

# 6-CH 2.4G Radio Control System Instruction Manual

- Thank you for purchasing our R/C system
- Before using, read this manual carefully



数字比例遥控系统 Digital Proportional Remote Control System





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## 1.0 Foreword

#### 1.0 Declaration

- (1) This product is designed for experienced pilots aged 14 years of age or older.
- (2) The user should operate the radio controlled aircraft at a legal, designated field.
- (3) HiSKY accepts no responsibility for damage or injury caused by mis-operation, mis-use or mis-control after purchase.
- (4) If assistance is required, please contact the distributor or our customer service representitives.

#### 1.2 Safety notice

- (1) Follow the guidelines specified in this manual

  Do not modify this transmitter in any way unless specified by this manual.
- (2) Safe operation

Operate this device depending on your own skill level and your health status; refrain from using this product if you feel feeble or fatigue. Do not operate this device under the influence of drugs or alcohol.

(3) Flying location

Despite being highly reliable and advanced products, mechanical and electronic failures may still happen. Do not operate the model aircraft in close proximity to people and other obstacles; refrain from flying in averse weather or at night to avoid hurting yourself or bystanders.

(4) Humidity

This product is made of highly complicated electronic and mechanical components, keep the product in a dry environment and avoid humidity to avoid electrical and/or mechanical damage.

(5) Heat

Avoid heat exposure; heat may cause electronic and mechanical components to warp or fail, do not expose this product to excessive heat to prevent failure.

#### 1.3 Pre-flight checklist

- (1) Ensure that the battery packs on both the transmitter and receiver/aircraft are fully charged prior to flight
- (2) Ensure both the throttle stick and the throttle stick and the throttle trim of your stay at the lowest positions before operation.
- (3) The transmitter must be turned on prior to powering on the aircraft .To end your flight, unplug the aircraft battery before turning the transmitter off. An incorrect order of connection or disconnection may cause the loss of control of your aircraft.

## 2.0 Features and specifications

#### 2...1 H-6Q transmitter specification

(1) Channels:6

(2) Resolution: 1024

(3) Frequency: 2.4GHz ISM frequency range

(4) Modulation: GFSK

(5) Spread spectrum mode:FHSS\

(6) Number of frequency channels:20

(7) Hopping rate: 240jumps/s

(8) Output power: <=20dBm

(9) Working current:<=150mA

(10) Operation voltage: 1.2V x 4 NiCad/NiMH (11) Dimensions: 150mm x188mm x 70mm

(12) Net weight: 322g

#### 2.2 H-6Q transmitter features

- (1) Utilizes 2.4GHz Frequency Hopping Spread Spectrum (FHSS) technology
- (2) Collective-pitch helicopters and fixed-wing aircraft compatible
- (3) Digital trim
- (4) Dual rates on aileron, elevator and rudder.
- (5) Swashplate mixing
- (6) Low voltage warning

#### 2.3 XY7000S receiver specifications

- (1) Channels:7
- (2) Frequency: 2.4GHz ISM frequency range
- (3) Modulation: PCM
- (4) Spread spectrum mode: FHSS
- (5) Operation voltage: 4.5-5.5V
- (6) Operation current: <=30mA
- (7) Net weight: 11.5g
- (8) Product size: 41mm x 28mm x 14mm

#### 2.4 XY7000S receiver features

- (1) 2.4GHz FHSS technology
- (2) High reception sensitivity, high resistance to interference

## 3.0 功能说明

#### 3.1 Front panel view

- 1. Antenna
- 2. Handle
- 3. Helicopter mode: IDLE (0/1) Airplane mode: CH5 Flap (0/1)
- 4. D/R (Aile Elve Rudd)
- 5. LED
- 6. Left stick
- 7. Digital trim
- 8. Digital trim
- 9. Eyelet
- 10. Power
- 11. LCD
- 12. Throttle hold
  (Airplane mode: CH6 Undercarriage)
- 13. Right stick
- 14. Digital trim
- 15 Digital trim
- 16. UP
- 17. DOWN
- 18. SELECT



#### 3.2 Rear view

- 1. Screw 1
- 2. Screw 2
- 3. Screw 3
- 4. Screw 4
- 5. Trainer port/DSC
- 6. Battery case cover



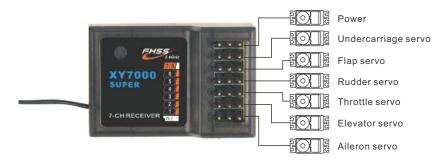
#### 3.3 Wiring diagram and binding procedure

#### Binding:

Switch on the transmitter, reduce throttle to its lowest position and make sure the alarm is off when powering on the receiver/aircraft. Press the bind button (if applicable) until the green light turns, solid, signaling binding success.

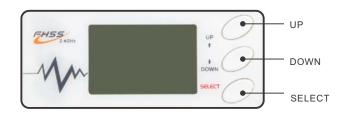
#### Caution:

While binding, place the transmitter and receiver antennas in close proximity if possible; make sure that there are no similar devices on bind mode within approximately 10 meters. If the light flashes after the binding procedure is complete, retry the binding procedure again until the light turns solid.



#### 3.4 Function keys in panel

There are 3 function keys on the H-6 panel, Details below:



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## 3.5 Stick calibration

Center both control columns, simultaneously hold the "throttle" trim up and the "rudder" trim left (mode 2); turn the transmitter on. The buzzer will sound four times, release all trims and reduce the throttle column to its lowest position.

#### 3.6 Trainer port (Digital Signal Converter, DSC)

This port is used to connect the transmitter to an optional simulator on your computer. The trainer cable and USB adaptor is sold seperately.

#### Instructions:

After simulator installation, plug the trainer cable into the DSC port and the USB adaptor; then plug the USB adaptor into the USB port on your computer.

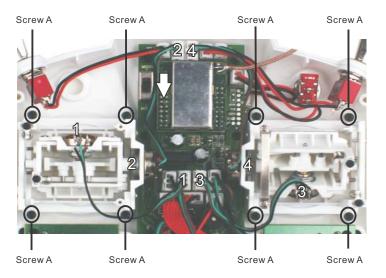
#### Attention:

- 1.Do not plug unauthorized devices into the DSC port on the transmitter; doing so will void the warranty.
- 2. This device is compatible with R/C simulators only.

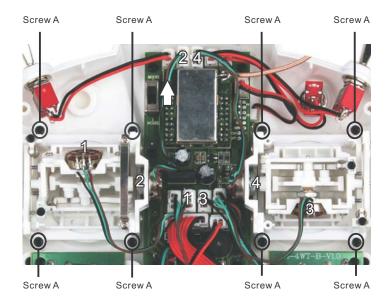
#### 3.7 Throttle stick configuration

To switch the throttle stick from the left column to the right (or vice versa), a mechanical modification needs to be made:

Remove the 4 screws and rear cover to expose the base plate. The photo below shows the in ternal below shows the internal views of right and left throttle setups. Using a phillips screwdriver loosen and remove Screw A to adjust the throttle mode, then screw the Screw A. Potentiometer cable connection in the corresponding positions are shown below. Replace the rear cover when the mechanical switch is completed.



Left throttle stick



Right throttle stick

#### 3.8 Battery installation

4x AA batteries are required to operate the H-6Q, the polarities of which are shown below



#### 3.9 LED backlight warning system

The backlit LCD screen of the H-6Q serves also as a warning system. Under normal operating conditions, the LED backlight is solid. If the backlight flashes and there is an audible warning sound, please check that the following conditions are met on the transmitter.

- (1) The transmitter battery voltage is no less than 4V
- (2) The throttle stick is at its lowest position
- (3) The IDLE switch is set to "0"
- (4) The Throttle hold (TH.HOLD) switch is set to "0"





(2)



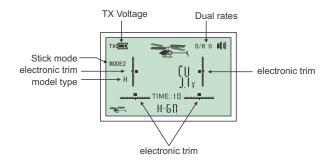


(1)

(3)

#### 3.10 LCD screen functions

The icons and what they signify on the LCD screen are indicated below:



## 4.0 Aircraft type

There are 2 flight modes that can be selected on the H-6Q transmitter: helicopter and fixed winged aircraft. These can be selected by double clicking the "UP" and "SELECT" keys. On the LCD screen, "L" is fixed winged mode while "M/H" is helicopter mode (as shown in the diagram below).



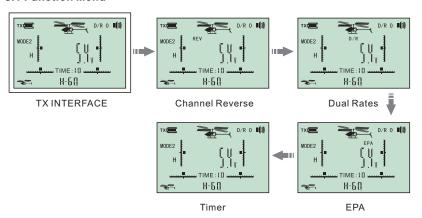
Attention: "M" mode is suitable for the HCP80

"H" mode is suitable for the HCP100  $\,$ 

"L" mode is suitable for the HFP80/HFP100/HMX120

## 5.0 Helicopter mode

#### 5.1 Function Menu



#### 5.2 Channel reverse



This function is used when the channel output opposites the desired output.

To toggle the channel reversal function, click the "UP" and "DOWN" keys to enter the system menu, then click "UP" or "DOWN" to scroll to the REV option; press "SELECT" to enter the REV menu, press "SELECT" again to select the desired channel and to change its reversal settings by clicking "UP" or "DOWN"; after the selection is finalized, press "SELECT" to exit to the channel selection, and simultaneously click the "UP" and "DOWN" buttons to exit to the main menu.

#### 5.3 Dual rates



This function allows one or more controls to have less (or more)control authority at the flick of a switch. With the dual rate selected, the servo deflection will appear to have been reduced in a manner similar to reducing the servo's end points.

To toggle the dual rates menu and make adjustments, click the "UP" and "DOWN" buttons to enter the functions menu, click "UP" or "DOWN" to scroll to the "D/R" option and press "SELECT" to enter the dual rates menu. Press "SELECT" again to select the desired channel and output by clicking "UP" or "DOWN"; after the selection is finalized, press "SELECT" to exit to the channel selection, and simultaneously click the "UP" and "DOWN" buttons to exit to the main menu.

#### 5.4 End point adjustment

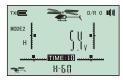


End point adjustment or EPA, limits the amount of travel on the servo, or esc. For example, an EPA limit of 50% means that only 50% of the servo/throttle throw is utilized even if the user input is 100% of the travel on their transmitter.

To toggle the EPA function, click the "UP" and "DOWN" keys to enter the system menu, then click "UP" or "DOWN" to scroll to the EPA option; press "SELECT" to enter the EPA menu, press "SELECT" again to select the desired channel and to change its EPA settings by clicking "UP" or "DOWN"; after the selection is finalized, press "SELECT" to exit to the channel selection, and simultaneously click the "UP" and "DOWN" buttons to exit to the main menu.

#### 5.5 Timer



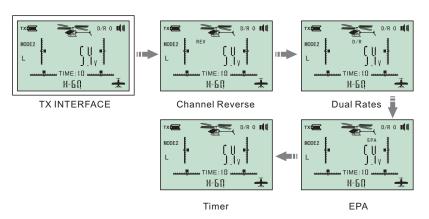


The timer provides audible warnings to the operator in order to control his/her flight time and prolong battery life.

To set the timer: double click "UP" and "DOWN" simultaneously to enter the function menu, then press "UP" or "DOWN" to select the "TIME" function; press "SELECT" to enter the setting menu and select the time by pressing "UP" or "DOWN. After the time has been selected, press "SELECT" to confirm, then hold down the "UP" and "DOWN" keys to return to the default menu. Hold "UP" to start the timer, hold "DOWN" to reset.

# 6.0 Fixed wing aircraft menu

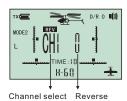
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#### 6.3 Dual rates







Channel select

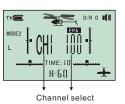
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## FCC Information and Copyright

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.

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

Note: The manufacturer is not responsible for any radio or tv interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.