

# ISF

## INDOOR SLOW FLYER RADIO CONTROL AIRPLANE

“水獭” 室内慢速遥控模型飞机



**ART-TECH**.COM  
R/C HOBBY

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## BRIEF INTRODUCTION

Thank you for purchasing the 'ISF' wireless remote control model plane from Art-Tech. In order to ensure your safety, please read this manual carefully before operating.

With characteristics of light weight, simple structure, easy assembly and operation, in particular, good low-speed flying performance, ISF is suitable for indoors or outdoors in the breeze (such as basketball courts, etc.) flights. With superb crash-resistant performance, it is the best model for beginners.

## MAIN SPECIFICATION

Length: 325 mm

Wingspan: 420 mm

Weight: 28 g

Wing area: 4.1 dm<sup>2</sup>

Li-poly battery: 130 mAh

Controlling distance: > 40 m

Flight time: 10 min

Minimum speed: 2 m/s

## PRODUCT'S CONSTITUTION



Airframe



Wing



Transmitter



Manual

## STATEMENT

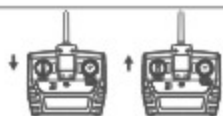
1. 'ISF' is suitable for the beginners. Please keep in mind that you are responsible for the safe operation for this model and any damage or harm which may cause.
2. Please adjust this plane correctly according to instructions and make sure the finger and other parts of your body out of the rotating parts of the plane, otherwise it may cause damage to the plane or injury yourself.
3. The user bears full responsibility of proper operation and use of this model. Art-Tech and any of its distributors can not be held responsible for any liability or loss due to improper operation.

**SAFETY PRECAUTIONS**

1. Never fly the "ISF" where are crowds of people.



2. Make sure that the model as well as the control system is in good state before the plane is taken off.



3. Only use Art-Tech's genuine accessories as replacement for damaged parts.



4. Do not attempt to catch the "ISF" while flying.



5. Not recommended for children under 12 years old.



**ASSEMBLING OF AIRPLANE**

1. Attach double-sided tapes on the back of fuselage.



2. Stick the wing and fuselage together.



Keep the symmetry while sticking the wing.



3. The model has assembled well.



**THE PREPARATION OF 3CH TRANSMITTER**

**BATTERY'S INSTALLATION**

1. Open up the cover of the battery, please place 6 AA cells into the bay as per the marked direction in the bay, and then fit the cover of the battery.
2. Turn on the transmitter.
3. The left indicator will turn green which means the power is on.
4. Turn off the transmitter.



★ You need purchase 6 cells as the power supply to transmitter

**CHARGING MODE**

1. Open up the cover of charging plug on the top of transmitter, then pull out the charging plug.
2. Please make sure that you have turned off the on-off switch.
3. Insert the plug of the charger into the charger socket of the model. (There is only one plug direction of the charger, and please do not insert it by force. Please ensure the on-off switch is on the 'on' position when it is charging.) The right side red indicator will start to flash. During the charging process, the flashing frequency will become faster until it stays lit, which means the battery is fully charged.

1. Open up the cover of charging plug on the top of transmitter.



2. Pull out the charging plug.



3. Connect the charging plug with CHG inside the fuselage.



4. This is the picture of charging.



**SAFETY WARNING****SAFETY INSTRUCTIONS FOR PROPELLER**

1. Anytime, please notice that do not use your face or fingers to approach the rotor wing.
2. Do not try to repair the destructive propeller or use other propeller with different specification.

**B. SAFETY INSTRUCTION FOR CHARGING**

1. Charging the control transmitter with the designed charger.
2. Do not keep away from the model when charging.
3. If you find the battery leaking, smelling, swollen, puffy or abnormal, stop using immediately and dispose of it in a safe place.
4. Do not use the spiculate equipment to prick battery to avoid explosion of the battery.
5. Do not get model wet.
6. Please keep the battery away from flammable materials.
7. Do not fly the model when the temperature is under 0 °C or above 45°C.
8. Please keep the children away from the model during flying.
9. Do not try to replace the li-po battery.
10. Do not throw the battery into fire in order to avoid explosion of the battery.

**SAFETY WARNING FOR INDOOR FLYING****THE SELECTION OF FLYING SITE**

1. Try to choose the indoor site with 6X8 meter where there are no electrical equipment or desk and chair.
2. Please turn off the fan when flying.
3. Please turn off the air-condition, or it will affect the performance of aviation.
4. Avoid flying around the place where there is valuables.

**MODEL CHECK**

Please check the symmetry of the main wing and tail wing, make sure the wing is with no distortion, otherwise it will affect the model flight normally. If the wing is with slight deformation, please try to correct it by hands.

**THE CONTROLLING WAY OF REMOTE CONTROL TRANSMITTER****THE OPERATION OF ASCENDING, HOVERING AND DESCENDING**

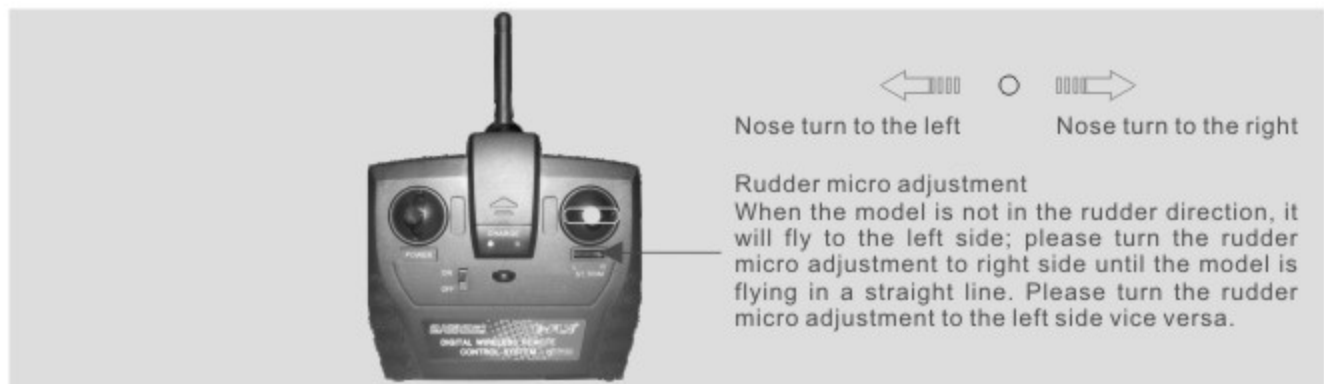
With the shake of left-hand joystick, you can control the speed of main rotor wing to achieve the ascending, hovering and descending of the planes. When push the left-hand joystick to the front, the power will reinforce; while pull the joystick back, the power will be weaken.



- Notice:1. With the accurate increase or decrease the power slightly, you can hold the model at a certain height to achieve the hovering.
2. The joystick is controlled as per proportionment and have 16 levels for the full power so that it can control the power accurately.
3. Please use hands to hold the body of the model if you manipulate this operation in the ground in order to avoid the model will slide front suddenly.

**THE OPERATION OF THE POINTING OF NOSE**


With the shake of the right joystick, you can control the pointing of the nose, then pull the right joystick left, the nose will turn left, whereas, it will turn right.



Note: The control of this direction is as per proportionment, you can achieve the quick or slow shake of nose by pulling range of the joystick.

**HOW TO FLY**

1. Firstly, please pull the left joystick to the bottom, and then turn on the power switch of transmitter,
2. Turn on the switch at the bottom of model, and put the model on the flat ground or table.
3. Please hold the radio and stay at the place where is 2 meters away from model.
4. Please pull the left joystick ahead to increase the speed of the main rotor wing, which will lead the model fly away from ground.
5. Adjust the inching knob under the right joystick to make the nose point to arbitrary direction.
6. Pull the right joystick to right or left, forward or backward to make the model turn right and left, forward or backward.
7. After flying ten minutes and the power will weaken, and you can not fly the model to a certain height steady, then you will have to prepare for landing. The method is that choosing the flat ground and to achieve landing blandly by pulling the left joystick back slightly.
8. After landing, please turn off the power switch on the helicopter first, and then turn off the switch of the transmitter.
9. Check whether the model is damaged, and loose parts.
10. Before your next round flight, please make sure the model and battery is cool enough after ten minutes before charging so that it can prolong the life-span of the model.



You should pull down the throttle immediately when crashing with the barrier and turnover. It can avoid the overloading by locking the rotor wing and it also can reduce the damage to the control circuit.

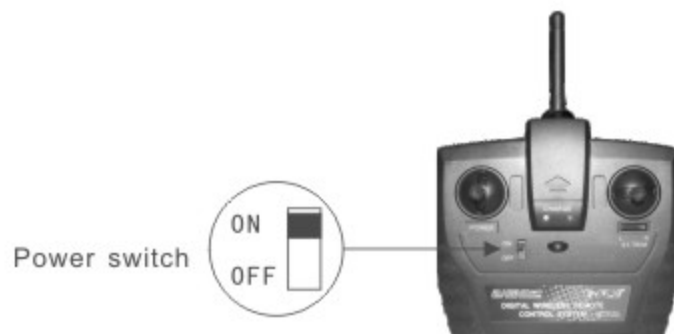
## BIND PROCESS

This model configures with the 2.4Ghz radio system and the automatic frequency binding technology has been adopted. Every time the model is started, the frequency needs to be bound again. Start procedures as follows:

1. Switch on the receiver



2. Then turn on the transmitter. Then the transmitter will enter the frequency binding stage with the right red LED flashing. About 10 seconds later, the flashing will stop and the indicator will be off, which means the binding process is completed.



3. Operate the joysticks and the motor and servo will response accordingly. If there is no response, repeat the above steps.

Notes: Only one transmitter can go on the frequency binding once, or the process will be affected.

During the binding process, the distance between the model and transmitter should be no more than 10m, or the process may fail.

COMMON TROUBLE SHOOTING

Phenomenon	Problem	How to solve
Cannot charge	Did not turn off the switch on the plane.	Turn off the switch on the plane.
	The battery in the transmitter is not full, Did not turn on the switch on the transmitter.	Change new battery, Turn on the switch on the transmitter.
No reaction	Did not turn on the switch on the fuselage.	Turn on the switch.
	The battery in the plane has not fully Charged.	Fully charge the battery.
	The switch of frequency is not in the correct position.	Adjust the switch of frequency to the correct position.
	The battery in the transmitter was not fully charged.	Charge new battery.
The model can not fly high and the propeller rotate slowly.	The battery in the plane was not fully charged.	Recharge the battery.
The model lose control and can not fly stably.	Exceed the controlling distance.	Do not exceed 40 M during flying.
	The battery in the transmitter was not fully charged.	Change the battery.
The model cannot fly up when full charged.	The center of gravity is too forward.	Bend the elevator servo behind the horizontal wing up to 0.5–1mm
The model fly in the shape of undulance.	The center of gravity is too backward.	Bend the elevator servo behind the horizontal wing down to 0.5–1mm.
Automatic turning during flying.	The wing distort.	Rectify the wing.



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THE TROUBLE SHOOTING FOR THE FUSELAGE

If the crust of fuselage is broken, you can use epoxy or silica gel to glue it.



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