DISCLAIMER

Please read this disclaimer carefully before using this product. This product is a hobby with motors but not a toy which is not suitable for people under the age of 18. By using this product, you hereby agree to this disclaimer and signify that you have read them fully. You agreed that you are responsible for your own conduct and content while using this product, and for any consequences thereof.

Before you fly the drone

1) Make sure all connections are good, and keep children and animals away during flying, firmware update, system calibration and parameter setup.

2) Always fly the drone away from unsafe conditions, such as obstacles, crowds, high-voltage lines, etc.

3) Do not use in bad weathers such as rainy day, snow, windy (more than moderate breeze), hail, lighting, tornadoes, hurricanes etc.

4) Check whether the propellers and the motors are installed correctly and firmly before flight. Make sure the rotation direction of each propeller is correct.

5) Check whether all parts of the drone are in good condition before flight. Do not fly with aging or broken parts.

6) Never overcharge LiPo batteries. Do not charge above 4.2V per cell. When the battery is fully charged, disconnect it from the charger. Never leave the battery charger unattended during charging.

7) Never discharge batteries to below 3.3V per cell

8) Remove batteries when not using the drone.
Quick Start - Radiolink AT9S Radio Controller

1. Switch G : Up for Angle mode

2. Switch E : Up for Low Speed
   (Only affect in Rate mode)

3. Throttle Down
   Mode 2 : Left Stick

4. Power On

5. Connect battery

6. Place drone on flat surface for 10 seconds to let it initialize.

Always check for battery cable clearance, DON’T let propellers cut the battery cable.
7. Unlock the system
   Mode 2 (default) : Left Stick : Right Bottom
   Mode 1 : Left Stick : Right; Right Stick: Bottom

8. You can fly now

9. After flying and land the drone,
   Please LOCK the propellers IMMEDIATELY
Quick Start - FrSky Taranis X9D Plus Radio Controller

1. Switch G: Up for Angle mode

2. Switch E: Up for Low Speed
   (Only affect in Rate mode)

3. Throttle Down
   Mode 2: Left Stick

4. Power On

5. Connect battery

6. Place drone on flat surface for 10 seconds to let it initialize.

Always check for battery cable clearance, DON'T let propellers cut the battery cable.
7. Unlock the system
   Mode 2 (default) : Left Stick : Right Bottom
   Mode 1 : Left Stick : Right; Right Stick: Bottom

8. You can fly now

9. After flying and land the drone,
   Please LOCK the propellers IMMEDIATELY
How to Control - Radiolink AT9S Radio Controller

**MODE 2 (LEFT THROTTLE)**

- **Switch E**:
  - Up is Low Speed
  - Middle is Medium Speed
  - Down is High Speed

- **Switch G**:
  - Up is Angle Mode
  - Middle is Horizon Mode
  - Down is Rate Mode

- **Switch H**: Flip it once to Reset timer

**MODE 2 (RIGHT THROTTLE)**

- **Switch E**: Up is Low Speed
- **Switch G**: Up is Angle Mode
- **Switch H**: Flip it once to Reset timer
- **Switch C**: Up is Buzzer OFF
  - Middle is Buzzer ON
  - Down is Buzzer ON

Power Switch
How to Control - FrSky Taranis X9D Plus Radio Controller

**MODE 2 (LEFT THROTTLE) Standard**

**MODE 1 (RIGHT THROTTLE)**

**Switch E**  
(only affect in Rate mode)  
Up is Low Speed  
Middle is Medium Speed  
Down is High Speed

**Switch H**  
Up is Timer On  
Down is Timer Reset

**Switch C**  
Up is Buzzer OFF  
Middle is Buzzer ON  
Down is Buzzer ON

**Power Switch**

**Knob S1**  
Speaker Volume

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Motors and propellers rotation
Video Transmitter

The video transmitter has up to 40 different video channels, available to avoid interference with other channels. If two or more drones are flying at the same time, try to select different video frequency to avoid video interference. The bigger different in video frequency between drones, the less interference generated.

**Channel button**

LONG press to change **Band**
SHORT press to change **Channel**

Always check the supported channels of your FPV reception devices such as monitor, goggles.

**Frequency Table**

<table>
<thead>
<tr>
<th>FRCH</th>
<th>CH1</th>
<th>CH2</th>
<th>CH3</th>
<th>CH4</th>
<th>CH5</th>
<th>CH6</th>
<th>CH7</th>
<th>CH8</th>
</tr>
</thead>
<tbody>
<tr>
<td>FR1(A)</td>
<td>5740</td>
<td>5760</td>
<td>5780</td>
<td>5800</td>
<td>5820</td>
<td>5840</td>
<td>5860</td>
<td>5880</td>
</tr>
<tr>
<td>FR2(B)</td>
<td>5705</td>
<td>5685</td>
<td>5665</td>
<td>5645</td>
<td>5885</td>
<td>5905</td>
<td>5925</td>
<td>5945</td>
</tr>
<tr>
<td>FR3(C)</td>
<td>5865</td>
<td>5845</td>
<td>5825</td>
<td>5805</td>
<td>5785</td>
<td>5765</td>
<td>5745</td>
<td>5725</td>
</tr>
<tr>
<td>FR4(D)</td>
<td>5658</td>
<td>5695</td>
<td>5732</td>
<td>5769</td>
<td>5806</td>
<td>5843</td>
<td>5880</td>
<td>5917</td>
</tr>
<tr>
<td>FR5(E)</td>
<td>5733</td>
<td>5752</td>
<td>5771</td>
<td>5790</td>
<td>5809</td>
<td>5828</td>
<td>5847</td>
<td>5866</td>
</tr>
</tbody>
</table>
RunCam Split Camera Recorder Module

* Note: **DO NOT** force pushing the micro SD card into the slot, this will damage both the card and the board. We know because we did!

Installing the video Micro SD Card is **very tricky**, RunCam used the same device like you used on cell phone sim card, you have to lift the lid, put the card into the slot and close the lid to lock it, this method holds the card better, especially in a crash.

1. Make sure you have disconnected battery. The top board is the recording module, open up the Micro SD Card lid on this board.

2. Put the card into the slot like you insert your sim card into your cell phone.

3. Close the lid and **push the lid forward to lock** everything.
Binding with Radiolink AT9S Transmitter

If your drone cannot respond to the radio controller, the connection between radio controller and receiver may be lost, and you can try to re-bind them by following the procedure.

(Skip Step One if it is already Purple light)

1. Press the tiny black button on the side of the receiver twice with small screwdrivers to make LED indicator turn PURPLE to enter S.Bus mode.

2. Press and hold the tiny black button until it is flashing BLUE and PURPLE, turn on the radio controller and it will automatically search for available receiver. The receiver will stop flashing once the binding process complete and there will be a Signal Strength icon on the screen.
Radio Controller Parameters - Radiolink AT9S Transmitter

If you reset your radio controller (AT9) setting, you can apply the setting below:

1) Press and Hold the controller wheel (With wordings “PUSH”) to unlock the manual. Press and Hold Mode Button to go into basic menu page

2) [STK-MODE] = 2 (Stick Mode) [LockScreen] = 30s (Time to lock screen)

3) [TYPE] = AIRCRAFT

4) [SELECT] = 02 [NAME] = CLEANFL (Any name you want)

5) Go to [AUX-CH] -> ATTITUDE, apply the setting below:
   - [CH] = CH5
   - [SW3] = SwG
   - [SW2] = NUL
   - [STABL.] = 0%
   - [STABL.] = 50%
   - [ARCO.] = 100%


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7) [1] [TIME] = 10:00
[1] [MODE] = UP
[1] [ON][1] = ST-THK (Using Throttle Stick to start the timer)
[1][ON]  [2] = 15% (Move the indicator over the value, set throttle stick to around 15%, Press and hold “Push” button to recognize the throttle value and move the wheel to change the arrow sign)
[1][RESET] [1] = SwH (Using Switch H to responsible for the reset timer action)
[1][RESET] [2] = DOWN (Using Switch H’s down action to reset the timer)

8) [1] [AILE] = NOR
[2] [ELEV] = REV
[3] [THRO] = REV
[4] [RUDD] = NOR
[5] [ATTI] = NOR
[6] [AUX1] = NOR
[7] [AUX2] = NOR
[8] [AUX3] = REV

9) [1] [AILE] = 100/100
[2] [ELEV] = 100/100
[3] [THRO] = 100/100
[4] [RUDD] = 100/100
[5] [ATTI] = 100/100
[6] [AUX1] = 100/100
[7] [AUX2] = 56/56
[8] [AUX3] = 100/100

10) Go to [F/S], apply the setting below:
[1] [AILE] = NOR
[2] [ELEV] = NOR
[3] [THRO] = 15%
[4] [RUDD] = -70%
[5] [ATTI] = NOR
[6] [AUX1] = NOR
[7] [AUX2] = NOR
[8] [AUX3] = NOR
**Binding with FrSky Taranis X9D Plus Transmitter**

1. Turn on your Taranis X9D Plus transmitter, goto "Model Setup" (Press MENU and PAGE button once). In the "Internal RF" section, choose **Mode = D16, Channel Range = CH1-16**, **Receiver No. 01**, and then click "Bind", the transmitter will start beeping.

2. Power up the **R-XSR receiver** (Connect battery to the drone) while holding the **Bind** button. The **RED LED** on the receiver will start flashing, which means binding has completed.

3. Power off Transmitter and Receiver.

4. Turn on the transmitter and power on the Receiver; you should see a Green LED on the receiver, which means it has bound with your FrSky transmitter.

**Radio Controller Parameters - FrSky Taranis X9D Plus Transmitter**

For FrSky TARANIS Plus user, you can use the latest OpenTX program to backup/restore your setting or our own profile. You can find the procedures below:


3. Turn on your radio by **holding both lower trims towards the center** and turn on transmitter at the same time, you will enter BootLoader mode.
4. Connect your FrSky Taranis X9D Plus transmitter to your PC / Mac via USB cable and the controller screen will show “USB Connected”.

5. Click ![icon] to read your radio controller profile

6. Your radio controller profile will be loaded on the screen, always click ![icon] to save your existing profile before you make any changes, in case thing goes wrong.

7. Click ![icon] to open our profile, drag the correct drone memory to your own transmitter. 

**Remember** to click ![icon] to write the profile back to your radio.

8. Unplug USB cable, switch off transmitter and switch on again.