixed wing aircraft model, glider model, racing rowing model, etc., which require that the controlled model shall not exceed the effective control distance, otherwise serious consequences will occur after losing control. Therefore, we suggest the user to check the effective control distance on site before each

actual manipulation of the remote control model.

In addition, some high-power 2.4GHz devices (such as 2.4GHz video transmission devices) will shorten the safety control distance of the 2.4GHz remote control system if they are used at the same time due to their wide bandwidth and large clutter radiation. Although the 2.4GHz remote control system has excellent anti-interference ability, it has also been verified that the 2.4GHz remote control system can be well matched with high-power 2.4GHz video transmission equipment. However, we strongly recommend that users with such use requirements must check the effective control distance on site before actually manipulating the remote control model every time.

Since the propagation mode of the 2.4GHz radio frequency signal is similar to a straight line, and buildings and vegetation have strong shielding against the 2.4GHz radio frequency signal, users should ensure that the controlled model is within the visual range without shielding and the antenna of the remote controller faces the model when using the 2.4GHz remote control system. When used indoors, since the wall completely blocks the signal of the 2.4GHz remote control system, please ensure that the remote controller and the controlled model are in the same room.

3.3. Safety measures:

When the 2.4GHz module system approaches the edge of the maximum control distance, the reaction speed of the controlled model will decrease, which is one of the safety measures we designed. Therefore, when users feel that the response of the controlled model is slow, they should reduce the distance from the controlled model in time.

Once the control signal is lost, the receiver will maintain the last state before the control signal is lost and wait for the re access of the effective control signal.

3.4. Measures after signal loss:

When in use, if the control range is exceeded or the signal is lost, the LED on the receiver will be converted to blue flashing mode, and the blue light will go out in case of serious loss. At this time, emergency measures should be taken to quickly approach the model out of control. After re entering the effective control area, the system will automatically return to normal control.

3.5. Consideration of power supply capacity:

The receiver requires that the power supply voltage must be continuously maintained above 3.7V.

When using multiple steering gear or digital steering gear, users should fully consider that the high current consumption of multiple steering gear or digital steering gear will reduce the power supply voltage. Therefore, it is necessary to comprehensively consider the power supply capacity of the battery, the power supply capacity of on-board BEC or independent BEC and the consumption demand of the steering gear. Generally, there is a gap between the nominal power supply capacity and the capacity that can be provided in actual use. The instantaneous insufficient supply voltage will cause the ksidea 2.4GHz module system to work abnormally, resulting in out of control. For safe use, please ensure that the power supply capacity of the battery has a certain margin.

4、 Fault diagnosis

1. After long-time pairing, the LED on the receiver cannot turn to bright blue:
Indicates that the pairing is unsuccessful. Turn off the power of the transmitter and receiver. Try pairing again after 10 seconds. If the pairing is still unsuccessful, it indicates that the interference of the external environment is very serious and the 2.4GHz remote control system cannot be used for the time being. Please change the venue or wait for some time to try again.

2. The blue LED on the receiver flashes:
First, it occurs in the pairing stage, indicating that the pairing is unsuccessful and pairing again.
Second, it occurs in the use stage, which means that the receiver has lost the transmitter signal, so it is necessary to quickly approach the two and re-enter the effective control area. Otherwise, the model will lose control and remain in the last valid state.

3. The red LED on the receiver is not on:
If the receiver is not powered on, check whether the power supply of the receiver is normal and whether the power wiring is correct.
4. No response of steering gear:
Check whether the system is in the state of successful pairing (the LED light on the receiver is blue); Check whether the steering gear signal line is correctly connected; Check whether the steering gear fails.
5. Abnormal response of digital steering gear:
As each manufacturer of the new digital steering gear has its own standards, there may be electromagnetic compatibility problems caused by the simultaneous use of multiple electronic devices. You can try to correct or improve the situation by modifying the settings on the remote control and installing magnetic rings.

compliance.

FCC Statement
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a
particular installation. If this equipment does cause harmful interference to radio or
television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/ TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Radiation Exposure Statement

The device has been evaluated to meet general RF exposure requirement.

The device can be used in portable exposure condition without restriction