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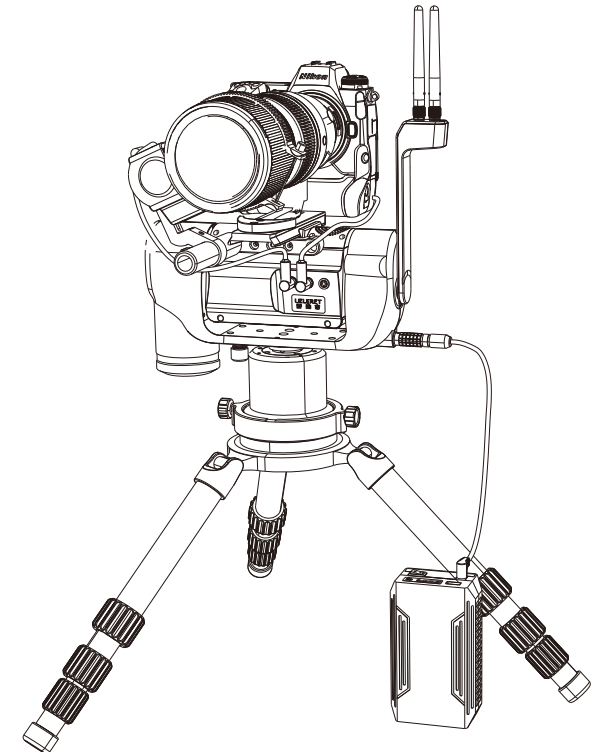
July 2024



## Remote Camera Assistant mini

### Software operation and camera function setting instructions

Nikon version



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## Preface

Thank you for your trust in choosing UELERET Remote Camera Assistant mini.

We will serve wholeheartedly for you.

The Remote camera assistant mini is a highly integrated smart device that controls digital camera shooting and smart gimbal movements through a handle and tablet. When the signal transmission is unobstructed or slightly blocked, the distance between the camera and the operator can be 0-500 meters or 0-1000 meters.

1. This software operation manual is applicable to products:

Remote camera assistant mini (wireless communication distance 500 meters)

Remote camera assistant mini (wireless communication distance 1000 meters)

2. The user pays to download the firmware from the official website of UELERET and purchase the communication package to upgrade to the Remote camera assistant mini 1000.

3. The operating software APP interface is the same for the aforementioned products.

4. The Remote camera assistant mini Pro version allows one host to control 1, 2 or 3 mini smart gimbal for shooting. This installation and operation manual applies to the basic part of the Pro version of Remote camera assistant mini.

The interface of the operating software APP is also the official website of UELERET, and purchased related components to upgrade to the Pro version of the Remote Camera Assistant mini.

5. If the user has purchased a Remote camera assistant mini, pays to download the firmware from the official website of UELERET.

## Basic part

### Chapter 1. Three control methods of Nikon camera

Function Items	Mirrorless camera	DSLR camera	Mirrorless camera
	Z9, Z8	D5, D850, D500	Z9, Z6III
Connection methods	USB cable, HDMI cable, shutter cable	USB cable, HDMI cable, shutter cable	Wireless
App	RCA mini N	RCA mini N	RCA mini
			SnapBridge App
Continuous shooting	Yes	Yes	No, single shooting only
		Add viewfinder camera	
Recording	Yes	Yes	Yes
Switch between photo and video with the App	No	Yes	Yes
Manual introduction	Part 1	Part 2	Part 3

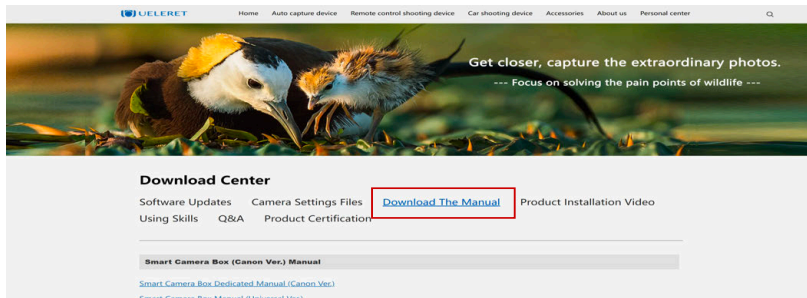
### Chapter 2. Composition and download of the manual

The RCA mini instruction manual consists of three parts and is accompanied by demo video.

Manual	Demo video
1. Software operation and camera function setting instructions	Software operation demon video Nikon camera function setting video
2. Installation instructions	RCA mini (Nikon version) step-by-step installation video

Manual ( PDF format) and videos can be downloaded from UELERET official website

Website: <http://www.ueleret.com>



Special instructions:

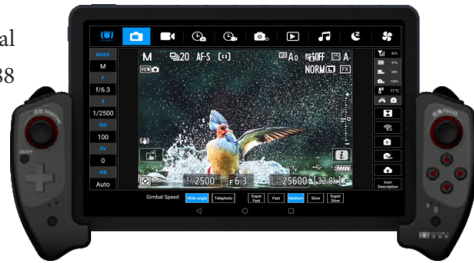
1. Please be sure to read the instructions carefully, install and try it out in a convenient place several times, and become proficient in the installation and debugging methods.
2. If you cannot master it proficiently, it will take a long time to install and debug at the shooting site, which will affect the user to shoot during the best light period.
3. The RCA mini is not a panacea. It is not suitable for all shootings. Whether to use it depends on the characteristics of the shooting object and the venue.
4. Nikon brand cameras have independent requirements for function settings.
5. The Nikon version uses Live View shooting mode for still photo shooting. In order to minimize the image transmission delay, the real-time display image displayed on the tablet uses lower pixels, which is not as clear as the LCD screen image seen when holding the camera. However, please don't worry, it is the camera taking the picture, and the clear and focused picture is stored in the camera memory card.
6. The Remote camera assistant mini uses a self-built 5G signal to realize communication between the smart gimbal, camera and tablet. Therefore, please ensure that the user is using it in a suitable environment.
7. In complex communication environments, such as cities, stadiums, large gatherings, towns, where there are many Wi-Fi signals, many and strong mobile phone signals, and near mobile communication towers, the communication signals of the Remote camera assistant mini may be interfered with , resulting in poor communication between Remote camera assistant and delays in using the device.
8. In the places far away from cities and towns, sparsely populated environments, and around rural areas, the communication conditions are relatively clean, and the Remote camera assistant mini will be smoother to use.
9. The further away from towns and in uninhabited areas, the smoother the communication of the Remote camera assistant mini.
10. After installing the Remote camera assistant and camera, please choose a place with no obstruction or slight obstruction within a distance of 0-500 meters or 0-1000 meters between the two ends for operation, and the signal repeater should be at least 1 meter above the ground. If there is serious obstruction between communications, the transmission of communication signals will be blocked, resulting in reduced communication capabilities, increased delay, and the inability to capture the shooting target in real time.



## Chapter 3. Description of operation part

### 1. Component composition

It consists of a tablet, operating handle, signal transmitter, signal transmitter battery(82.88 Wh), and battery charger.



Tablet computer combined with operating handle ▶

#### Operating handle



Different batches of control handles may have slight differences in appearance and icon printing, but the functions and operation methods remain unchanged.

#### Signal transmitter

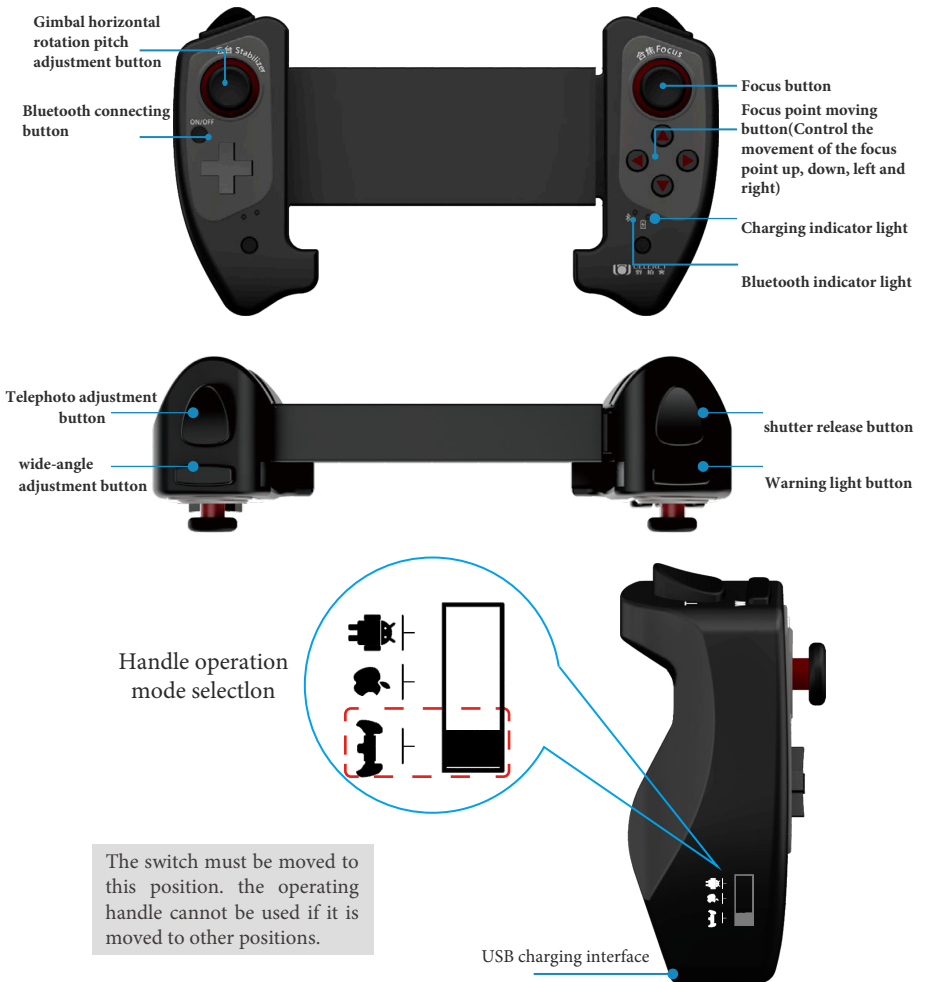


Signal transmitter battery

#### Battery charger




### 4. Operating handle description



The switch must be moved to this position. the operating handle cannot be used if it is moved to other positions.

### 5. Handle charging / Bluetooth connecting function

- 1) The operating handle uses USB interface for charging
- 2) During the charging process, the charging indicator light flashes and stays on when fully charged.
- 3) Connect Bluetooth: Set the handle operation mode switch to “” .

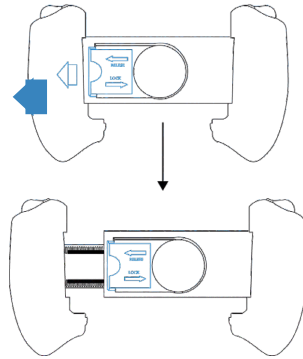
Tips: The operating software is available in tablet and mobile versions. In the following description, the display of the tablet interface is used as an example.

## Chapter 4. RCA mini App and operating handle debugging program

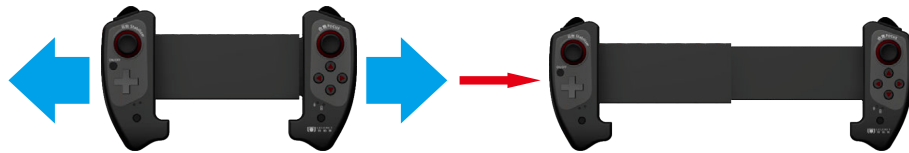
1. Open the hidden bracket at the bottom of the signal transmitter and place it on a suitable ground.

2. Clamp the tablet on the operating handle. For handle expansion and tablet clamping, please refer to the following diagram:

(1). Loosen the buckle on the back of the handle (follow the instructions of the blue mark in the picture on the right, outward to loosen the buckle and inward to lock the buckle), pull the handle outward with moderate force to expand the clamping width of the handle, and then tighten the buckle again.



As shown in the picture on the right, the handle is opened. Pay attention to the position where the width is 5-10mm smaller than the clamping plate, and lock the bayonet on the back.

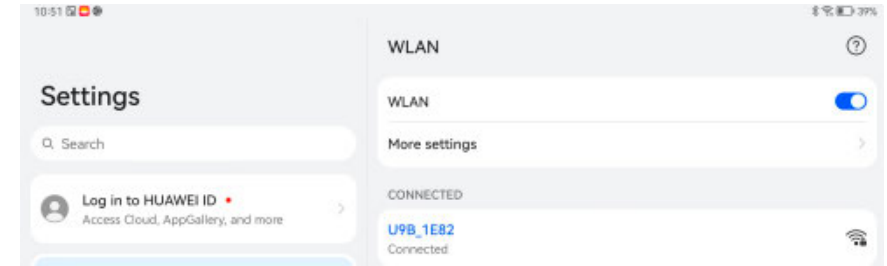


(2). As shown in the picture, pull the bracket to the left and right, and install the tablet from top to bottom. After the tablet is installed at the bottom, release it, and the handle will automatically clamp the tablet.



3. Connect the network between the tablet and the smart gimbal

Shown in the picture below, turn on the tablet and click to turn on Wi-Fi. When you search for the hotspot named "U9B\_\*\*\*\*" click Connect and enter the original password 12345678. When you see the prompt "Signal Connected", it means the connection is completed. If you need to modify the Wi-Fi name, you can read the Wi-Fi naming instructions below.



4. Connect the operating handle to the Bluetooth signal

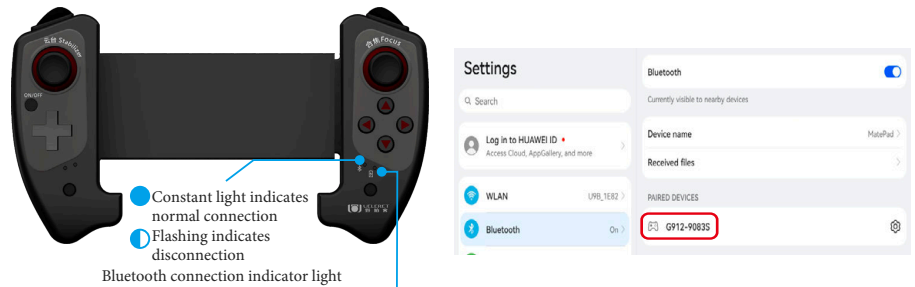
When using it for the first time, it needs to be paired first as following:

Set the handle operation mode switch to press the Bluetooth connection button, and the "⌘" indicator light will flash quickly; turn on the Bluetooth function on the tablet device, click "Scan", and when the device name named "G912-9083S" is searched, select pairing connection; the connection is successful and the "⌘" indicator light is always on. A tablet that has been successfully connected will automatically connect to the handle with Bluetooth turned on when its Bluetooth function is turned on.

\* Notes: After the initial pairing is successful, for subsequent use, you only need to turn on Bluetooth on the tablet, press the Bluetooth connection button on the handle, the Bluetooth connection indicator light on the handle will stay on, and the Bluetooth connection operation between the tablet and the handle is completed.

\* If the indicator light does not display, it means that the connection is unsuccessful.

\* If the indicator light is off, please check whether the battery of the controller is insufficient and whether the Bluetooth of the tablet is turned on.



● Constant light indicates normal connection  
 ● Flashing indicates disconnection  
 Bluetooth connection indicator light

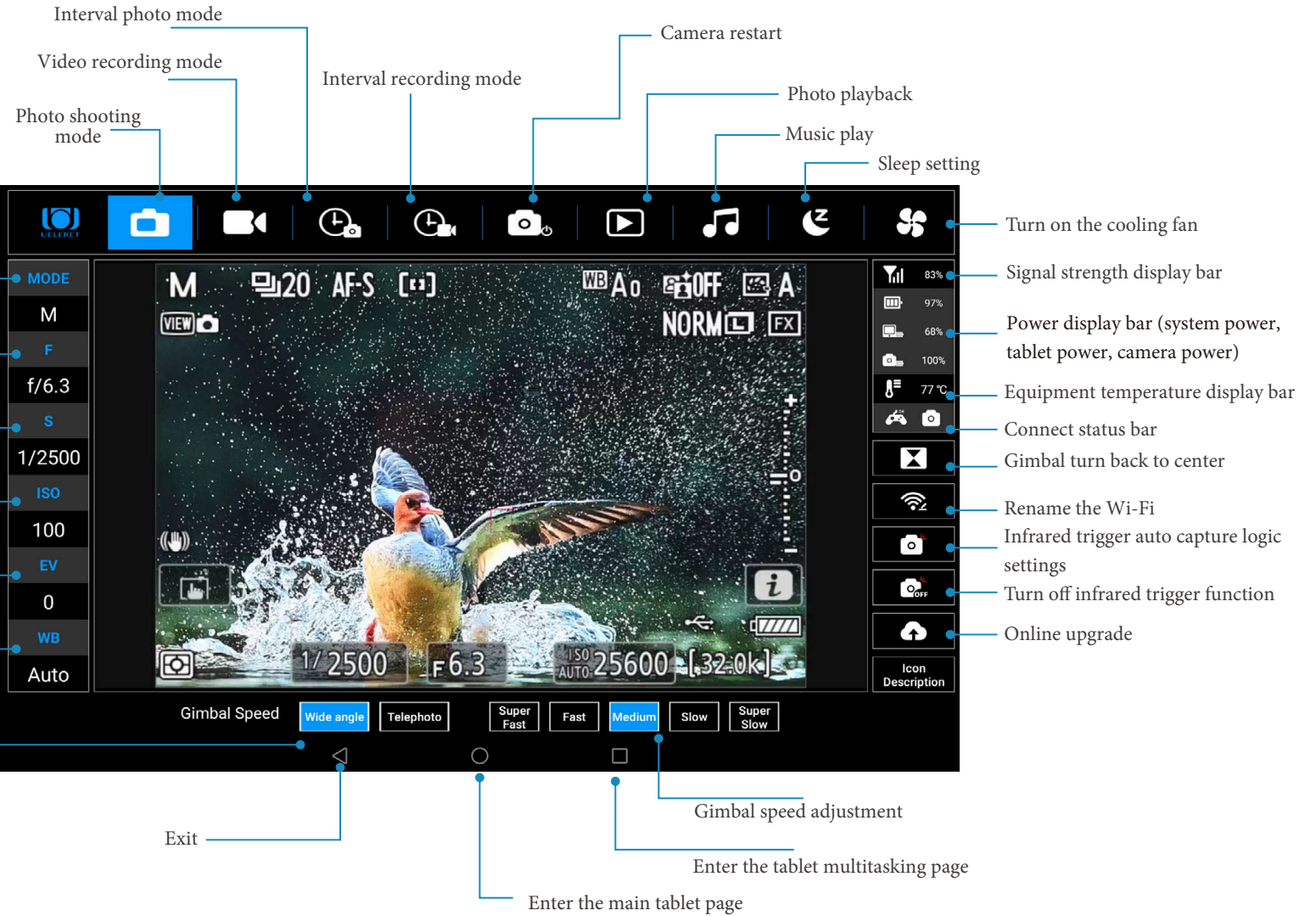
● Always on indicates that the battery is full  
 ● Slow flashing indicates charging  
 ● Flash indicates low battery level  
 ● Charging indicator light

## Part 1 The first control method - Wired connection to Nikon mirrorless camera

### Chapter 1. Introduction to the RCA mini N mirrorless camera operation page function items

#### 1. Software operation interface description

- (1) Tablet interface description (Android).
- (2) Download the mobile APP (Android version) from the official website.
- (3) APP (Apple version) is under development.
- (4) The operating interface of the Z9/Z8 camera.



- Exposure mode adjustment
- Aperture size adjustment
- Shutter speed adjustment
- ISO adjustment
- EV adjustment
- White balance adjustment

- Turn on the cooling fan
- Signal strength display bar
- Power display bar (system power, tablet power, camera power)
- Equipment temperature display bar
- Connect status bar
- Gimbal turn back to center
- Rename the Wi-Fi
- Infrared trigger auto capture logic settings
- Turn off infrared trigger function
- Online upgrade

- Wide angle and telephoto options
- Exit
- Gimbal speed adjustment
- Enter the tablet multitasking page
- Enter the main tablet page

## 2. Choice of Camera & Lens

After entering the login page, a lens specification selection table will appear. After selecting the lens in use, the system will automatically select the appropriate thrust to drive the zoom lens. Not only will the zoom speed be more appropriate, but also a silent effect will be achieved. If you are using a small-sized zoom lens such as 24-70mm, 16-35mm, etc., just choose the "within 70mm" lens.

Illustration of the lens selection table interface of the operating software



The thrust required by the lens zoom adjuster to drive zoom lenses of different specifications:

1. When zoom lenses of different specifications are zooming, the lens zoom adjuster requires different thrust to drive the zoom lens. Different thrusts produce louder and smaller sounds.
2. The specific situation is as follows:

Lens model	Proper lens zoom thrust and sound					
	Big thrust	Sound	Medium thrust	Sound	Small thrust	Sound
70-200mm f/2.8					▲	Weak
80-400mm f/4.5-5.6			▲	Light		
180-600mm F5.6-6.3			▲	Light		

3. Soft material zoom ring: inner diameter 40~84mm. When using short-throw lenses such as 15-35mm/24-70mm/24-105mm, these lenses do not have lens brackets, and the quick release plate must be installed on the bottom of the fuselage. For the relatively small body and is equipped with a zoom ring made of hard material, which will collide with the quick release plate when zooming. With a soft zoom ring, this won't happen. You can download and watch the "Installation of Nikon short throw lens" video from the official website, which has detailed demonstrations.

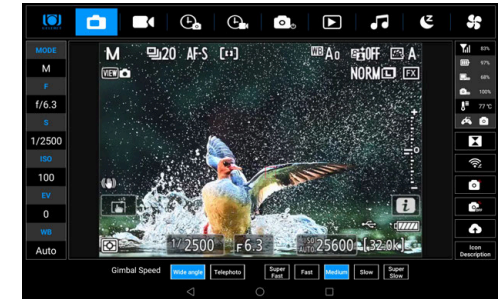
4. Manual focus will be used in the following situations:

- (1). The contrast of the shooting background is very weak, the color difference of the subjects is very small, and the autofocus function is difficult to distinguish.
- (2). Objects that require clear focus are interfered by many other objects, affecting focus. The autofocus function has difficulty focusing on the subject.

Therefore, the above situation will also occur when using the Remote camera assistant mini. You can use the lens zoom adjuster as a focus adjuster, similar to the manual focus method. The same applies when using a fixed-focus lens, and the installation method is the same as the lens zoom adjuster.

3. Test the functions of the tablet to ensure they are workable

Open the operating software [RCA mini App] . The default screen of the APP is photo shooting mode, as shown in the figure below:



Please operate on the tablet in sequence and check whether the following parts are workable:

(1). Look at the status bar on the right to check whether the Bluetooth and Wi-Fi connections are successful.

If it is not connected, the interface will flash a reminder in red as shown on the right. You need to check the corresponding connection steps:

(2). Watch the signal strength on the right side to check the signal strength.

As shown on the right, the corresponding signal strength percentage will be displayed. The higher the percentage, the stronger the signal.

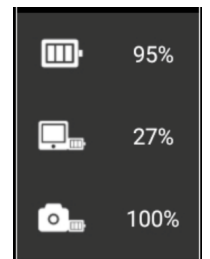
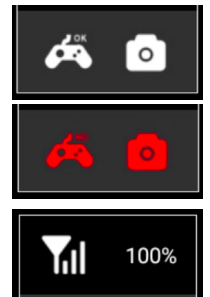
① Signal strength shows the quality data of wireless communication between the smart gimbal and the signal transmitter.

② If the signal strength is lower than 20%, image transmission may not be smooth.

(3). Check the battery status bar on the right to ensure sufficient power.

As shown in the picture on the right, includes system power, tablet power, and camera power.

When the tablet's power is below 20%, it will automatically enter power-saving mode and its image decoding capability will decrease, the screen will appear blurry and delayed, please charge it in time.





1. System power refers to the power supplied to the smart gimbal.
2. When using the UB-01 large-capacity battery, the maximum system power display is 50% until the power runs out. If a boardable smart battery pack is used, the system power display is the actual battery power.
3. Tablet battery: The actual displayed battery power of the tablet or mobile phone. If the battery level is shown below 20%, please charge the tablet in time.
4. Camera battery capacity: If the camera uses the original battery, it displays the actual battery capacity of the camera. If using a camera battery adapter, it will show 100%. Until the system power runs out.

#### 4. Equipment temperature and fan cooling

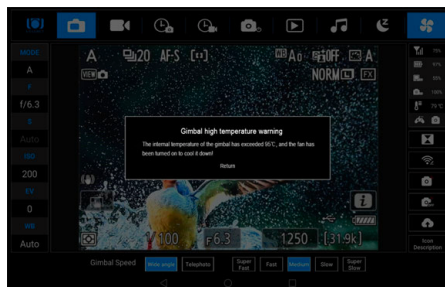
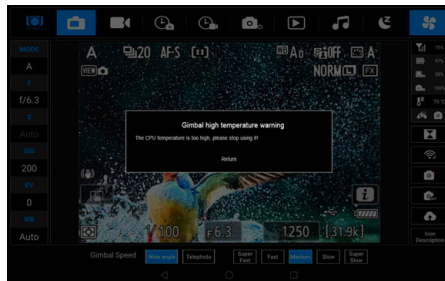
- (1). The ambient temperature of the RCA mini is: 0-45°C. The device temperature displayed on the APP is different.
- (2). Equipment Temperature: The temperature displayed on the RCA mini App is the temperature of the CPU, it is displayed after the computer is turned on.
- (3). High temperature restrictions and warnings:

When the CPU temperature reaches 105,°C the operation interface will prompt "CPU temperature is too high, please stop using it."

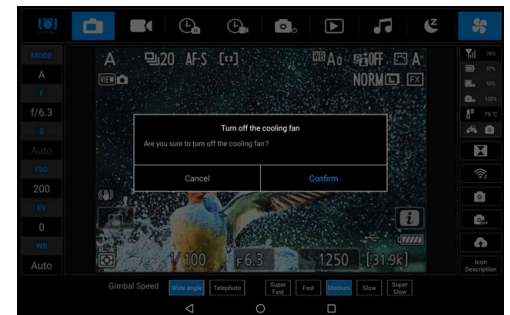
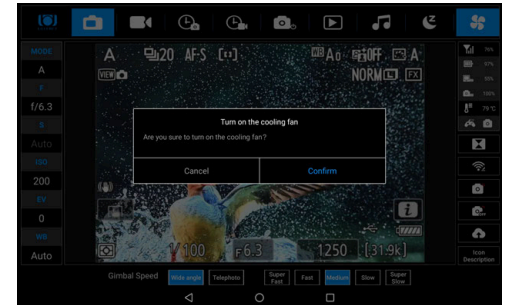
Starting from 90,°C the color changes from yellow to red for warning. 90-°C 95°C yellow, 95-°C 100°C light red, 100°C -105°C deep red.

- (4). The mini gimbal is equipped with a fan for cooling.

- ①. The fan stops when the gimbal is started. The icon color is white.
- ②. When the gimbal CPU temperature reaches 95°, the device will forcefully turn on the fan to cool down to ensure normal operation of the device. There will be a prompt on the lower right side of the APP "The device temperature has reached 95 degrees and the fan is on."



- ③. When the fan graphic is white, it means the fan stops running; when the fan graphic is blue, it means the fan is working.
- ④. Turn of the fan: click the fan icon and select in the pop-up window. After confirmation, the icon will turn from white to blue.
- ⑤. Turn off the fan: click the fan icon and select in the pop-up window. After confirmation, the icon turns from blue to white.



- (5). The fan makes a slight sound when running, and it is suitable for shooting scenes with high requirements for silence. The user needs to choose to turn on and off the fan according to the temperature of the device.


#### 5. Introduction to top function buttons

Mirrorless camera:

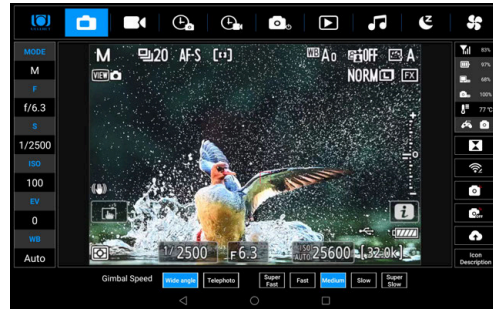



Photo mode, video mode, interval shooting, interval recording, camera standby, camera restart, photo playback, music playback, sleep setting, fan cooling are arranged in order, and check whether each screen is displayed normally.

6. The detailed introduction of function buttons is as follows:

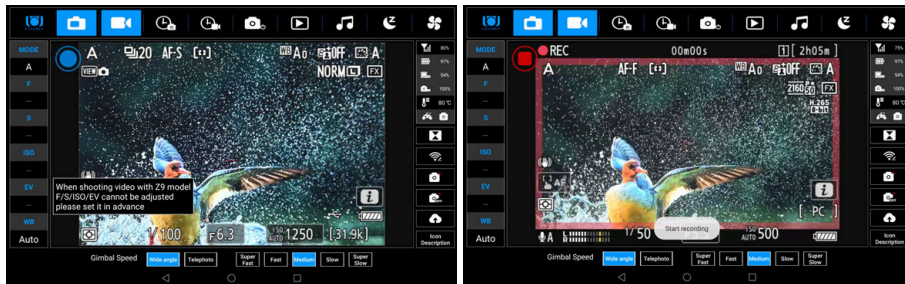
【Photo mode】 

- 1). Move the shooting mode lever to the photo shooting position.
- 2). Open the APP and the default photo mode screen will appear;
- 3). The picture displayed in the photo mode is [Live view screen], which is consistent with the picture seen on the LCD screen on the back of the camera body.



【Video mode】 


- 1). Move the shooting mode lever to the position for video recording; select the video recording mode by turning the lever.
- 2). In the video recording mode, on the APP page, the exposure mode cannot be adjusted, and the aperture, speed, ISO, and EV value cannot be adjusted. You need to set them on the camera before shooting. The mode displayed on the APP is the same as the camera body.
- 3). In the video recording mode, the white balance can be adjusted on the APP page.
- 4). The frame size (pixels), animation quality, and file format required for recording video cannot be adjusted on the RCA mini App and need to be set on the camera before shooting.



Click the blue circle in the upper left corner, the circle turns red, and the video starts recording. (Some mirrorless cameras will display a red safety margin frame on the screen)

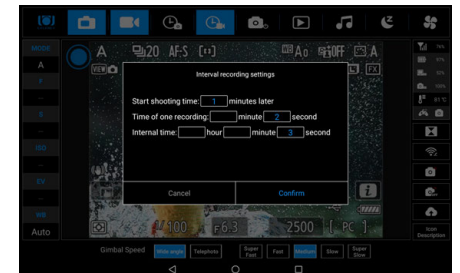
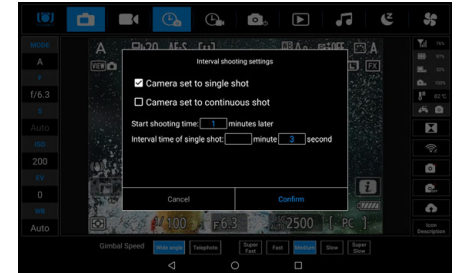
Switching between 【photo mode】  and 【video mode】 


Nikon mirrorless camera, cannot switch shooting mode from the RCA mini App.

【Interval photo setting】 

Click the interval photo setting button to enter the settings.

1. Interval photo shooting defaults to be continuous shooting mode.
2. There are two modes: "Set the camera to single shooting" and "Set the camera to continuous shooting". After setting, click Confirm to complete the setting;
3. After setting and confirm, the icon for interval shooting will be blue. Click the icon to stop, the icon will turn white and stop. If you need to continue taking interval photo shooting, need to reset the interval shooting logic.
4. In the single-shot mode of the digital camera, the interval shooting setting method is the same as that of the digital camera.
5. Added interval shooting settings in continuous shooting mode.
6. The interval shot photos can be compiled into time-lapse videos through software.



【Interval recording setting】 

1. Interval recording can meet the needs of fully automatic video recording when unattended.
2. After setting and confirm, the interval recording icon will be blue. Click the icon to stop, the icon will turn white and stop. If you need to continue interval recording, you need to reset the interval recording logic.

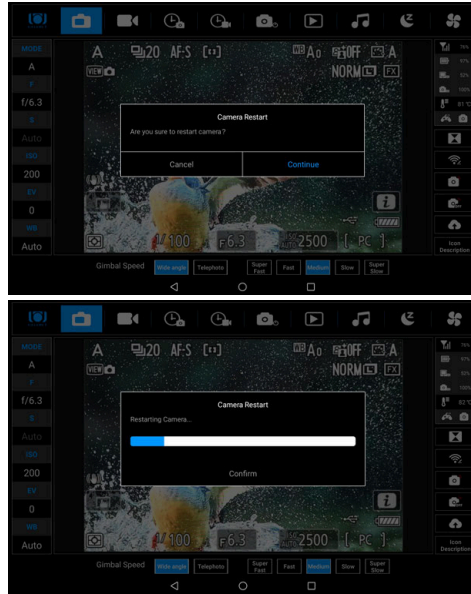
Note: The interval continuous shooting and interval recording functions are functions developed for the RCA mini. Digital cameras do not have this function.



**[Restart camera]** 

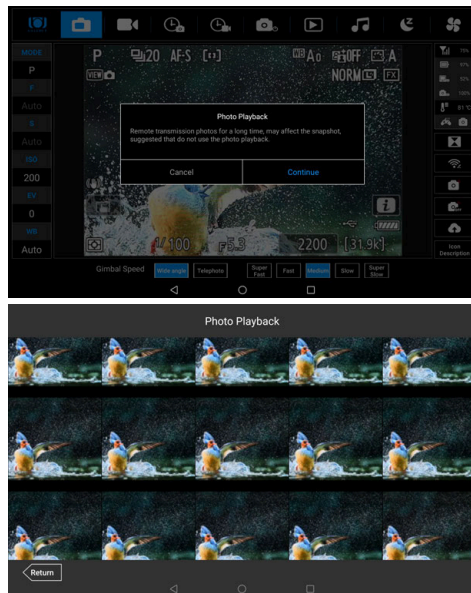
The [Restart camera] function can only be used when using a camera battery converter, not workable if you use the camera's original battery. Because the camera power supply is not related to the smart gimbal.

1. If the equipment is used for a long time, the digital camera and control system may experience program disorder and reduced response speed.
2. Restarting the camera will help restore the system and initialize.
3. After pressing [Restart camera], the camera will immediately restart. There will be a pop-up window prompting: The camera restart has been completed. Please click Return to re-enter the software for normal use.

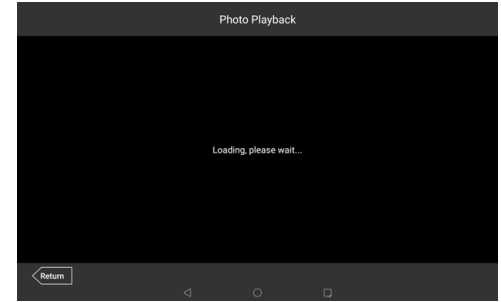


**[Photo playback]** 

1. Helps the user to check the shooting effect.
2. You can only view photos, not videos.
3. Due to the high pixels of the photos and the large capacity of a single photo, the tablet displays a thumbnail for browsing.
4. Browsing thumbnails can only display the 100 pictures taken recently.



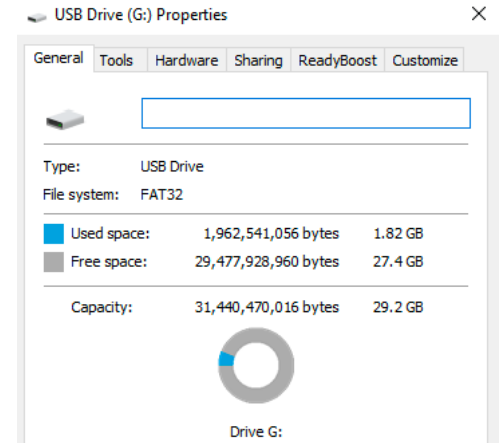
5. The browsing diagram shows that the transmission takes a long time. It is not recommended to use the photo playback function frequently as it may affect timely shooting after animals appear.



**[Music play]** 

Click the [music play] button to play music. In wildlife photography, it can be used to lure animals to appear. If you think that the sound of the pan/tilt movement will affect the appearance of animals, you can also play the sounds of animals to cover it up.

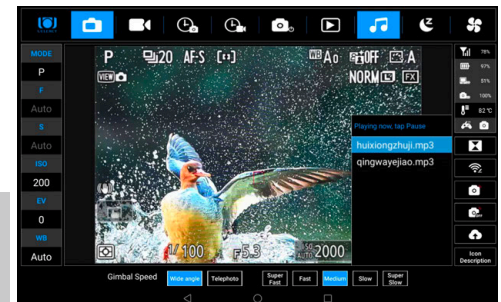
1. Creation of U disk files for RCA music playback.
  - (1). The U disk file system must be FAT32, or NTFS.
  - (2). Create the folder 'audio' in the first root directory
  - (3). Up to four tracks can be stored;
    - a. English names are in lowercase.
    - b. Chinese tracks are also available, but there must be no spaces between the words.
    - c. There can be other folders in the U disk.



Tips: How to query the U disk file system?

- ① Insert the USB flash drive into the computer.
- ② Right-click the disk and click Properties.
- ③ See the picture on the right for the display properties page.

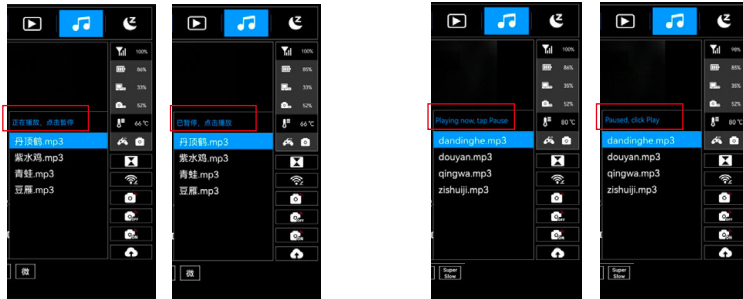
Note: The USB flash drive containing music tracks must be inserted into the right one of the two USB ports on the gimbal.



## 2. 【Music play】 Operation

(1). Click 【Music play】 , and the track interface will appear;

- a. Four tracks will appear;
- b. The default maximum volume will appear ;



Chinese tracks

English tracks

(2). The default blue block covers the first track. And blue words appear on the black bar above the track interface: "Please click on the track you want to play."

- a. Click on any one of the tracks, the music will start playing. Above the track interface, it will show "Now playing, click to pause".
- b. The blue block covers the track being played;
- c. Click "Now playing, click to pause", and the music being played will be paused; Then on the track interface.

(3). For the track that is covered by the blue block and is being played, if there is no subsequent click action, the music will not be paused and the single will be played in a loop.

(4). Click on the track that is not covered by the blue block. And the blue block will cover the track that was just clicked, and the track will start playing. If there is no subsequent click action, the music will not pause and the single will be played in a loop.

(5). The frequency of clicking the track cannot be too frequent. After clicking on a track, you need to stop for 5 seconds before clicking on a certain track. Clicking a track for less than 5 seconds will cause confusion in track playback. And you need to exit the APP or restart the gimbal (through the sleep setting method) or turn off the power of the gimbal to stop music playback.

(6). Exit the APP and the music being played will stop playing. After entering the APP run according to the above rules again.

(7). Turn off the power of the gimbal and the music being played will stop.

## 【Sleep settings】

1. The function of sleep setting function ,

- (1). Save power and the battery can be used effectively for a longer time.
- (2). Timing off and on the power of the gimbal can help the user to shoot in the best light period.

2. Situations where it is necessary to set the RCA mini to sleep mode: Set up the RCA mini at the shooting location in advance instead of going to the scene to install the equipment before shooting. This can minimize the impact on animals and birds.

(1). For example, before 18:00 on the previous day, the user sets up a RCA mini at the selected shooting location and sets it up.

3. The start time is 5:30 before sunrise the next morning. At 5:30, the RCA mini will automatically turn on the power. The user can directly control the device remotely to shoot without having to set up the equipment. Avoiding affecting the animals can also save the user a lot of time and energy. If there is no sleep setting, the device starts running after being installed at 18:00 the day before. Although the device is not operated, the device will continue to consume power, and the remaining capacity of the battery may not guarantee sufficient shooting time the next day.

(2). After shooting in the morning when the light is good, the subsequent light is very strong, especially at noon, and the shooting effect is not good. The user hopes to start shooting at 16:00. There was a few hours of waiting time in between. If there is no sleep setting, the device will continue to consume power. When shooting starts at a suitable time in the afternoon, the battery capacity may not guarantee sufficient shooting time.(3). During shooting, the user needs to stop shooting for a long time, such as resting or leaving for several hours.

### 3.How to set sleep time

(1). Click [Sleep settings], the following picture will appear, and the settings are completed.

(2). After clicking [OK], once the sleep time is up, the RCA mini will stop powering the camera, shut down the smart gimbal, and only retain The amount of power that can be turned on.

(3). When the sleep time ends, the RCA mini automatically turns on the power, the smart gimbal starts running, and resumes transmitting wireless signals. Reconnect the signal repeater, connect the tablet Wi-Fi and handle, and operate the control device and camera.



4. During sleeping, the device's sleep state cannot be changed through the App and the device cannot be controlled.

As there is no communication signal transmission at both ends. You must wait until the sleep time is over, the RCA mini power supply automatically starts up, and the communication signal is available before you can enter the operation. Unless the user goes to the smart gimbal and turns on the power switch via a button, the device can be operated. However, this will affect the animals at the shooting site, and may disturb the animals and leave the shooting location, making it impossible to continue shooting.

5. After the gimbal restarts after sleep, you must re-enter the APP before operation.

6. Things to note when setting the sleep time:

(1) Before setting the sleep time, the user must consider the sleep time according to the needs of shooting. So as not to delay effective shooting.

(2). Check the time on the tablet, mobile phone, and watch.

There may not have network in the wild. Therefore, the time on the tablet may not be consistent with the actual time, it is best to check the time on the tablet with that of your phone or watch before setting the sleep time.

(3). There are two ways to check the adjustment time:

a. The tablet computer is connected to the mobile hot spot and connected to the 4G or 5G network, and the time can be automatically adjusted.

b. If there is no 4G or 5G network in the local area, you can directly adjust the time on the tablet to be consistent with the time on the watch.

To set the sleep function, the following conditions must be met:

The camera is powered by a battery converter equipped with the RCA mini, and is powered by a gimbal for remote sleep operation.

After successfully setting sleep for the first time, the App will prompt "You have already set the sleep time" when setting sleep again.

After sleeping, you need to wake up the camera.

After sleep time ends, the Nikon camera's Live view will display a blue screen. This is because after the camera has been sleeping for a long time, the connection between the camera and the smart gimbal has been interrupted, and the smart gimbal needs to wake up the camera again.

How to wake up the camera:

1. Press the shutter button once to release the shutter. This will wake up the camera. Soon, "Camera Connection OK" will be displayed.

2. Click [Restart camera] to wake up the camera. "Camera connection is normal" will be displayed.

Note: When using the sleep setting function, interval shooting and interval recording cannot be set at the same time. When the sleep time is over, the RCA mini and the camera start to work again, the interval photo shooting and interval video settings are effective.

7. Click on the lower right side in turn to test the function of each button

Each button is introduced as follows: The non-infrared trigger version cannot use the infrared trigger function.



Gimbal back to center

Wi-Fi rename

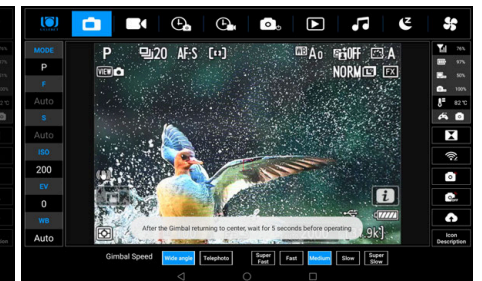
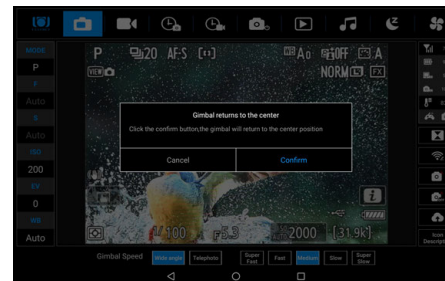
Infrared trigger automatic shooting

Settings Turn off infrared trigger

function Software online upgrade

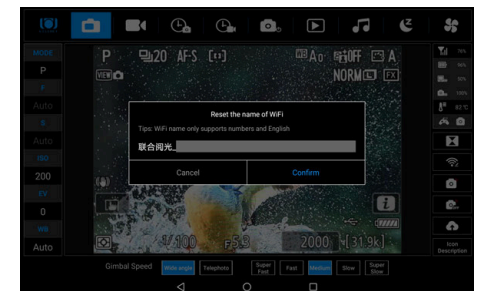
**【The gimbal returns to center】**

Click the [The gimbal returns to center] button, and after confirmation, the gimbal will automatically move and return to the initial position.



**【Wi-Fi naming】**

The user can set the Wi-Fi name to facilitate the user to identify the Wi-Fi signal name of his RCA mini.





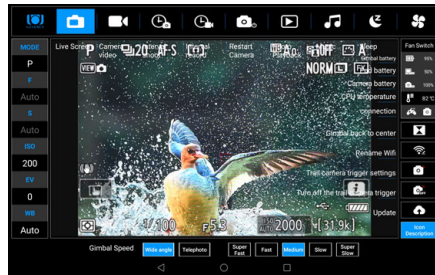
**【Online upgrade】**

When a new version of the APP is released, you can upgrade with network. After connecting to the Wi-Fi, you can download the firmware to upgrade



**【Explanation of icons】**

Click [ Explanation of icons], and the name corresponding to each icon will be displayed on the screen to facilitate memory, Click [Explanation of icons], again and the explanations will disappear.

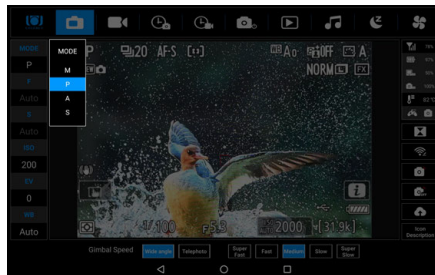


8. Click the camera shooting parameter bar on the left, and click to confirm they are workable.

1. Click on the camera exposure mode, and the M/P/A/S modes will be listed, as shown in the figure:

2. The display of camera adjustment parameter values is consistent with the parameter values of the camera model installed on the gimbal.

3. The method of adjusting camera parameters is the same as the result of the user adjusting parameters using the camera. The exposure value will be displayed in the real-time display screen. Please read Part 2 "Nikon mirrorless camera function settings instructions."



In video recording mode on mirrorless cameras Z9/Z8, exposure mode and white balance can be adjusted, but aperture, shutter speed, ISO, and EV values cannot be adjusted.

**Chapter 2. Test the operating handle to ensure the functions are working properly**

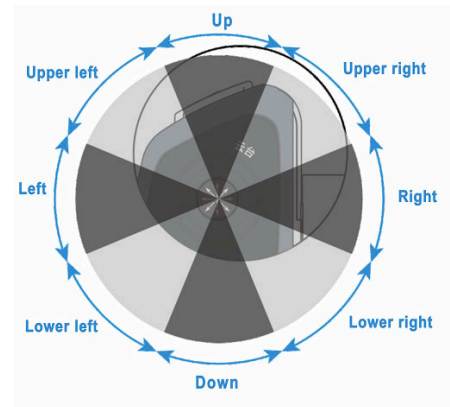
1. Test the gimbal's horizontal rotation and pitch adjustment keys to check whether the main body of the smart gimbal rotates normally accordingly.

As shown in the picture, you can control the gimbal by moving the joystick, and you can control the camera lens to move in eight directions. Movement (vertical upward, vertical downward, horizontal left, horizontal right, upper left 45 degrees, upper right 45 degrees, lower left 45 degrees, lower right 45 degrees).

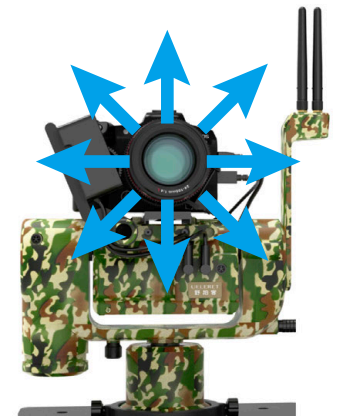


Operate Handle (icon of the joystick for controlling the gimbal)

As shown in the figure, the instructions for the user's rocking direction of the joystick corresponding to the movement of the camera lens are as follows:



Controller rocker rocking angle area

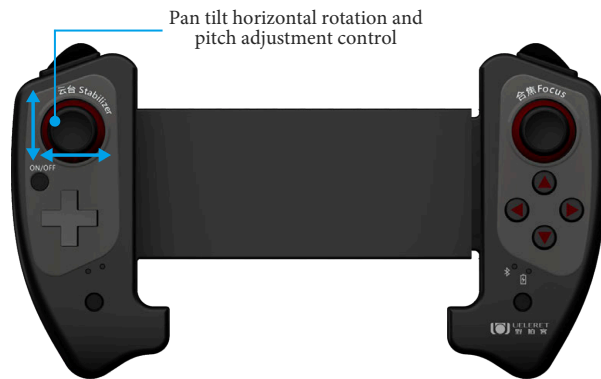


Corresponding camera lens movement

- Also check the tablet screen (the screen should switch to photo mode)  
Whether the gimbal is rotating synchronously accordingly, when the horizontal rotation and pitch adjustment of the gimbal reaches the left/right end and the upper/lower end, there will be a prompt of "Left/right/up/down has been limited" at the bottom of the tablet interface.
  - The gimbal has five speeds for horizontal rotation and pitch: Super fast, fast, medium, slow, super slow.
- Super fast, fast, medium, slow, are suitable for use with focal lengths within 300mm;  
fast, medium, slow, super slow are suitable for use with focal lengths above 300mm.  
Fine adjustment is suitable for adjusting the focus point to a precise position and composition; it is fast and suitable for target search.

The specific operation is as follows:

When the lower limit point is reached, the words "lower limit" will be displayed here. When the left limit point and the lower limit point are reached at the same time, the words "lower left limit" will be displayed here. he limits in other directions Same thing.



The lower position is limited



#### 4. Smart gimbal speed adjustment operation instructions:

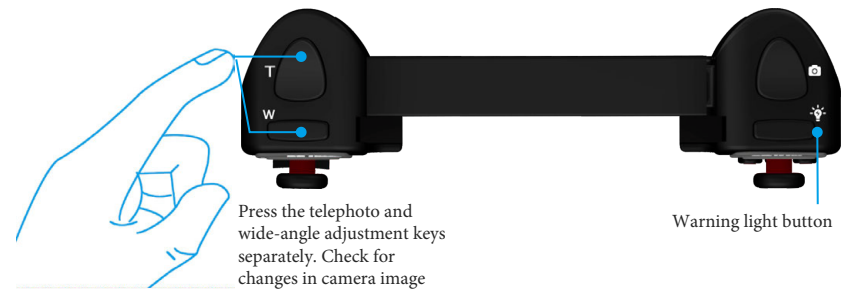
You can adjust the speed of the smart gimbal through the following methods.  
As shown in the figure below, select different speeds through the five-speed buttons "Super fast, fast, medium, slow, super slow" at the bottom of the operation interface.



The APP sets the wide-angle end and the telephoto end, which refers to a high zoom lens. The panning and tilting speeds of the lens focal length are different between the wide-angle focal length and the telephoto focal length. The speed setting meets the requirements of the wide-angle large screen and the telephoto small screen.

#### 2. When the smart gimbal is in motion, shoot relevant action.

- When the smart gimbal rotates and tilts, the focus point moves, focus, shutter release, lens zoom, and warning light can all be operated at the same time.
- When animals move in straight lines left and right, vertically up and down, or diagonally up and down, effective shooting can be achieved through skilled and effective gimbal operation and other related shooting button operations. That is, what ecological photographers often call panning and chasing shots can be achieved
- Press the camera lens zoom adjustment button (only for zoom lenses, fixed focus lenses cannot be used). Check whether the zoom component of the smart gimbal body is working properly. At the same time, check whether the real-time display screen of the tablet computer is also zoomed in and out accordingly.
- When the tablet is in any screen state, press the camera zoom adjustment button to realize the zoom function of the camera zoom lens.
- Real-time display mode allows you to directly observe the zooming in and out of the camera lens.
- The specific operations are as follows:



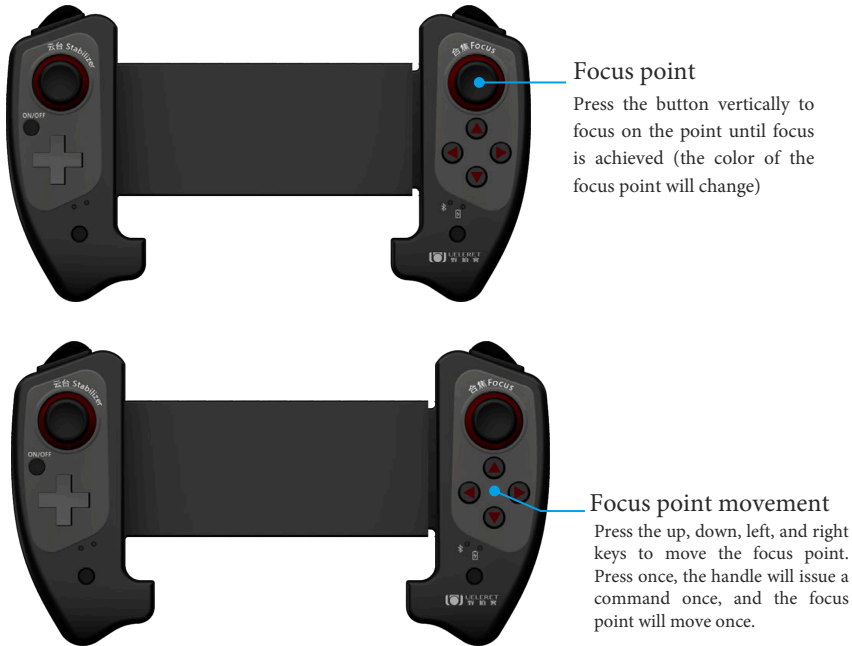
#### 3. Moving the focus point and focusing

Check whether the focus point on the tablet screen moves normally, and press the button to check whether the focus function is normal.

- The focus point movement buttons are in four directions. Each time you press, the focus point moves.
- Characteristics of instructions issued by the operating handle:
- Press once to issue a command.
  - If you keep pressing the focus point button, it will only be commanded once.
  - If pressed 10 times in rapid succession, the handle continue to send 10 commands. Even you stop pressing, if the command has not been sent, the handle will continue to send the command, and the focus point will continue to move on the screen. The reason is that there is a 2-5 millisecond lag between when the handle command is issued and when the camera transmits the image of the focus point movement back.
- This is different from hand-holding the camera. On the camera body, if you keep pressing the focus point movement button, the focus point will continue to move. When you stop moving the focus point, it will stop.

2. When the handle operates any function, such as when the gimbal rotates and tilt or the camera lens changes the focal length, it can focus and move the focus point at the same time.

3. The specific operations are as shown in the figure below:

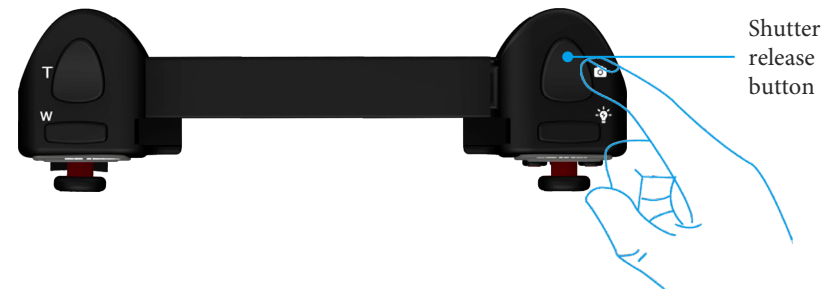


4. Press the warning light button and check whether the warning light of the RCA mini flashes normally.



5. Press the camera shutter release button and check whether the photo taking function is workable.

- (1) When the camera is set to single shooting, press the button and the camera will take a photo. Pressing the shutter button continuously will still take a single shot.
- (2) When the camera is set to continuous shooting mode, press and hold this button and the camera will shoot continuously according to the set number of continuous shots. Release the button and the camera stops shooting.
- (3) The number of consecutive shots and the speed of continuous shooting are related to the camera's image storage capacity and environment. This is the same as the description in the camera manual.
- (4) The App cannot adjust single shooting and continuous shooting. This function is a mechanical adjustment method on the camera body, so the App cannot set and select the function.



6. Tested ok.

Take the operating handle, tablet computer, and signal repeater (including power supply) to the shooting site selected in advance.

### Chapter 3. Nikon mirrorless camera settings and App operation instructions

Each brand of camera design has its own characteristics. The third-party software may not be able to read and operate and adjust all camera functions and parameters.

1. Nikon models suitable for RCA mini



Type	Models	Description
Mirrorless camera	Z9, Z8	Standard configuration

## 2. Software Update

- (1) Please update the latest firmware on the Nikon website. Some functions are available only after updating the firmware , otherwise new functions cannot be displayed and operated on the RCA mini C's APP.
- (2) Only when the camera firmware version and RCA mini C' App version are the latest, can the RCA mini read the camera's settings and perform at its best.
- (3) The automatic update function is set on the RCA mini 's APP, and if a new version of the App is available, a message will automatically pop up on the APP .
- (4) When using the product, if the upgrade information automatically pop-up , you need to confirm whether the camera has been updated, if not, please do not choose to update for the time being.

## 3. Characteristics of switching exposure modes on Nikon mirrorless cameras

- (1). The RCA mini App cannot remotely switch the camera's shooting mode.
- (2). The camera will enter PC mode after connecting the Nikon mirrorless camera via USB, you cannot shoot from the camera now.
- (3). You need to restart the camera every time you switch shooting modes to ensure that the settings are saved successfully.



Note: Every time after switching the shooting modes, you need to shut down and restart the camera.

## 4. RCA mini (Nikon ver.) still image shooting mode function implementation table

Examples of some models

Model			Display screen	
			Z8	Z9
Shooting mode	Camera parameter adjustment	Exposure mode	OK	OK
		Aperture size	OK	OK
		Shutter speed	OK	OK
		ISO sensitivity	OK	OK
		EV Exposure compensation	OK	OK
		White balance	OK	OK
		Autofocus method	Unreadable, set up in advance	Unreadable, set up in advance
	Automatic face recognition		Yes	Yes
	Animal eyelid automatic identification tracking		Yes	Yes
	Shooting mode	Touch tablet screen	Focus point display	OK
Touch to move the focus point			OK	OK
Touch focusing			OK	OK
Single shooting			NO	NO
Continuous shooting			NO	NO
Handle operation		Move focus point	OK	OK
		Focusing	OK	OK
		Single shot	OK	OK
		Continuous shooting	OK	OK

## 5. RCA mini (Nikon ver.) recording mode function implementation table

Model		Z8	Z9
Recording mode	Camera parameter adjustment	Exposure mode	OK
		Aperture size	NO
		Shutter speed	NO
		ISO sensitivity	NO
		EV Exposure compensation	NO
		White balance	OK
		Autofocus method	Unreadable, set up in advance
	Automatic face recognition		Yes
	Animal eyelid automatic identification tracking		Yes
	Focus point display		OK

Model		Z8	Z9	
Recording mode	Touch tablet screen	Touch to move the focus point	OK	OK
		Touch focusing	OK	OK
		Single shooting	NO	NO
		Continuous shooting	NO	NO
	Handle operation	Move focus point	OK	OK
		Focusing	OK	OK
		Single shooting	OK	OK
		Continuous shooting	NO	NO
Function selection	Short film size	Nonselectable	Nonselectable	
	High frequency frame	Unreadable	Unreadable	

Notes:

1. For different models of cameras, third-party software may not be able to read and adjust all the functions and parameters in the camera.
2. The compatible models can touch the focus, focus on the tablet. The focus button on the handle can also be used to focus.
3. After enabling the "continuous autofocus function" on the camera settings, the tablet displays the screen in real time, where the focus point moves to, the position directly focus, touch the screen also focus and focus at the same time.

6. Nikon camera exposure mode on a tablet

Exposure mode	RCA mini software shows		Camera screen display	
	Aperture	Speed	Aperture	Speed
P mode	Auto	Auto	Real-time value display	Real-time value display
A mode	Real-time value display	Auto	Real-time value display	Press the focus button or press the shutter to display
S mode	Auto	Real-time value display	Press the focus button or press the shutter to display	Real-time value display
M mode	Real-time value display	Real-time value display	Real-time value display	Real-time value display

7. Focus point movement and focus characteristics in shooting mode and recording mode

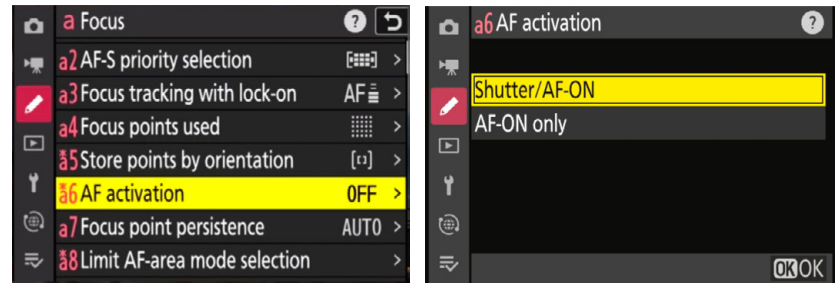
Shooting mode	Touch panel PC	Handle operation keys
Real-time display of shooting modes	After touching to move the focus point, it will be roughly positioned.	The focus point is precisely positioned after the focus point is moved by the handle button
Recording mode	After touching to move the focus point, it will be roughly positioned.	The focus point is precisely positioned after the focus point is moved by the handle button

At the shooting mode and recording mode screen, in the camera's video mode there are different animation size, corresponding to the output screen resolution is different, can not be adapted one by one, resulting in finger touch the focus point can not be accurately identified. Therefore, the way to move the focus point by the handle.

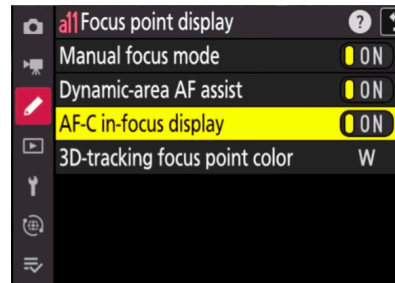
8. Nikon mirrorless camera settings

Settings for photo shooting mode (Example: Z8)

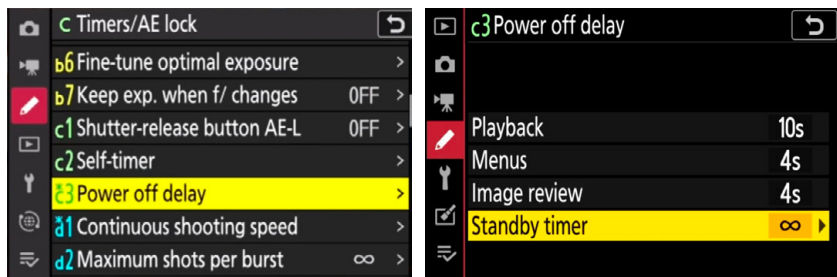
(1) Camera custom settings: AF-ON setting: If AF-ON is set, the handle's shutter focus button will not be able to focus.

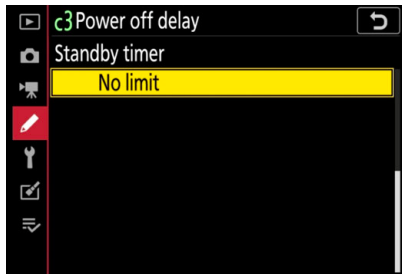


(2) Focus point display settings

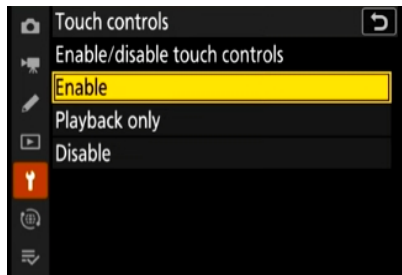
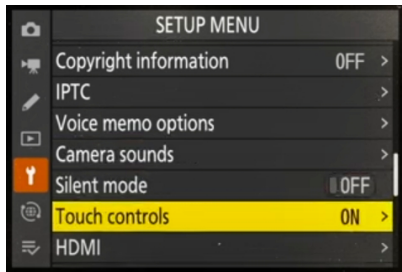


(3) Power off delay set to [No limit]

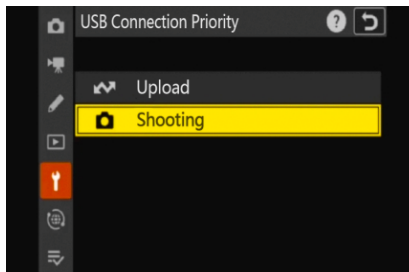
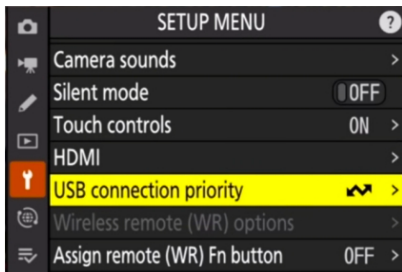




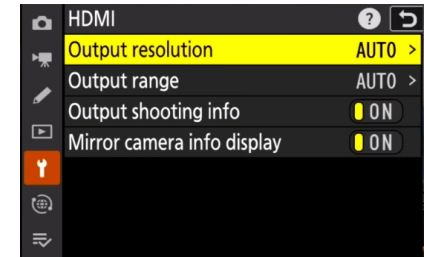
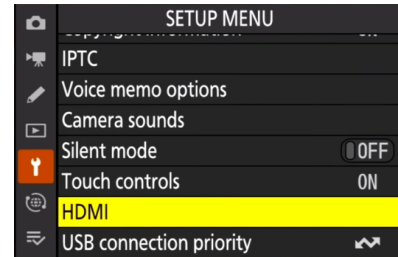
(4) Touch control set to [ON]



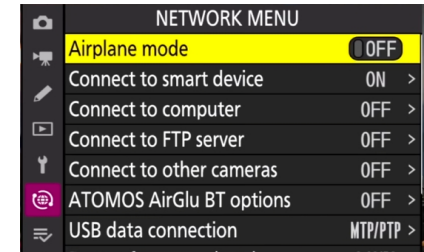
(5) USB connection priority



(6) HDMI Settings: Output resolution set to [AUTO], Output range set to [AUTO], Output shooting information set to [ON], mirror camera information display set to [ON].



(7) Airplane mode set to [OFF].

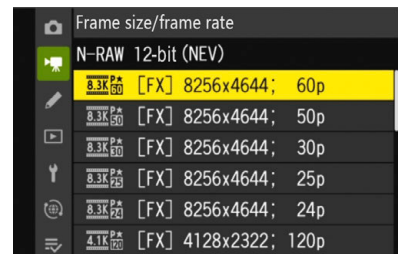


(8) Video recording mode settings.

① Video file type, any option can be selected.



② Frame size/frame rate: No restrictions on frame size, but the frame rate must be set to higher than 30p, excluding 30p.



Note: If it is not set as this, the tablet will not be able to display images.

## Part 2 The second control method - Wired connection to Nikon DSLR camera

### Chapter 1. Introduction to the RCA mini N DSLR camera operation page function items

#### 1. Software operation interface description

- (1) Tablet interface description (Android).
- (2) Download the mobile APP (Android version) from the official website.
- (3) APP (Apple version) is under development.
- (4) The operating interface of the D5, D850, D500 camera.

This section specifically explains the differences between Nikon DSLR cameras and mirrorless cameras in terms of operation and camera settings.

The screenshot shows the camera's software interface with various settings and controls. Labels point to the following features:

- Interval photo mode**: Located at the top of the interface.
- Video recording mode**: Located at the top of the interface.
- Interval recording mode**: Located at the top of the interface.
- Camera restart**: Located at the top of the interface.
- Photo shooting mode**: Located at the top of the interface.
- Photo playback**: Located at the top of the interface.
- Music play**: Located at the top of the interface.
- Sleep setting**: Located at the top of the interface.
- Viewfinder screen**: Located at the top of the interface.
- Turn on the cooling fan**: Located on the right side of the interface.
- Signal strength display bar**: Located on the right side of the interface.
- Power display bar (system power, tablet power, camera power)**: Located on the right side of the interface.
- Equipment temperature display bar**: Located on the right side of the interface.
- Connect status bar**: Located on the right side of the interface.
- Gimbal turn back to center**: Located on the right side of the interface.
- Rename the Wi-Fi**: Located on the right side of the interface.
- Infrared trigger auto capture logic settings**: Located on the right side of the interface.
- Turn off infrared trigger function**: Located on the right side of the interface.
- Online upgrade**: Located on the right side of the interface.
- Icon Description**: Located on the right side of the interface.
- Exposure mode adjustment**: Points to the **MODE** button.
- Aperture size adjustment**: Points to the **F** button.
- Shutter speed adjustment**: Points to the **S** button.
- Sensitivity adjustment**: Points to the **ISO** button.
- Exposure compensation adjustment**: Points to the **EV** button.
- White balance adjustment**: Points to the **WB** button.
- Wide angle and telephoto options**: Points to the **Wide angle** and **Telephoto** buttons.
- Gimbal Speed**: Points to the **Wide angle**, **Telephoto**, **Super Fast**, **Fast**, **Medium**, **Slow**, and **Super Slow** buttons.
- Exit**: Points to the back arrow button.
- Enter the main tablet page**: Points to the home button.
- Enter the tablet multitasking page**: Points to the square button.
- Gimbal speed adjustment**: Points to the **Wide angle**, **Telephoto**, **Super Fast**, **Fast**, **Medium**, **Slow**, and **Super Slow** buttons.



## 2. Differences in operation between Nikon DSLR cameras and mirrorless cameras

- (1) Nikon DSLR cameras use an original viewfinder camera to take photos. Both single and continuous shooting can be controlled.
- (2) RCA mini Nikon DSLR camera version: This is not a standard product and a viewfinder camera accessory is required to order additionally.
- (3) Compatible Nikon DSLR models: D5, D850, D500.

## 3. Enter the App page and select DSLR camera & camera lens

After entering the login page, select DSLR camera.

For DSLR cameras, you need to install a viewfinder camera. Use the viewfinder image when taking photos. Then, select the lens specifications. After selecting the lens in use, the system will automatically select the appropriate thrust to drive the zoom lens. Not only will the zoom speed be more appropriate, but also a silent effect will be achieved. If you are using a small-sized zoom you are using a small-sized zoom lens such as 24-70mm, 16-35mm, etc., just choose the "within 70mm" lens. silent effect will be achieved. If you are using a small-sized zoom lens such as 24-70mm, 16-35mm, etc., just choose the "within 70mm" lens.



Illustration of the lens selection table interface of the operating software

## 4. Introduction to top function buttons



Viewfinder screen, photo mode, video mode, interval shooting, interval recording, camera standby, camera restart, photo playback, music playback, sleep setting, fan cooling are arranged in order, and check whether each screen is displayed normally.

## 5. The detailed introduction of function buttons is as follows:

Viewfinder camera (Exclusive for the Nikon DSLR camera App)

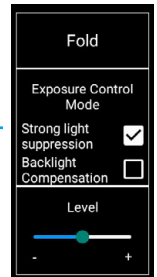
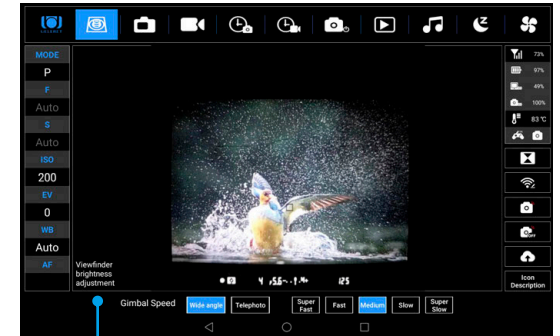


1. The viewfinder camera does not record natural scenes directly but rather captures the image displayed within the camera's viewfinder. This is similar to taking a photo of the LCD screen of another camera. Therefore, the exposure conditions differ from natural scenes, and the image contrast is very high.

2. The viewfinder camera lacks the complex structure of high-end DSLR cameras and has lower dynamic range. Therefore, after recording high-contrast images, adjustments are necessary to make the images on the tablet more suitable for natural conditions.

3. Brightness adjustment for the viewfinder camera mainly involves two parameters: Exposure control mode: There are two options of highlight suppression and backlight compensation. If the image brightness is too high, select highlight suppression; if the surrounding area of the image is too dark, select backlight compensation.


Control Intensity: There is a negative-positive (-/+) direction. Drag the slider until the image brightness is appropriate and the brightest parts are clearly visible.

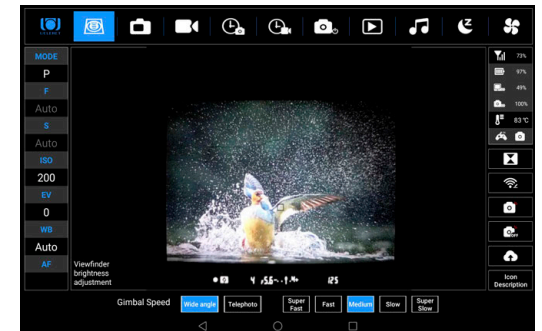


### 【Photo mode】



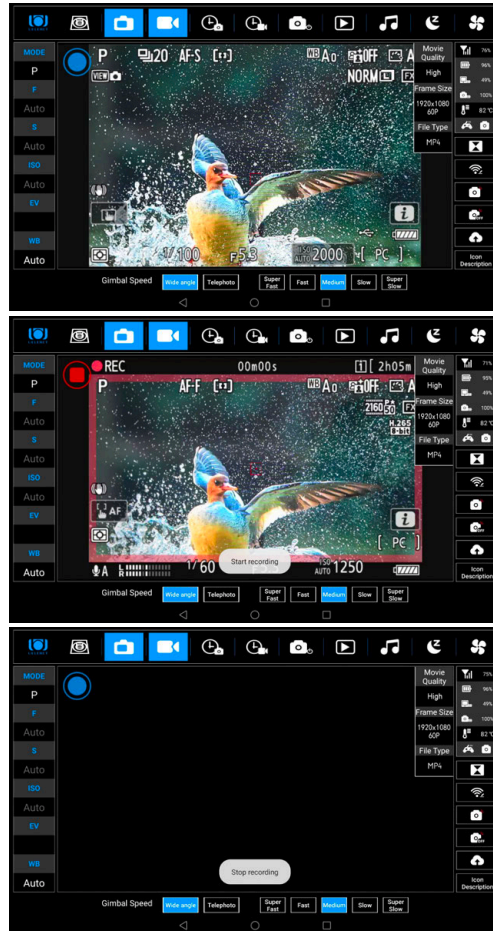
- (1). Move the shooting mode lever to the photo shooting position
- (2). Open the APP and the default photo mode screen will appear;
- (3) For DSLR cameras, the displayed image is from the viewfinder camera, consistent with what is seen through the viewfinder.

Note: If you do not use the viewfinder camera image and instead use the  screen for shooting, only single shots are possible; continuous shooting is not supported.



【Video mode】

1. Turn the shooting mode dial to the video recording position; select the video recording mode by rotating the dial.
2. DSLR camera: The required frame size (pixels), animation quality, and file format for recording can be adjusted on the RCA mini App.



Click the blue circle in the upper left corner; the circle turns red, and start recording. Click the red circle again; the circle turns blue, and recording stops.

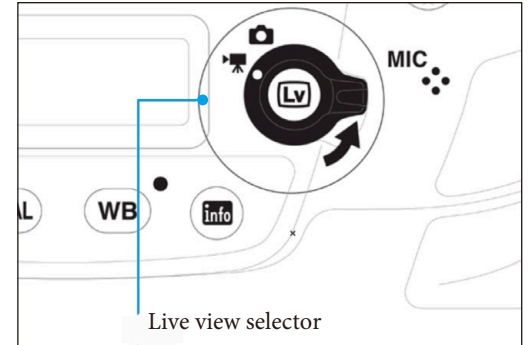
Chapter 2. Switching between 【Photo mode】 and 【Video mode】

For Nikon DSLR cameras, the camera body must be set to video mode in advance.

The RCA mini App can remotely switch the shooting modes.

If the camera is set to photo mode, the App cannot switch to video mode. The camera must be set to video mode.

1. First, rotate the live view selector to [movie live view].



2. In this setting, the App displays the viewfinder image, and the Nikon camera can take still photos normally.
3. To record a video, click on the [LV screen] on the App, then click on [camera recording]. A blue circle appears in the upper left corner; click the blue circle, it turns red, and the camera starts recording.

Chapter 3. Nikon DSLR camera settings and App operation instructions

1. RCA mini (Nikon ver.) still image shooting mode function implementation table

Model		Display screen	
		D5/D850/D500	
Shooting mode	Camera parameter adjustment	Exposure mode	OK
		Aperture size	OK
		Shutter speed	OK
		ISO sensitivity	OK
		EV Exposure compensation	OK
		White balance	OK
		Autofocus area	OK
	Automatic face recognition	Yes	
Animal eyelid automatic identification tracking	Yes		

Model		Display screen	
		D5/D850/D500	
Shooting mode	Touch tablet screen	Focus point display	OK
		Touch to move the focus point	NO
		Touch focusing	NO
		Single shooting	NO
	Handle operation	Continuous shooting	NO
		Move focus point	OK
		Focusing	OK
		Single shot	OK
Continuous shooting	OK		



## 2. RCA mini (Nikon ver.) recording mode function implementation table

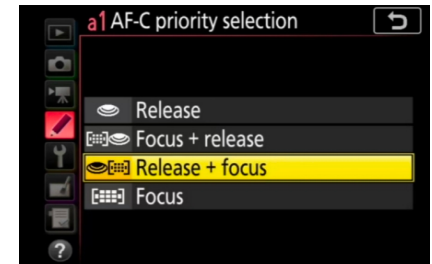
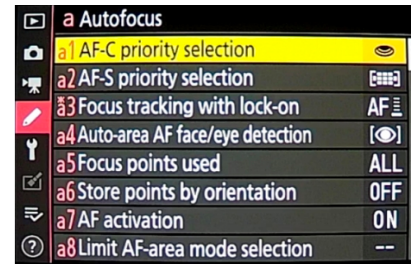
Model		D5/D850/D500	
Recording mode	Camera parameter adjustment	Exposure mode	OK
		Aperture size	OK
		Shutter speed	OK
		ISO sensitivity	OK
		EV Exposure compensation	OK
		White balance	OK
		Autofocus method	OK
	Automatic face recognition		Yes
	Animal eyelid automatic identification tracking		Yes
	Focus point display		OK
	Touch tablet screen	Touch to move the focus point	NO
		Touch focusing	NO
		Single shooting	NO
	Handle operation	Continuous shooting	NO
		Move focus point	OK
		Focusing	OK
	Function selection	Single shooting	NO
Continuous shooting		NO	
Function selection	Short film size	Selectable	
	High frequency frame	Unreadable	

### Notes:

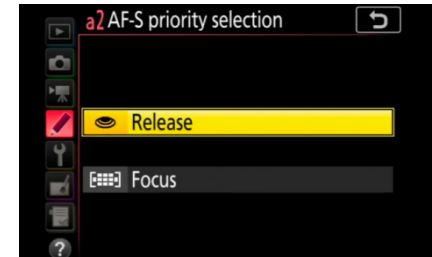
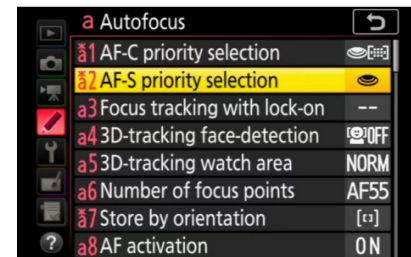
1. For different models of cameras, third-party software may not be able to read and adjust all the functions and parameters in the camera.
2. The compatible models can move the focus button on the handle can also be used to focus.
3. After enabling the "continuous auto-focus function" on the camera settings, the tablet displays the screen in real time, where the focus point moves, it will directly focus.

## 3. Nikon DSLR Camera setting requirements

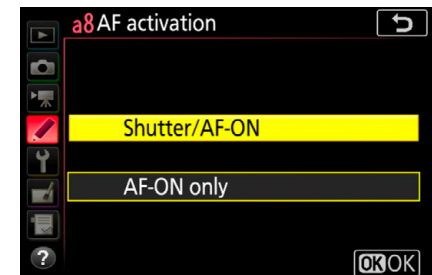
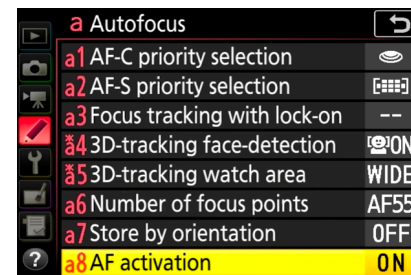
- (1) Set [AF-C priority selection] to [Release + Focus].



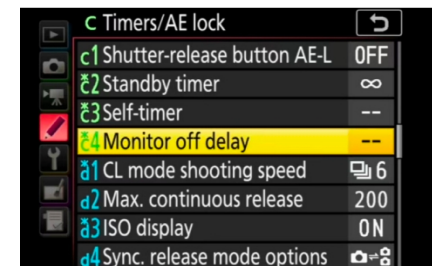
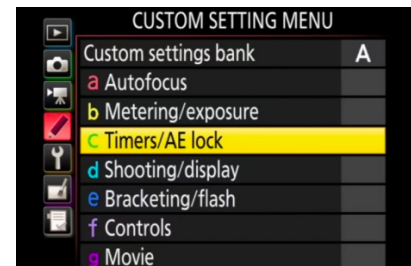
- (2) Set [AF-S priority selection] to [Release].

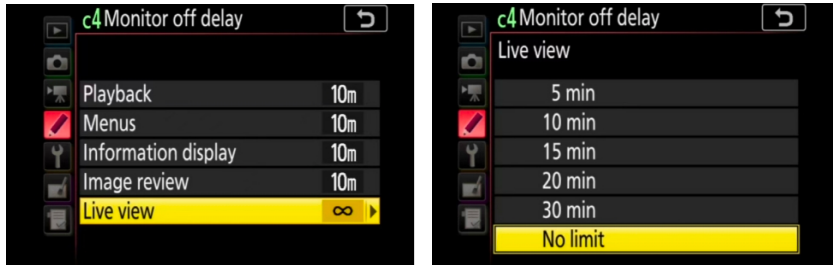


- (3) Set [AF activation] to [Shutter/AF-ON Button], do not set it to [AF-ON Button only].



- (4) Set the [Monitor off delay] to [infinite].





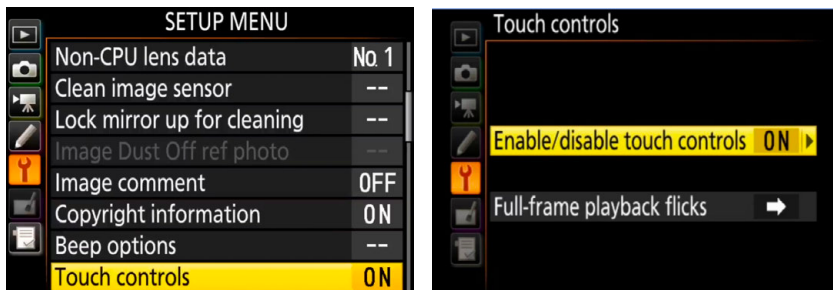
(5) [HDMI output resolution] set to [AUTO].



(6) [Dynamic area AF assist] set to [ON].



(7) [Touch control] set to [ON].



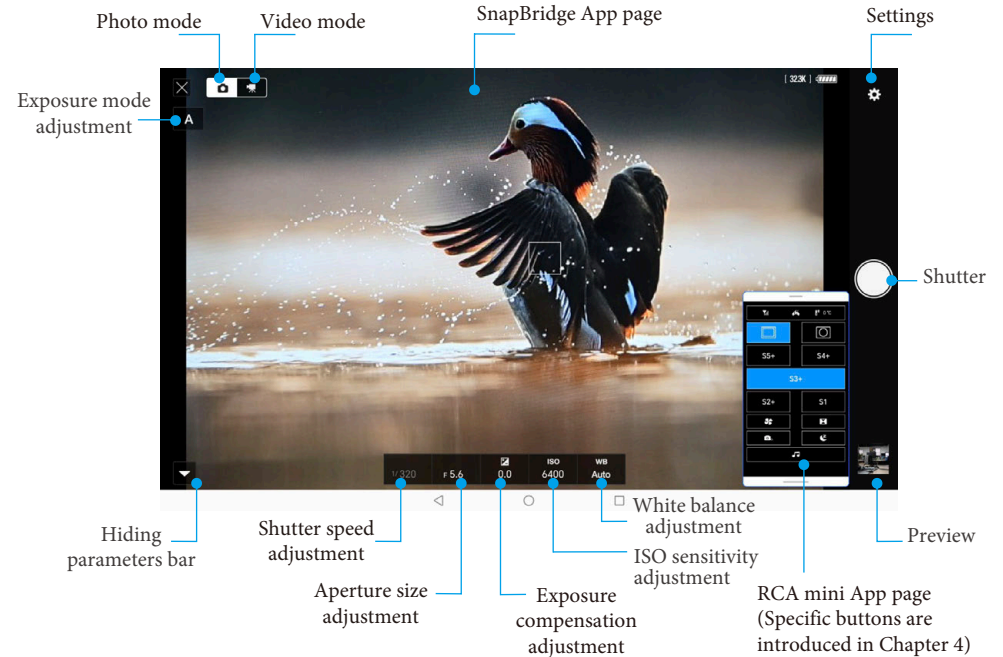
### Part 3. The third control method - Wireless connection with Nikon mirrorless camera

The RCA mini connects to some cameras via Wi-Fi and to control the camera with the Nikon SnapBridge App. This allows for switching between photo and video modes with the App.

#### Chapter 1. Introduction to Nikon mirrorless camera operation page functions

##### 1. App page description

The operation page for Nikon mirrorless cameras consists of the SnapBridge App and the RCA mini App.



##### 2. Compatible Nikon camera models

Z9, Z6III

## Chapter 2. SnapBridge App connection and usage

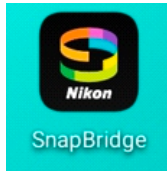
### 1. Connecting the camera to external Wi-Fi and mobile App for the first time

#### Step 1: Preparation

##### (1) Install the SnapBridge App

Download the App on your smartphone or tablet.

Download link: <https://www.nikonusa.com/content/snapbridge-App> and click install on your smartphone to complete the installation.



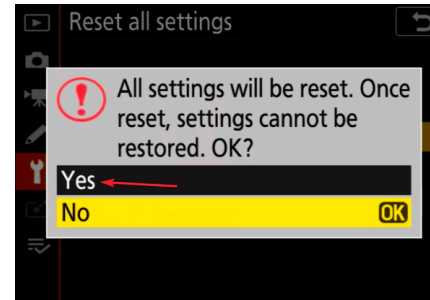
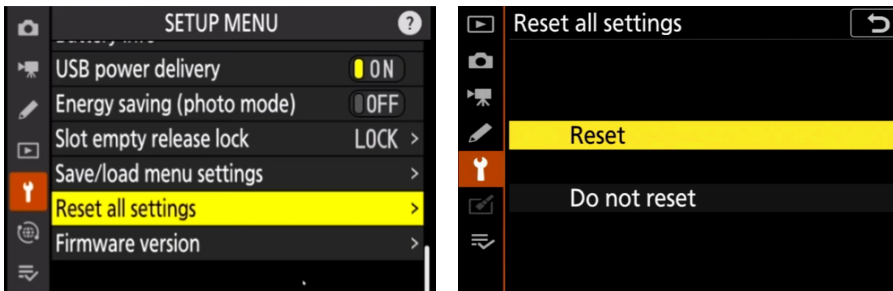
##### 2. Upgrade the camera firmware or ensure it is the latest firmware released by Nikon.

The SnapBridge App requires specific firmware versions. Cameras that do not meet the firmware version requirements cannot connect to external networks. For instructions on checking the firmware version and upgrading the firmware, refer to the Nikon website.

##### 3. Camera initialization

- (1) If the firmware has just been upgraded, there is no need to initialize the camera.
- (2) Before using the RCA mini, if you have customized some settings on the camera, or used a smartphone or other communication methods for remote shooting, it may be difficult to restore the initial settings through the [MENU], please initialize the camera.

Nikon camera initialization settings:



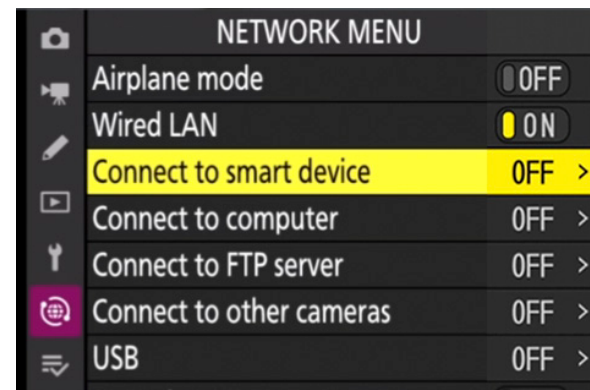
### Step 2: Connecting the camera to the RCA mini (U9A\_\*\*\*\*) Wi-Fi

Basic settings  
Click MENU.

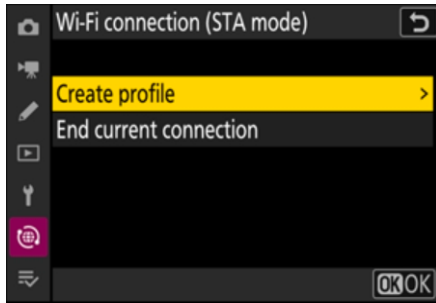
- Enter the Network menu.
- [Airplane mode] set to [OFF].
- [Wired LAN] set to [ON].
- [Connect to Computer] set to [OFF].
- Connect to FTP Server] set to [ OFF].
- Move the yellow box to [Connect to Smart Device] and press the ► button.



Using the Z9 camera as an example.

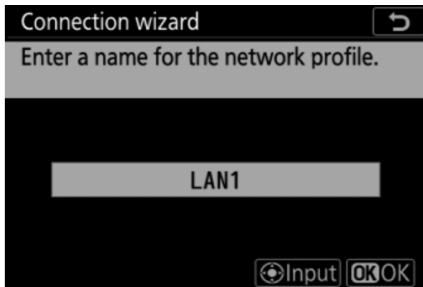


When this page appears, select [Wi-Fi Connection (STA mode)] and press the ► button.



When this page appears, select [Create profile] and press the ► button.

When this page appears, tap [Confirm] on the camera screen.



When this page appears, tap [OK Next] on the camera screen.



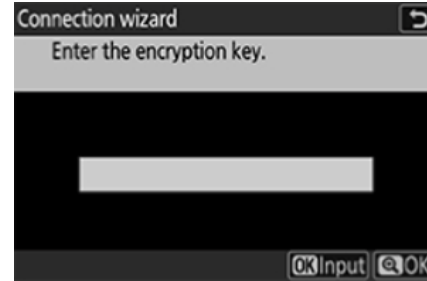
When this page appears, please wait.



When this page appears, select [U9A\_2006], and tap [OK Next] on the camera screen.



When this page appears, tap [OK Input] on the camera screen..



When this page appears, tap [12345678] on the camera screen.



After entering the numbers, tap [Confirm] on the camera screen.



When this page appears, tap [Confirm] on the camera screen.



When this page appears, it's searching, please wait for some time.

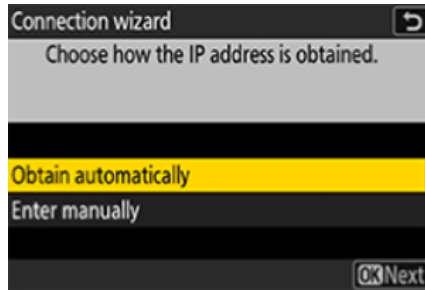


Until [U9A\_2006] appears, indicating that the camera has connected to Wi-Fi, click the [OK] button on the camera.

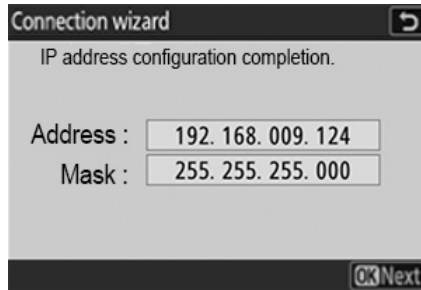




When this page appears, the purple frame is over [Obtain Automatically]. Tap [Next] on the camera screen.



When this page appears, tap [Next] on the camera screen.

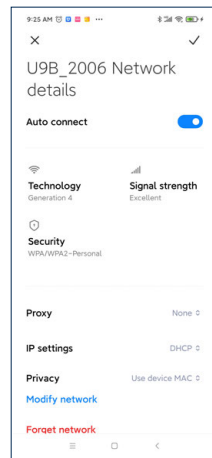
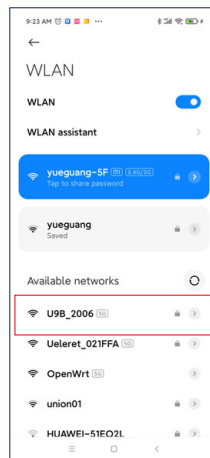


When this page appears, start to set the smartphone or tablet with the SnapBridge App installed.

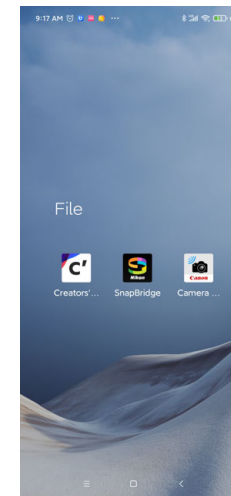


### Step 3: Connecting the SnapBridge App to the camera

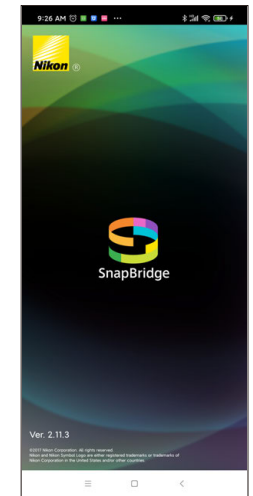
Search the Wi-Fi of the signal transmitter [U9B\_2006] on the mobile network, click [Connect] to enter the password [12345678], and click [Connect]



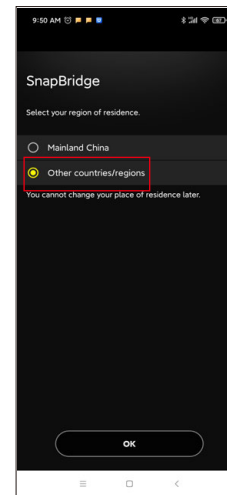
It shows connected.



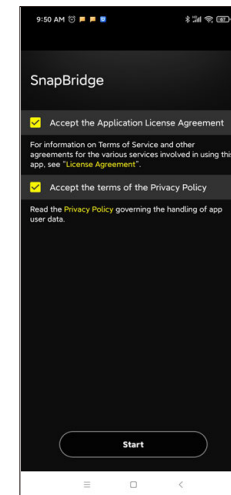
Click to open the SnapBridge App for the first time connection.



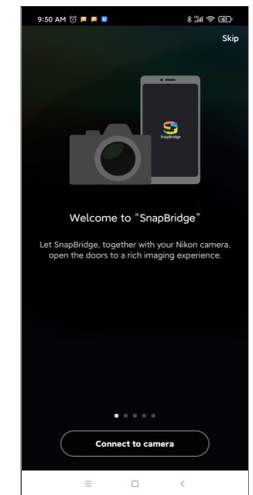
Opening



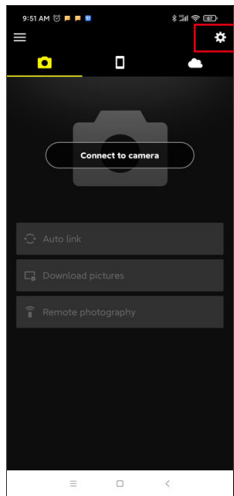
Select and click [Other countries/regions] in the red box, click [OK]



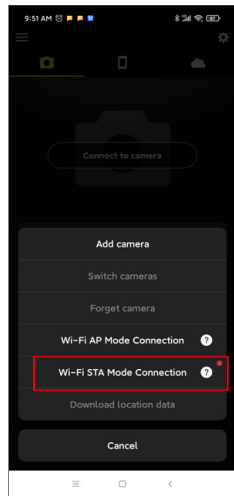
Select to ✓, click [Start]



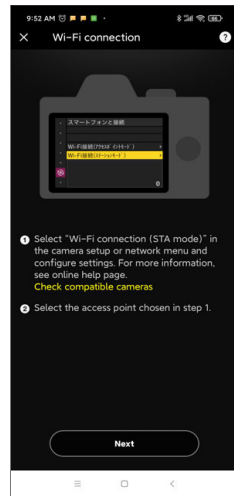
Click [Skip].



Click the red frame icon in the upper right corner



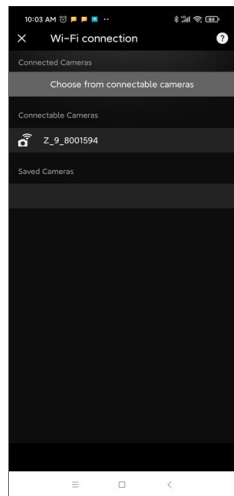
Click [Wi-Fi STA mode connection]



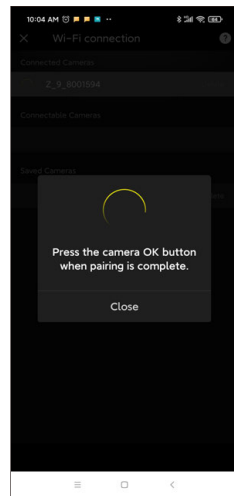
Click Next



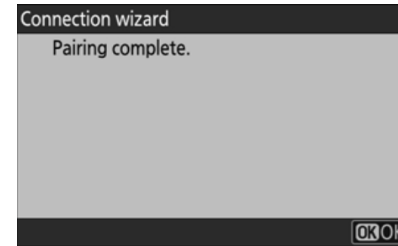
Click [Connect Wi-Fi]



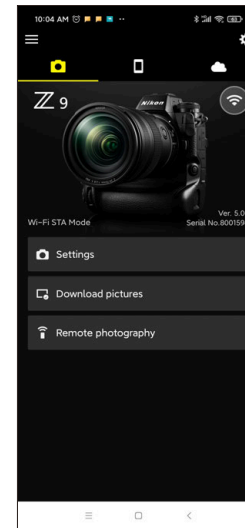
Click [Z\_9\_8001594]



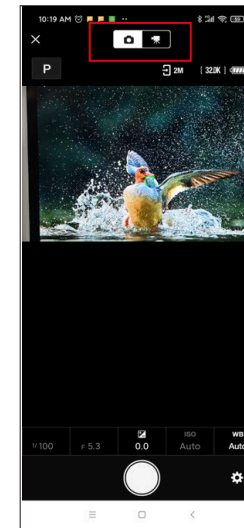
This page appears ; your first pairing is completed. Follow the prompts to operate on the camera screen.



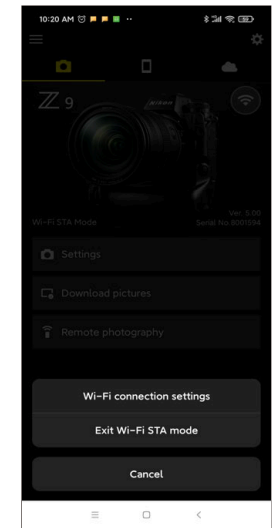
At the same time, this page appears on the camera screen. Click [OK].



The SnapBridge App will show this page; click [Remote Photography] to enter the shooting page.



The phone will display the camera lens view. Click the white circle to start taking photos. The icons on the top of the SnapBridge App page have two modes: photo mode and video mode. Click any one of the red frame on the top. At the same time, the camera screen will be black.



Please do not select [Exit Wi-Fi STA Mode].

\* If the connectable camera shows Z9, it has been connected. If it fails to connect, please exit and re-enter the SnapBridge App and try the process again.



## 2. Re-pairing of SnapBridge App

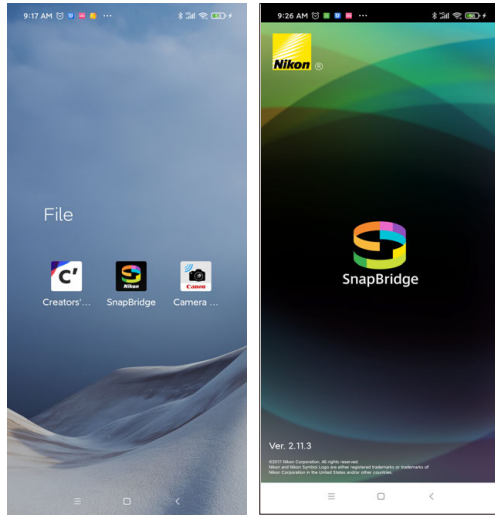
Conditions for use

On camera

(1) The camera has not disconnected from the network, the Wi-Fi - U9A signal has not been interrupted, and the camera is not powered off and restarted, or it is powered off and restarted.

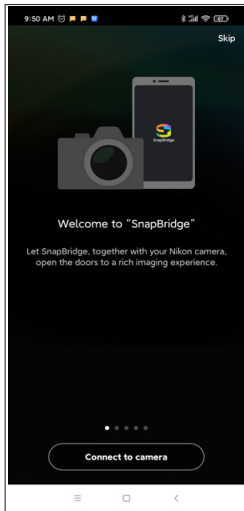
On the Mobile/Tablet:

(2) The SnapBridge App on the phone has not exited, and the phone has not disconnected from the Wi-Fi - U9B network. (If the phone's communication network has been disconnected, reconnect to the Wi-Fi - U9B).

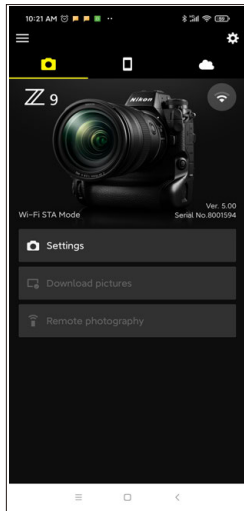


Open the Nikon SnapBridge .

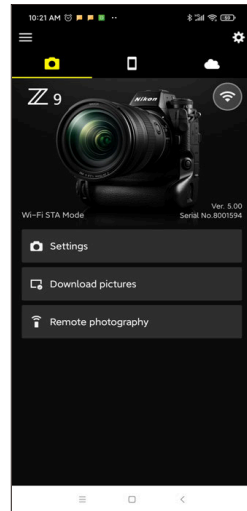
Opening



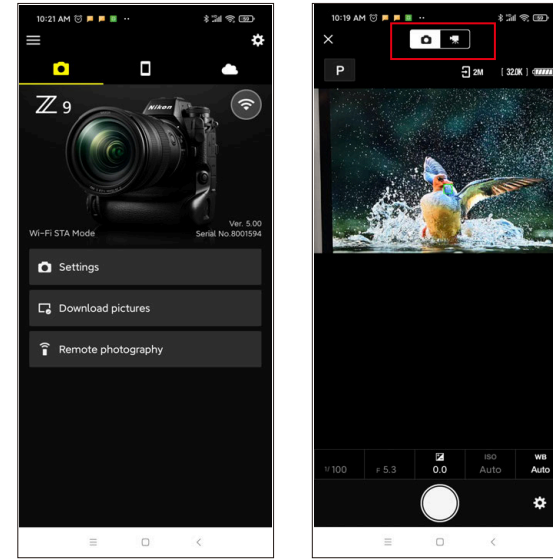
Enter this page.



If the signal icon is flashing, indicates that it is searching.



If the signal icon stops flashing, indicating that it is connected.



The SnapBridge App displays this page, Click [Remote Photography] to enter the shooting page.

The SnapBridge App will display the camera lens view. Click the white circle to start taking photos. The icons on the top of the SnapBridge App have two modes. Click as your requirement.

## Chapter 3. Features of SnapBridge App

### 1. Communication Features

The camera and the App have internal memory , allowing for quick re-connection.

- (1) If the camera has not been powered off and restarted, it will maintain its Wi-Fi connection with U9A.
  - ① If you exit the SnapBridge App without selecting [Disconnect], you can continue to reconnect the App to the camera.
  - ② If you exit the App and click [Disconnect], upon re-entering the App, click [Reconnect] and follow the same steps as the initial connection process.
  - ③ If you exit the App, click [Disconnect], and disconnect from the U9B signal, before re-entering the App, you need to reconnect your phone to the U9B Wi-Fi, then open the App and follow the same steps as the initial connection process.

(2) If the camera and RCA mini are powered off

① If the camera has not connected to any other network, no matter how long it has been powered off, simply turn on the Wi-Fi of the RCA mini and the camera, the camera will automatically prioritize and reconnect with U9A.

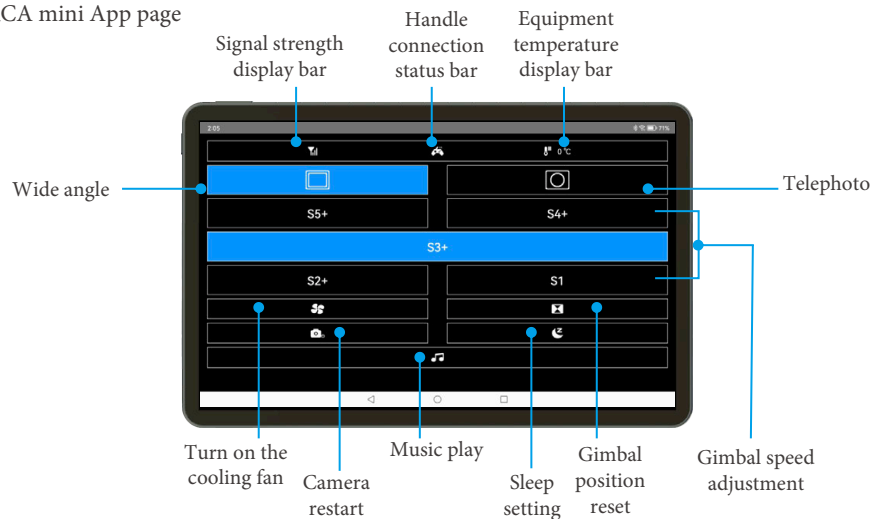
② Turn on the signal transmitter, and connect your phone to the Wi-Fi U9B. Open the SnapBridge App and follow the same steps as the initial connection process to reconnect the phone App to the camera.

## 2. SnapBridge App operation features

Brand	Model	Camera shooting mode settings	SnapBridge App		
			Photo mode	Video mode	Photo mode and video mode switching
Nikon	Z9 Z6III	Photo mode (Single shooting)	Single shooting, exposure modes P/M/S/A available		OK, switchable, single shooting only. Exposure modes available; video modes P/M available
		Photo mode (Continuous shooting)	Single shooting, exposure modes P/M/S/A available		OK, switchable, single shooting only. Exposure modes available; video modes P/M available
		Video mode		Video exposure modes P/M available	OK, switchable, single shooting only. Exposure modes available; video modes P/M available

## Chapter 4. To control the gimbal with the RCA mini App

RCA mini App page



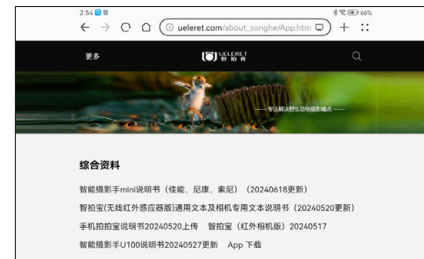
## Button operation instructions:

The RCA mini App is a simplified version of the RCA mini N, retaining only the relevant function buttons for gimbal control. The operation method corresponds to the buttons of the RCA mini N. For detailed operations, please refer to the corresponding content in the part 1 of the chapter 1 of this manual: "Introduction to the RCA mini N mirrorless camera operation page function items" on pages P9-P20.

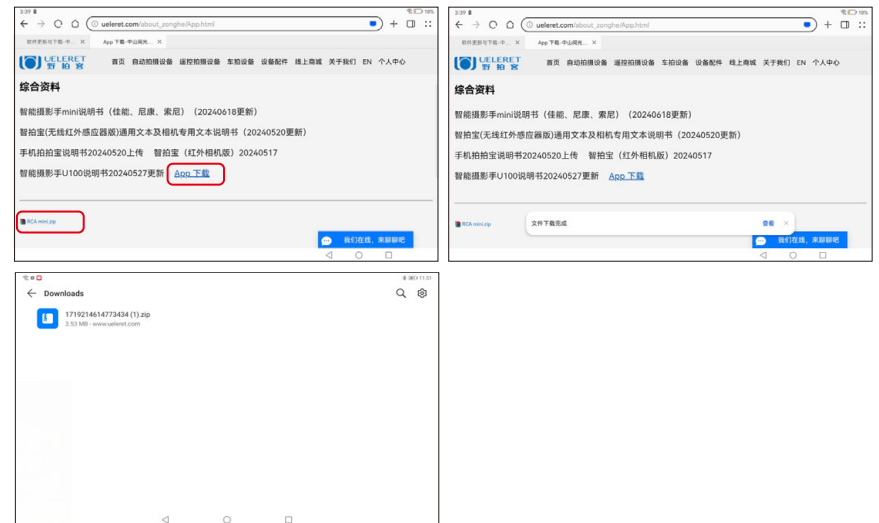
## Chapter 5. Coordinated control shooting of SnapBridge App and RCA mini

### 1. Download and install RCA mini App

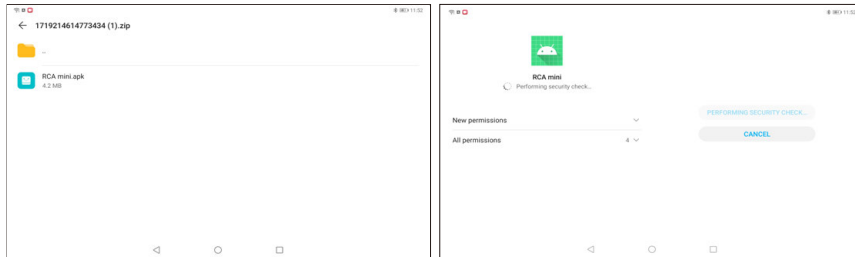
(1) Enter the website: [http://www.ueleret.com.cn/about\\_xzxx/Software.html](http://www.ueleret.com.cn/about_xzxx/Software.html) to access the data download page.



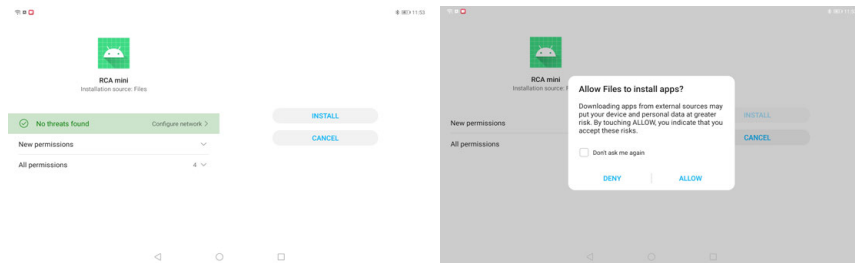
(2) Click the App download button at the bottom of the page, download the RCA mini file, and unzip it.



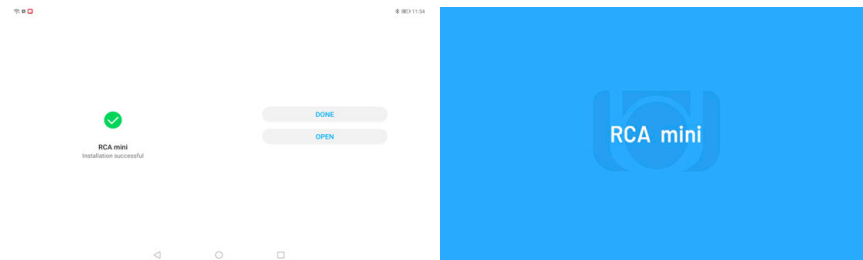
(3) Click the unzipped file with the apk suffix to install.



(4) Select [Understand that this App has not been reviewed and may pose a risk] and then choose [Continue Installation].

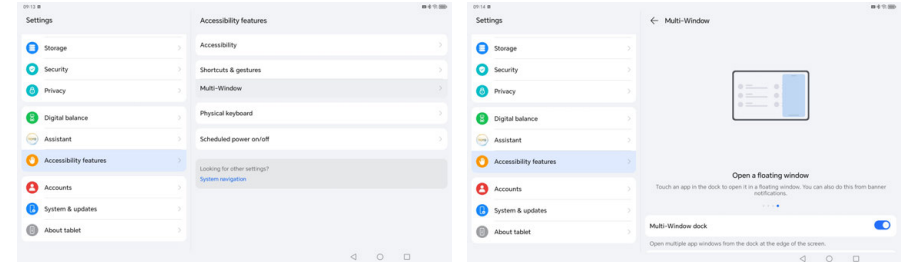


(5) Once the installation is successful, select [Open] to enter the RCA mini App.

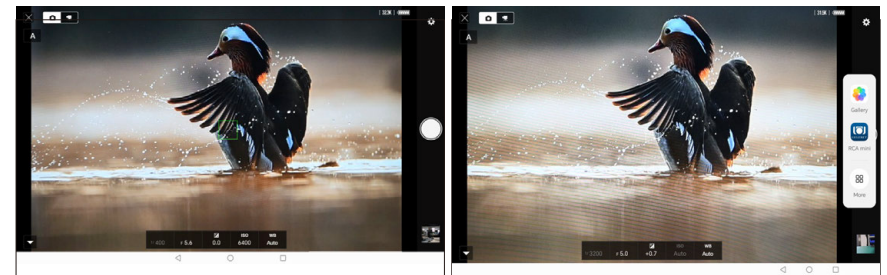


## 2. Multi-window mode control shooting

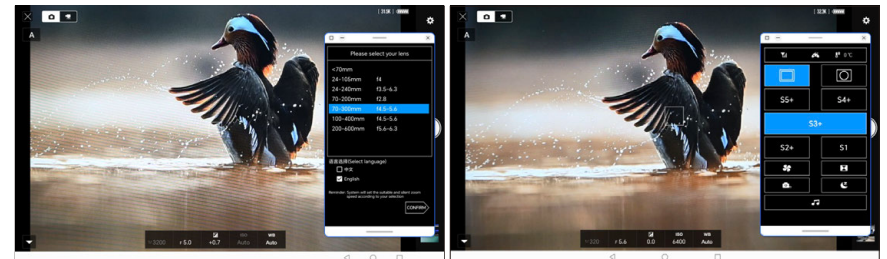
(1) Enter tablet setting page - [Accessibility features] - [Multi-Window] - turn on [Multi-Window dock] (Take Huawei Harmony system as an example, other tablets may have differences, please check the tablet manual).



(2) After successfully opening the Nikon SnapBridge App to control the camera, use the tablet's multi-window function to open the RCA mini APP small window to run.

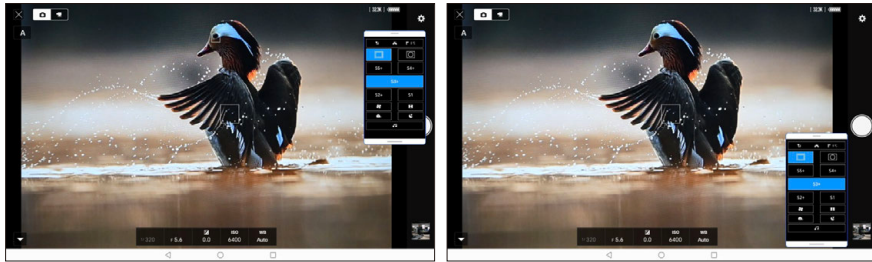


(3) Select the lens focal length according to the RCA mini APP prompts and enter the control page.



(4) Press and hold the edge of the RCA mini APP to reduce the size of the App page and reduce the obstruction of the SnapBridge App page.

- a. For camera shooting control, directly operate on the SnapBridge App page.
- b. For RCA movement and zoom control, first click on a blank area in the RCA mini App and then control it through the handle.



Usage tips:

How to prevent the RCA mini App from zooming in after it is reduced?

- a. Do not click on the RCA mini App page quickly. If you click quickly, the RCA mini App page will zoom in, blocking the Creators' App screen, which is not conducive to shooting.
- b. If you keep your finger on the reduced RCA mini App for a while, the RCA mini App page will not zoom in.

(5) Tablet + mobile phone are connected to control shooting separately, so that SnapBridge App and RCA mini APP can shoot smoothly without interfering with each other.

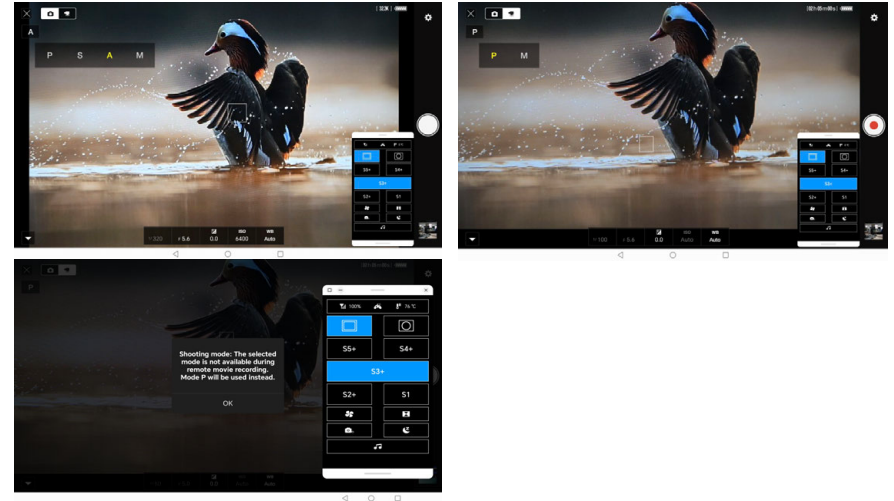
- a. After mounting the tablet on the handle, use the phone clamp accessory to fix the phone.



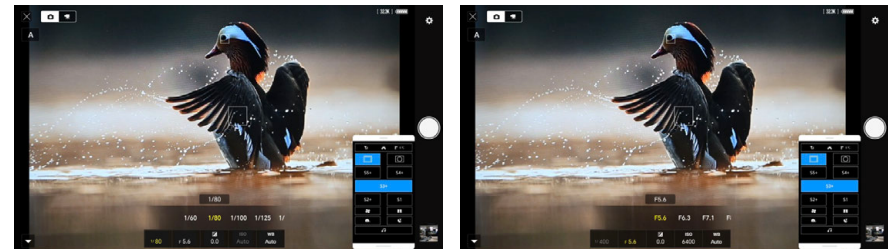
- b. The tablet only needs to connect to the Wi-Fi [U9B\_\*\*\*\*], then open the SnapBridge App to control the camera.
- c. Install the RCA mini MB App on the phone, connect to the Wi-Fi [U9B\_\*\*\*\*] and the handle's Bluetooth [G912-9083S], then open the RCA mini MB App to control the RCA mini.

3. Shooting settings

(1) Select photo mode or video mode in the upper left corner of the screen. In video mode, only P mode and M mode are available to set.

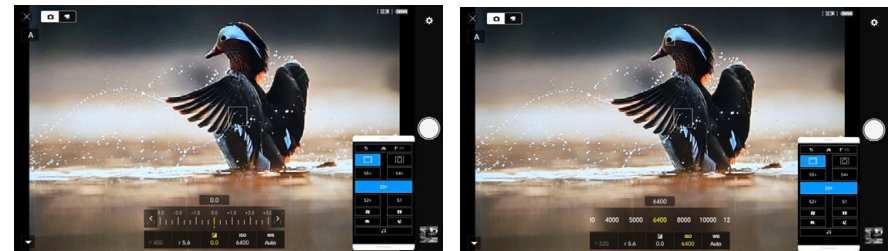


(2) Camera shooting parameter settings



Shutter speed adjustment

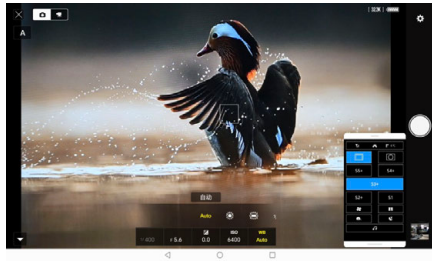
Aperture size adjustment



Exposure compensation adjustment

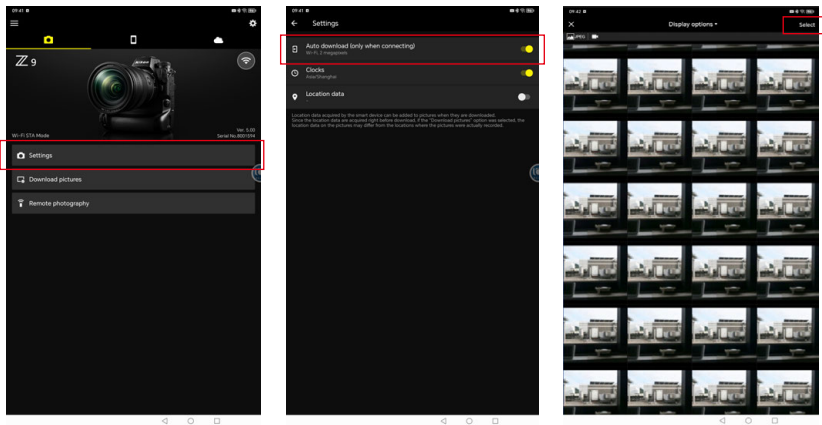
ISO sensitivity adjustment





White balance adjustment

(3) Photo transfer



## Part 4. Introduction to Related Content

### Chapter 1. Operation instructions on the shooting site

#### 1. Preparation matters for operating the shooting scene

- (1) Determine the distance between the subject and the smart gimbal by visual judgment or using a rangefinder.
- (2) Make sure there are no obvious obstructions between the installation location of the smart gimbal and camera and the antenna of the handheld tablet computer operating terminal.
- (3) The photographer holds a handle and a tablet, which can be separated from the signal repeater. The effective distance of separation is within 100 meters.
  - ① If the subject is within a safe distance from the user, there is no need to hide or block, and the user will not affect the safety and movement of the subject, then the signal repeater can be placed next to the user.

- ② If the subject is not within a safe distance from the user, that is, the user needs to hide and block it so as not to affect the safety and movement of the subject, then the signal transmitter needs to be separated from the user's handheld operating handle and tablet.
- ③ The user holds the operating handle and tablet and hides behind shelters and obstructions (such as in cars, behind woods, grass, rocks, etc.), and the signal transmitter is placed in an unobstructed position from the smart gimbal antenna. (It can be erected on a tripod, hung on a branch, or placed on a high rock mound, etc.) The separation distance should not exceed 100 meters.
- (4) Check the signal strength through the tablet, and adjust the position and angle appropriately to achieve a strong signal state.
- (5) After the signal transmitter is placed, open the App of RCA mini on tablet and signal transmitter, repeat steps in the previous chapter to check whether the functions of the tablet and handle are normal.
- (6) After all functions ready enter the shooting stage. Wait patiently for your subject to appear.
- (7) If the tablet cannot display the image sent by the smart gimbal or the operation is not smooth, you need to check whether the Wi-Fi and Bluetooth connections in Chapter 3 are normal and whether the strength of each signal is normal. Check whether the tablet battery and the signal transmitter battery are normal. Check one by one until normal.
- (8) When the power of the tablet is less than 20%, it will seriously affect the efficiency of image decoding, and the screen will suffer from delays and blur. At this time, it needs to be charged or connected to a power supply battery. While charging, the tablet can be used successfully.

#### 2. Instructions for shooting control

- (1) When the subject appears, adjust the gimbal angle and camera focal length (only for zoom lenses) to make the subject appear at an ideal angle and position in the real-time display, then you can shoot as long as the exposure is appropriate.
- (2) Or switch to the real-time display screen (larger screen), adjust the camera shooting parameters, adjust the gimbal angle, direction, exposure parameters, and when it reaches the best state, press the shutter button to take photo.

### Chapter 2. Camera setup by copying

#### 1. Download the file from the official website and copy it to the camera

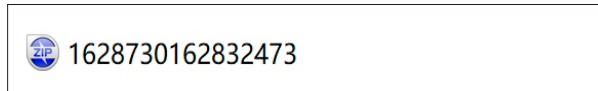
UJELERET copied the Z9, Z8 camera settings suitable for RCA mini Nikon version use, and form the firmware, put on the official website. The user can download it from the official website, copy it to the camera memory card, and then load it into the camera. This makes it very easy to complete the camera settings.

a. Enter the website of UELERET: www.ueleret.com.cn, select "Download" in the top navigation bar, then select the secondary menu "Camera Settings File Download".



b. Select the appropriate settings file for your own camera, click on the download for a compressed file package form, after the completion of the download, please first decompress, you will get a camera-specific settings name of the file (note that before importing the memory card do not modify the name of the file, otherwise it will lead to the camera can not be recognized and thus lead to setting failure) the following illustration to D850 camera settings file as an example:

Compressed package illustration: 1628730162832473.zip

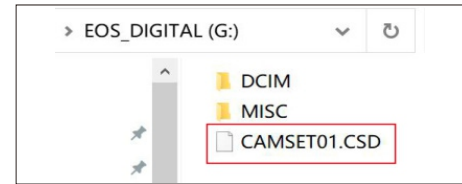


Unpacked file: CAMSET01.CSD

Name	Size	Packed	Type
..			File folder
CAMSET01.CSD	796,764	21,936	CSD File

c. How to copy files from the computer to the camera memory card :

1. You must use a memory card that can be used by each camera model ;
2. First format the memory card through the camera ;
3. Insert the memory card into the card reader ;
4. Copy the file to the first window that appears in the root directory of the opened memory card. If the file is placed in a subfolder of the memory card, the camera cannot find the file.



As shown on the left, the setup file needs to be placed in the first window of the root directory of the memory card.

(5). Insert the memory card with the camera settings file into the camera, and turn the camera on.

## 2. Camera load settings file from memory card

Operate as shown in the following illustration.

Taking the Z9 camera as an example, picture of Z9 camera loading from memory card to camera:



Note:

1. Nikon cameras generate camera setup files with the same file name. Therefore, when downloading from the website to your computer, please be careful to make sure that the camera model you select when downloading the setup file from the UELERET website is the same as the camera model you want to set up.
2. Except for the third part of the manual settings, which cannot be changed due to the operating characteristics of the RCA, all other settings can be set in the way you are used to.

## Chapter 3. Other usage requirements and questions answered

### 1. Requirements for the installation and use of battery converters

Nikon cameras have restrictions on the use of non-original batteries, and need to read the correct protocol of the battery before the camera can be used normally. The battery converter developed by UELERET has avoided the restriction, but it does not exclude the occasional situation that the camera is not recognized for use without power.

Therefore, the user is recommended to follow the procedure below.

Take the U/EP-9 battery converter as an example to illustrate the installation and use procedures when installing the RCA mini:

1. The camera power switch is OFF;
2. The U/EP-9 battery converter into the camera body battery compartment, locking;
3. The U/EP-9 battery converter power cable into the corresponding power connector of the smart gimbal;
4. Turn on the power of the smart gimbal;
5. Turn on the camera power switch to ON state.

The camera can be used normally then.

If the power switch of the camera is turned on before and the power of the smart gimbal is turned on after, the camera will not be able to use if the power level of the camera is only one frame. This is because Nikon cameras have restrictions on the use of non-original batteries, and it is necessary to read the correct battery protocol before the camera can be used normally. If the camera shows only one cell, please follow the above procedure again.

**Special Notes :**

When using the remote control mode of RCA mini to operate the timer shutdown appointment start function, the user does not have to worry about whether the camera can be used properly. RCA mini will ensure that the smart gimbal in the scheduled shutdown time after the end of the reboot, the camera normal use.

## 2. How to update the camera firmware

When the camera firmware version is not consistent with the Nikon official website version, you need to update the firmware.

- (1) Download the latest firmware package.
- (2) The steps for updating are as follows:

### Copy the update file to the CF card (or CFast card)

- a, Insert the CF card (or CFast card) formatted by the camera into the card reader.
- b, Copy the firmware update file to the first page that appears when the CF card (or CFast card) is opened (root directory).

\* If the firmware update file is placed in a subfolder of the CF card (or CFast card), the camera cannot find it.

- c, Take the CF card (or CFast card) out of the card reader.

\* When removing the CF card (or CFast card), be sure to follow the steps described in the computer or card reader instructions.

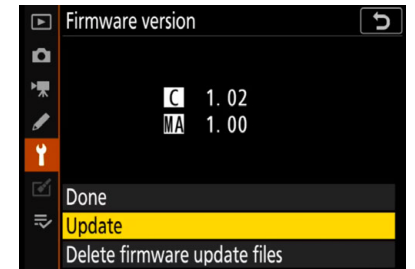
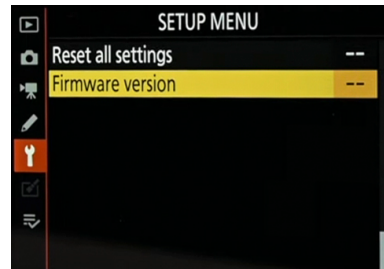
- d, Rotate the mode dial to select the <P> mode (or some other mode except the fully automatic mode).

- e, Insert the CF card (or CFast card) with firmware into the camera.

- f, Turn on the power switch, then press the <MENU> button to display the menu.

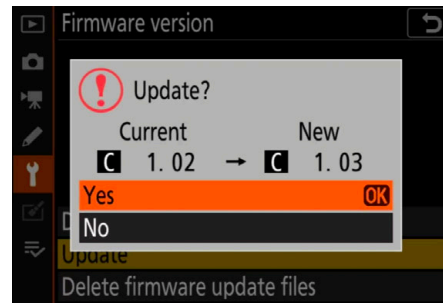


- g. Rotate the Main Dial and Quick Control Dial to select the "Firmware Version"-"Upgrade", then press the <SET> button.



- h. The firmware update screen appears. Turn the Quick Control Dial to select OK, then press the <SET> button. Start the operation from step (5).

\*If the firmware update screen does not appear on the LCD monitor, it may be because the firmware update file is not properly copied to the CF card (or CFast card) so please try again from step (1).



Disclaimer: As this product is an original patented product, there may be changes in its features or specifications in the future. In the event of any changes, please refer to the official website of our company. UELERET reserves the right to interpret any changes.