



Smart ANPR Camera

FAQ Manual



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1 How to clear your browser cache?

Problems

- The color of license plate displayed on the webpage is different from the real one.
- After upgrading the program, the rule line remains the old version.
- Preview does not work on your browser.
- After upgrading the program, the English characters are appearing as garbled text.

Possible causes

The browser cache has not been cleared yet.

Solutions

- If you are using IE browser,
 1. Click  on the upper-right corner of the browser.
 2. Select **Internet options** > **General**, click **Delete** under browsing history.
 3. Check the boxes for data you want to delete and click **Delete**.
 4. Log in to the webpage. Follow the on-screen prompts to download and install the control.
 5. Go check if the previous problems are solved.

If the issue has been resolved, please consider it settled; if not, please reach out to the appropriate technical support.
- If you are using Google Chrome,
 1. Click  on the upper-right corner of the browser and select **Settings** from the drop-down menu.
 2. Select **Privacy and security** > **Clear browsing data**.
 3. Check the boxes for data you want to delete and click **Delete**.
 4. Go check if the previous problems are solved.

If the issue has been resolved, please consider it settled; if not, please reach out to the appropriate technical support.

2 How to address the issue of the IE browser automatically redirecting to Edge when opened?

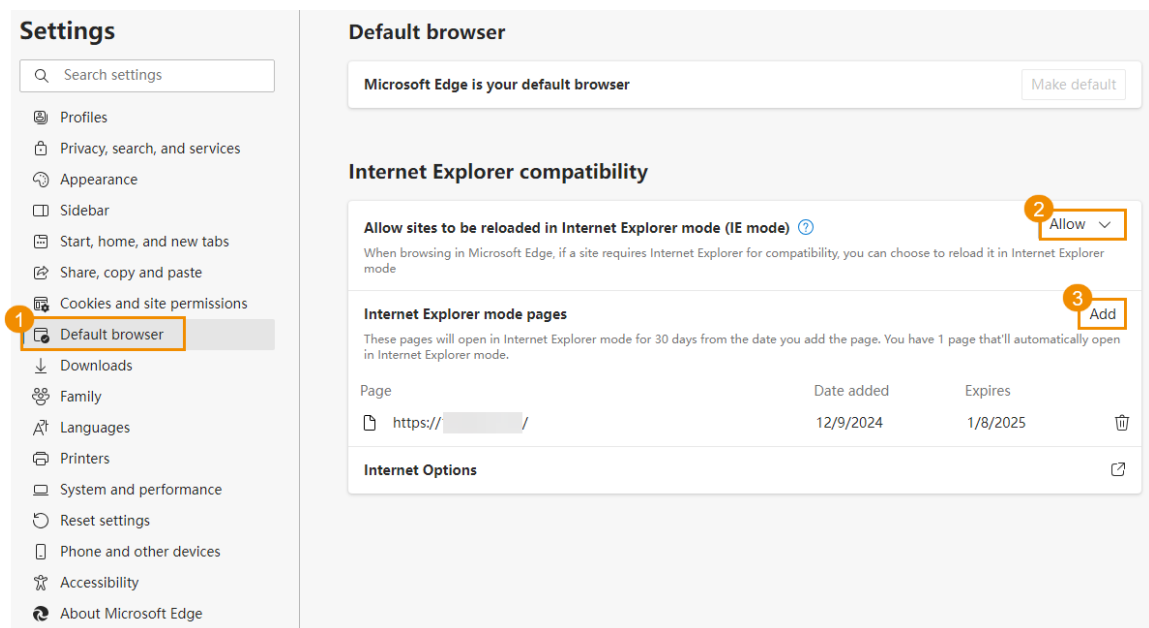
Problems

Due to certain operations within the Windows system, opening the IE browser redirects us directly to the Edge browser. However, the Edge browser sometimes fails to download plug-ins, preventing us from utilizing functions that require these plug-ins.

Solutions

1. Open the Edge browser and click **...** on the upper-right corner of the browser, and then select **Settings**.
2. Select **Default browser** and select **Allow** to allow sites to be reloaded in Internet Explorer mode (IE mode) and click **Add** to add the camera IP under Internet Explorer mode pages.

Figure 2-1 Add camera IP



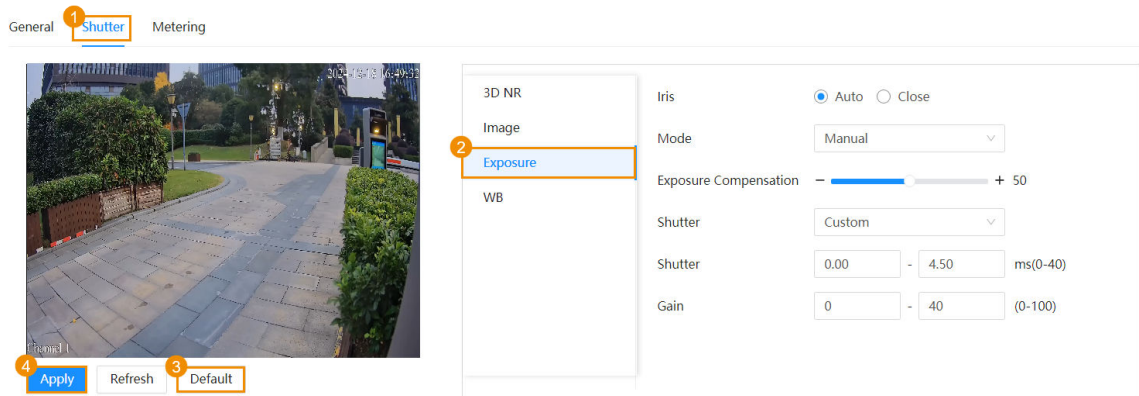
3. Open **My Computer** and go to C:\Program Files. Delete the webrec folder found in this location.
4. Restart the Edge browser to successfully download the plug-in.

3 What to do if the license plate blurred?

The exposure mode must be set to manual and cannot be switched to automatic. The image parameters are configured to the optimal factory default and require no adjustments.

1. Log in to the webpage.
2. Select **Setting** > **Camera** > **Image** > **Shutter** > **Exposure**.
3. Click **Default** and **Apply**.

Figure 3-1 Configure exposure mode



4. Go check if the previous problems are solved.

If the issue has been resolved, please consider it settled; if not, please reach out to the appropriate technical support.

4 What to do if the live view page features alternating light and dark stripes?

Problems

At night, the video feed on the live view page displays alternating light and dark stripes.

Possible causes

This phenomenon is known as the "Flicker" effect, which is mainly caused by the differing operating frequencies of the camera and the light source. For example, in some areas, the power frequency is 50 Hz, while in others it is 60 Hz. When the camera's shooting frequency is not synchronized with the power frequency of the light source, it results in a flickering effect characterized by alternating brightness.

Solutions

The flicker phenomenon does not impact the camera's normal recognition and snapshot functionality. It resembles the alternating light and dark stripes observed when early mobile phones record video facing a light source. Unless there are specific requirements, it is recommended not to make any adjustments. However, if there are particular needs, you might try adjusting the shutter parameter to 10 to see if the issue can be resolved.



Increasing the shutter speed might cause the license plate to appear blurred due to motion, which could impact recognition quality.

5 How to deal with the issue of not snapshotting of passing vehicles?

Problems

The vehicle passed through the camera detection area without activating a snapshot.

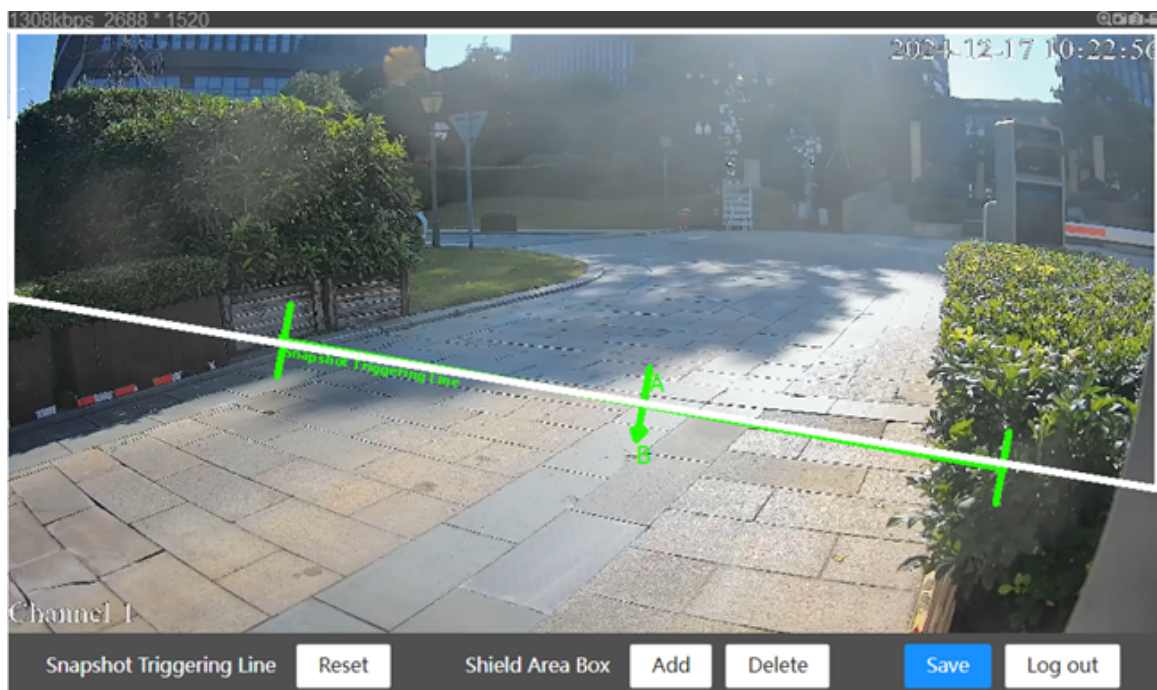
Possible causes

The snapshot triggering line configuration is incorrect.

Solutions

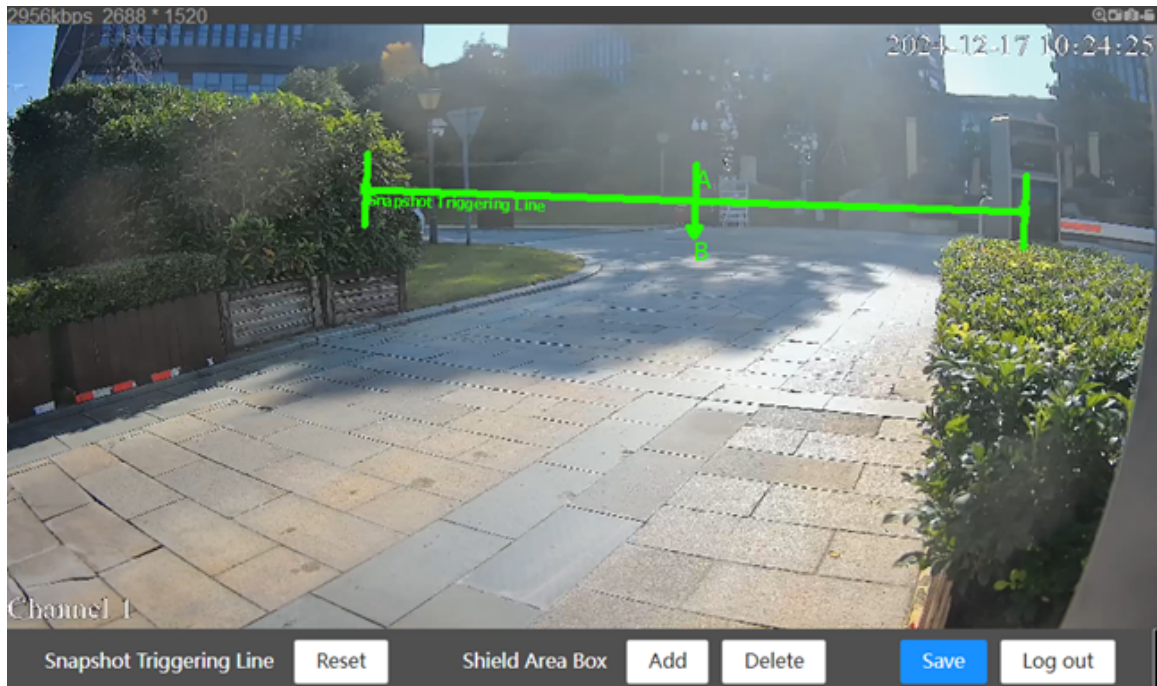
1. Log in to the web page and click **Rule Config**.
2. Check whether a shield area has been added in the key recognition area indicated by the line, as illustrated in the figure below. If it is present, please remove the shield area.

Figure 5-1 Check snapshot triggering line configuration



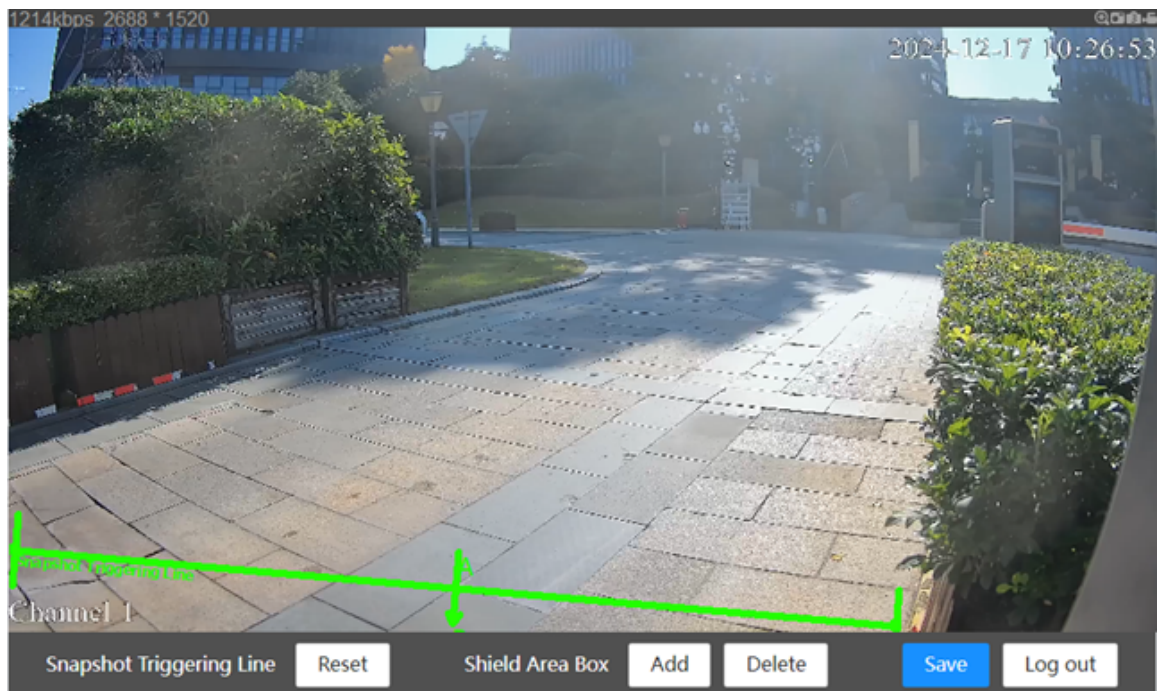
3. Check if the triggering line is far from the camera; if it is, click **Reset** to redraw it.

Figure 5-2 Wrong line drawing (1)



4. Check if the triggering line is too close to the camera; if it is, click **Reset** to redraw it.

Figure 5-3 Wrong line drawing (2)



5. Go check if the problem is solved.

If the issue has been resolved, please consider it settled; if not, please reach out to the appropriate technical support.

6 Snapshots of the rear of the vehicle are captured during the scene of entry and exit.

The issue can be improved by altering the capture direction and resetting the triggering lines. The camera is installed too low to capture some large vehicles and the excessively wide place to be detected makes installation adjustments difficult. In general, it is essential to adjust the camera installation height and limit the driving direction of vehicles.

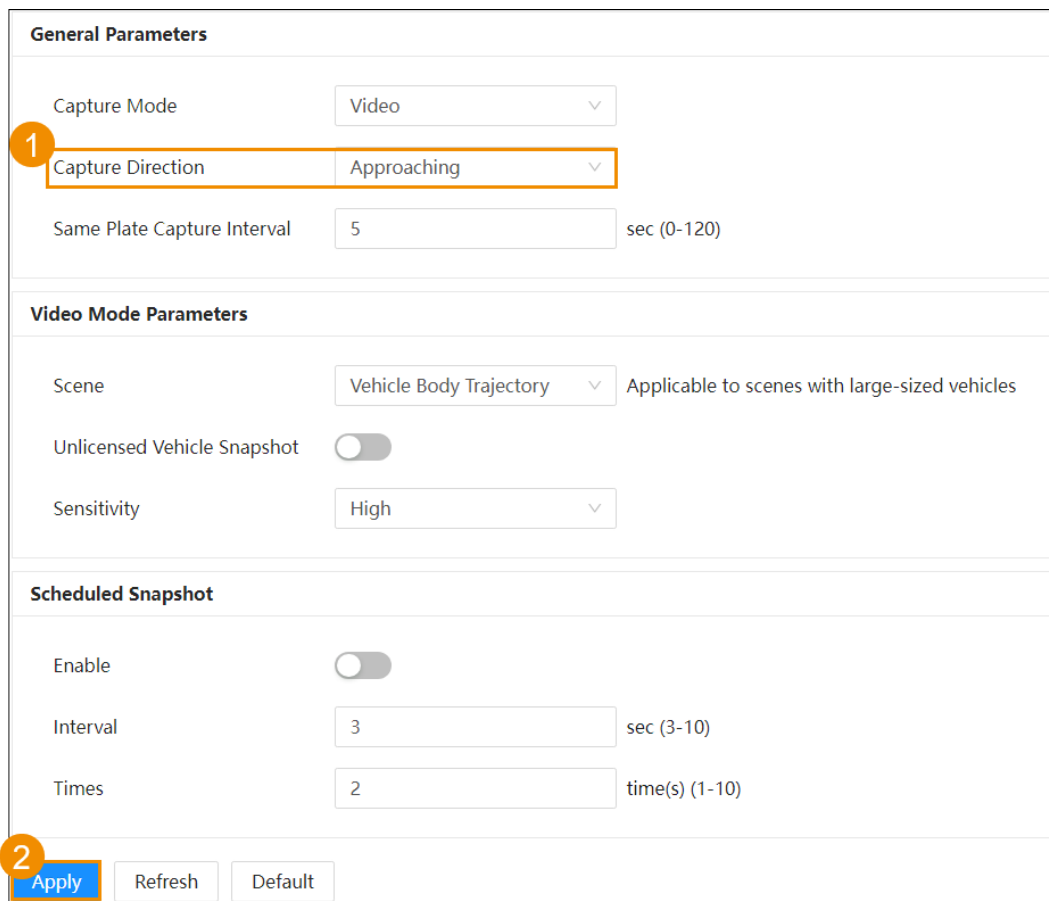
- Changing the capture direction

1. Log in to the web page.
2. Click  and select **ANPR > Snapshot**.
3. Select **Approaching** from the drop-down menu next to **Capture Direction**.



If the rate of capturing the rear of vehicles exceeds 5%, it is essential to utilize the platform's license plate filtering function. For more detailed information, please consult the accompanying documentation.

Figure 6-1 Changing capture direction



General Parameters

Capture Mode: Video

1 Capture Direction: Approaching

Same Plate Capture Interval: 5 sec (0-120)

Video Mode Parameters

Scene: Vehicle Body Trajectory Applicable to scenes with large-sized vehicles

Unlicensed Vehicle Snapshot: ☐

Sensitivity: High

Scheduled Snapshot

Enable: ☐

Interval: 3 sec (3-10)

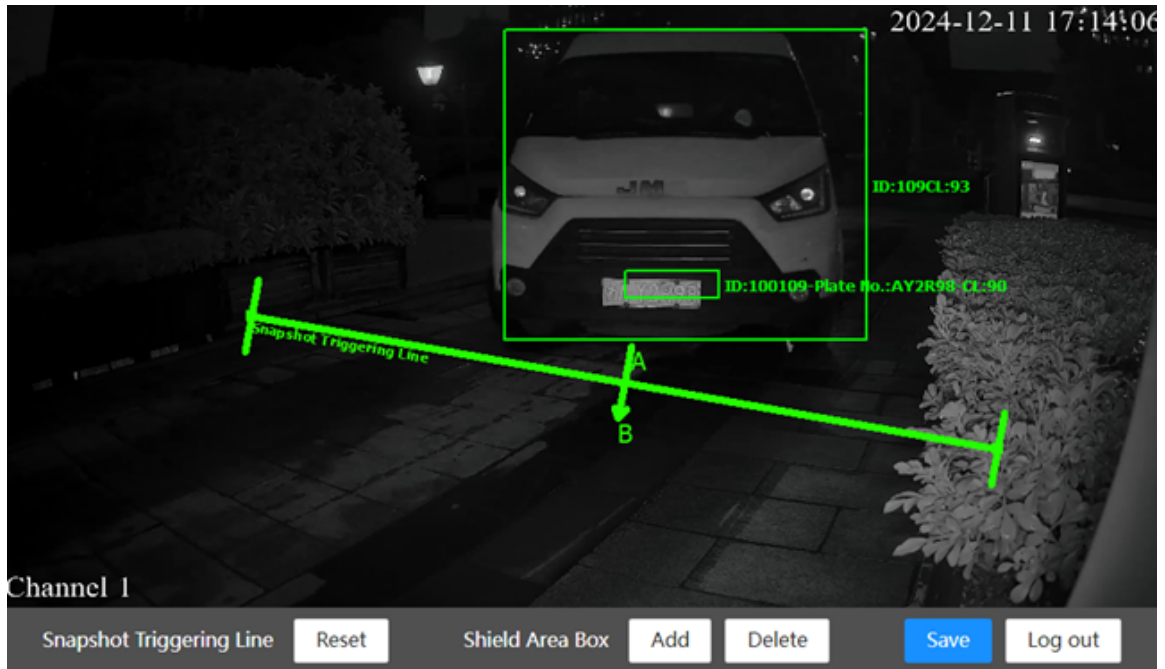
Times: 2 time(s) (1-10)

2 Apply Refresh Default

- Resetting the triggering line

1. Log in to the web page.
2. Select **Live > Rule Config**.
3. Readjust the triggering line by moving it upward as needed.

Figure 6-2 Resetting the triggering line



4. Go check if the problem is solved.

If the issue has been resolved, please consider it settled; if not, please reach out to the appropriate technical support.

7 How to reset the password?

If you forgot the admin user password, you can use the password reset feature to create a new password on your own. The device supports password reset via both hardware and the web.

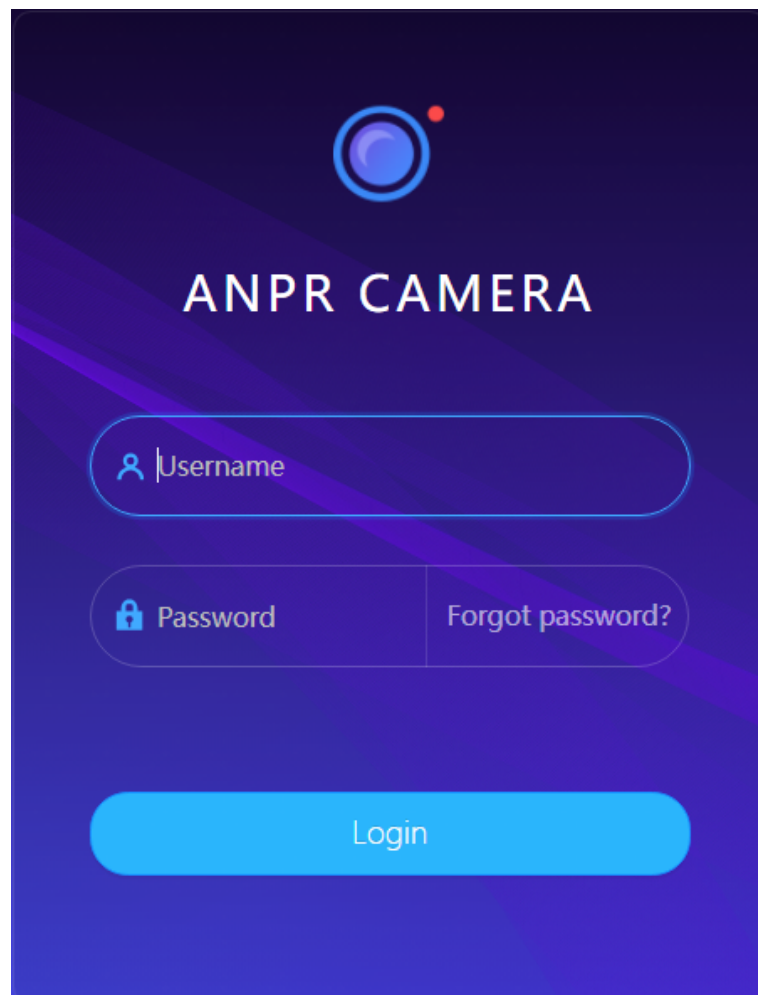
- On the device, you can press and hold the reset button for more than 5 seconds to restore the device to its factory default settings. Each entry and exit camera features a hard reset button; please refer to the specific device's user's manual for the button's location.



Please proceed with caution since this action will reset all settings to factory defaults.

- On the web, you can reset the password on the login page.
 1. Open the browser and enter the IP address, then click **Enter**.
 2. Click **Forgot password?**, and click **OK** in the prompt notification.

Figure 7-1 Forgot password



3. Scan the QR code and follow the instructions as prompted on the page, and enter the received **Security code** into the text box, and then click **Next**.

Figure 7-2 Enter security code

1 Security Code
2 Password Reset



SN:00*****2:72:9a

Please scan QR code.

Note (For admin only):

Option 1. Please download and use EasyViewer, go to Me -> Password Security -> Reset Device Password and scan the left QR code.

Option 2. Please use any APP with scanning and recognition function, scan the left QR code to get encryption strings. And then send the strings to support_gpwd@htmicrochip.com.

Email Address: 1***@163.com



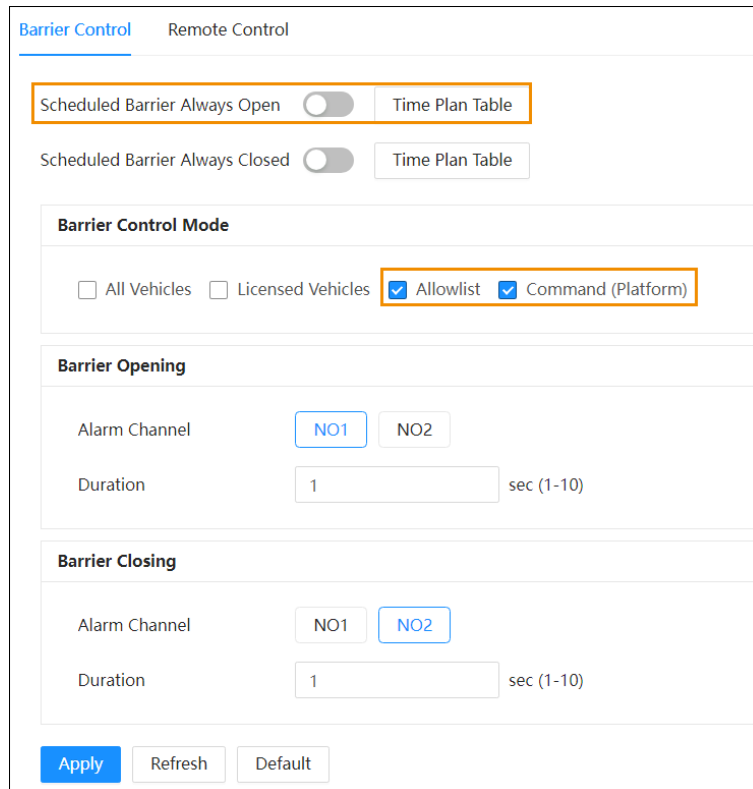
- ◇ When scanning the QR code to obtain a security code, a single QR code permits a maximum of 2 scans for retrieval.
- ◇ After the designated phone receives the security code, please use it within 24 hours; otherwise, it will become invalid.
- ◇ The same device can generate a maximum of 10 security codes in one day, and it can be reset a maximum of 10 times.
- ◇ It is mandatory to provide the user's phone number during device initialization to receive the security code; otherwise, a password reset cannot be completed.

4. Create a new password and click **OK**.

8 Do not open the barrier arm while vehicles are passing.

1. Verify whether the remote control can open the barrier arm. If it cannot, check any issues related to the barrier; if it can, proceed to Step 2.
2. Log in to the camera's webpage and click **Open** next to **Test Barrier Opening/Closing**. If the barrier arm does not open, proceed to Step 3; if it does, skip to Step 4.
3. Inspect the wiring and use a multimeter to test the on/off status when the barrier arm is opening and outputs signals.
4. Check the method for opening the barrier arm. When opening the barrier arm from the platform, select **Command (Platform)** or **Allowlist** for barrier control mode. Please check the scheduled time plan for barrier opening and whether the license plate is in the allowlist.

Figure 8-1 Barrier control



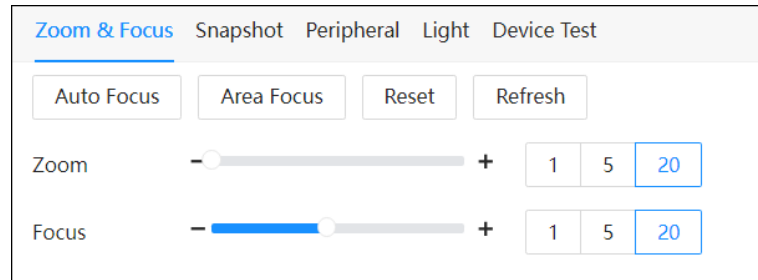
5. Select **Search** and click **Alarm-out Port** and **Snapshot Records** respectively to check whether any alarm or snapshot records are generated. If no snapshot was taken, examine the camera scene and the snapshot triggering line configuration; otherwise, proceed to Step 6.
6. Check the delivery status of rule configuration (specially the vehicle release rule and filter conditions) on the platform.
7. Go check if the problem is solved.

If the issue has been resolved, please consider it settled; if not, please reach out to the appropriate technical support.

9 What to do if the camera does not focus?

1. Check for any objects obstructing the camera lens. If there are any, please adjust the camera to face the actual scene or remove the obstruction.
2. Log in to the webpage, select **Live** > **Zoom & Focus** and click **Reset** to restore to the default factory settings.

Figure 9-1 Zoom & Focus



Do not select **Auto Focus** at night.

3. Go check if the problem is solved.

If the issue has been resolved, please consider it settled; if not, please reach out to the appropriate technical support.

10 How to prevent using the license plate image to gain access through the barrier?

Problems

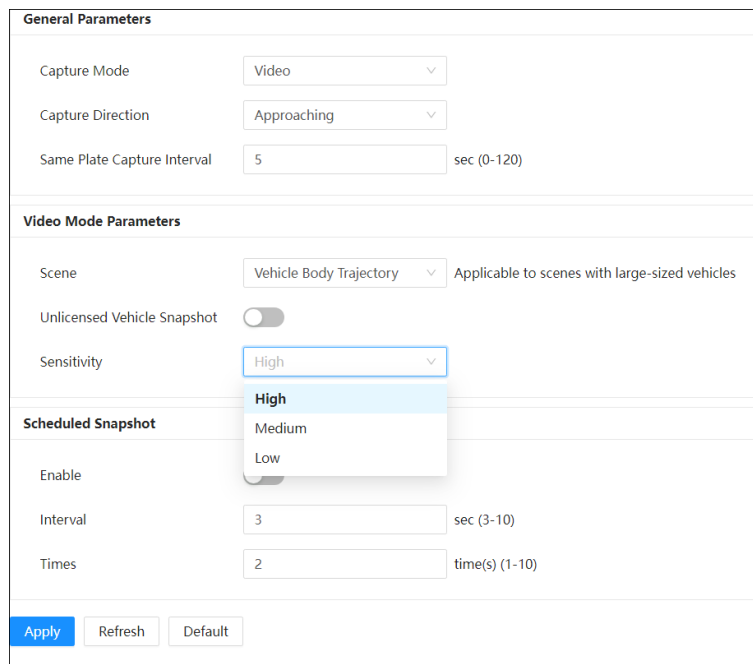
It is found that someone is using license plate image for recognition.

Solutions

The camera's ability to recognize vehicle models relies on confidence levels and confirmation frames. When the confidence levels of the vehicle models within the confirmation frames meet the established threshold, the algorithm identifies it as a vehicle and proceeds with the recognition. Thus, in situations where the license plate image is used to gain access through the barrier, we can enhance the effectiveness of anti-counterfeiting by increasing the threshold for vehicle recognition, lowering the sensitivity of vehicle detection, and bolstering the confirmation frames for license plate recognition.

1. Log in to the webpage, and click  and select **ANPR > Snapshot**.
2. Select medium or low sensitivity as needed.

Figure 10-1 Set snapshot



General Parameters	
Capture Mode	Video
Capture Direction	Approaching
Same Plate Capture Interval	5 sec (0-120)
Video Mode Parameters	
Scene	Vehicle Body Trajectory Applicable to scenes with large-sized vehicles
Unlicensed Vehicle Snapshot	☐
Sensitivity	High (dropdown menu open showing High, Medium, Low)
Scheduled Snapshot	
Enable	☐
Interval	3 sec (3-10)
Times	2 time(s) (1-10)
Apply Refresh Default	

3. Click  and select **ANPR > AI Setting**. You can level down **Vehicle Detection Sensitivity**. It is recommended not to adjust below 30, as this may impact the proper snapshot of vehicles.

Figure 10-2 Lower down sensitivity

Intelligent Analysis

Smart Detection

Target Detection

Detection Type

☒ Motor Vehicle ☒ Two-wheeled and Three-wheeled Vehicles ☒ Pedestrian

Vehicle Detection Sensitivity

-

+

40

AI Attribute Settings

Motor Vehicle

☒ Vehicle Type ☒ Logo ☒ Vehicle Color

Advanced

Advanced

delete country=xx

⊕

Apply

Refresh

Default

11 How to deal with license plate recognition error?

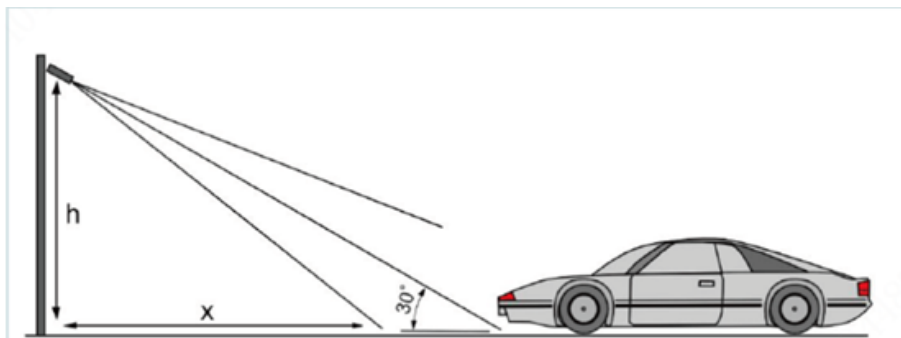
Problems

The license plate is being recognized wrong.

Solutions

1. Verify that the on-site installation environment meets the required standards. Camera installation requires consideration of the camera lens angle, license plate angle, and license plate pixel factors as follows.
 - a. In the case of positive installation, the angle between the camera lens tilt and the horizontal ground should be less than 30° , and the relationship between the height h and the capture distance x is $x \geq 1.7h$.

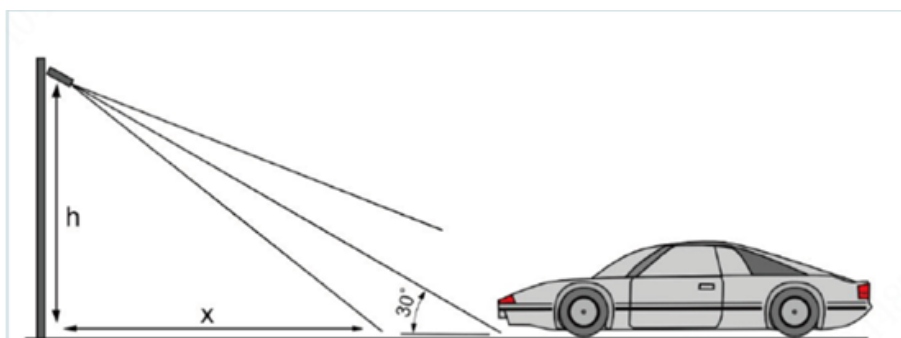
Figure 11-1 Positive installation



- b. In the case of side-mounting, the angle between the horizontal camera lens and the roadway lane line should be less than 30° , and the distance h between the camera and the farthest lane line of the monitored lane and the capture.

The relationship between the distance x and the capture distance is $x \geq 1.7h$, and x is worth a minimum value of 1.7 times the lane width, otherwise the algorithm recognition will be affected.

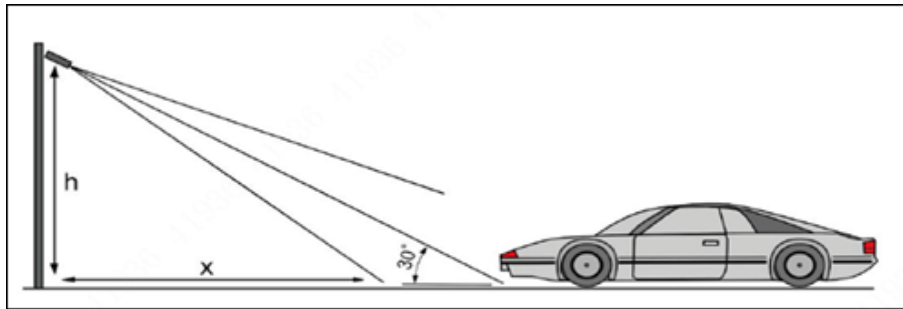
Figure 11-2 Side mounting



- c. In the case of front mounting, the angle between the camera lens and the horizontal ground should be less than 30° .

The relationship between the height h and the capture distance is $x \geq 1.7h$.

Figure 11-3 Front mounting



- d. The angle of the license plate to the horizontal surface shall not be greater than 5°, as shown in the following diagram:

Figure 11-4 Angle of the license plate



- e. Algorithm recognition needs to meet the requirements of license plate pixel: single-layer license plate pixel is not less than 140 pixels; double-layer license plate pixel is not less than 80 pixels.
2. Check if you have selected the correct **Plate Algorithm**.
 - a. Log in to the webpage.
 - b. Go to **Live > Snapshot > Plate Algorithm**.
 - c. Select the plate algorithm according to your location. If the region or country where you locate is not on the list, you can select **Oversea ALG** as an alternate.
 3. Recommended installation height for each series is as follows:

Table 11-1 Recommended installation scenarios

Product Series	Installation Height	Capture Distance	Detection Width
215 series	1.2 m	3.5–6 m	3–4 m
	1.5 m	4 m	
	1.8 m	4.2–6 m	
	2.0 m	4.5–6 m	
415 series	1.2 m	3–8 m	3–4 m
	1.5 m	4–8 m	
	1.8 m	4.2–8 m	
	2.0 m	4.5–8 m	
237 series	2.0 m	6–10 m	3–4 m
	2.5 m	6–12 m	
	3.0 m	6–15 m	
	3.5 m	6–17 m	

Product Series	Installation Height	Capture Distance	Detection Width
	4.0 m	6–19.5 m	
	4.5 m	8–22 m	
	5.0 m	8.5–24 m	
	5.5 m	9.5–27 m	
	6.0 m	10–30 m	
437 series	3.0 m	12–15 m	7 m
	3.5 m	12–17 m	
	4.0 m	12–19.5 m	
	4.5 m	12–22 m	
	5.0 m	12–24 m	
	5.5 m	12–27 m	
	6.0 m	12–30 m	
ITC413-PW4D-(I)Z1	1.2 m	3–8 m	3–4 m
	1.5 m	4–8 m	
	1.8 m	4.2–8 m	
	2.0 m	4.5–8 m	
ITC413-PW4D-(I)Z3	2.0 m	6–10 m	3–4 m
	2.5 m	6–12 m	
	3.0 m	6–15 m	
	3.5 m	6–17 m	
	4.0 m	7–19.5 m	
	4.5 m	8–20 m	
	5.0 m	8.5–20 m	
	5.5 m	9.5–20 m	
	6.0 m	10–20 m	
	3.0 m	12–15 m	7 m
	3.5 m	12–17 m	
	4.0–6.0 m	12–20 m	

ENABLING A SMARTER SOCIETY AND BETTER LIVING

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