

Vigilant Eye -BWC 2.0

User Manual



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Introduction

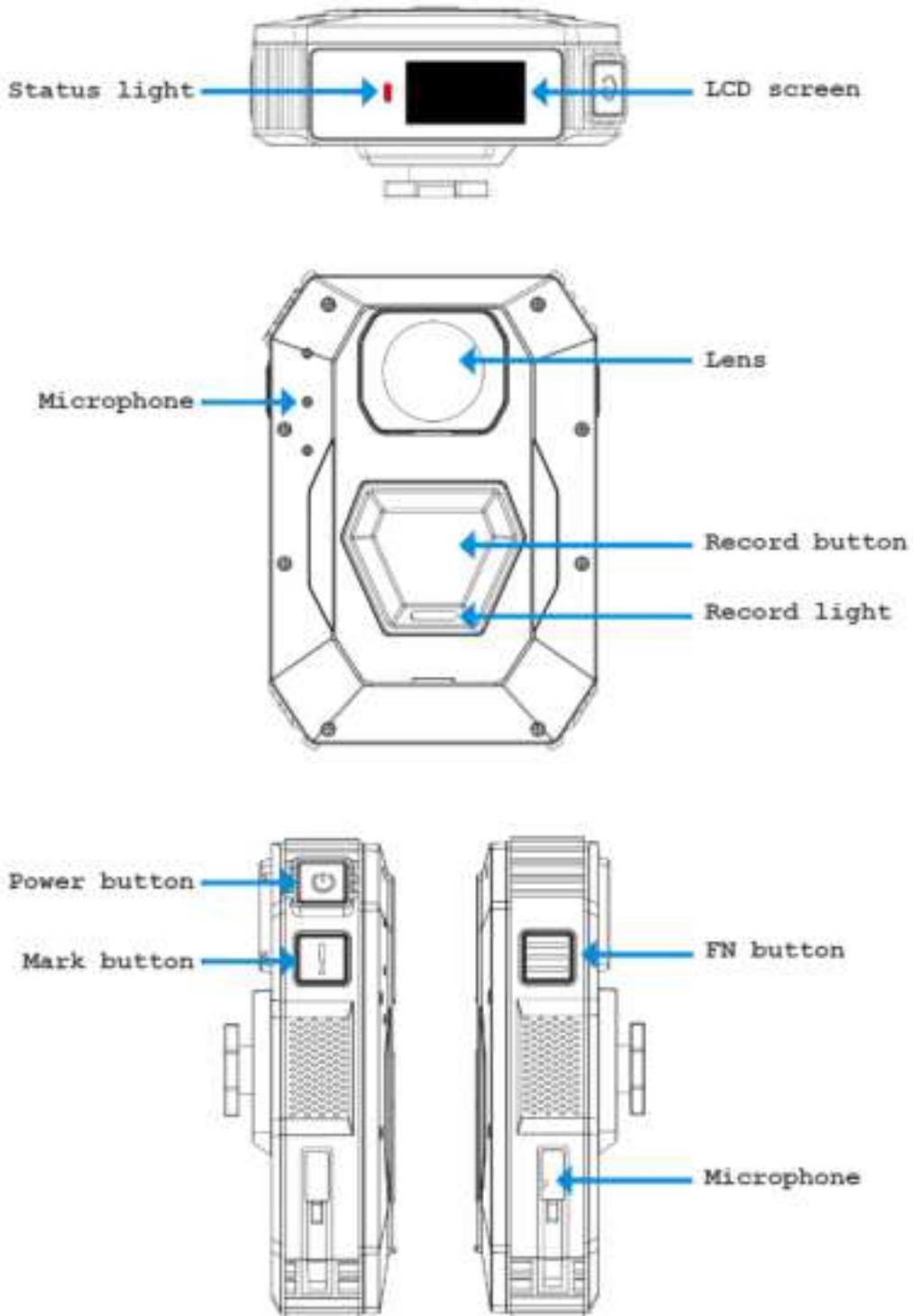
The Vigilant Eye BWC 2.0 is a body-worn camera (BWC) equipped with audio and video recording functions. The BWC is applicable in various harsh environments of law enforcement, security, military, etc. Designed to be part of the law enforcement solution, the Vigilant Eye 2.0 is used for recording cases and collecting evidence, to facilitate case forensics for the police. In the meantime, policeman tracking and alarms are provided, implementing real-time protection for policemen during law enforcement. As the core of the law enforcement system, the Vigilant Eye 2.0 supports multiple methods to upload evidence. Policemen can log into the platform and app to view and mark the evidence playback and associate cases.

The Vigilant Eye 2.0 can work in standby mode and recording mode. When the Vigilant Eye 2.0 changes from the standby mode to the recording mode, it alerts the Vigilant Evidence Management System and activates the alarm recording function to collect evidence. On the Vigilant Evidence Management System, you can also implement monitoring, tracking, and scheduling operations for the onsite situation through the BWC node.

BWC Operation

1. Button and Instructions Explain

1.1. Button function



Button function description:

| Button | Pressing Mode | Description |
|---------------------------------------|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power button | Press | Power on when in the power-off status |
| | Press and hold (3S) | LCD screen is on display when in the power-on status |
| | Press and hold (10S) | System reset |
| Record button | Press one time or double press.(Configurable) | Press the button in the standby status: activating the recording Press the button in the power-off status: powering on and activating the recording |
| | Press and hold (3S) | Stop recording |
| FN(function) button | Double-press | Activating (deactivating) mute (During BWC recording) |
| | Press and hold (3S) | Activating (deactivating) AP |
| M(mark) button | Press | Marking videos (during recording) |
| | Press and hold (3S) | SOS alarm recording (Alarm send to VEMS under 4G or wifi) |
| M+FN | Press and hold (3S) | Activating and deactivating the stealth mode |
| Resetting button (Behind the battery) | Press | System reset |
| FN+Power | Press | Turn on / off the Privacy Mode |

1.2. LED/Beep/Vibration status

BWC LED light, Beep, Vibration reminder status:

| BWC status | BWC LED status | Beep | Vibration | Description |
|------------------------|---------------------------------------------------------------|---------|-----------|-------------------------------------------|
| Power on | Solid Red | 1 times | 1 times | Change to Green after power on success |
| Power off | No | 1 times | 1 times | |
| No recording (Standby) | Solid Green | No | No | |
| Recording | Solid Red The LED on the Record button will be solid Red too. | 2 times | 2 times | By button or the event trigger or keyword |

| | | | | |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------|-------------------|------------------------|---------------------------------------------------------------|
| Stop recording by pressing button | Solid Red change to Solid Green | 1 times long beep | 1 times long vibration | |
| Recording starts abnormally | No | 1 times long beep | 1 times long vibration | LCD show recording failed |
| Mute audio | Solid Yellow | 1 times | 1 times | Solid yellow until unmute audio |
| Enable WIFI AP | Solid Blue | 1 times | 1 times | Solid Blue until disable WIFI |
| Remote Live view (From the VEMS) | Flashing Red The LED on the Record button will be Flashing Red too. | 1 times | 1 times | Flashing Red until stop live view |
| WIFI AP disable Unmute audio Mark video Quit stealth mode | No | 1 times | 1 times | |
| Battery Power lower than 20% and every 5% reduction(BWC no plugin the Dock) | No | 1 times | 1 times | |
| Enter stealth mode | No | No | No | |
| BWC NFC pair success | No | 1 times | 1 times | |
| BWC NFC pair fail | No | No | No | |
| BWC voice activate | No | 1 times | 1 times | |
| Under stealth mode: Start recording | No | No | 2 times | |
| Under stealth mode: Stop recording | No | No | 1 times long vibration | |
| Under stealth mode: Power off | No | No | 1 times | |
| BWC on the Dock: Charging | Flashing: BWC Charging Solid: Finished charging | No | No | |
| BWC on the Dock: Server connection | Failed: Red Success:Green | No | No | The LCD screen will show the server failed connection status. |

Note: New LED status will replace the current status. And When the LED status of the battery conflicts with the LED status of the server connection, the LED status of the server connection has a higher

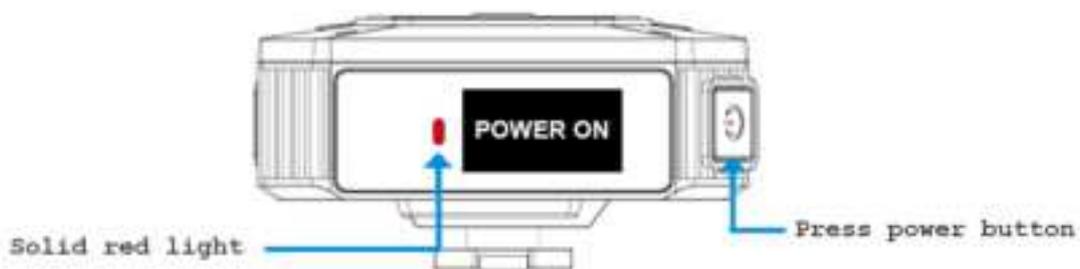
priority.

Dock LED status:

| LED status | Description |
|------------|------------------------|
| Solid Blue | Dock is power on |
| Solid Red | BWC plug into the Dock |

2. Power On

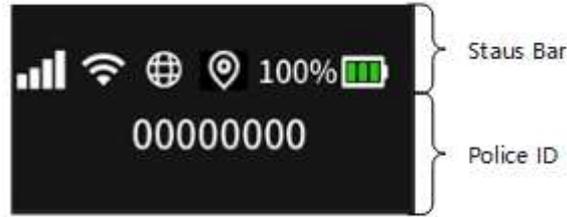
Step 1. Press the power button, the BWC status light turns solid red and the Streamax logo is displayed on the LCD.



Step 2. When the BWC status light turns from solid red to solid green, and the logo on the LCD disappears and changes to the BWC status, the BWC is powered on and in standby mode.



Step 3. In the standby mode, the BWC status and policeman ID are displayed on the LCD (if the BWC is powered on for the first time, no policeman ID is displayed until the ID is configured). On the upper part of the LCD, the status icons for the 4G signal, AP hot spot status, server (platform) connection status, GPS positioning, battery percentage, and battery level are displayed in turn.



Status icons

| Icon | Name | Description |
|------|-------------------------------|------------------------------------------------------------------------------|
| | 4G connection signals | Able to search for and connect to 4G signals |
| | No 4G connection | Unable to search for 4G signals (No SIM card, SIM is broken) |
| | Strong GPS signal | Positioned through GPS |
| | Weak GPS signal | Weak GPS signal |
| | No GPS signal | No GPS signals or positioning deactivated |
| | AP hot spot activated | The AP hot spot function is activated |
| | AP hot spot deactivated | The AP hot spot function is deactivated |
| | WiFi Client connect success | WiFi Client connect success |
| | WiFi Client not connect | WiFi Client not connect |
| | Connected to the platform | Successfully connected to the Vigilant Evidence Management System |
| | Not connected to the platform | Not connected to the Vigilant Evidence Management System |
| | No storage space | The remaining storage space is insufficient for recording |
| | Little storage space | The remaining storage space is less than 10% |
| | Evidence upload completed | All evidence in BWC has been uploaded to the platform. No video file in BWC. |

| | | |
|-------------------------------|------------------------|----------------------------------------------------------------------------------------------|
| | Battery level | The battery percentage and remaining battery level |
| | Policeman ID | The policeman ID bound on the BWC |
| | Keyword identification | Keyword identification activated on the BWC |
| | Storage Low | LCD shows this picture when storage space is less than 10% or 5% or 2% or 1% |
| | Storage Full | LCD shows this picture when storage space is full |
| Privacy Mode OFF | Privacy Mode OFF | Exiting privacy mode . |
| Privacy Mode ON | Privacy Mode ON | Entering privacy mode success |
| | Battery low | LCD shows this picture when battery is less than 60% or 20% |
| | High temperature | If the BWC does not on the dock and the temperature is higher than 55° C it will remind you. |
| POWER OFF | Power off | BWC power off |
| POWER ON | Power on | BWC power on |
| START RECORDING FAILED | Start recording failed | BWC starts recording failed |
| ENTER STEALTH MODE | Entering stealth mode | BWC enters stealth mode |
| | Upgrade failed | BWC upgrades failed |
| UPGRADING | Upgrading | BWC is upgrading |

3. Recording Mode

The recording mode can be activated on the BWC in an active or passive manner. For the active manner, you can click the record button or press Mark button for 3s to activate the recording mode. For the passive manner, there are multiple trigger modes for different scenarios. When the BWC status is changed to the recording mode, the area on the LCD displaying the policeman ID will display icons indicating the recording mode, and the status light will change accordingly. After the recording mode

is activated, real-time monitoring can be implemented on the platform for the BWC through 4G networks.

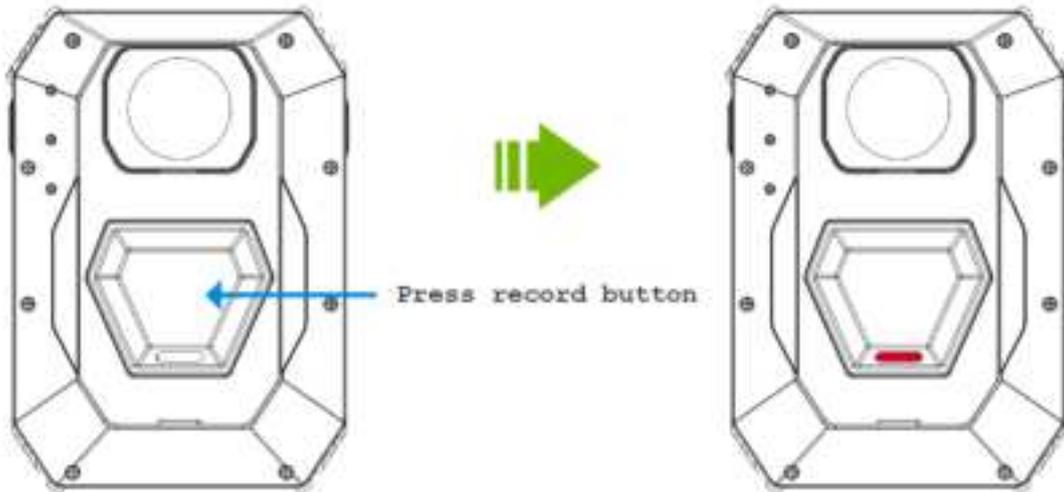


Recording status icons:

| Icon | Name | Description |
|------|------------------------------|------------------------------------------------------------------------------------|
| | Manual recording | The recording mode activated by manually pressing the record button |
| | Keyword recording | The recording mode activated through keyword detection |
| | Intense movement recording | The recording mode activated through user movement status detection |
| | MDVR Linkage recording | The recording mode activated through the MDVR linkage |
| | Gun drawing recording | The recording mode activated through gun drawing action detection |
| | Geo-fence recording | The recording mode activated when the BWC enters a specified area |
| | SOS recording | The recording mode activated by enabling SOS alarms |
| | Live view monitoring | Remote real-time monitoring of the onsite situation is implemented on the platform |
| | BWC Linkage recording | The recording mode activated through the other BWC linkage |
| | Remote instruction recording | The recording mode activated by the instruction of server |

3.1. Manual Activation

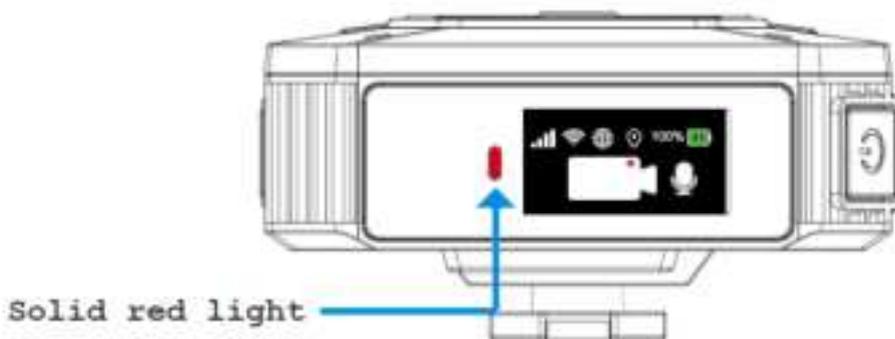
Step 1. Press the record button on the BWC. The recording light turns red, indicating that the recording is successfully activated.



Step 2. When the default recording icon is displayed on the LCD of the BWC (see the following figure) and the BWC produces two short prompt tones, the Vigilant Eye 2.0 starts recording.



Step 3. In the recording mode, the status light is solid red. After opening the recording, there will be a short sound prompt with vibration periodic according to the video reminder setting, which remind the police that the video is in progress. You can use the mobile APP to set whether the BWC has a sound and led light reminder. Please refer to the instructions of Vigilant View.



3.2. Keyword Activation

(1) Function Description

In some scenarios where users may not be able to manually activate the recording mode, the BWC can automatically activate the recording by identifying some key words and report the related status alarms to the platform.

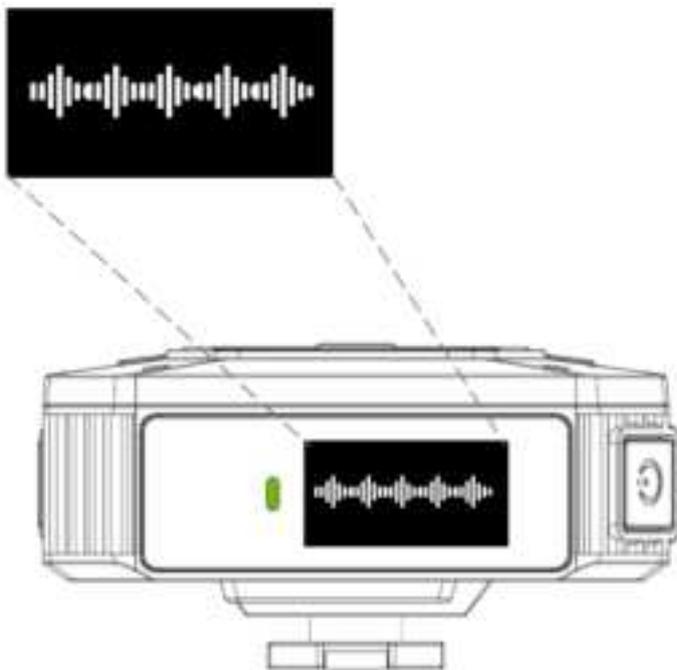
(2) Keyword List

| Type | Keyword |
|------------------------------------|------------------------------------|
| Wake-up word | activate bwc |
| Control words | start recording |
| | mute audio |
| | unmute audio |
| Alarm words | Drop the gun |
| | Shots fired |
| | Freeze |
| | Drop your gun |
| | Keep your hand |
| | Put your hand |
| | Get down on the ground |
| | Shots fired, give me help |
| | Shots fired, I have been hit |
| | Shots fired officer down |
| | Freeze, stand on the way |
| | Freeze or I will shot |
| | Freeze, don't move |
| | Drop your gun now |
| | Drop the gun now |
| | Keep your hands up where I can see |
| | Put your hands up where I can see |
| | Put your hands on the ground |
| | Put your hands on the wheel |
| | Keep your hands on your head |
| Keep your hands on the lap | |
| Get down on the ground, don't move | |
| Get down on the ground, drop it | |

| | |
|--|-----------------------------------|
| | Get down on the ground, head down |
| | Get down on the ground, right now |

(3) Normal Activation

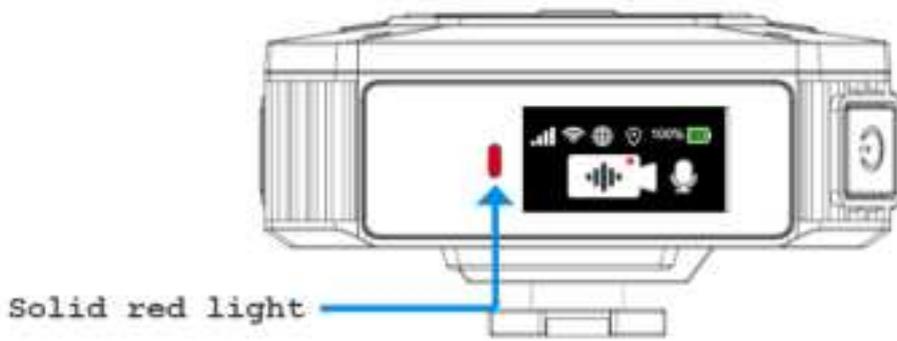
Step 1. Say the wake-up word "activate bwc" so that the BWC will activate keyword identification. The BWC will produce a prompt tone with a vibration, and the icon for keyword identification is displayed on the LCD. This process of awakening BWC to start keyword recognition is similar to saying: Hey, siri! with your Apple mobile phone.



Step 2. When the icon is displayed, say the control word "start recording" within 3 seconds. The BWC will activate the recording according to the command, and the recording icon overlapped with the keyword identification icon is displayed on the LCD (see the following figure).



Step 3. After the keyword recording is activated, the status light turns from solid green to solid red. In the meantime, the BWC produces 2 short prompt tones with vibrations. After opening the recording, there will be a short sound prompt with vibration periodic according to the video reminder setting.



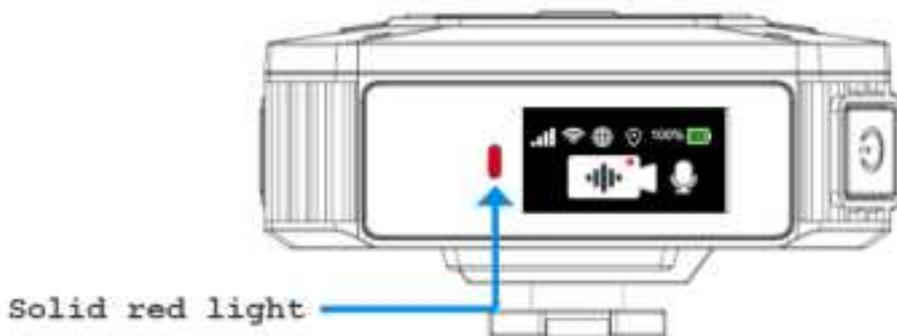
(4) Emergency Activation

Step 1. Say an alarm word (such as freeze and put your hand). The BWC will automatically identify the command.

Step 2. After the keyword identification is successful, the BWC changes to the recording mode, and the recording icon overlapped with the keyword identification icon is displayed (see the following figure). In this situation, if the BWC is connected to the platform through 4G networks, the alarm status will be reported to the platform.



Step 3. After the keyword recording is activated, the status light turns from solid green to solid red. In the meantime, the BWC produces 2 short prompt tones with vibrations. After opening the recording, there will be a short sound prompt with vibration periodic according to the video reminder setting.



3.3. Intense Move Activation

(1) Function Description

To prevent difficulties in forensics in the future due to delayed recording activation in chasing criminals, the BWC will identify intense movements of the user through the movement status identification function, and activate the alarm recording.

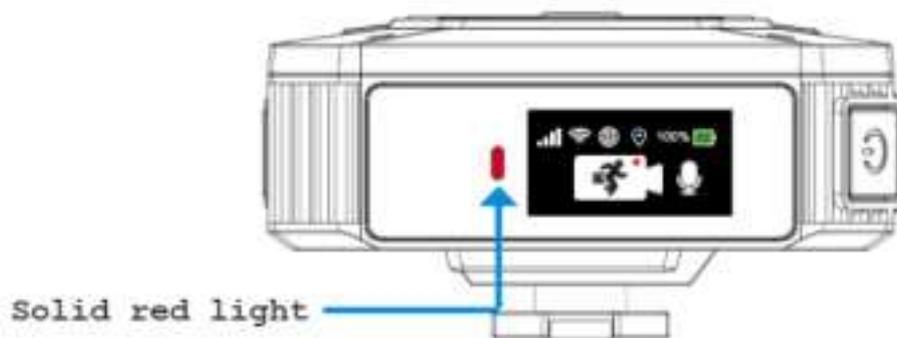
(2) Operating Instructions

Step 1. The user starts to chase criminals, and the BWC identifies the user movement status change.

Step 2. The alarm recording is activated, and the recording icon overlapped with the intense movement icon is displayed (see the following figure). In this situation, if the BWC is connected to the platform through 4G networks, the alarm status will be reported to the platform.



Step 3. After the intense movement recording is activated, the status light turns from solid green to solid red. In the meantime, the BWC produces 2 short prompt tones with vibrations. After opening the recording, there will be a short sound prompt with vibration periodic according to the video reminder setting.



3.4. MDVR Linkage Activation

(1) Function Description

Law enforcement personnel may encounter emergencies when driving a police car in patrol. In this situation, the linkage recording on the BWC can be remotely activated through the MDVR alarm, as long as the BWC is near the police car and is bound to the MDVR. In this way, the multi-perspective law enforcement scene will be recorded, and the police officers can restore the law enforcement process more completely and comprehensively.

(2) Operating Instructions

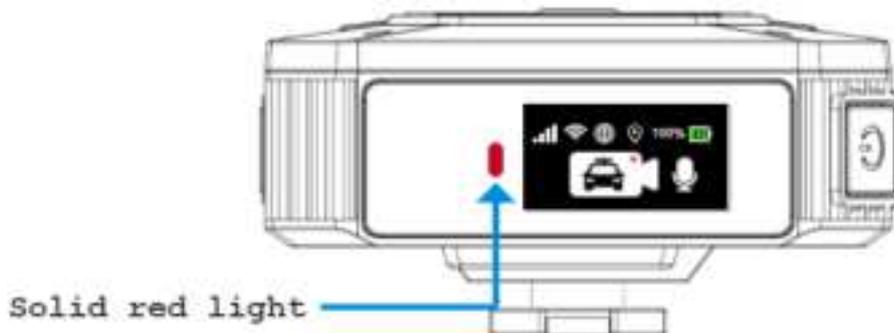
Step 1. After the MDVR alarm, remote linkage with nearby BWCs is implemented through Bluetooth.



Step 2. The MDVR activates recording on the BWCs paired with it in the signal coverage (about 10 meters) , and the recording icon overlapped with the Bluetooth linkage icon is displayed on the LCD (see the following figure).



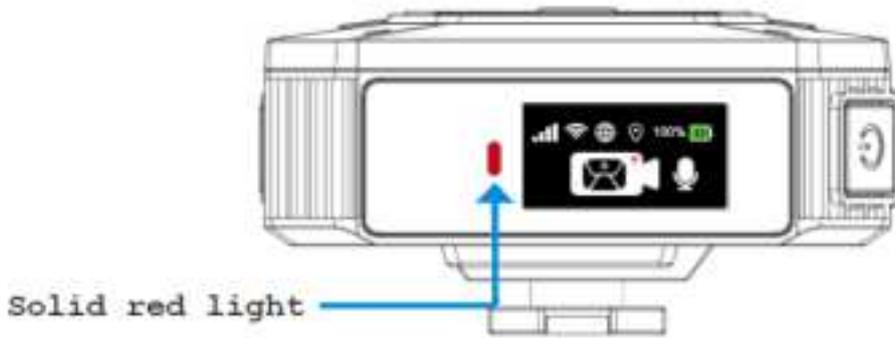
Step 3. After the Bluetooth recording is activated, the status light turns from solid green to solid red. In the meantime, the BWC produces 2 short prompt tones with vibrations. Then, a short prompt tone is produced every 5 minutes until the recording is stopped.



3.5. BWC linkage Activation

BWC can linkage surrounding 10m distance BWC recording.

When BWC is activated by BWC, the LCD will show below icon.



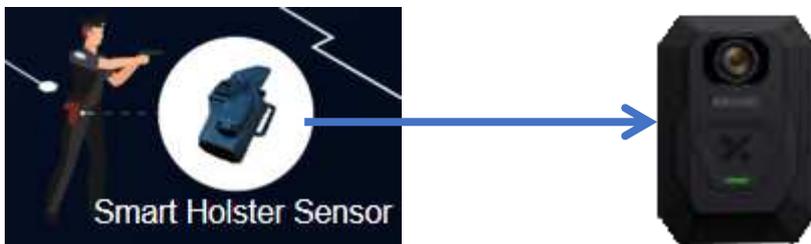
3.6. Pull Gun Activation

(1) Function Description

When a policeman draw the gun in an emergency during law enforcement, the holster sensor can detect the movement of the gun and send a Bluetooth broadcast. BWC and MDVR within the broadcast range can be linked to open the video.

(2) Operating Instructions

Step 1. After police office draw the gun, remote linkage with nearby BWCs is implemented through Bluetooth.



Step 2. BWCs which in the range open the Bluetooth linkage video, the video icon appears in the LCD screen and add the gun alarm icon (shown below)



Step3. When the pull gun alarm video mode is turned on, the status indicator light will change from green to red. At the same time, send 2 short notes with vibration. After opening the recording, there will be a short sound prompt with vibration periodic according to the video reminder setting.

3.7. Geo-Fence Activation

(1) Function Description

Law enforcement personnel need to record videos in real time in high-risk areas. To satisfy this need, you can specify high-risk areas on the platform, and implement linkage activation of the geo-fence recording on BWCs. When the law enforcement personnel enter a high-risk area, recording will be activated on the BWC through linkage. When the law enforcement personnel enter a low-risk area, the recording is deactivated. When the law enforcement personnel leaves a high-risk area to a low-risk area, the recording needs to be turned off manually.

(2) Operating Instructions

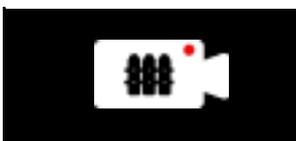
Step 1. Specify the geo-fence area on the map of the platform (refer to the manual of the Vigilant Evidence Management System).

Step 2. Enable the related functions of geo-fence for the BWC on the IE browser (refer to the description about configurations in the IE browser).

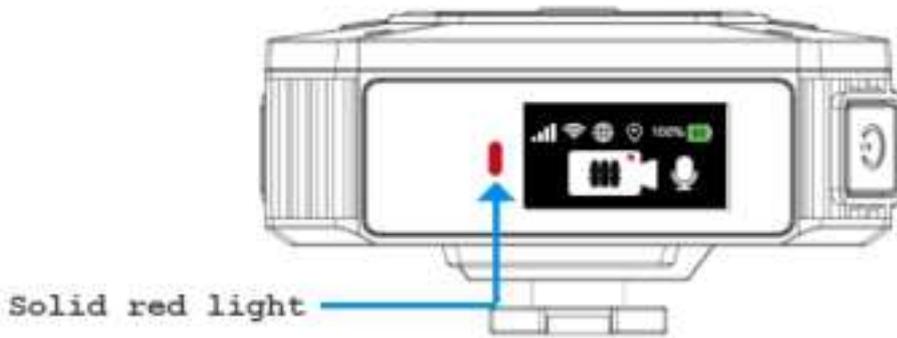
Step 3. The user wears a BWC and enters the specified geo-fence area.



Step 4. The geo-fence alarm recording is activated, and the recording icon overlapped with the geo-fence icon is displayed on the LCD (see the following figure).



Step 5. After the geo-fence recording is activated, the status light turns from solid green to solid red. In the meantime, the BWC produces 2 short prompt tones with vibrations. After opening the recording, there will be a short sound prompt with vibration periodic according to the video reminder setting.



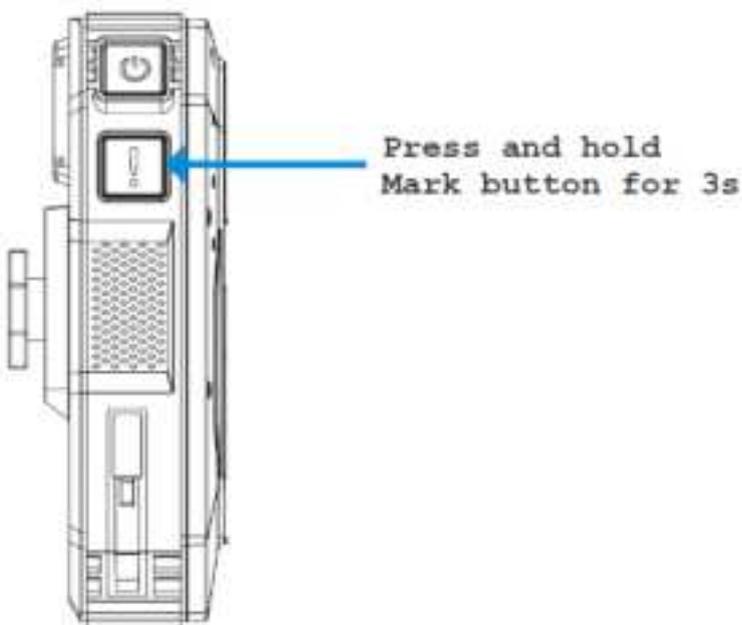
3.8. SOS Activation

(1) Function Description

During law enforcement, the law enforcement personnel may encounter emergencies in which the personnel need assistance from the platform. In this situation, the BWC can send alarms with the SOS identifier to the platform through 4G/WiFi networks and activate real-time streaming for the platform, so that manual intervention such as remote command can be carried out through the platform.

(2) Operating Instructions

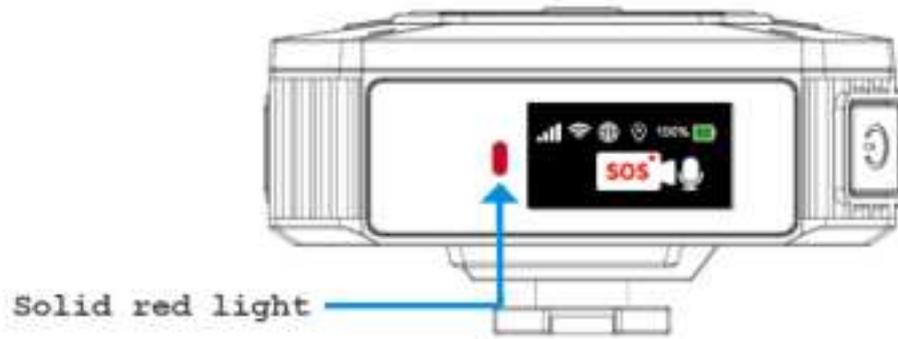
Step 1. Press and hold the Mark button of the BWC.



Step 2. The SOS alarm recording is activated, and the recording icon overlapped with the SOS icon is displayed on the LCD (see the following figure).



Step 3. After the SOS recording is activated, the status light turns from solid green to solid red. In the meantime, the BWC produces 2 short prompt tones with vibrations. After opening the recording, there will be a short sound prompt with vibration periodic according to the video reminder setting.



Notice: Without 4G/wifi network, after SOS alarm is turned on, only video recording can be turned on, not linkage with the platform.

3.9. Live View Monitoring

(1) Function Description

After the recording mode is activated on the BWC, the platform can remotely communicate with the BWC through 4G networks, and monitor the live view through the BWC camera in real time.

(2) Linkage Mode

Step 1. The user activates the recording mode using any method. The BWC will report alarms and upload the positioning information to the platform through 4G networks.

Step 2. After receiving the alarms, specify the BWC for linkage, and then monitor the user's current environment in real time.

Step 3. The status light on the linked BWC turns from solid red to blinking red (flashing until the real-time monitoring ends), and a short prompt tone is produced, indicating the monitoring is started.



Step 4. A "LIVE" icon is displayed on the left side of the LCD, as shown in the following figure. This icon will be displayed until the platform monitoring or BWC recording is stopped.



3.10. Muting in Recording

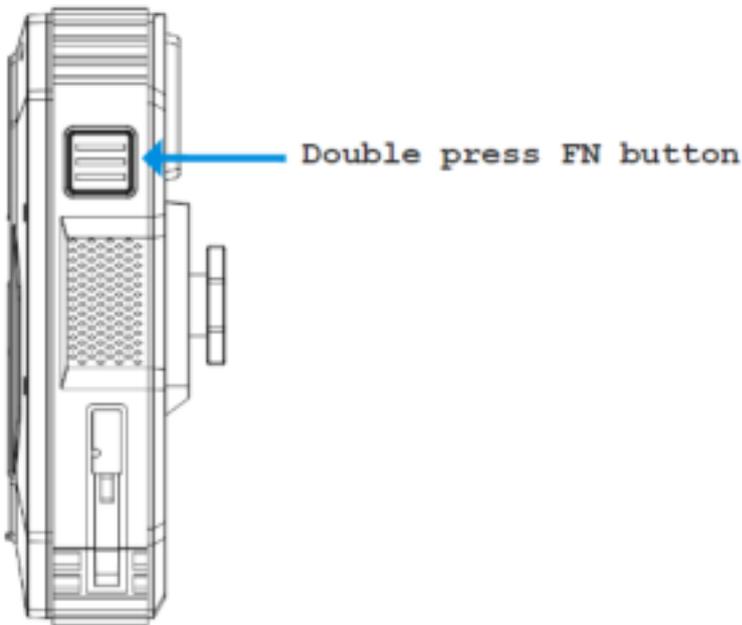
In the law enforcement process, there are some scenarios where personal privacy needs to be protected. In such scenarios, you can manually activate the muted recording on the BWC to protect the privacy of the law enforcement personnel or the object of law enforcement.

3.10.1. Manual Activation/Deactivation

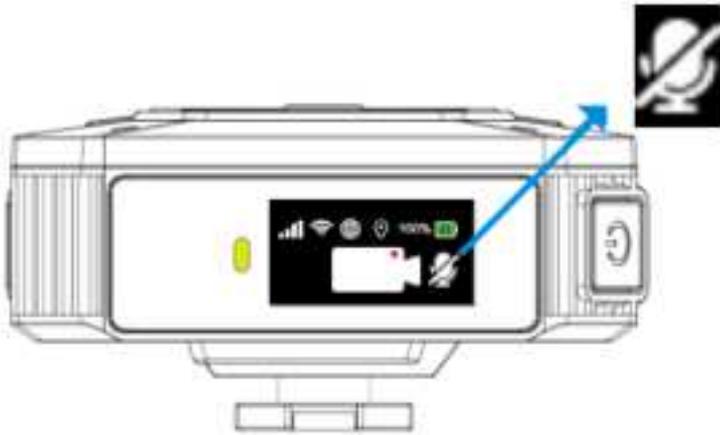
Step 1. After the recording mode is activated, the audio recording function is activated by default. In this situation, the unmute icon is displayed on the right side of the recording icon (see the following figure).



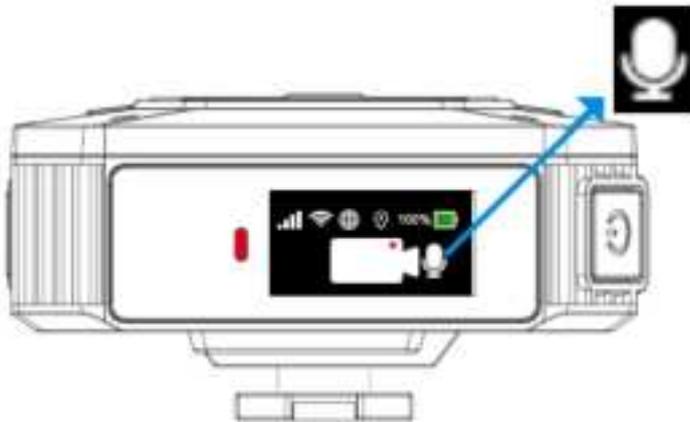
Step 2. Double-press the FN button on the side of the BWC.



Step 3. The status light turns from solid red to solid yellow. The unmute icon is changed to the mute icon on the LCD (see the following figure), indicating that the audio is successfully muted for the recording. The status light remains solid yellow until the muted status is released.



Step 4. To unmute during the recording, repeat step 2 to double-press the FN button. After a short prompt tone is produced and the mute icon is changed to the unmute icon on the LCD (see the following figure), the audio recording is restored.



Note: You can also identify the mute status according to the status light. Solid yellow indicates the mute status, and solid red indicates the unmute status.

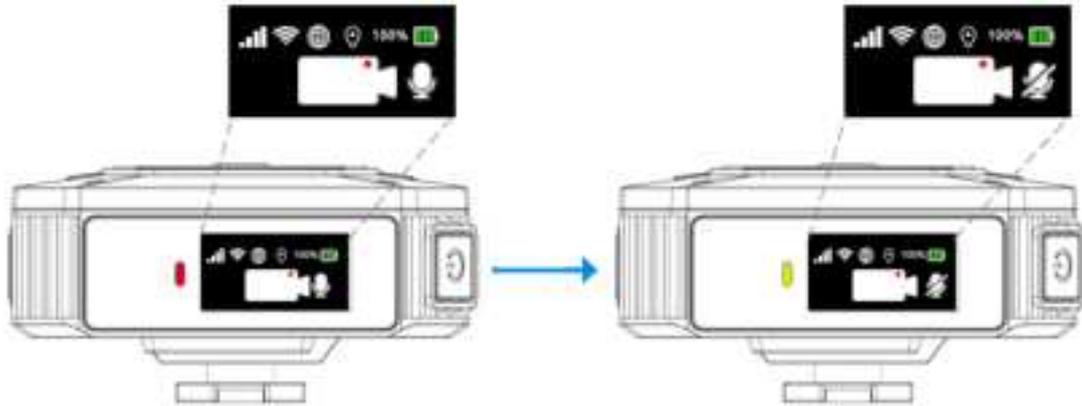
3.10.2. Keyword Activation/Deactivation

Mute Activation

Step 1. Say the wake-up word "activate bwc" in the recording mode so that the BWC will start keyword identification according to the command and produce a short prompt tone.

Step 2. After the prompt tone is produced, say the word "mute audio" within 3 seconds. The BWC will mute the audio in the recording according to the command.

Step 3. The audio recording status icon will change to the mute icon on the LCD (see the following figure), and the status light turns from solid red to solid yellow.

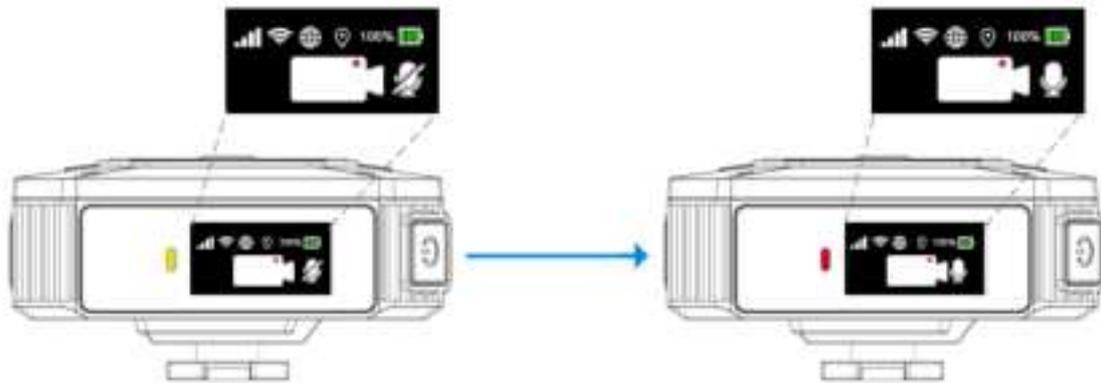


Mute Deactivation

Step 1. Say the wake-up word "activate bwc" in the recording mode so that the BWC will start keyword identification according to the command and produce a short prompt tone.

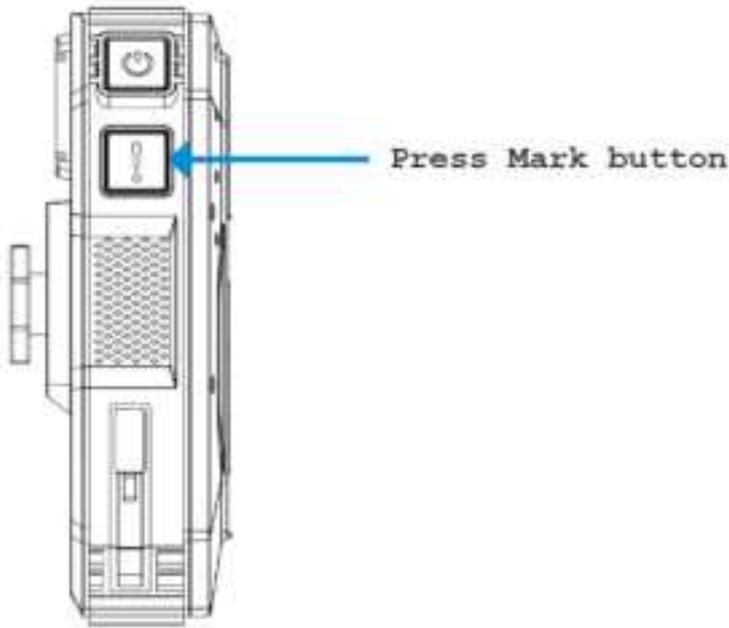
Step 2. After the prompt tone is produced, say the word "unmute audio" within 3 seconds. The BWC will unmute the audio in the recording according to the command.

Step 3. The audio recording status icon will change to the mute icon on the LCD (see the following figure), and the status light turns from solid yellow to solid red.



3.11. Recording Marking

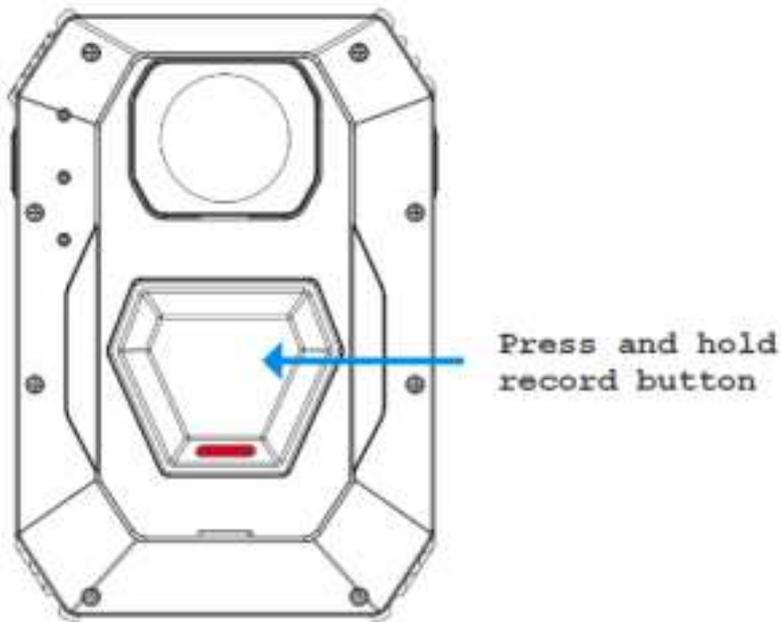
In the recording mode, press the MARK button of the BWC to mark particular time points for the videos. Also, when the BWC activates the alarm, it starts to mark automatically. Marking is convenient for the extraction of relevant evidence.



3.12. Stopping Recording

3.12.1. Manually Stopping Recording

Step 1. Press and hold the record button.



Step 2. Check the BWC LCD. The recording is deactivated and the BWC enters the standby mode in the following scenario: the recording icon and recording status icon disappear and the policeman ID appears, the status light turns from solid red to solid green, and the BWC produces a long prompt tone.

3.13. Start Recording Failed

If, there is an abnormal situation in which recording mode cannot be started, and the following text

prompt appears in the LCD screen of BWC, you can try to reset the BWC (reference chapter 13 resetting), if still cannot solve the problem please get the running log of BWC(reference to chapter BWC Configuration 5. [BWC Log](#)) and contact technical support.



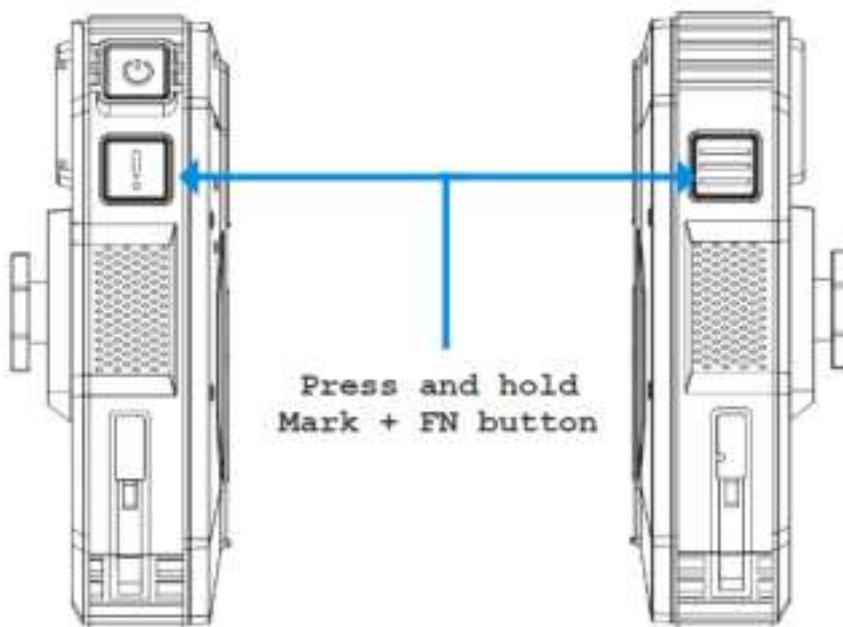
4. Stealth Mode

(1) Function Description

In some scenarios, stealth is required in law enforcement. The law enforcement personnel can activate the stealth mode to prevent self-exposure due to sound and light indications on the BWC. In the stealth mode, the LCD, prompt tone, status light, and recording light are turned off, but there are vibrations when recording is turned on or off.

(2) Operating Instructions

Step 1. Press the FN and MARK buttons at the same time and wait for the BWC to enter the stealth mode.



Step 2. When **ENTER STEALTH MODE** is displayed on the LCD, wait for 5 seconds until the notification disappears. The BWC enters stealth mode.

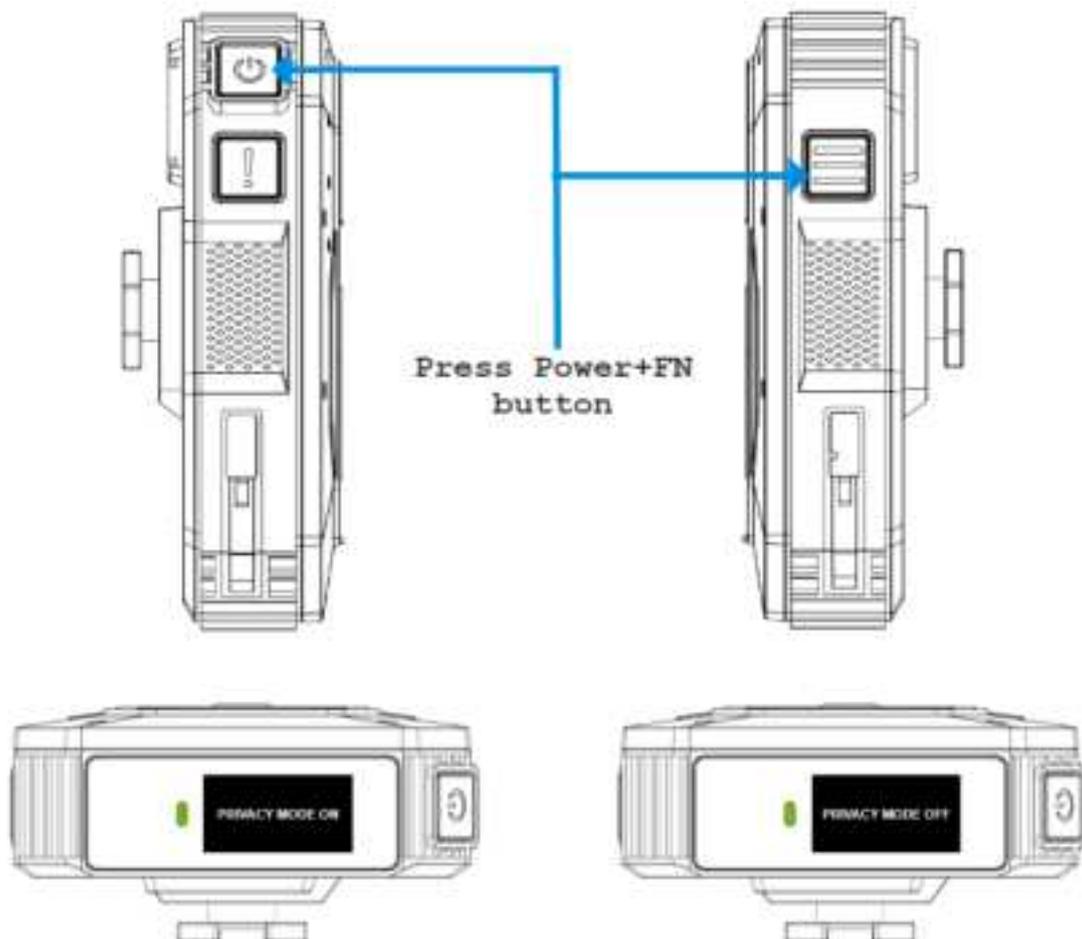


Step 3. To restore the standby mode, repeat step 1 to press the FN and MARK buttons at the same time and wait until the LCD restores the display. Then the BWC changes from the stealth mode back to the standby mode or recording mode.

5. Privacy Mode

When police officers are in the changing room or other private areas, they can enter Privacy Mode. After enabling Privacy Mode, BWC will not be linked by other devices for recording, and will turn off automatic recording, such as AI. For specific configuration parameters refer to '6.1.3.3 Button Settings'.

Press FN + Power button to ON/OFF Privacy Mode:



6. Battery

6.1. Charging the Battery

6.1.1. Charging strategy

- (1) Battery temperature less than 0 °C do not charge;
- (2) Battery temperature at 0°C-15.0°C, charge with 800mA 4.35V
- (3) Battery temperature at 15.1°C-41.5°C, charge with 1.6A 4.35V
- (4) Battery temperature at 41.6°C-47.0°C, charge with 1.0A 4.35V
- (5) If the battery temperature exceeds 47.0°C, stop charging, then when the battery temperature drops to 41.5°C, charge with 1.0A 4.35V

6.1.2. Charging on a Dock

The single-slot dock is usually equipped on a police car and supports charging and data upload for a single BWC.



Operating Instructions

Step 1. Ensure that the dock is powered on. The status light of a powered dock is blue (see the following figure).



Step 2. Insert the BWC vertically into the dock. The dock status light turns red, and the dock is successfully connected to the BWC (see the following figure).



Step 3. When a BWC is not fully charged yet, the status light on BWC is blinking. After the BWC is fully charged, the status light on BWC turns solid.

Status light on BWC

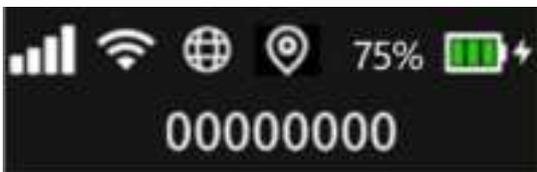


Step 4: Insert the battery into the dock. The battery light of the dock turns red or green. (If the battery is not fully charged yet, the battery light is red. If the battery is fully charged, the battery light is green.) The following figure shows that the battery is fully charged and the battery light is green.)



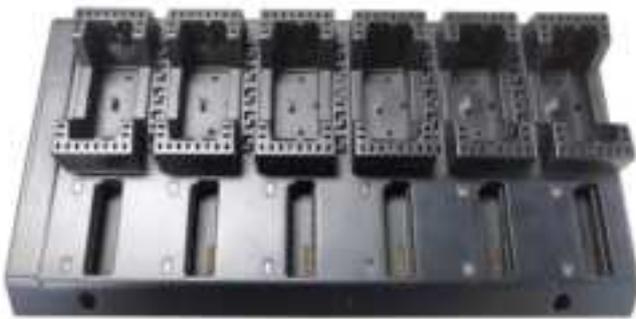
Charging Status

If there is no video evidence that needs to be uploaded from the BWC, the dock only charges the BWC, and only the status bar and policeman ID are displayed on the LCD of the BWC (see the following figure).



6.1.3. Charging on a Station 【Need to update pic】

The Station is usually equipped in the police Station and supports the charging and data upload for multiple BWCs.



Operating Instructions

Step 1. Ensure that the Station is powered on. The status light of a powered Station is blue (see the following figure).



Step 2. Insert the BWC vertically into the Station. The BWC light on the Station turns red, indicating the connection is successful (the light indications are the same as the dock).



Step 3. Insert the battery into the Station. The battery light of the Station turns red or green. (If the battery is not fully charged yet, the battery light is red. If the battery is fully charged, the battery light is green. The following figure shows that the battery is fully charged and the battery light is green.)



6.2. Taking out the Battery

Take out the battery from the BWC according to the operations in the following figures.



Note: When take out the battery, you need to pull the sticker to the left side, but not upwards.

6.3. Put battery into BWC

Step 1: When put battery into BWC, placing the left side of the battery into the battery compartment so that the gold fingers are flush with the pins. Then press the right side of the battery into the battery compartment.

Step 2: After inserting the upper battery cover protrusion against the groove, press the lower battery cover.

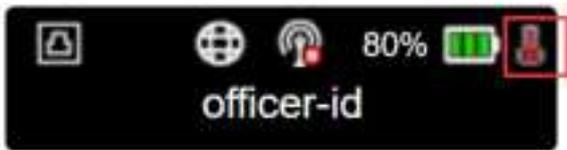
Step 3: Press the corner of the battery cover to ensure the IP level.

6.4. High temperature protection

Charging protection:

The BWC is going to stop charging when the temperature is higher than 47°C . When the temperature drops below 47 °C, BWC will resume charging.

High temperature icon is displayed on BWC LCD:



Discharging protection:

If the BWC temperature is between 55° C - 60°C, it will remind you every 5 minutes (Beep and LCD). If the BWC temperature is > 60°C, it will remind you first, then stop recording and shut down.

High temperature reminder is displayed on BWC LCD:



6.5. Low Battery Level

When the battery level is lower than 20%, **BATTERY LOW** is displayed on the LCD of the BWC (see the following figure), and short prompt tone are produced to remind the user that the BWC is of low battery level and needs to be charged. The prompt will appear each time when the battery level drops by 5% until the BWC is charged or is powered off due to insufficient power.



Battery status displayed on the LCD

| Status Icon | Description |
|-------------|----------------------------|
| | Fully charged (100%) |
| | Sufficient power (99%-70%) |
| | Moderate power (69%-30%) |
| | Low power (29%-1%) |
| | Empty battery holder 0% |

Note: When the BWC is charged, a lightning icon is displayed on the right side of the battery icon:



6.6. Backup battery

6.6.1. Battery switch

When the main battery of BWC is removed, BWC will automatically switch to the backup battery for power supply. If the backup battery has insufficient power, BWC will shut down automatically when main battery removed.

To protect the backup battery, BWC cannot be powered on when the main battery is not inserted.

6.6.2. RTC

The backup battery is dedicated to powering the RTC chip. Once the backup battery runs low on power, it will cause the device's time to be abnormal. Therefore, please charge the device in a timely manner to ensure that the backup battery always has sufficient power.

7. View and Edit on the App

Users can log in BWC through Vigilant View APP. To play back, edit and set the Vigilant eye. (See the Vigilant View user manual for details).

8. Evidence Upload

Operating Instructions

Note: The dock or station must be connected to the Router to get the IP address and access the network.

Step 1. Ensure that the dock is powered on. The status light of a powered dock is blue (see the following figure).

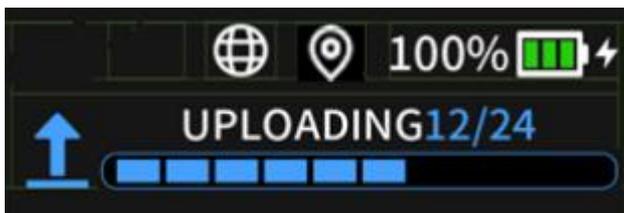


Step 2. Insert the BWC vertically into the dock (see the following figure). The dock status light turns

red, and the dock is successfully connected to the BWC.



Step 3. If there is video evidence in the BWC needing to be uploaded and synchronized to the platform, the dock can upload the data automatically, and the status bar and upload progress are displayed on the LCD (see the following figure).



Step 4. When all evidence in BWC has been uploaded to the platform, The LCD will show this icon (📁) to remind the police that all evidence has been uploaded to the platform.

9. Vehicle Binding

Each BWC can be bound to a police car. You can place the BWC close to the NFC area of the MDVR for automatic pairing and binding between the BWC and the vehicle. After the BWC is bound, linkage operations such as evidence merge and linkage recording activation (for details, see the MDVR manual).

9.1. Binding

Step 1. Place the BWC close(0-2cm) to the NFC area of the MDVR as shown below. The MDVR will automatically identify the BWC nearby.

Note: BWC NFC is under the X logo. MDVR NFC reader is under the button.



Step 2. If the MDVR successfully binds the BWC, the license plate number of the vehicle on which the MDVR is installed is displayed on the LCD of the BWC (see the following picture).

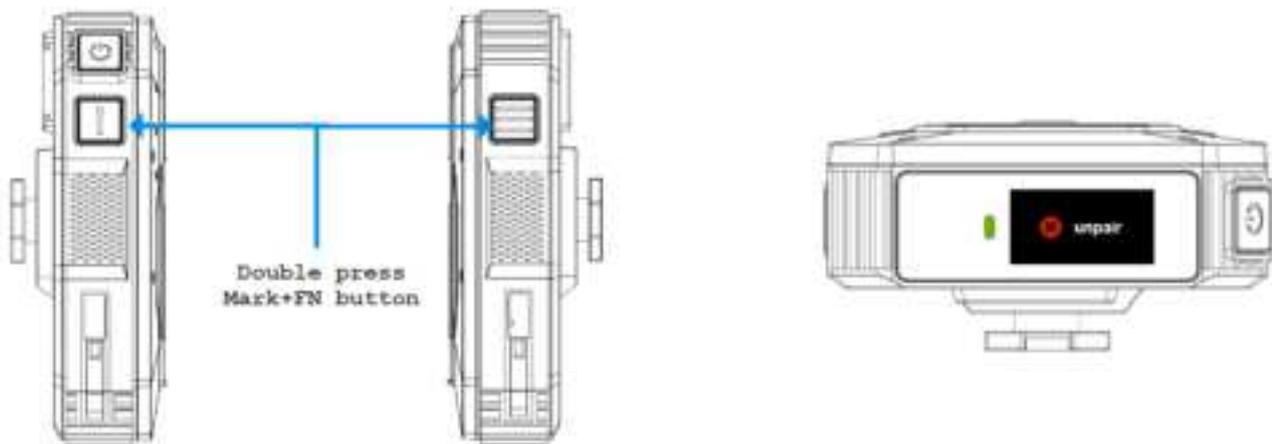


Step 3. The standby status is restored and displayed on the LCD of the BWC after 5 seconds.

Note: The BWC can be bound to the MDVR of any police car, but one BWC can only be bound to one MDVR at a time. When you need to change the binding relationship from the last MDVR to the new MDVR, you don't need to release through the APP. You just place the BWC close to the NFC area of the new MDVR. The binding relationship will automatically change from the last MDVR to the new MDVR.

9.2. Unbinding

Double click FN + Mark button to unbind:



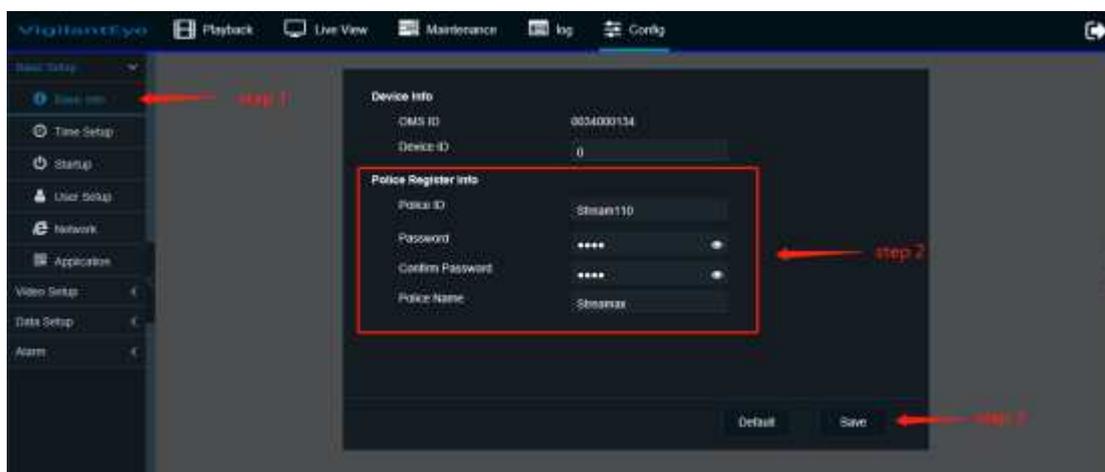
Or unbind by APP:Vigilant View.

10. Policeman Binding

Step 1. Register the policeman account on the Vigilant Evidence Management System, and specify key information such as the policeman name and ID (for details, see the user manual of the Vigilant Evidence Management System).

Step 2. Specify the policeman ID on the BWC.

Open the browser, log in to the Vigilant Eye configuration interface by following the steps (see the description about configurations in the IE browser). Enter the configuration menu, click Basic Info on the left pane to switch the interface on the right pane. Then specify the policeman ID and policeman name in the area enclosed in the red box, and click Save.



Note: The ID and name on the BWC must be consistent with those registered on the platform so that the policeman can be bound. (Please refer to Vigilant Eye Management System User Manual

for the binding setup on platform)

Step 3. Connect the BWC to the network by inserting it into a dock or station (refer to section 6.2 Charging the Battery) or through 4G signals so that the BWC connects to the Vigilant Evidence Management System.

Step 4. The platform automatically implements binding based on the policeman information in the BWC. Then the BWC is displayed on the right pane of the platform main page indicating that the BWC is online. Police officers can also judge whether BWC has successfully connected to the server through the icon () displayed on the LCD. The binding is successful.

Note: One BWC can be bound to one and only one policeman at a time.

11. Storage Status

(1) Function Description

The videos recorded on the BWC need to be uploaded through the dock for evidence backup and archive (see section 6.2.1. Charging on a Dock). Due to storage limitations, the uploaded video data will be overwritten for subsequently recorded video evidence. If the data is not uploaded for a long time and the storage space is full, recording cannot be activated or the video cannot be completely recorded, hampering evidence collection. To prevent such inconveniences, the BWC will prompt notifications on the LCD when it is in standby mode, in order to notify the user that storage space is insufficient and prompt evidence upload is needed.

(2) Insufficient Storage Space

When the storage space is insufficient, an icon indicating that the SD card is about to be full on the right side of the policeman ID on the LCD of the BWC. (The icon is shown in the following figure.)

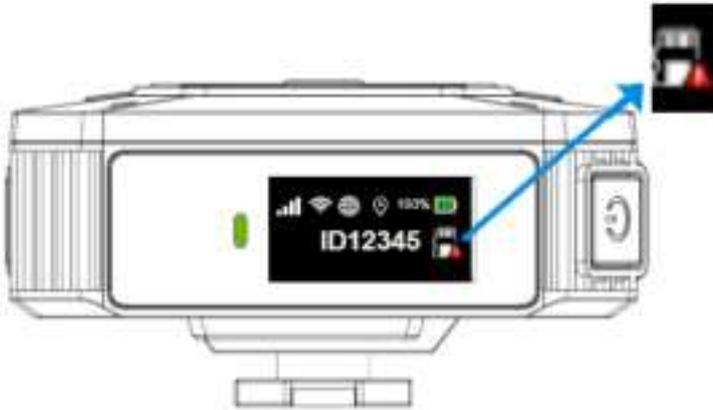


You can still activate the recording mode on the BWC, but you may fail to record complete videos. In this situation, you need to upload evidence promptly so that you can have more storage space for video

recording.

(3) No Storage Space

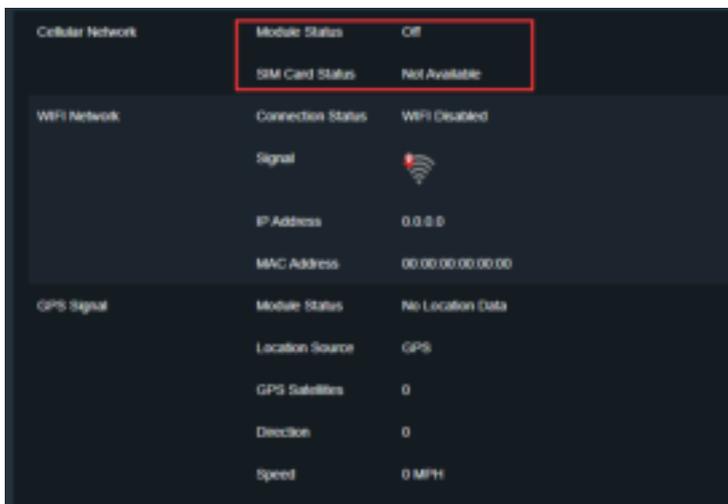
When the BWC has no storage space, an icon indicating that the SD card is full is displayed on the right side of the policeman ID on the LCD of the BWC. (The icon is shown in the following figure.)



Then you need to upload the evidence before you can record videos on the BWC.

12. SIM Card

1. When the BWC plugin to the station/dock/type-c adapter charger, the 4G module will be disable, the module status will be: Off.



2. The 4G will only work when pull out the BWC from the station/dock/type-c adapter charger, the module status will be: On.



3. You can check the 4G connection by the LCD:

| Icon | Name | Description |
|------|-----------------------|--------------------------------------------------------------|
| | 4G connection signals | Able to search for and connect to 4G signals |
| | No 4G connection | Unable to search for 4G signals (No SIM card, SIM is broken) |

Note: SIM card supports hot swapping, which takes effect within 3 minutes after plugging and unplugging.

13. Resetting

Press and long hold the power button for 10s or press reset button within the battery hold for resetting. Resetting supports the BWC hardware reboot, resetting user configuration is not included.

Step 1. Open the rear cover of the BWC and take out the battery.



Step 3. Use the screwdriver or pen to press on the reset button or press and hold on the button for resetting (Resetting can only achieve the BWC hardware reset, modifying relevant parameters is not supported).



Step 4. After the reset, press the power button to restart the BWC.

14. Power Off

Press and hold the power button for 3 seconds. When **POWER OFF** is displayed on the LCD, the BWC is powering off. Wait until the text disappears. The BWC is powered off.



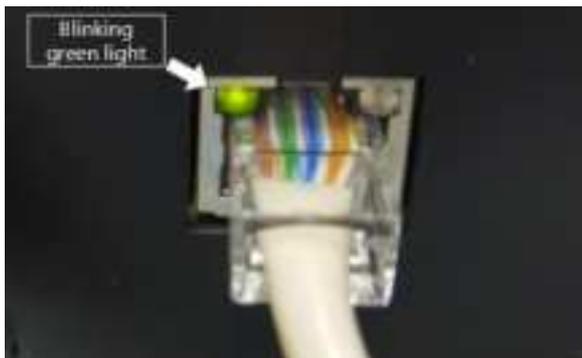
Note: If BWC is recording, it will not POWER OFF, but if you press and hold for 10 seconds, it will reset.

BWC Configuration

1. Login page

Step 1. Power on the dock or station. When you see that the station status light is on, the blue light indicates that the station has been powered on successfully

Step2. Connect the station to the Router through the network cable. When the light on the left side of the network port blinking green light, the station is connected to the network.



Note: The station need to be connected to the Router since the BWC is under DHCP mode, need the Router to assign the IP to BWC.

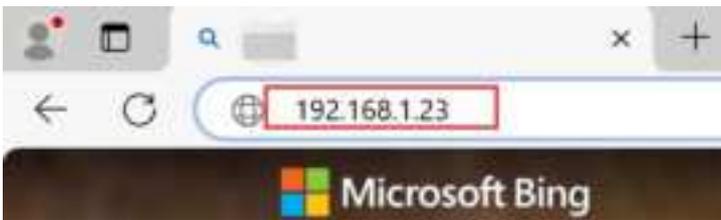
Step 3. Install the BWC battery and insert it into the dock or station.



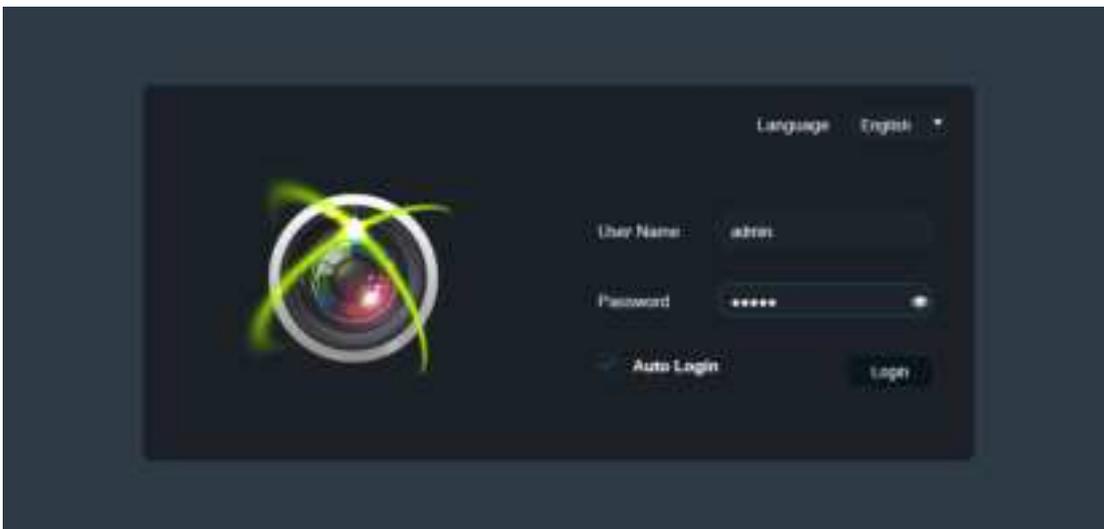
Step 4. After BWC inserting the station or Dock, BWC will automatically obtain the IP address assigned by the router (DHCP mode). After successful acquisition, it will display the IP on the LCD screen (as shown in the figure below) for 5 seconds.



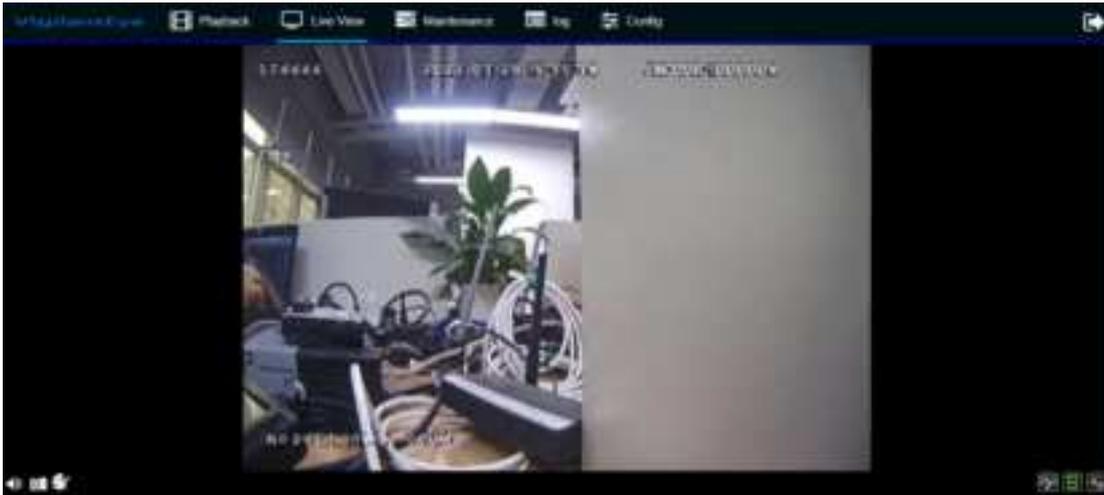
Step 5. Open the browser(Chrome \ Edge \ Firefox \ Safari) and enter the BWC IP address.



Step 6. After the above processes are completed, you can log in to BWC configuration for the first time. Enter the administrator user name and password (the default administrator user name and password are “admin”, and it is recommended to use the administrator account for subsequent operations. If you use an normal user account, some functions may not be available). Check the auto login option, and the login step will be skipped automatically next time. Click the login key at the bottom right to log in to the account.



Step 7. When you see the following window, BWC configuration login succeeds.



2. Playback Page

Choose the Playback:

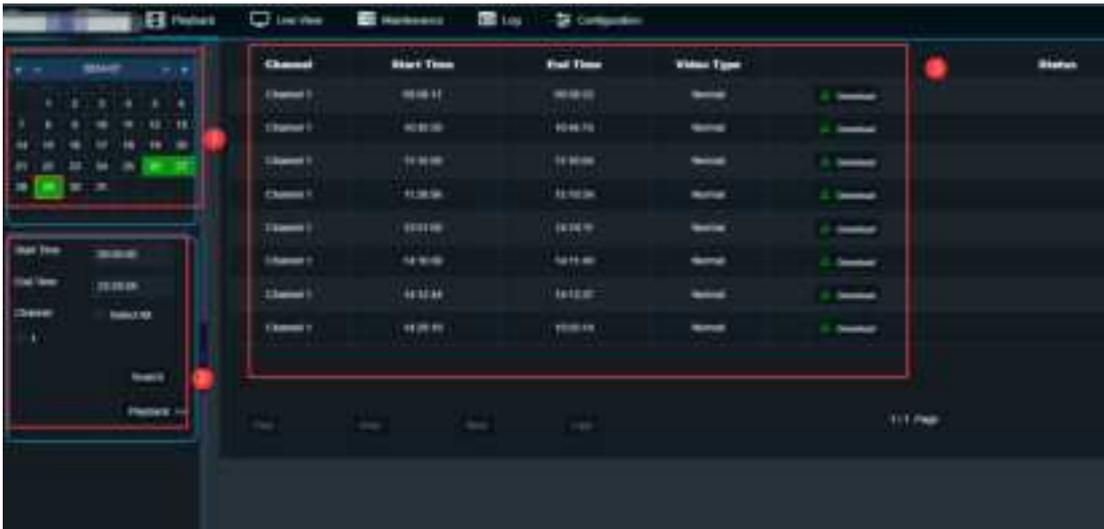


2.1. Backup video

Step 1: Select the date for which video playback is required. The green color is the date for which video is available, and the background color is the date for which no video is available. After selected, the date has a yellow box;

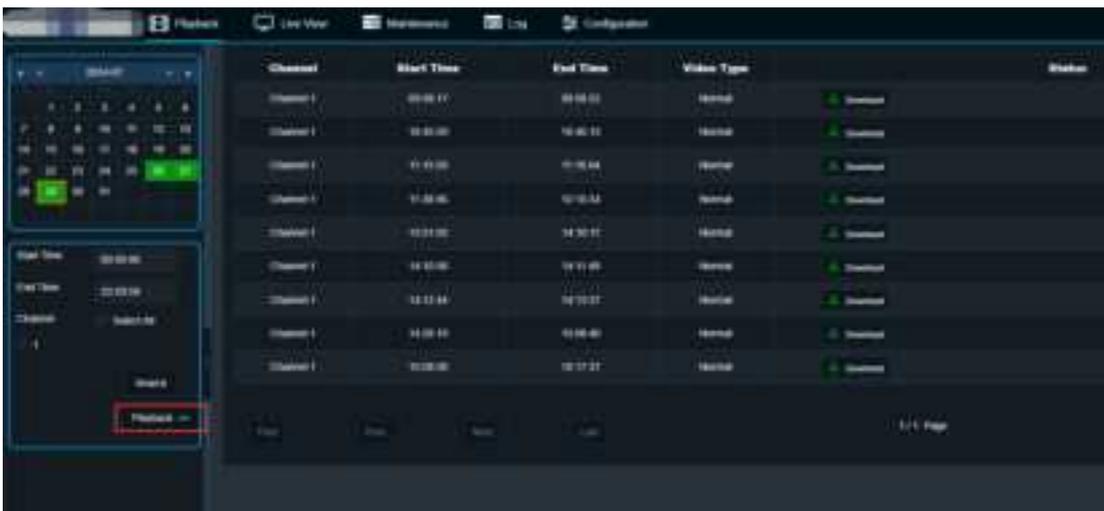
Step 2: Select a time period and Click search;

Step 3: Click the Download button to download videos local



2.2. Playback

Step 1: Click Playback button switch to playback page

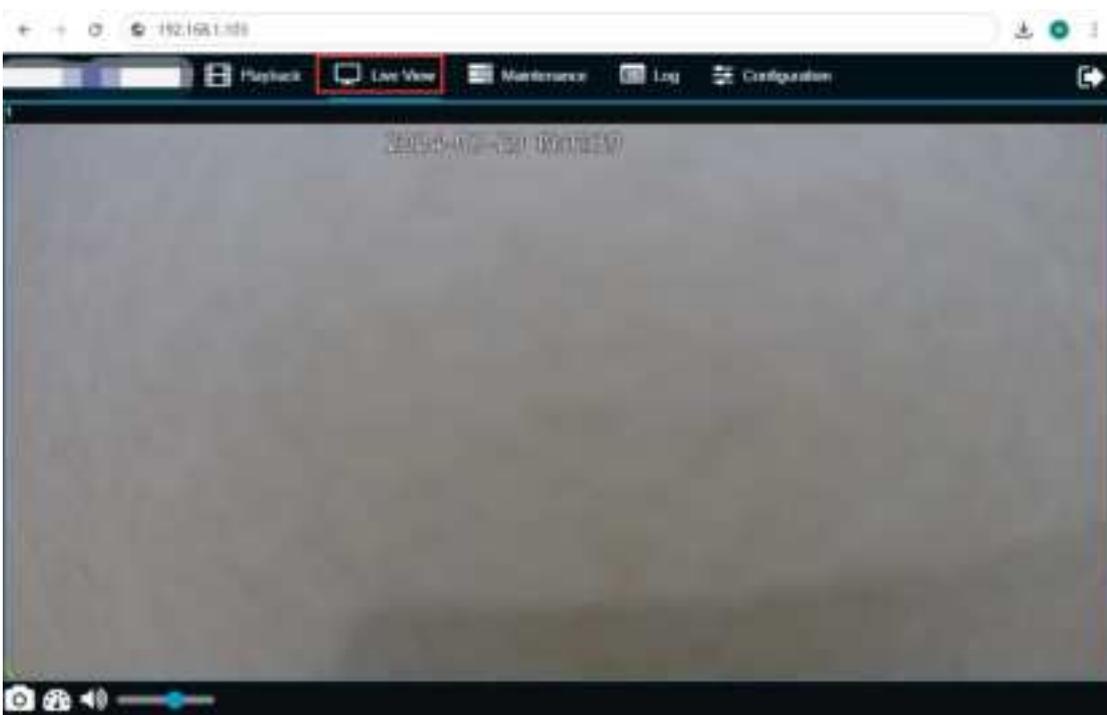


Step 2: Playback



3. Live View Page

Click Live View page to view live video



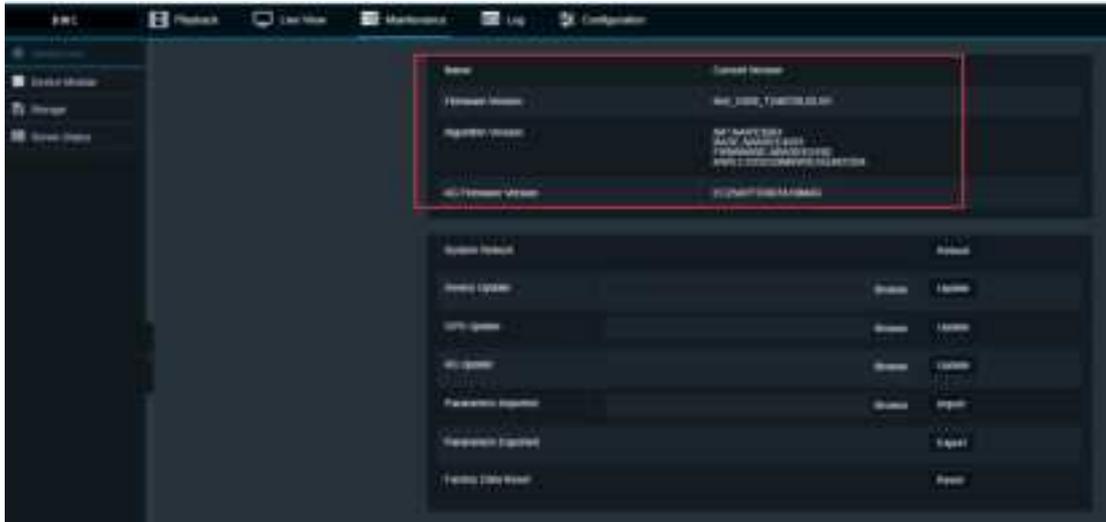
4. Maintenance Page

The Maintenance page includes version information, device modules, storage devices, and basic information

4.1. Version Info

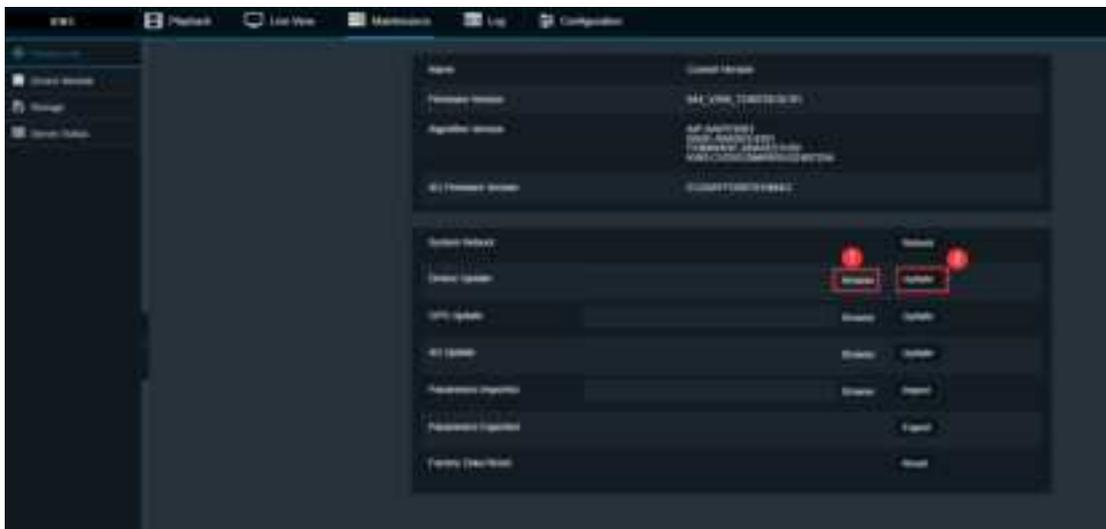
4.1.1. Module Version

Displays BWC firmware Version / Algorithm Version / 4G Firmware version

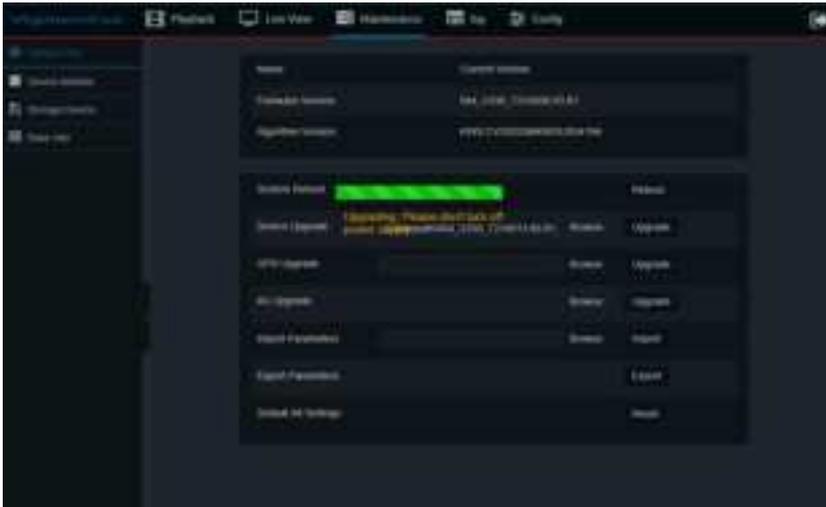


4.1.2. Upgrade

Select the upgrade package then click upgrade button.



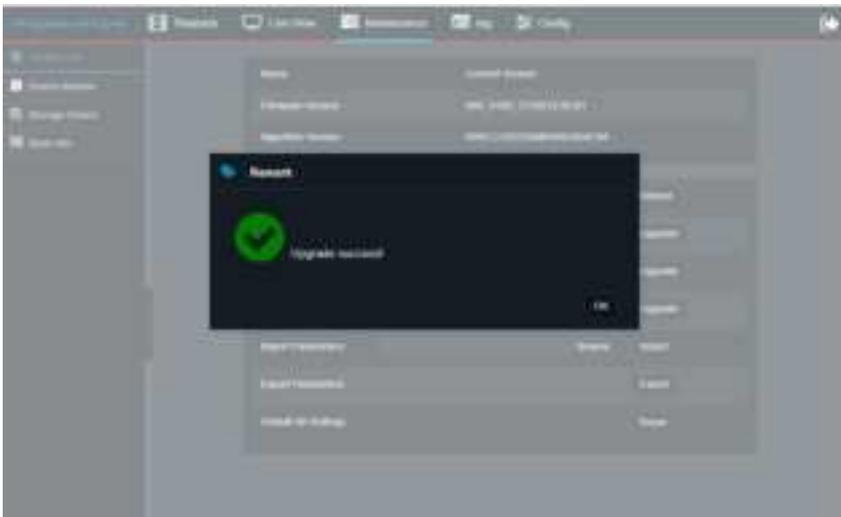
During the upgrade, do not disconnect the power source from the BWC, which can cause upgrade interruption.



During upgrade, the BWC LCD screen displays UPGRADING as the following figure.



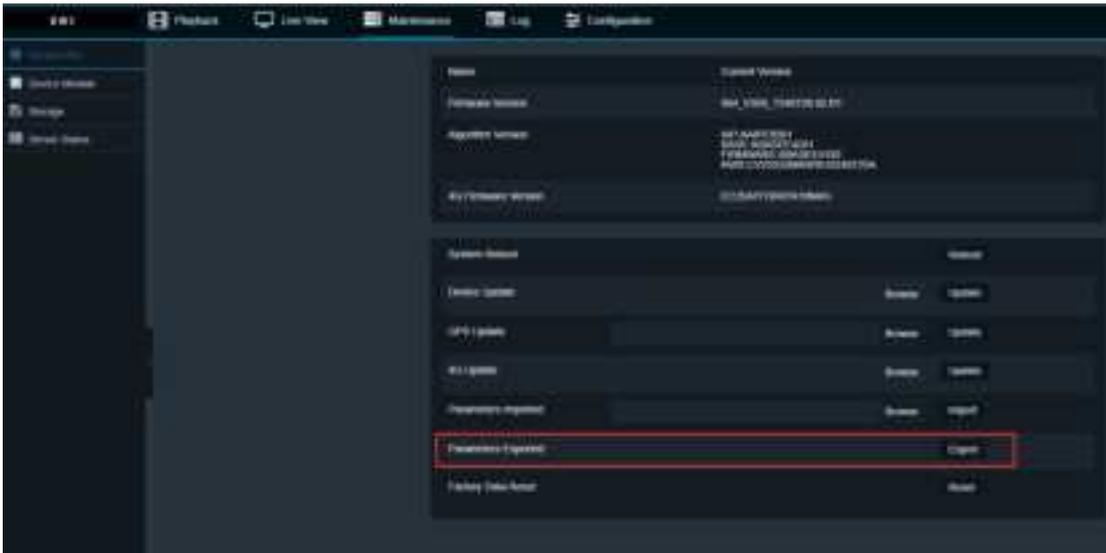
After succeeded upgrade, the following prompt is displayed in the window.



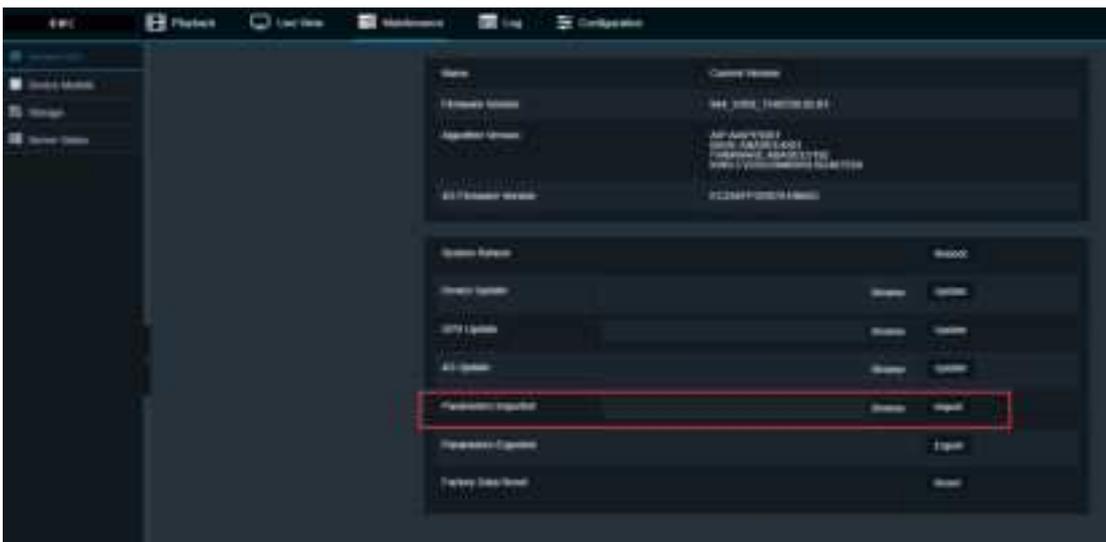
Note: BWC supports to upgrade 4G modules on the dock, but limited to browser direct connection to BWC.

4.1.3. Parameters configuration file Import and Export

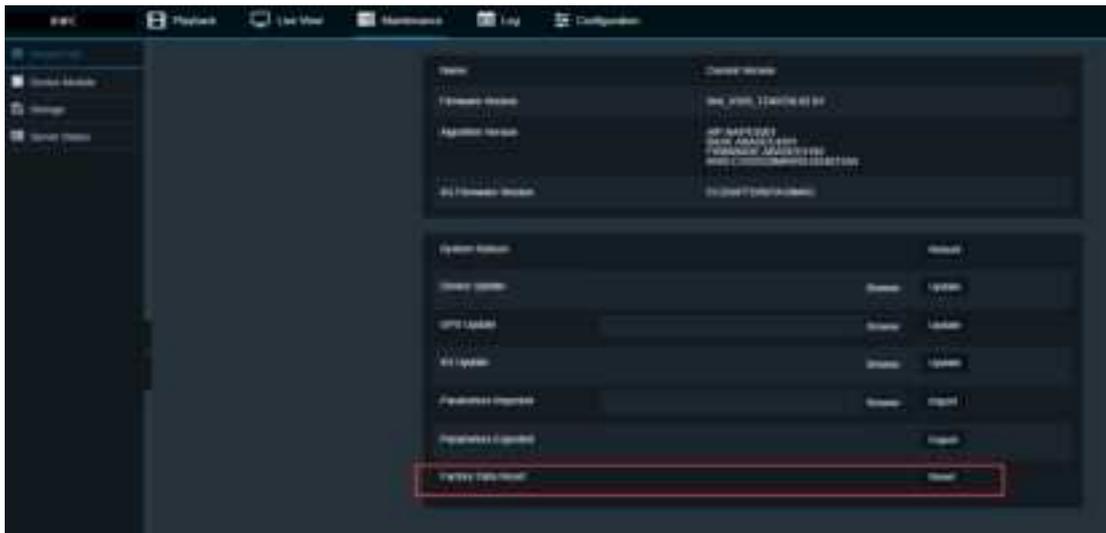
Export :



Import :

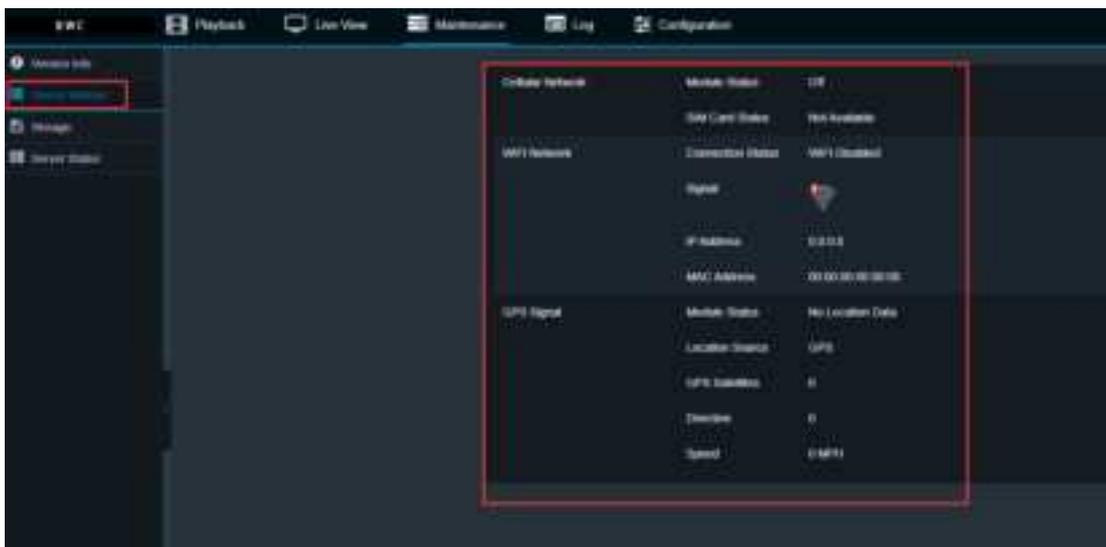


4.1.4. Restore factory settings

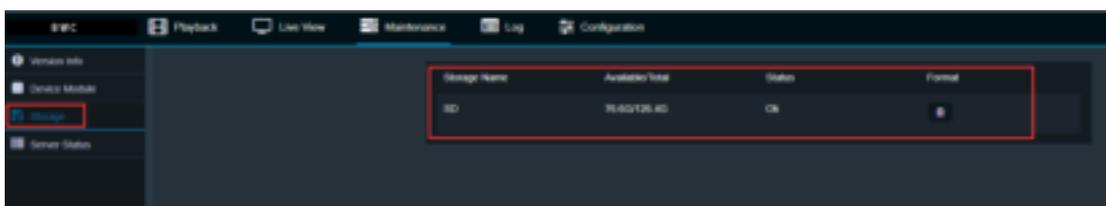


4.2. Device Module Status

Displays the status of Cellular / WiFi / GPS module



4.3. Storage Status



- Capacity: Remaining space and total space
- Status: Display SD status
- Format: Support formatting SD card

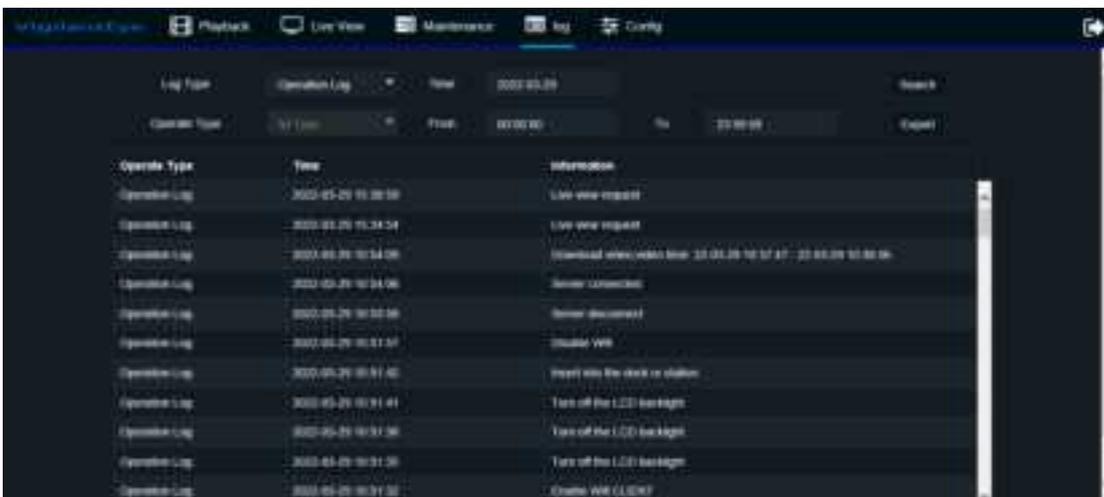
4.4. Server Status



Note: The server is configured in ‘Device Setup => Network => Server settings’

5. Log Page

(1) Log types include alarm logs, operation logs, and lock logs



(2) When something wrong and R&D needs to provide BWC running log, please input the “BWC IP/logs/” .

Download the log of the day when the problem occurred to us (as shown below).

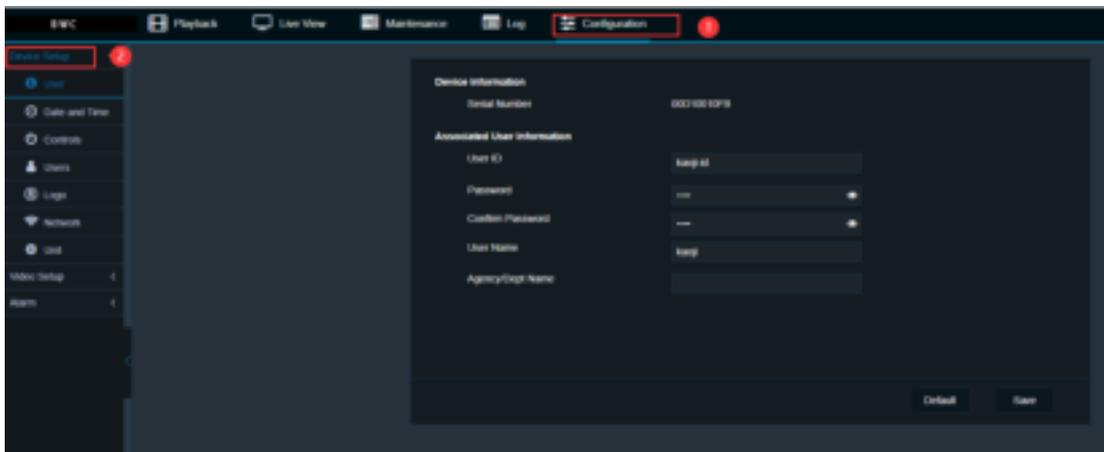


6. Configuration Page

6.1. Device Setup

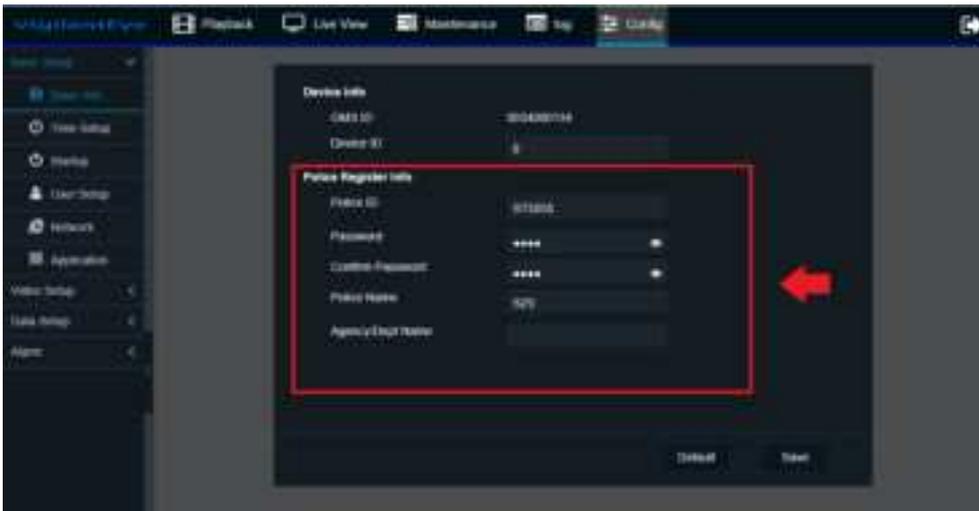
Step 1. Go to the Configuration page.

Step 2. Go to Device Setup



6.1.1. User

Step 1. Input the officer information.



Note: The Police ID must be the same as the one when you register the officer on the VEMS, otherwise this BWC will no connect to the VEMS.

The password and ID here can be used to login the officer APP and login page in browser.

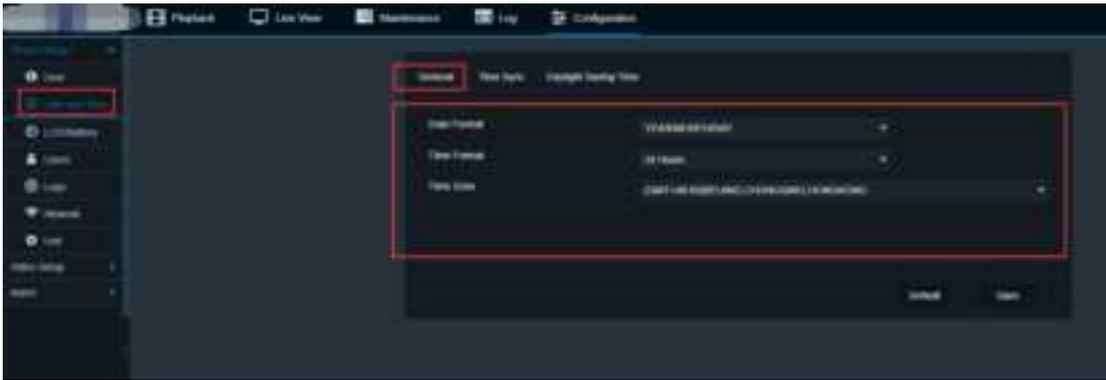
Step 2. Finish config, Save



6.1.2. Date and Time

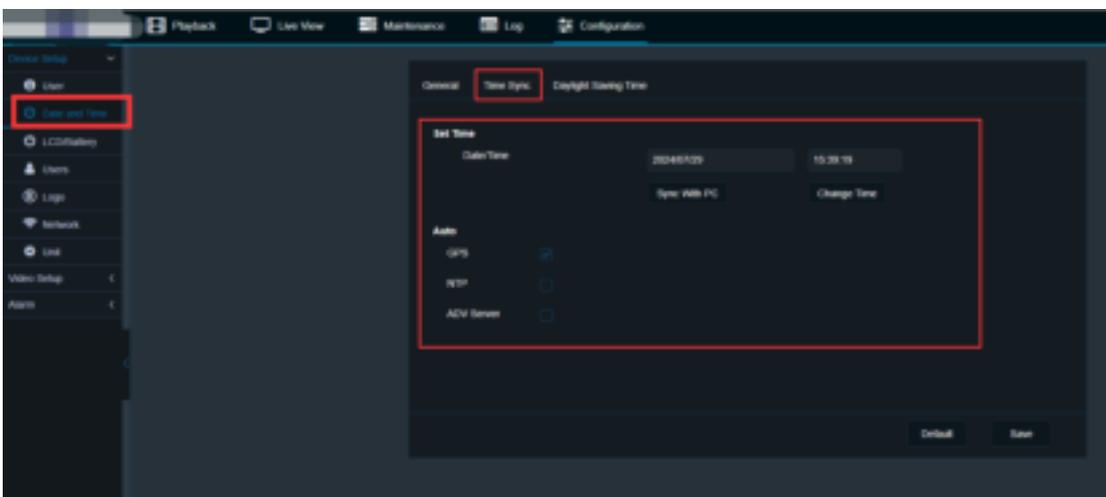
6.1.2.1. General setting

You can set the time format, time system, and time zone.



6.1.2.2. Time Sync

You can synchronize time manually or automatically.



6.1.2.3. Daylight Saving Time

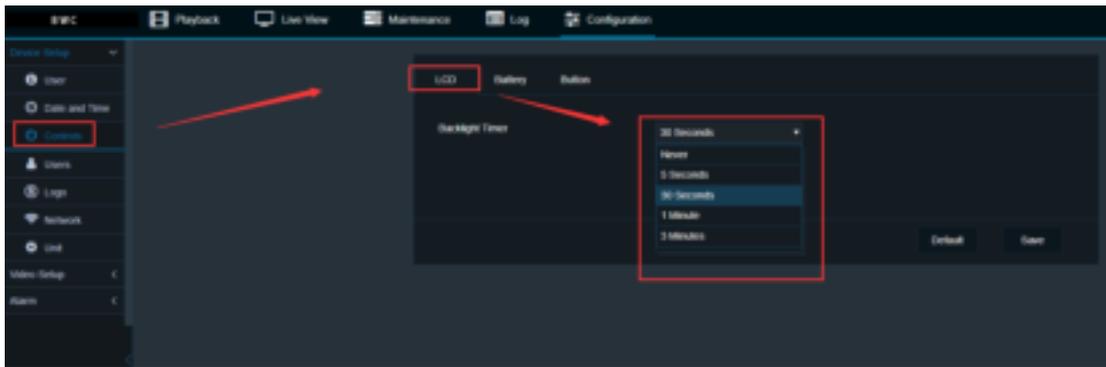
Configure the DST



6.1.3. Control

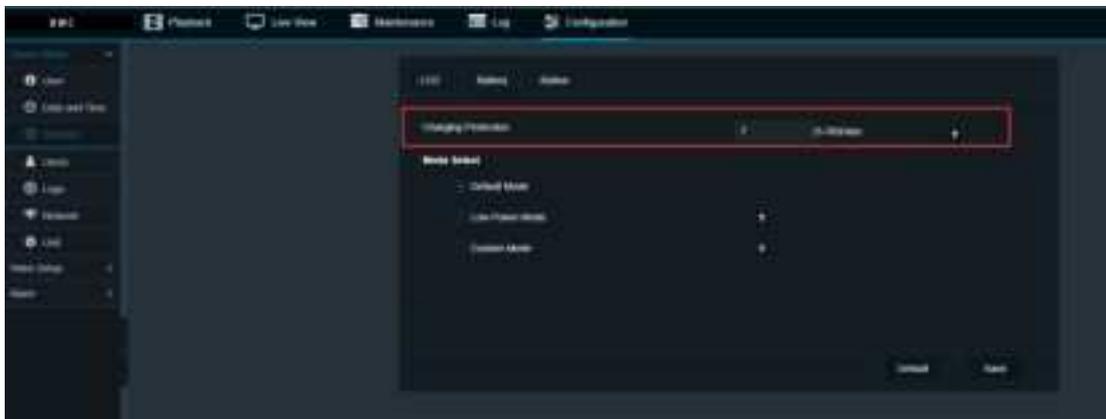
6.1.3.1. LCD Settings

BWC LCD light off time set up.



6.1.3.2. Battery Settings

Long term charging on the dock has an impact on battery life, so you can set the maximum charging time to automatically shut down and no longer charge.

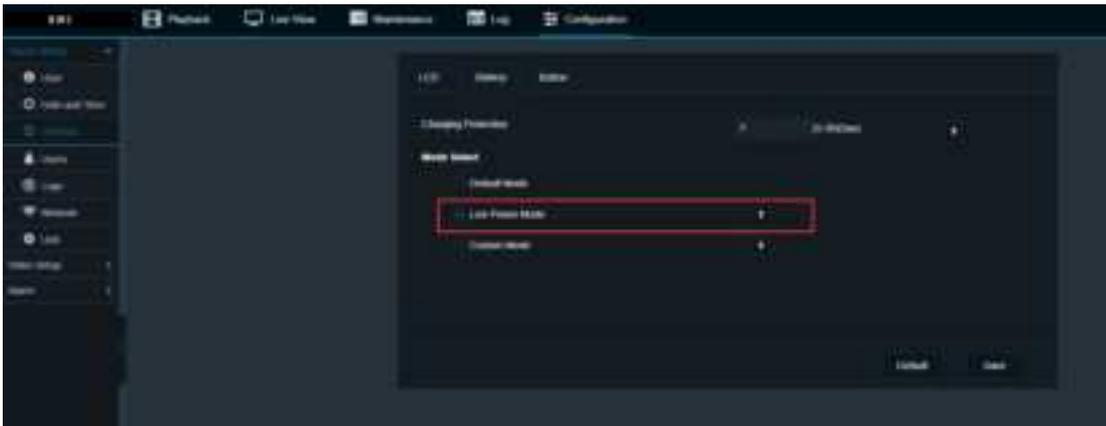


Low Power Mode is used to testing the BWC battery life time.

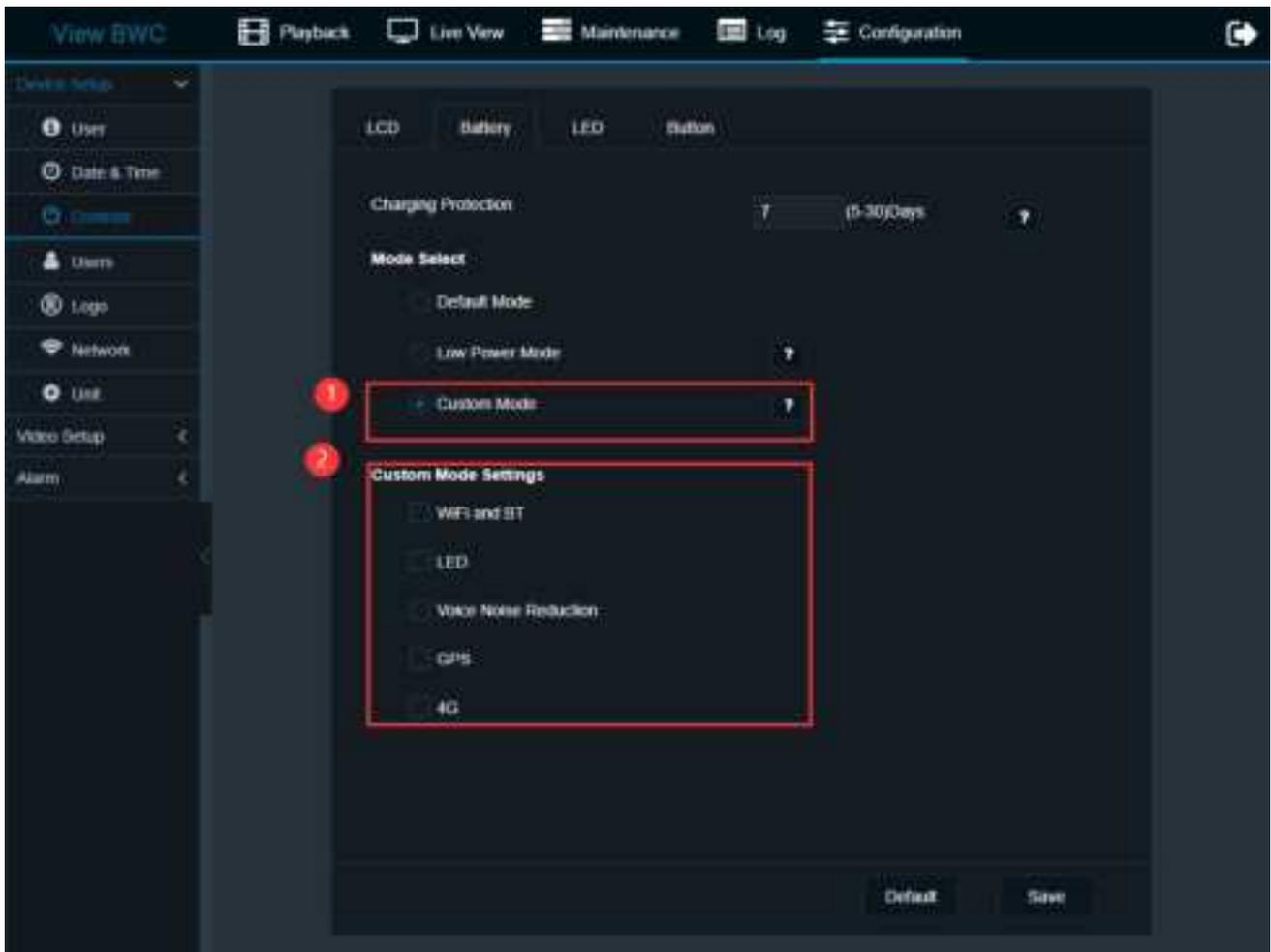
When enable the energy saving mode, besides the recording feature will be available, all of other module/functions will be disable. Including:

- Disable 4G
- Disable WIFI
- Disable BT
- Disable GPS
- Disable LED
- Disable Speech Recognition
- Disable beeping
- Disable vibration
- Disable stealth mode

- LCD turn off after 5s



Custom Mode supports that modules are disabled or enabled, the disabled modules are never launched.



6.1.3.3.Button Settings

6.1.3.4. Privacy Mode

Quick Click FN+Power button to turn on / off the Privacy Mode



The Privacy Mode supports configure the linkage of Alarm types,



Automatically exit configuration :



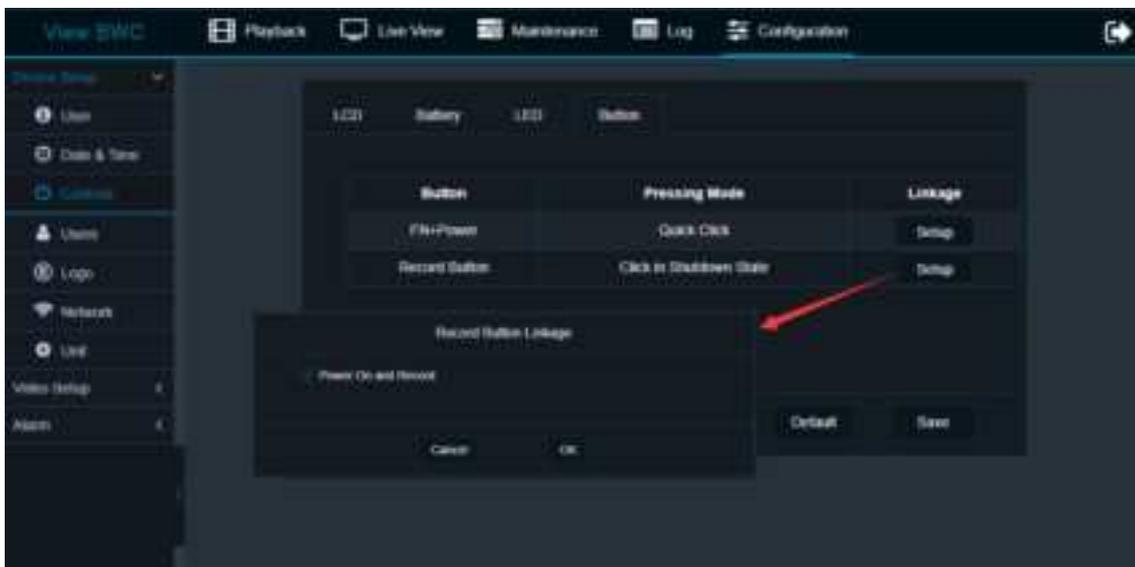
- Enable: automatically exit after exceeding the set duration
- Disable: never automatically exit, must press FN+Power button to exit

The Privacy Mode will be off:

- Plugging into dock for charging
- Restarting

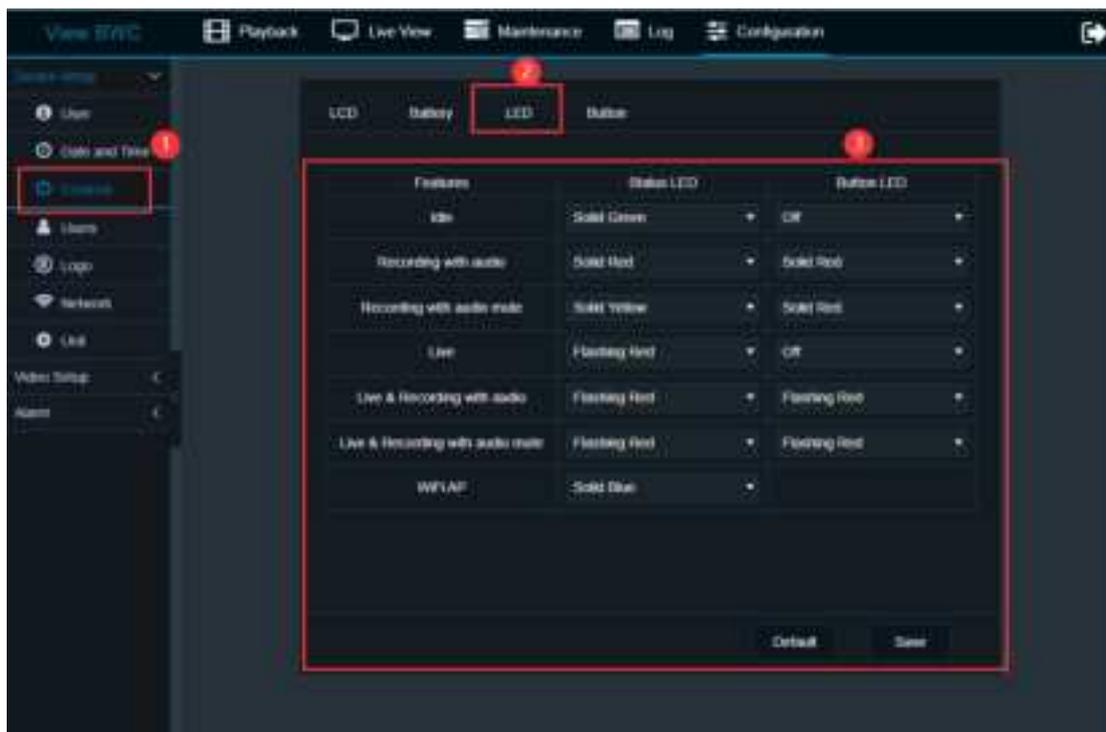
6.1.3.5. Power on and record

If the Power On and Record feature is enabled, the BWC will power on and start recording when you click the record button while it is in the shutdown state.



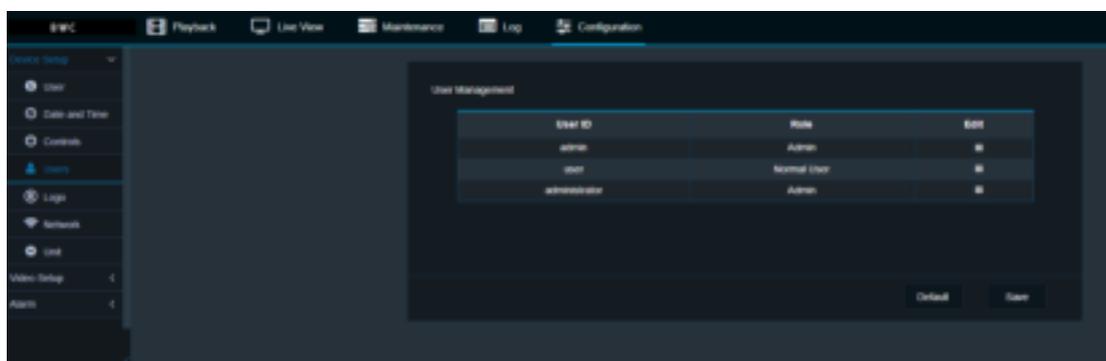
6.1.3.6. LED Settings

Users can customize the LED status of BWC in various states:



6.1.4. Users setting

All user's passwords can be changed here



- admin: The highest authority user
- administrator: Same permissions as admin user, but without logo setting permission
- user: The user with the least privilege that no Config page permission and Maintenance page permission

6.1.5. Logo Setup

On the Logo setup, can manually import the logo below.



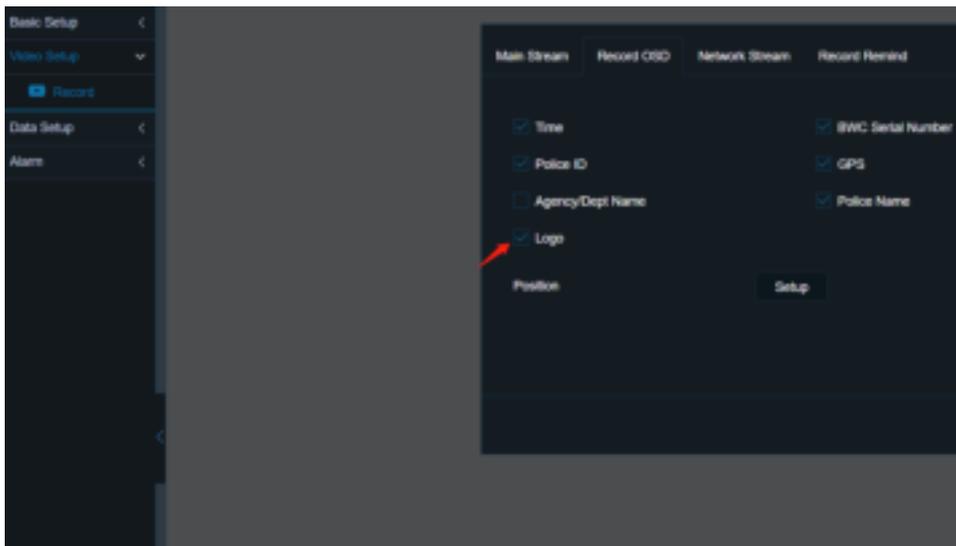
For the logo pic please refer this document to create:



LE solution Logo customization.doc

After import the OSD logo to the BWC, remember to enable the OSD:

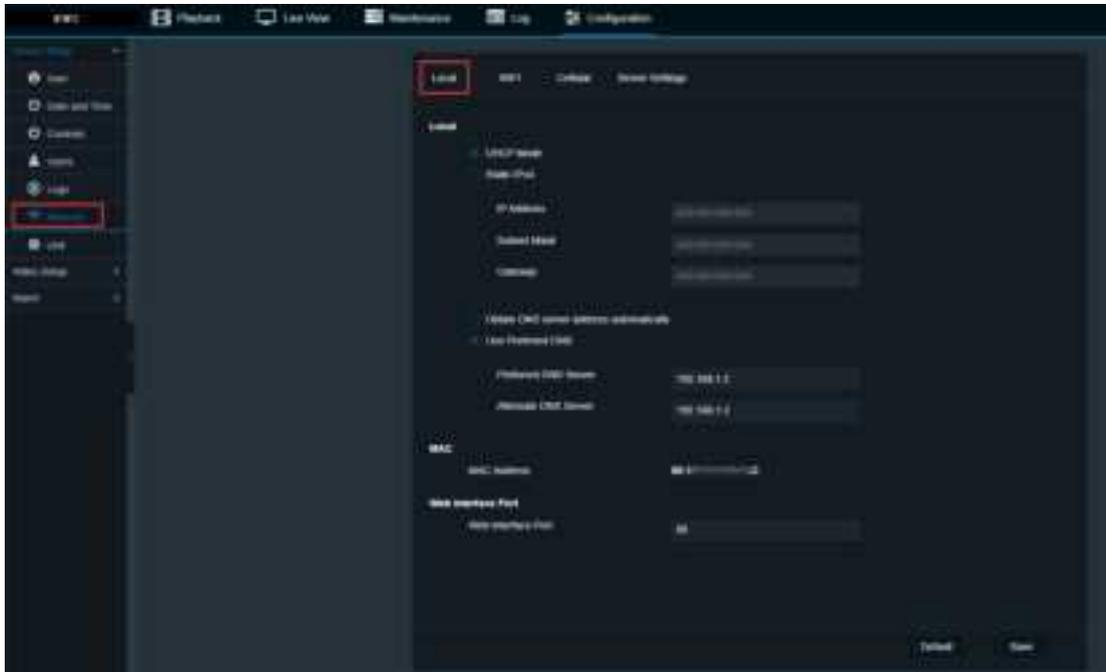
If still no display, please clear the page cache and restart the browser



6.1.6. Network setting

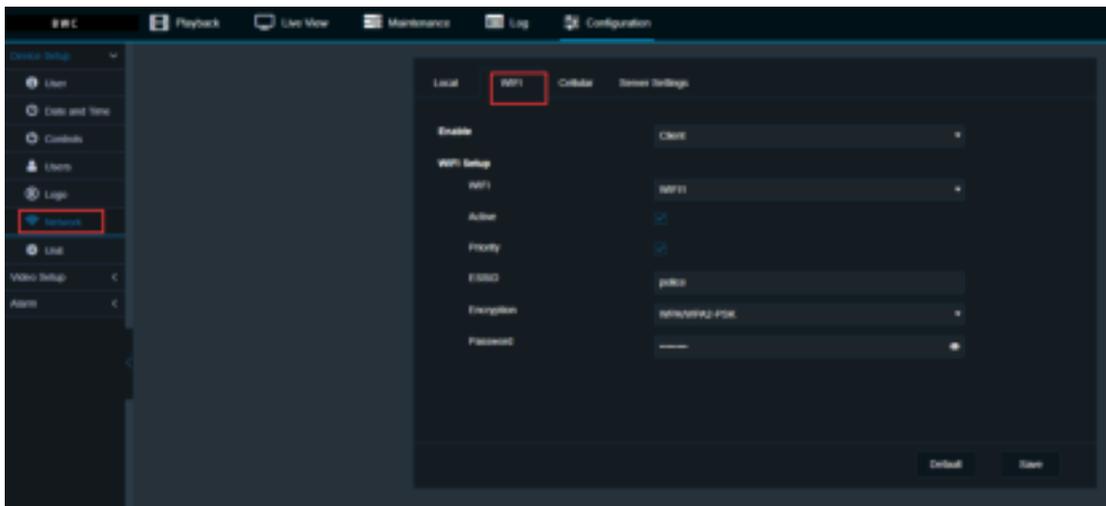
6.1.6.1. Local network

You can set DHCP and fixed IP address modes (DHCP is the default for BWC).



BWC should be DHCP.

6.1.6.2. WIFI network

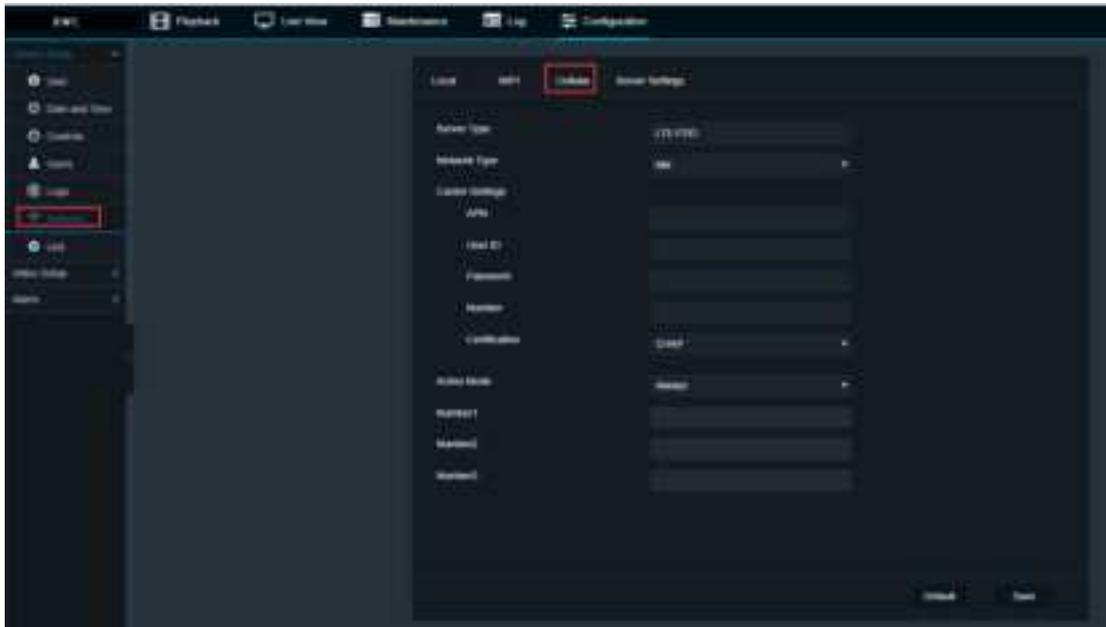


BWC provides 2 WiFi config.you can set WiFi ESSID and Password.

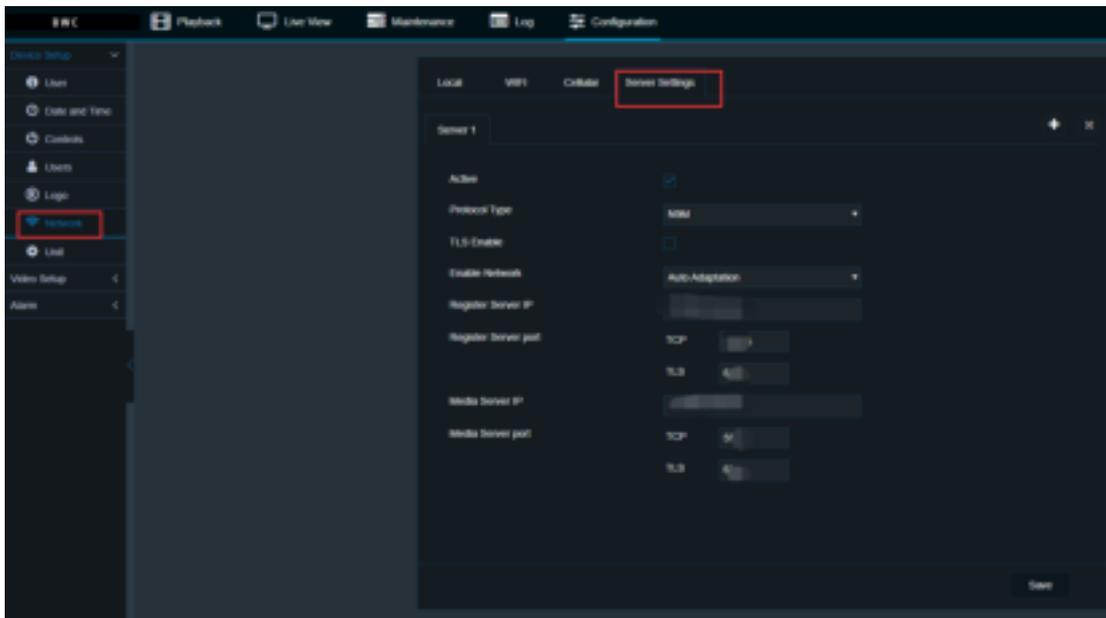
You can set the priority of WiFi.Between WiFi 1 and WiFi 2 you can only set one priority WiFi.The BWC will connect to the WiFi which has the priority when there have both two WiFi.

6.1.6.3. Cellular Module

You can use the default parameters, which do not need to be modified under normal circumstances.



6.1.6.4. Server Setup



One BWC can only connect to one VEMS.

The protocol type should be N9M

IP:VEMS server IP

Register server IP default is: 21083

Media server IP default is: 21093

6.1.7. Unit setting

Support modifying temperature units



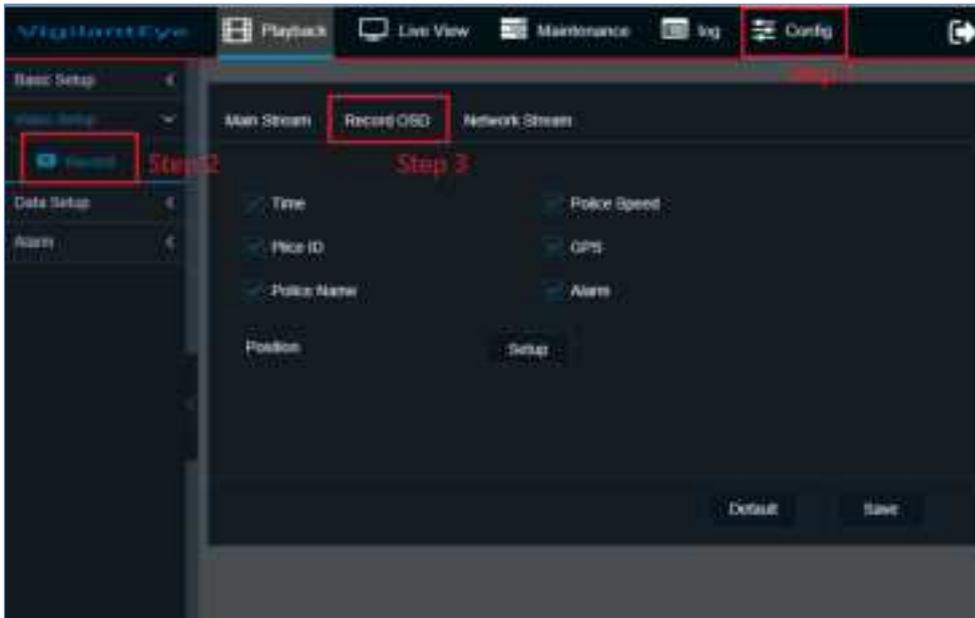
6.2. Video Setup

6.2.1. Main stream



You can set resolution, frame rate, picture quality, encoding format, encoding mode, audio mode.
You can enable or disable video prerecording.

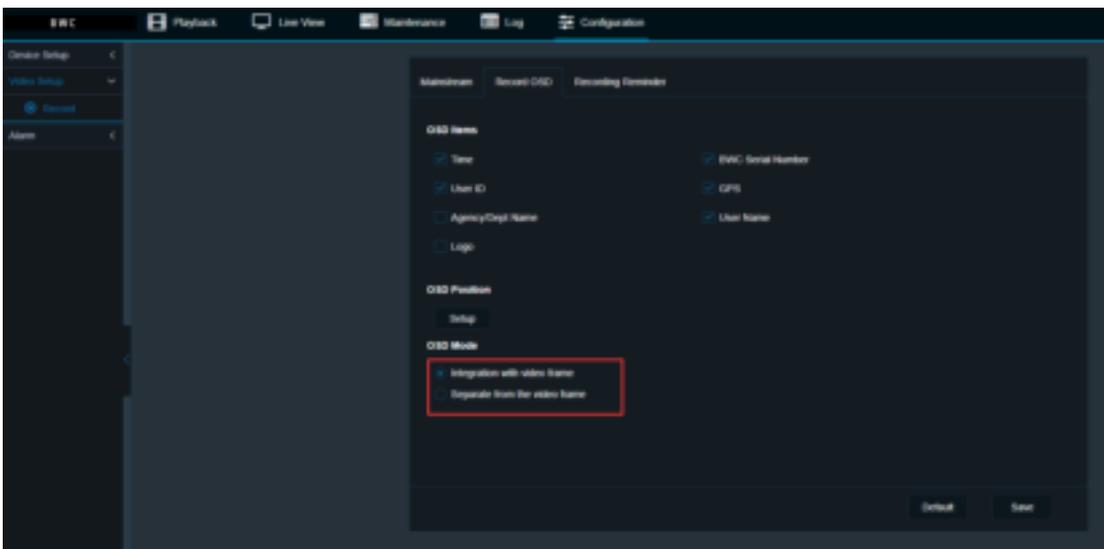
6.2.2. Record OSD



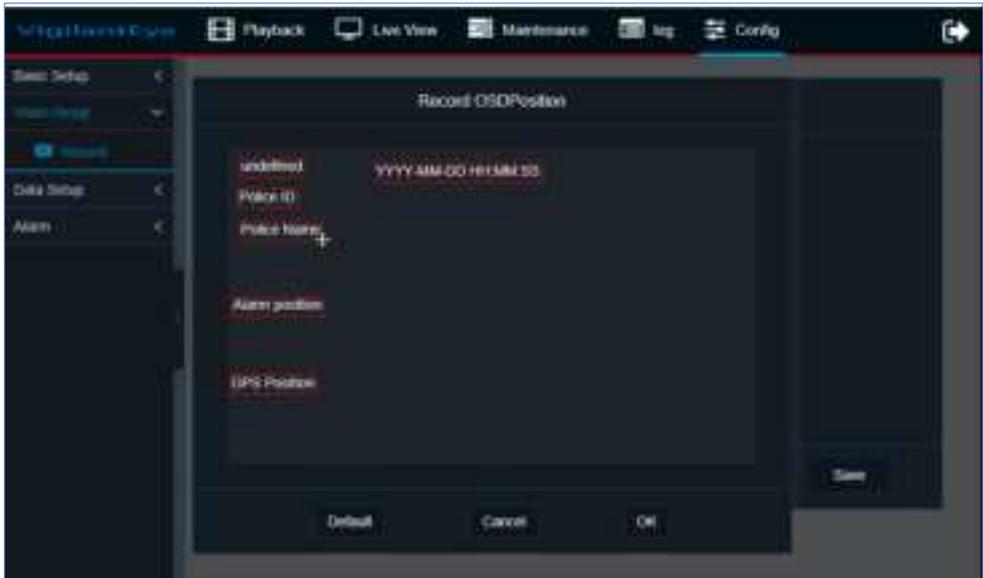
Support two different OSD:

Integrate with video frame: The OSD will keep already display on the video, can't hide.

Separate from the video frame: OSD will no show when playback on the browser, and can choose to show or hide the OSD when playback the video from VEMS.



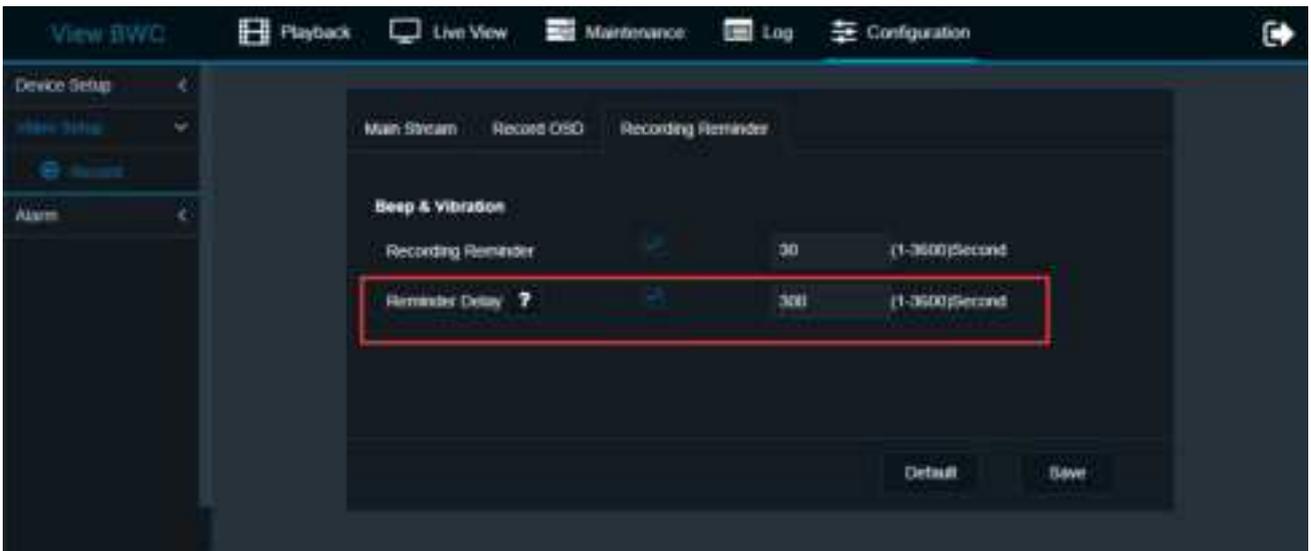
Can choose the OSD position on the image.



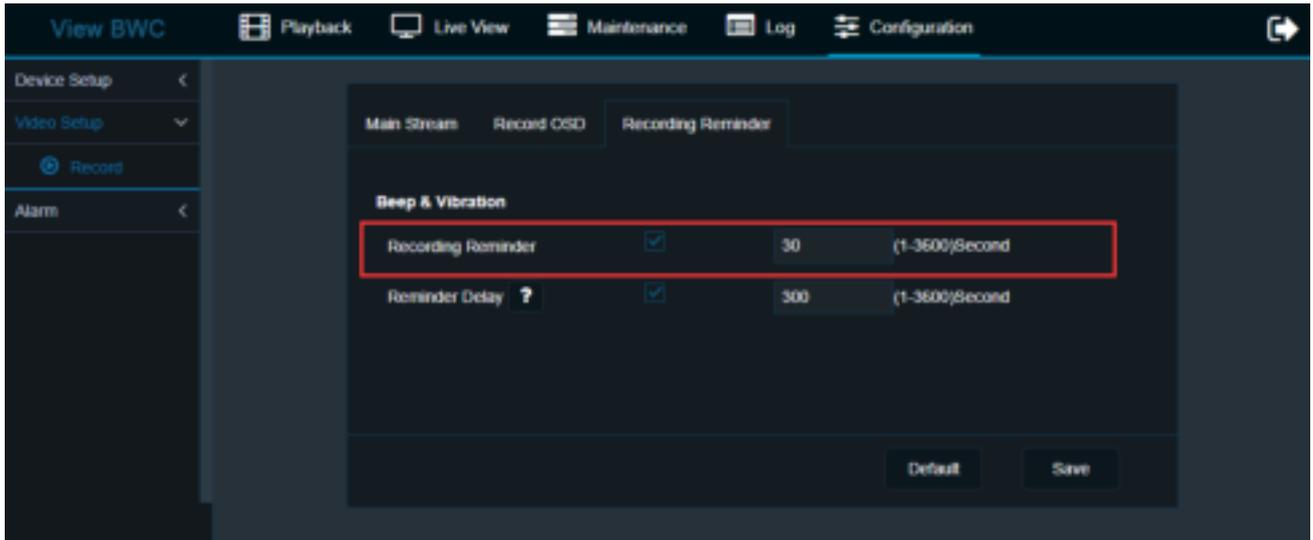
Remember to click the Save.

6.2.3. Record Remind

First Reminder:



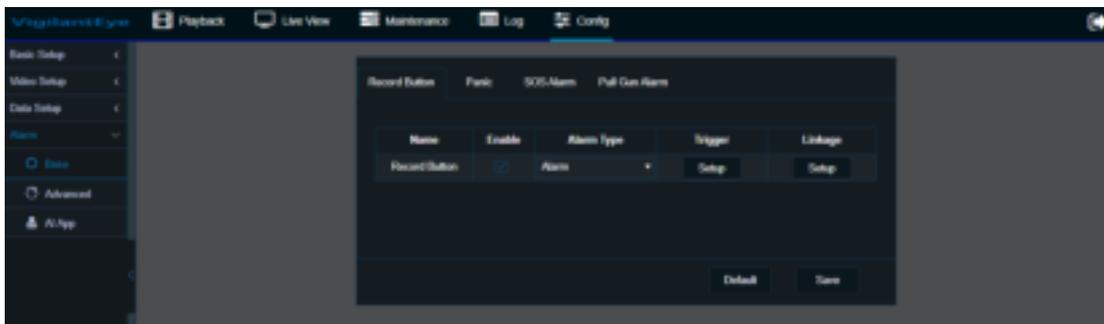
Continuous reminder interval time:



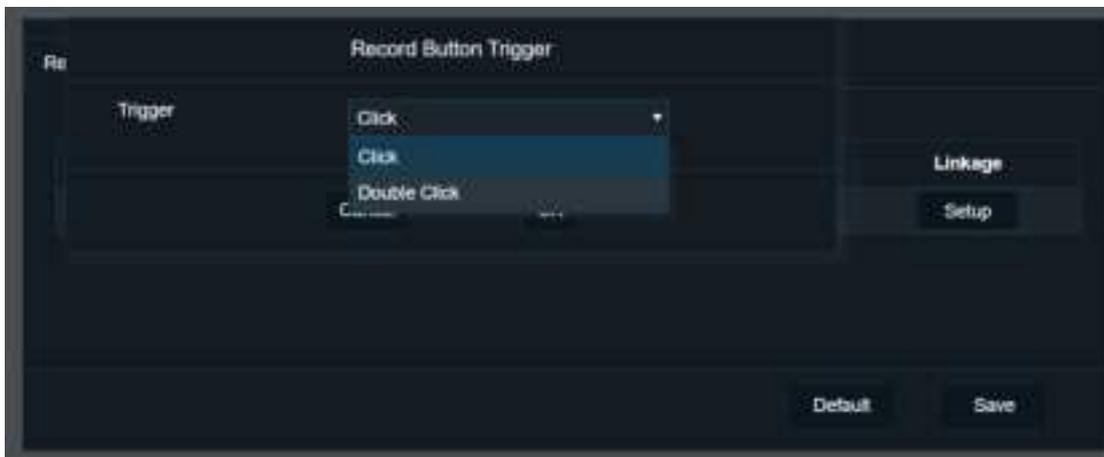
6.3. Alarm settings

6.3.1. Record Button Alarm

When the user press the BWC record button can trigger the alarm.



User can setup one click activate recording or double click to activate by “Trigger” setup:



Linkage Setup:

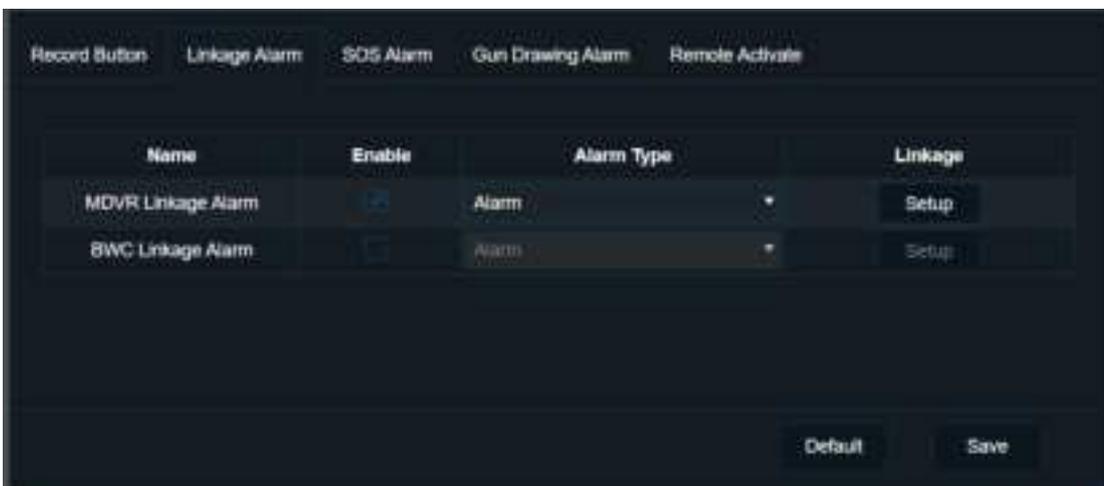


- Prerecording: can set prerecording duration and type. (must enable prerecording on the Record page firstly)
- Linkage other devices: linkage BWC and MDVR

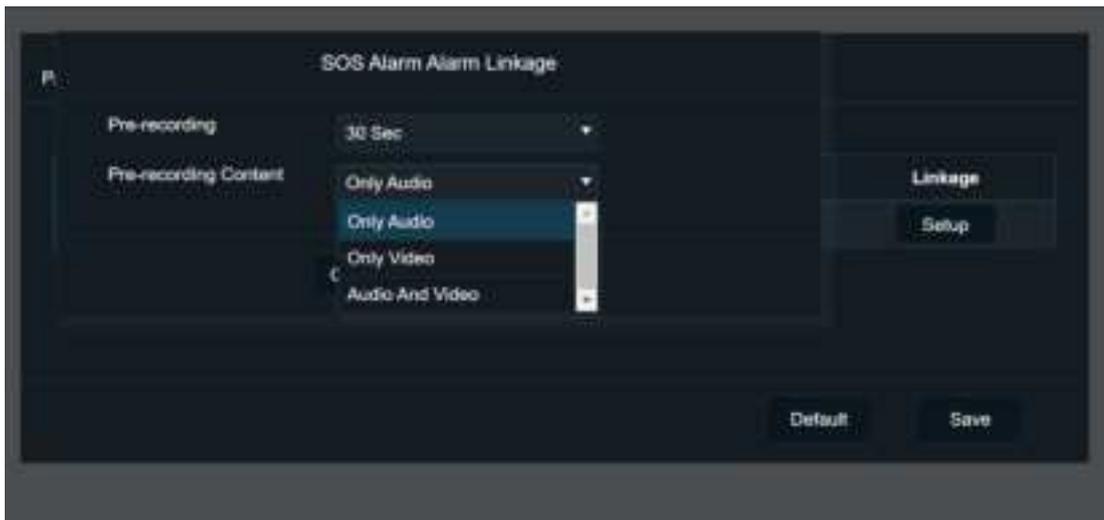
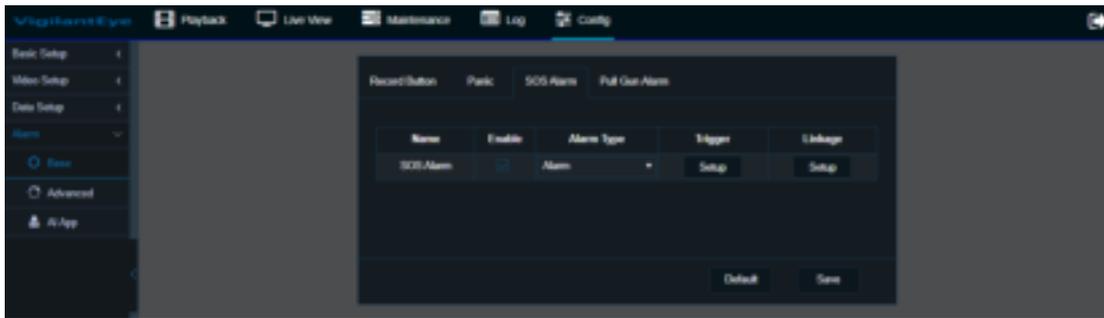
6.3.2. Linkage Alarm

MDVR linkage Alarm: MDVR alarm can linkage this BWC recording

BWC linkage Alarm: BWC can linkage this BWC recording.

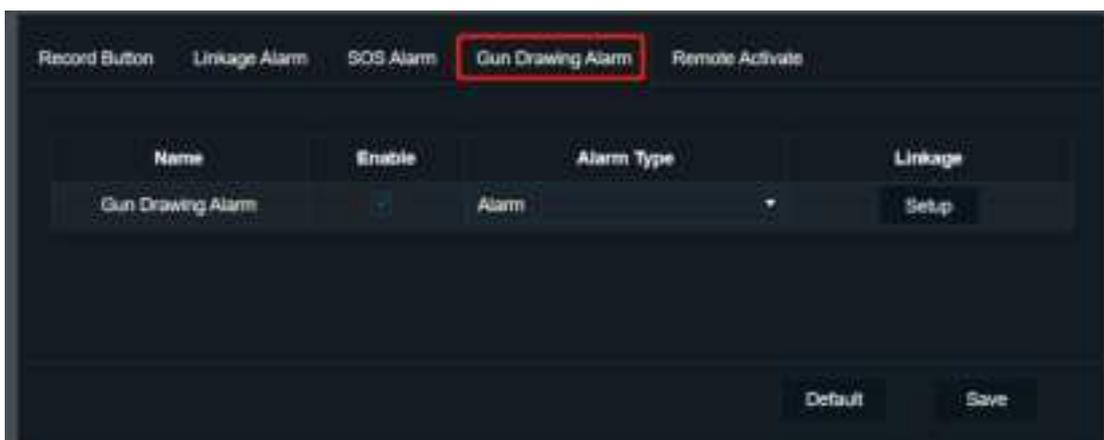


6.3.3. SOS Alarm



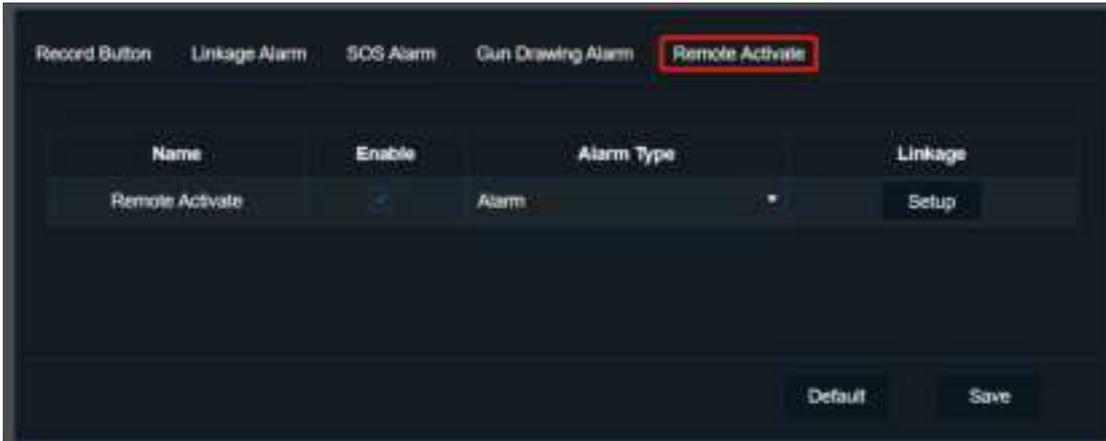
6.3.4. Gun Drawing Alarm

Need the G1 sensor to work with BWC to trigger the Gun drawing alarm.



6.3.5. Remote Activate

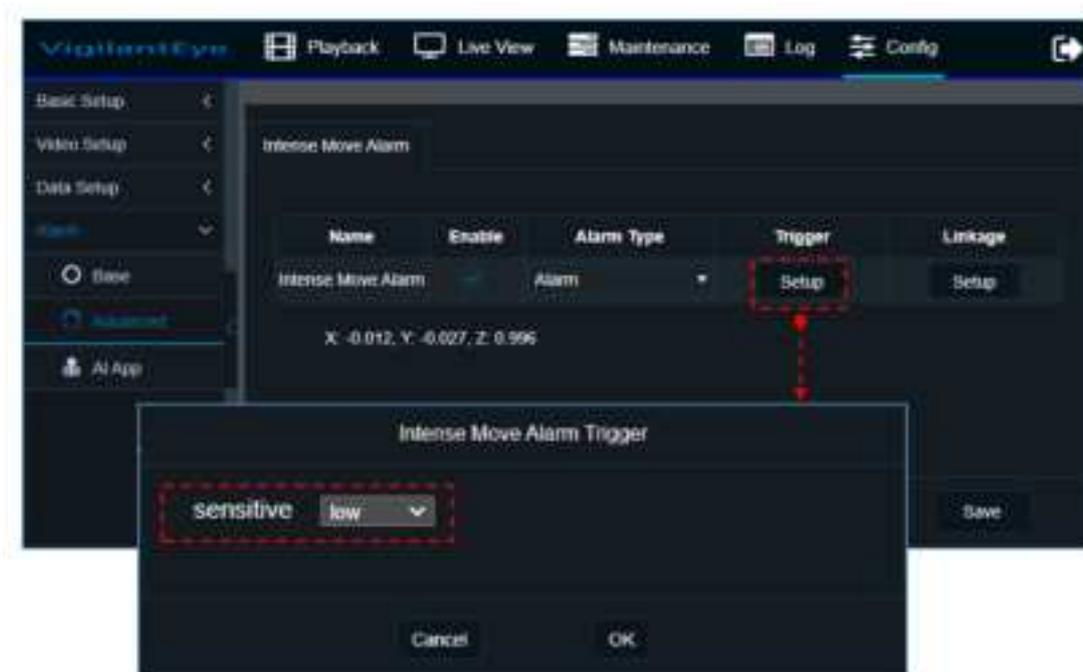
This feature no support yet on VEMS.



6.3.6. Intense Movement Alarm

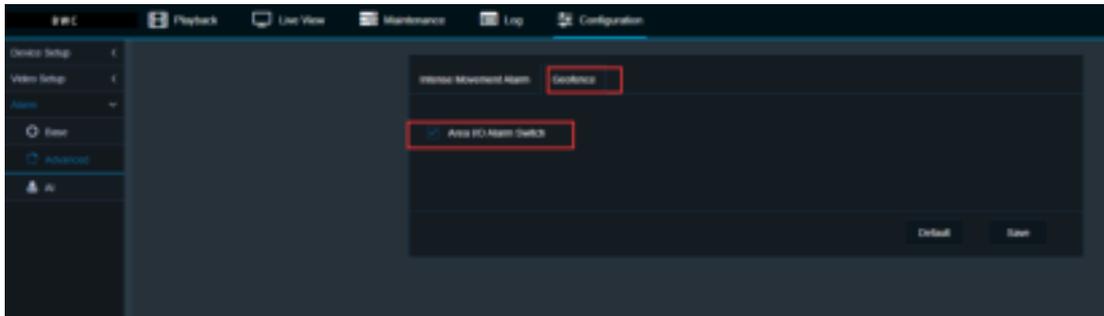


Support to choose the sensitivity: Low or High.



6.3.7. Geofence Alarm

Automatically start recording when entering the fence:



Note: The fence needs to be configured on VEMS. After configuration, it will be automatically sent to BWC.

6.3.8. AI Alarm

BWC will detect below voice and activate the recording automatically:

- 01 Shots fired, give me help
- 02 Shots fired I have been hit
- 03 Shots fired officer down
- 04 Freeze, stand on the way
- 05 Freeze or I will shot
- 06 Freeze, don't move
- 07 Drop your gun now
- 08 Drop the gun now
- 09 Drop the gun
- 10 Drop your gun
- 11 Keep your hands up where I can see
- 12 Put your hands up where I can see
- 13 Put your hands on the ground
- 14 Put your hands on the wheel
- 15 Keep your hands on your head
- 16 Keep your hands on the lap
- 17 Get down on the ground, don't move

18 Get down on the ground, drop it



7. FCC warning

Federal Communication Commission Interference Statement

FCC ID: 2AM6L-BWC2

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

Radiation Exposure Statement:

This device meets the government's requirements for exposure to radio waves.

This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard for wireless device employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg. Tests for SAR are conducted using standard operating positions (10mm) accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands.

To maintain compliance with radio frequency exposure guidelines and limits, keep the Vigilant Eye at least 10 mm away from your body. When you carry the Vigilant Eye on your body, use only accessories equipped with an integrated belt clip that are supplied or approved by the manufacturer. If you use a body-worn accessory not supplied by the manufacturer, verify that the accessory does not contain metal and keep the Vigilant Eye at least 0 mm from your body.