



## Milesight-Troubleshooting ANPR Settings on NVR

**Update****2019.12.17**

Milesight ANPR Solution based on Milesight NVR with Milesight Camera provides users a comprehensive ANPR experience, abundant functions including Settings, Live View, Smart Analysis, etc.

In order to make ANPR perfectly work on NVR, this troubleshooting shows you some important operation parts including:

- Preparation
- How to set ANPR?
- How to check real-time license plate?
- How to check ANPR record?
- How to check/backup ANPR logs?

## I. Preparation

Here are some notes you should notice before using ANPR function.

- ① Insert available HDD to NVR.
- ② Upgrade your device to corresponded firmware version.

**Camera:** V4X.7.0.72-r16 or above.

**NVR:** V7X.9.0.7-r7 or above.

Firmware download link: <http://www.milesight.com/support/download#firmware>

- ③ Ensure your device support LPR/ANPR function.

Model of NVR:

- [MS-N1009-UT / MS-N1009-UNT](#)
- [MS-N5008-UT / MS-N5016-UT](#)
- [MS-N7016-UH / MS-N7032-UH \(16 ANPR Channels\)](#)
- [MS-N8032-UH / MS-N8064-UH \(16 ANPR Channels\)](#)
- [MS-N1009-UPT](#)
- [MS-N5008-UPT / MS-N5016-UPT](#)
- [MS-N7016-UPH / MS-N7032-UPH \(16 ANPR Channels\)](#)

Name of LPR Camera:

- [LPR H.265+ Mini Bullet Camera](#)
- [LPR H.265+ Vandal-proof Motorized Mini Bullet Camera](#)
- [LPR H.265+ Pro Box Camera](#)
- [LPR H.265+ Motorized Pro Bullet Camera](#)
- [LPR 12X H.265+ AF Motorized Pro Bullet Camera](#)
- [LPR 12X H.265+ Mini PTZ Bullet Camera](#)

- ④ Ensure that NVR can get license plate information. Please set **TCP** which is the default mode as Post Type. It can be set in Camera web page -> Advanced Settings -> ANPR -> Settings interface.

LPR Message Post Settings	
Enable LPR Message Post:	<input checked="" type="checkbox"/>
Post Type:	TCP
Camera LPR Port:	3344

## II. How to set ANPR?

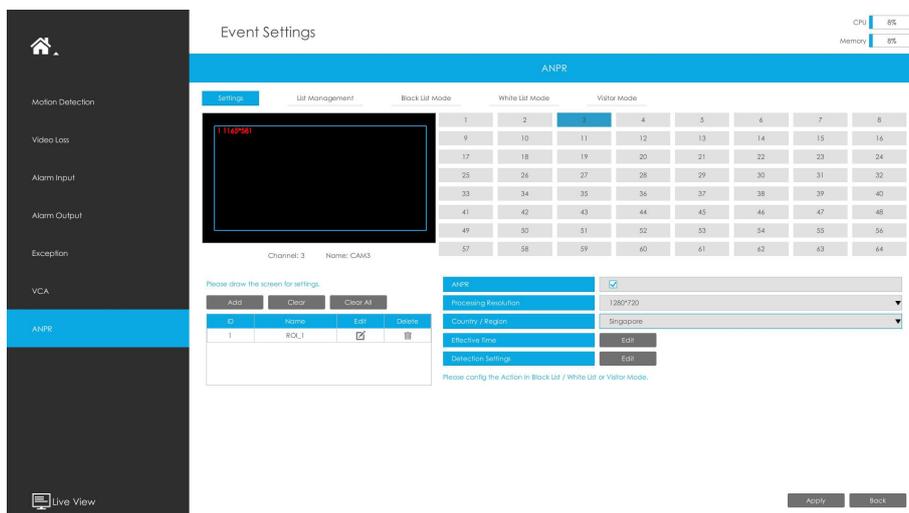
Set ANPR settings on Event -> ANPR interface.

ANPR settings consist of Settings, List Management, Black List Mode, White List Mode and Visitor Mode.

### Settings

Do as following 5 steps to enable ANPR function.

Camera will start to detect license plate and NVR will start to receive license plate information once these steps are done.



**Step1:** Select a channel and enable ANPR function.

**Step2:** Select processing resolution. The further distance you detected, the higher resolution is needed. 1280\*720 by default.

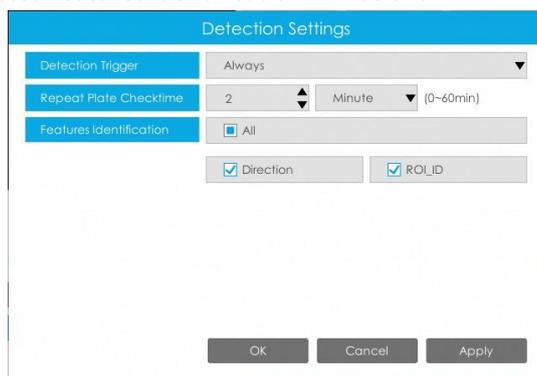
**Step3:** Set ANPR function effective time.

**Step4:** Set detection parameters including detection trigger, repeat plate checktime and features identification.

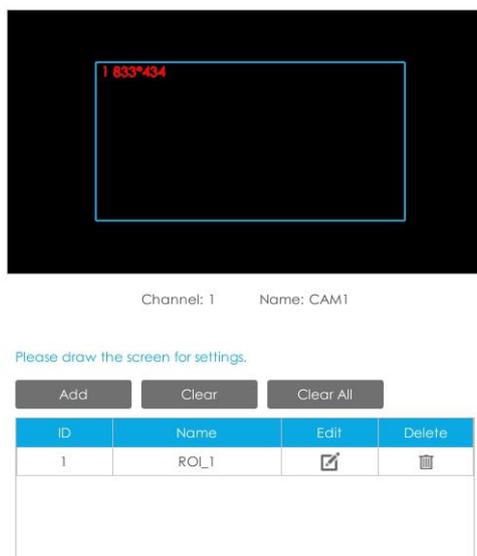
**Detection Trigger:** Always and Alarm Input are available. It will only detect when alarm input is triggered if you select Alarm Input.

**Repeat Plate Checktime:** The same license plate information won't be received on NVR within the time you set.

**Features Identification:** The selected features identification will be shown in ANPR logs interface.



**Step5:** Set the detected ROI region which can be up to 4 regions. License plate will only be detected in the ROI regions.

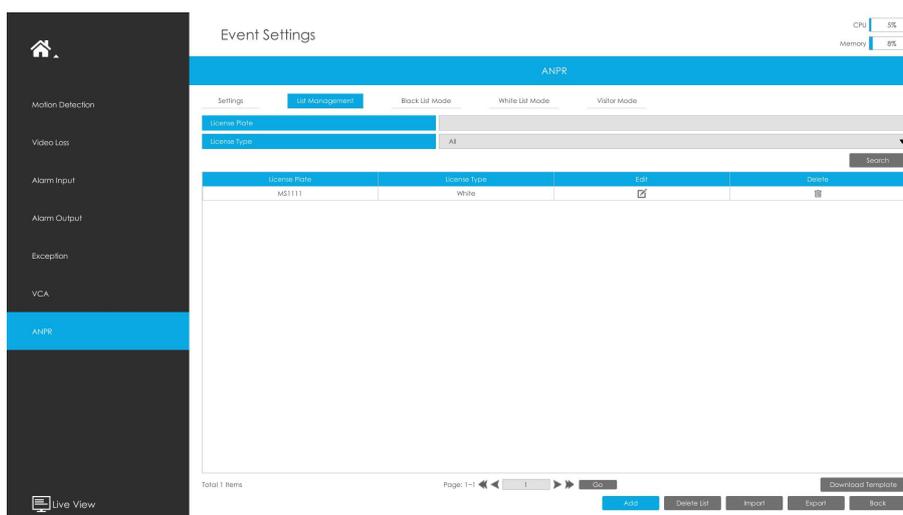


### List Management

Make a license plate list for your own NVR ANPR system.

Upload license plates and set them with different license type here. 10000 plates can be added at most.

Kindly note that the list is exclusive for NVR, working with all LPR cameras you add. It won't synchronize with the list on camera side.



There are two methods to add license plates:

① Add one by one.

**Step1:** Click Add button

**Step2:** Input the license plate and select license type.

**Step3:** Click OK and then the license plate will be added into the list.



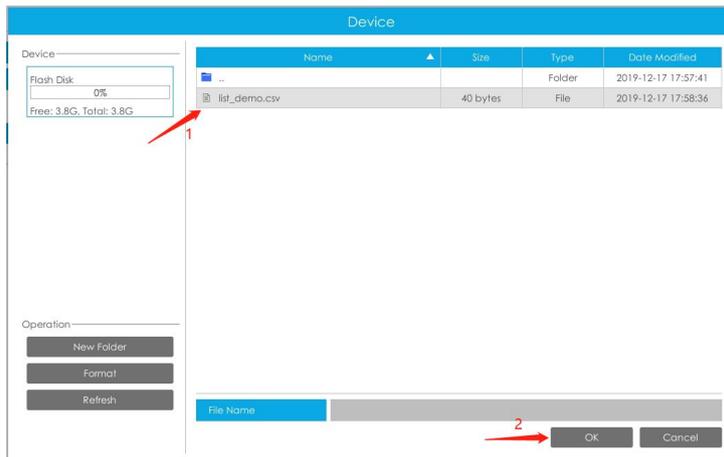
② Batch adding by importing template.

**Step1:** Click Download Template button , select USB device folder and click OK to download Template.

**Step2:** Input all license type and license plate number as Template shows.

	A	B
1	Type	Plate
2	White	2008ZGZ
3	Black	34AB1234
4		
5		
6		
7		
8		
9		
10		
11		
12		

**Step3:** Click Import button , select the file and click OK to add all license plates into list.



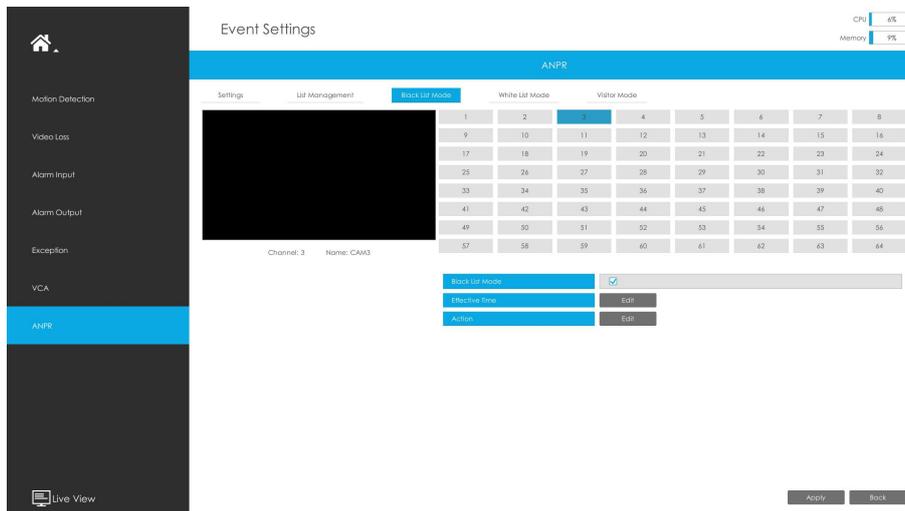
**Black List Mode/White List Mode/Visitor Mode**

We provide you three modes for better event management, which is based on two license types.

**Black List Mode:** Manage event for license plates in black list.

**White List Mode:** Manage event for license plates in white list

**Visitor Mode:** Manage event for those license plates do not have license type.

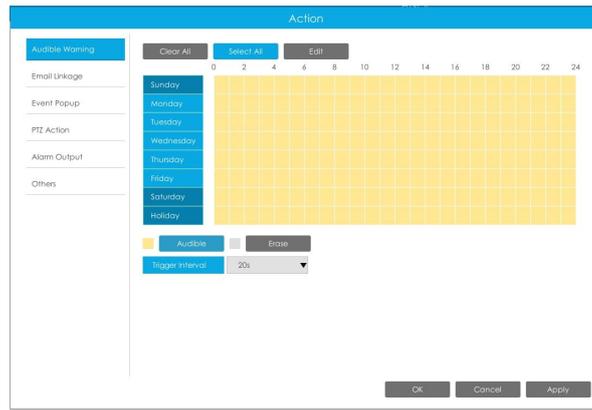


Steps for settings:

**Step1:** Enable Black List Mode/White List Mode/Visitor Mode as your demand.

**Step2:** Set effective time which means Mode works during that.

**Step3:** Set action including Audible Warning, Email Linkage, Event Popup, PTZ Action, Alarm Output and Trigger Channels Record.

**Note:**

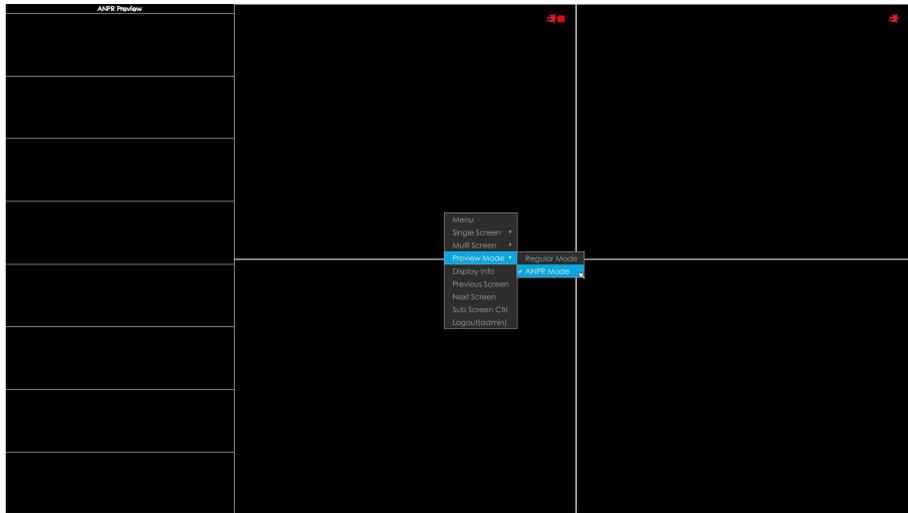
Do not forget to enable these modes, set effective time and record action for corresponded mode, ensuring that you can get real-time video when license plate is detected (Effective time and record action is enabled by default.). You can refer to **How to check ANPR record** part for detailed record settings.

### III. How to check real-time license plate?

At the beginning, you need to switch the preview mode to ANPR mode.

There are two methods to enter live view ANPR Mode:

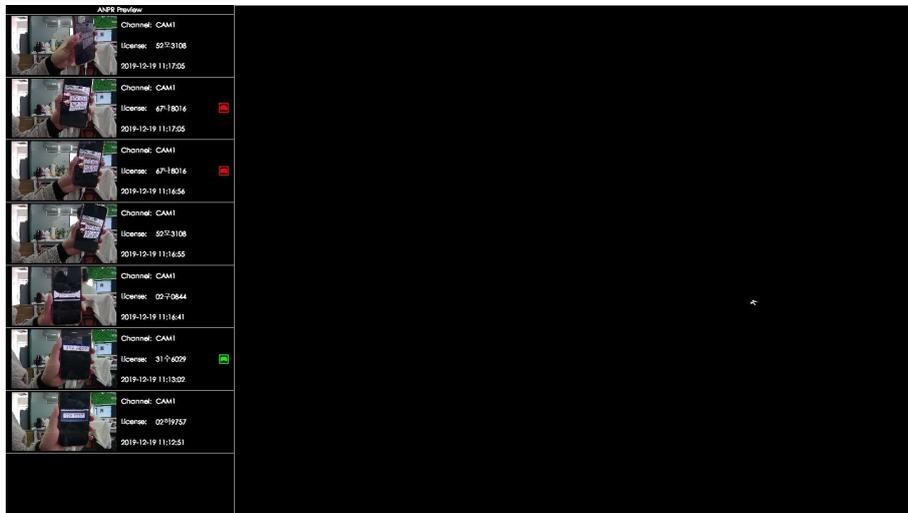
- ① Right click the mouse and select ANPR Mode as preview mode.



- ② Select ANPR Mode on live view bottom tool bar.



After entering ANPR mode, the real-time license plate information will be shown on the left of the interface once it get detected.



License plate information includes Plate Snapshot, Channel Name, License Plate Number, Detected Time and Plate Type.

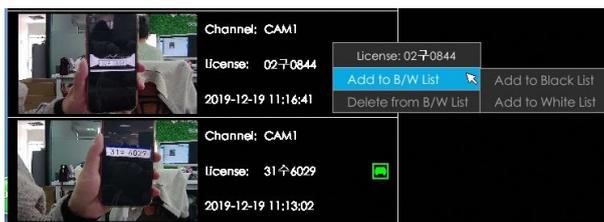
Two License types:

- License from Black List
- License form White List

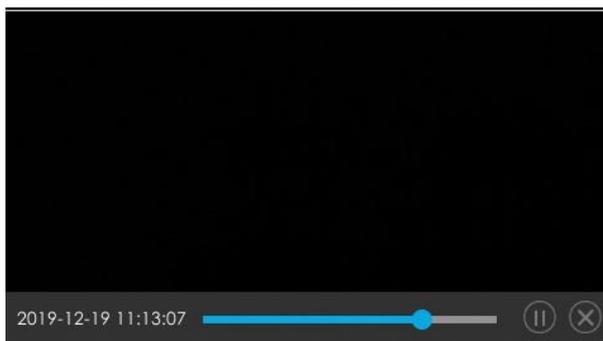


No plate type will be shown if the license plate does not exist in Black/White list.

However, you can right click the license plate information to quick add it to Black/White list or delete it from Black/White list.



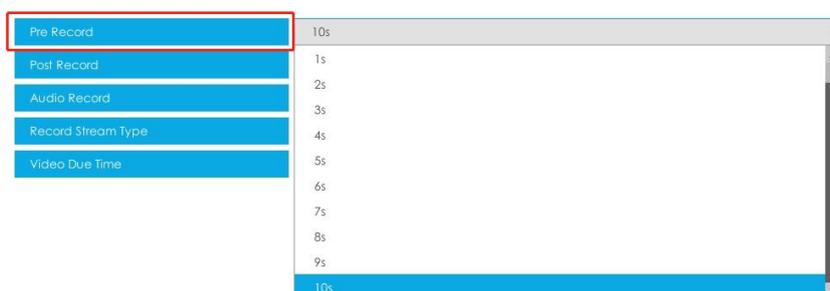
Besides, you can click the license plate information to check the latest X seconds (10s~20s) video.



#### Note:

- $X = 10 + \text{Pre Record Time}$

You can set Pre Record Time in Storage -> Video Record -> Record Settings interface.



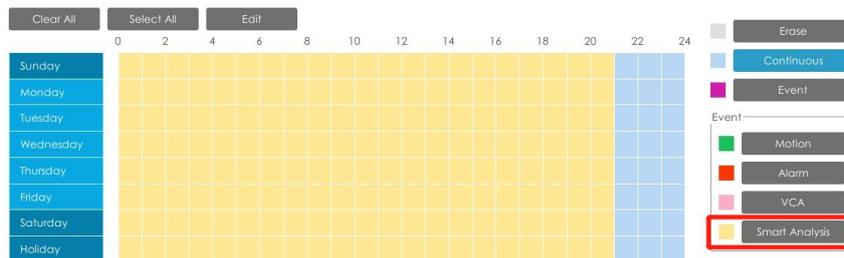
- Ensure that there is available HDD on NVR and correct record settings is made, so that you can check the record on live view. Please refer to **How to check ANPR record** part for detailed record settings.
- Ensure that NVR can get the license plate information. Please set **TCP** which is the default mode as Post Type. It can be set in Camera web page -> Advanced Settings -> ANPR -> Settings interface.



## IV. How to check ANPR record?

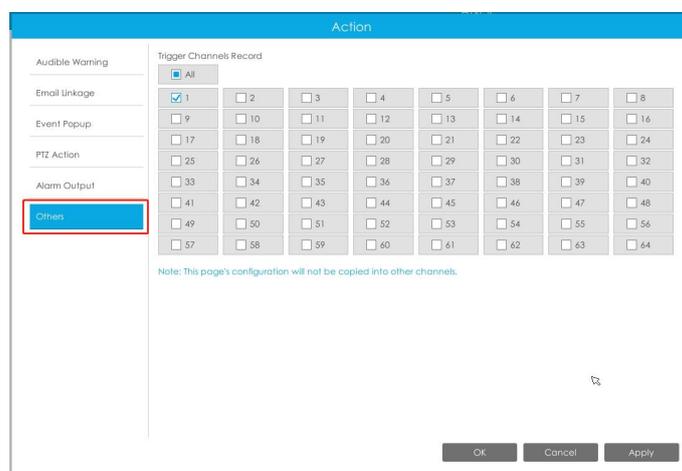
Before checking record, please ensure that you have done correct settings to make record work.

**Step1:** Set Smart Analysis as Record Type in Storage -> Video Record -> Record Schedule interface.



**Step2:** Black List Mode or White List Mode or Visitor Mode is enabled as your demand.

**Step3:** Effective time and Trigger Channels Record action of Black List Mode/White List Mode/Visitor Mode is set (Full effective time and trigger channel record are set by default).



Then NVR will record when license plate is detected .

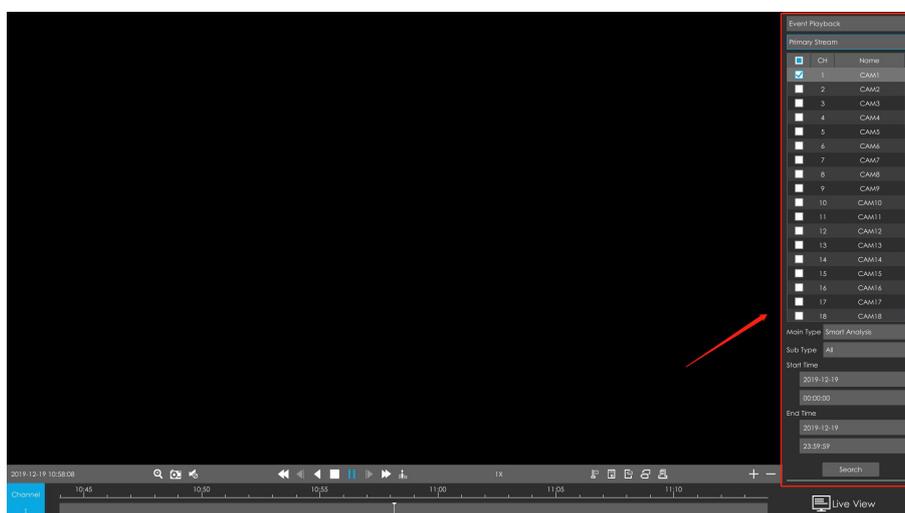
**Note:**

Generally, record is triggered by event. If you just enable ANPR function without enabling Black List/White List/Visitor modes and setting record action, that means you just enable the function while record action is not set. Then no record will be triggered. **So it is necessary to do all above three steps if you want to trigger record.**

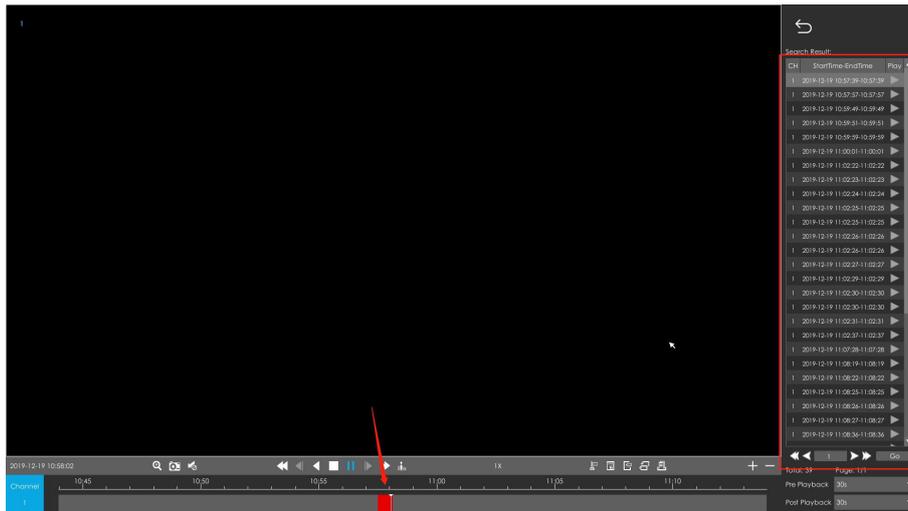
### Check record in Playback

Entering Playback -> Event Playback -> Smart Analysis interface.

Input corresponded information and click search button  to search.

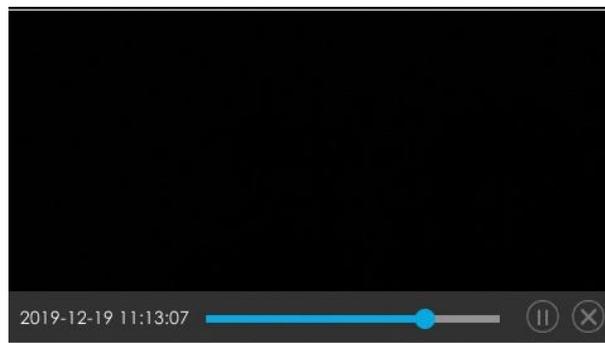


Click record to play the video searched out .



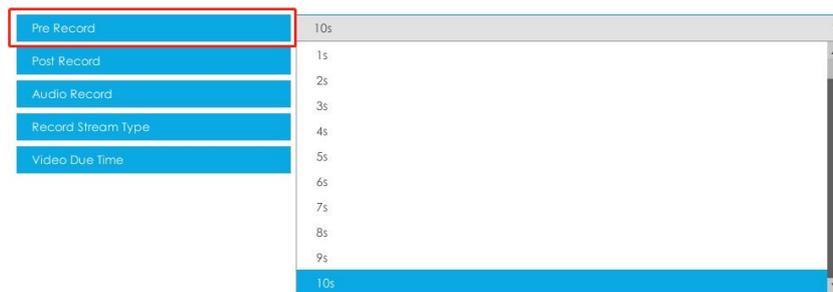
**Check video in Live View**

Click the license plate information to check the latest X seconds (10s~20s) video.



**Note:**

- X = 10 + Pre Record Time  
You can set Pre Record Time in Storage -> Video Record -> Record Settings interface.



- Ensuring that there is available HDD on NVR and correct record settings is made so that you can check the record on live view. Please refer to **How to check ANPR record** part to check if record is correctly set.

## V. How to check/backup ANPR Logs?

### Check ANPR logs

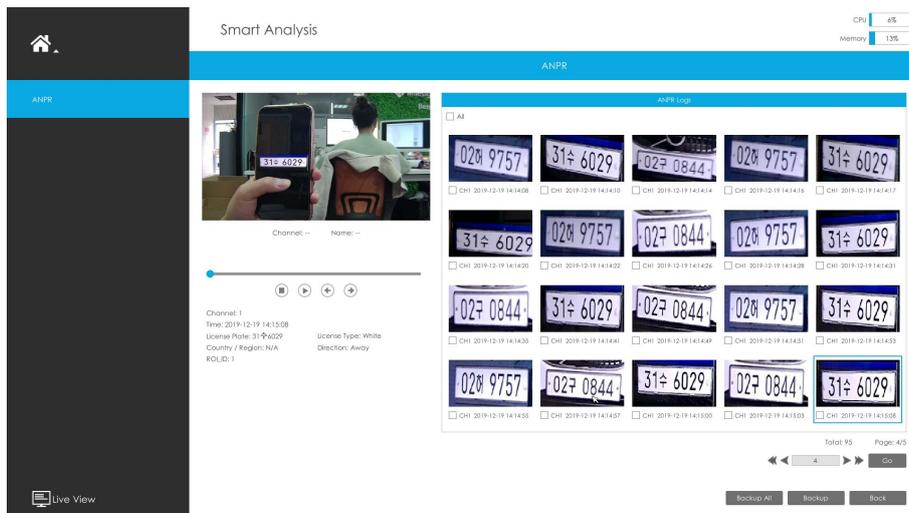
Search on Smart Analysis interface.

Input corresponded information and click search button  to search.



Then you will get a whole ANPR logs list.

License plate snapshot will be shown on the logs list while the complete image video and license plate information will be shown on the left of the interface.



Click  to play the video.



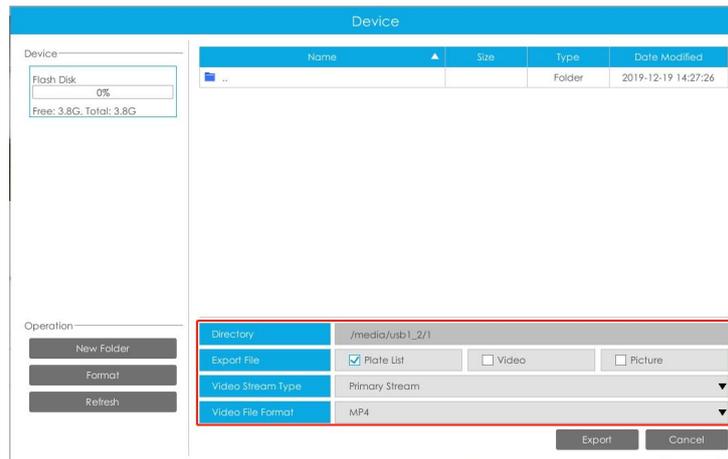
### Backup ANPR logs

Two methods are available after searching ANPR logs out .

① Backup license plates you want.

**Step1:** Tick license plates you want to backup and click backup button .

**Step2:** Select the export file type, video stream type and video file format, then click export button.



② Backup all.

**Step1:** Click backup all **Backup All** button.

**Step2:** Select the export file type, video stream type and video file format, then click export button.

Then you will get corresponded file as selected export file type.

 Picture	12/19/2019 6:49 AM	File folder
 Plate List	12/19/2019 6:48 AM	File folder
 Video	12/19/2019 6:49 AM	File folder

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