Fly-Dream 2.4GHz V3 Radio Control System

Thank you for purchasing our Fly-Dream 2.4GHz V3 Radio Control System. We are sure you will enjoy it. The following notes will guide you through the simple set up procedures.

FD 2.4GHz V3 radio control system

FD 2.4GHz works with the standard of Frequency-Hopping Spread Spectrum (FHSS). It changes frequency quickly within each band, so that any interfering signal from the environment does not disturb the signal path between the transmitter and the receiver. This ensures safe, stable operation over a wide range of conditions likely to be encountered at any flying field.

FD 2.4GHz V3 radio control system's features

◆Long range (>1200m on ground for 6 and 8 channel systems, >450m for 4 channel system)

◆Light, small, long range receivers.

◆Failsafe. You can set the receiver to default to a pre-set position on all channels in the unlikely event of signal loss.

◆Automatic frequency scan when turning on the transmitter and receiver ensures no frequency clash and maximum safety.

◆Transmitter antenna design ensures a stable signal.

◆Bind once, use forever!

◆Range test. Convenient method to check the performance of the system which means you won't need to walk kilometers away.

◆Ultra-low-power design. Low power consumption by Transmitter modules and Receivers.

FD 2.4GHz V3 radio control system's details

1. FD 2.4GHz V3 radio control system consists of:

Transmitter module （IS-8F/IS-8J）   ×1
Receiver （IS-8R /IS-6R /IS-4R/IS-4R0）   ×1
Transmitter antenna (IS-TA)   ×1
Voltage protector/Bind(Code) ring   ×1

2. Transmitter module compatibility

Futaba module（IS-8F）：

　Futaba: 3PM/3PK/7U/8U/8J/9C/9Z/10C and FN series.
　Hitec: Optic 6/Eclipse 7.
　WFLY: WFT08/WFT 09.

JR module（IS-8J）：

　JR: 347/388/783/U8/PCM10/PCM10S/PCM10SX/ PCM10IIS/
　　　8103/3810/J9303/MX-22/MX-24S/PX/9X/9XII / Turnigy9X

3. Transmitter module specifications

　Dimensions:58.5×37.5×22.1mm（IS-8F）
　　　　　　　63.9×48.5×36.5mm（IS-8J）
　　　　　　　40.2×20.1×6.2mm （IS-8D） (DIY kit)
　Operating Voltage:6V～18V
　Operating Current: 40mA
　Output Power :< 19mW
　Resolution: 1μs

4. Receiver specifications:

Type	IS-4R0（4CH）	IS-4R（4CH）	IS-6R (6CH)	IS-8R（8CH）
Dimensions	24×15.1×5.6mm	24×15.1×5.6mm	34.2×18.4×8.7mm	36.2×20.1×8.1mm
Weight	1.9g	2.2g	6.5g	7.3g
Distance	240m（on ground）	450m（on ground）	1200m	1200m
Operating Voltage	3.7V～6.0VDC	3.7V～6.0VDC	4.8V～6.0VDC	4.8V～6.0VDC

Follow these easy steps to set up your transmitter and receiver.

Install the transmitter module

1. Remove the original transmitter module.
2. Put the FD 2.4GHz transmitter module into the module port and screw on the transmitter antenna.
3. Set your transmitter to PPM / FM mode.

Bind and set Failsafe on the receiver(s)

1. Before installing the receiver(s) in your model(s) follow the instructions below to bind the receiver to the transmitter.
2. You can set failsafe either in the model or on the bench. It is best to check that the control surface positions for failsafe are what was intended before flying.

Note: When you do install the receiver in the model try to place the tip of the antenna (the silver bit(s) approx 33mm long) away from objects with high conductivity, such as metal parts, servos, ESC's, battery packs, wires, and carbon fiber structures. For receivers with 2 antennas position the tips of the antennas so they are approximately 90 deg to each other. If possible put the tip of the antennas (the 33mm long silver bit) outside of the fuselage for maximum reception.

Bind receivers

1. Turn the transmitter on. Make sure that your transmitter is set to PPM (FM) mode, and then turn the transmitter off. Note:- Receivers will not bind if the transmitter is set to PCM mode.
2. Press the "BIND" button on the TX module and turn on the transmitter. The LED on the module will light green for 0.5s then go off for 1s. Release the button within this 1s. When you have changed to "BIND" mode, the LED on the module will flash between red and green. You are then ready to bind the receivers.
3. **The binding procedure is different for IS-4R(0)(see 3A) and IS-6R and IS-8R (see 3B)**

3A: IS-4R0 and IS-4R	3B:IS-6R and IS-8R
Plug the FD code ring into the 4th channel. Connect the receiver to the battery, The LED on the receiver will light. Immediately pull out the FD code ring (The LED lights for 2 seconds, make sure to pull out the code ring within 2 seconds). The LED will flash quickly and go out. This shows that the receiver has bound to the module. Turn off the power to the receiver. If you do not want to bind more receivers at this time, turn off the transmitter	Press and hold the button on the receiver （under the sign of Vthumb ）. Connect the receiver to the battery. The LED on the receiver will light red (about 2S), Immediately (while the LED is on) release the receiver button. The LED will flash quickly several times and go out. Turn off the power to the receiver. If you do not want to bind more receivers at this time, turn off the transmitter.

4. Check system operation.

Turn the transmitter on. The module LED should be green. Connect the receiver to the battery. The red LED on the receiver will flash three times (now it is searching for the frequency) and light red, indicating the receiver is operating properly. The LED on the receiver will not light when there is no signal.

After following these steps to program your transmitter and receiver, both modules will continue to operate together each time you use the modules without further binding.

Set Failsafe

Set failsafe after initial binding or when you change the receiver to another model.
It is best to set failsafe with the receiver connected to all the functions that you intend to use in your model.

IS-4R0 and IS-4R	IS-6R and IS-8R
1. After initial binding, turn on the transmitter. 2. Plug into FD code ring to the 4th channel. Connect the receiver to the battery (or turn on the power switch on the receiver). The LED on the receiver will light, then go out. Take off the FD code immediately the LED comes on. (The LED will light for only 2 seconds. Make sure to get the code ring off within 2 seconds.) The LED on the receiver will then go on. 3. Move the controls on your transmitter to where you want the surfaces / motor etc to be in the event of lost signal. Turn off the transmitter. The receiver will flash several times; this shows the receiver has remembered the position which you have set. In the rare event that your system losses signal, all channels will return to the position which you have set. 4. Turn off the power to the receiver. Failsafe is now set. 5. Check that failsafe works, by turning on the transmitter then the receiver / model. Turn off the transmitter. The controls should go to their preset position. They will return to those on the transmitter when power is restored. 6. After setting failsafe and making sure the receiver works normally, plug the servo into the 4th channel. 7. Go Fly.	1. After initial binding, turn on the transmitter. 2. Press and hold the button on the receiver(under the sign of "Vthumb"). Connect the receiver to the battery (or turn on the power switch on the receiver). The LED on the receiver will light（about 1s） and then go out for about 1s）. At this time (when the LED off) remove your hand from the receiver button. The LED on the receiver will then go on. 3. Move the controls on your transmitter to where you want the surfaces / motor etc to be in the event of lost signal. Turn off the transmitter. The receiver will flash several times; this shows the receiver has remembered the position which you have set. In the rare event that your system losses signal, all channels will return to the position which you have set. 4. Turn off the power to the receiver. Failsafe is now set. 5. Check that failsafe works, by turning on the transmitter then the receiver / model. Turn off the transmitter. The controls should go to their preset position. They will return to those on the transmitter when power is restored. 6. Go Fly.

Range checking

For safety, we suggest you conduct a range test before each flying session.

1). Have a friend hold the model for you. Position the model at least two feet (60cm) above non-metal contaminated ground. If you don't have anyone to help you, use something like a wooden bench. Make sure the model cannot move under its own power.

2). Press the "RANGE" button on the module and turn on the transmitter. The yellow LED will light for 0.5s then go out for 1s. Make sure you release the "RANGE" button within this 1s. The LED on the module will light yellow. The module is now in "RANGE" mode.

3). Move control sticks on the transmitter and verify that the model is responding normally. Move away from the model to approx 50m (IS-6R, IS-8R) or 30m (IS-4R). If the control surfaces move as expected it shows the TX module and receiver are working as expected and can be used. If control is lost, or the model behaves abnormally, please check and resolve any problems before conducting another range test. Do not fly if the range test fails and cannot be fixed.

4). When range testing is complete, press the "RANGE" button on the Tx module. The LED on the TX module will light green, indicating that the TX module has returned to its normal power state. You can now fly.

During the range test the Transmitter module will have a range of approx 50m (IS-6R, IS-8R) and 30m (IS-4R). In normal power mode, range is greater than 1,200 meters (IS-6R and IS-8R) and 450 meters (IS-4R).

Attention：

1. Range is affected by the environment .Please range test in the open away from any obstacles.

2. If the transmitter is too close to the receiver (about 5cm) the receiver may not work. Simply move the transmitter away from the receiver. It will work fine if the transmitter and receiver are more than 1m apart.

3. Do not fly unless it is safe to do so. Consider the safety of others at all times when flying.

Enjoy your Fly-Dream 2.4GHz Radio Control System.

If you have any questions please do not hesitate to contact us or visit our website: www.fd-rc.com

FCC STATEMENT

1. 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.(2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.NOTE: 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.

RF warning statement:

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.