

# **AI Event and Search Management**

Please read this manual carefully before using the product and keep it for further reference. If there is any aspect of the NVR or User manual you would like to discuss please call our technical department This manual will take you through the aspects of the AI Analytics, event and search portions of the NVRs operation.

### **Face Recognition**

Only some models support alarm based on face match. If your device doesn't support face recognition function, please skip the face database and face recognition instructions.

### **Detection Settings**

**Face Detection**: Alarms will be triggered if someone intrudes into the pre-defined alarm areas. (1) Click Start> Settings> AI/Even> AI Event> Face Recognition> Detection to go to the following screen.

Camera Name IP01	~		
Face Recognition			
Detection Recognition			
Enable Detection by IPC Parameter Settings Trigger Mode			Al Resource: 12% 🗎
	Rule		Camera storage
	Duration	3 Secs 🗸	
	Snapshot Interval	30 Secs 💙	Save target picture
	Snapshot Number		
	Face exposure	50	
ANA ANA	Face Size(Range :		White Strength
	Max	50	
white the second s	Min		
Clear		Display range	Close

2 Select the camera, check -Enable Detection by IPC and set the duration.

(3) Set the snapshot interval and snapshot number. The snapshot interval refers to the time interval that the camera captures the same face during its continuous tracking period. The snapshot number refers to the picture number of the same face captured during its continuous tracking period (For example: the snapshot interval is set to **30 seconds** and the snapshot number is set to **3**; then the camera will capture the same face once every 30 seconds and it will capture their face 3 times at most during its continuous tracking period).

④ Enable face match exposure as need. When the brightness of the captured face is not enough, it can be enabled. (Only some IPCs support this function)

(5) Set the alarm area. Click **-Draw** and then left click and drag the mouse to draw a detection area. Click **-Clear** to delete the alarm area. Then set the detectable face size by defining the maximum value and the minimum value (The default size range of a single face image occupies from 3% to 50% of the entire image).

1P01	Rule		
	Duration	20 Secs ~	
	Snapshot Interval	30 Secs ~	
Min	Snapshot Number	3	
	Face exposure	50	
	Face Size(Range :	3%~50%)	
	Max	50	]%
TAM	Min		
✓ Draw Clear		V Display range	

- 6 Click Apply to save the settings.
- (7) Click -**Trigger Mode** to go to face detection alarm linkage setting screen:

		Configure	Configure			
Snapshot	IP01			IP02	None	
Push				IP01		
Buzzer				IP03	None	
] Pop-up Video						
] E-mail						

# Face Detection Alarm Linkage:

Trigger Mode allows you to pick which alerts are produced once a detection has been made: -Record, -Snapshot, -Push, -Alarm-out, -Preset, -Buzzer, -Pop-up Video and -E-mail as needed.

**Record**: Click the -**Configure** button to pop up the window. Select camera on the left side and then click the right arrows to set the camera as the trigger camera and select trigger camera on the right side and then click left arrows to cancel the trigger camera. Click -**OK** to save the settings. The trigger cameras will record automatically when faces are detected.

*Alarm-out:* Click the -**Configure** button to pop up the window. Then the -**Trigger Alarm-out** window will pop up automatically. Configure the trigger alarm-out in the window. The system will trigger the alarm-out automatically when faces are detected. You need to set the delay time and the <u>sch</u>edule of the alarm outputs.

**Preset**: Click Manual and then select the preset for each camera.

**Snapshot**: check it. The current camera will capture images automatically when faces are detected.

**Push:** If it is enabled, the system will send push messages to your phone when faces are detected. The remote connection will need to be set up prior to this to work.

*Buzzer:* if it is enabled, the system will begin to buzz when faces are detected.

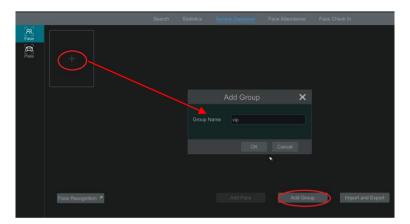
**Pop-up Video**: if it is enabled, the system will pop up the corresponding video automatically when faces are detected.

*E-mail*: if it is enabled, the system will send an e-mail when faces are detected. Enable -IPC Audio or -IPC Light as needed (only some IPCs support these two functions).

9 Click - Apply || to save the settings.

# Face Database Management

(1) Click Start> Settings> AI/Event> AI Event> Face Recognition> Face Database to go to the following screen as shown below.

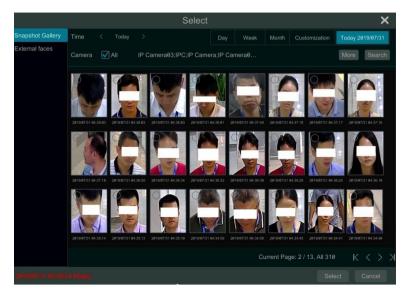


For the first time, you can click "+" or -Add Group to add groups.

(2) To add targets for each group. Select a list and then click Select to expand the list as shown below.

Click -Add and then click -Select Face to add face images. You can add faces from snapshot gallery or external faces. Adding faces from snapshot gallery: Select search time or self-define the search time and then click -Search to search target faces. Then select the desired faces and click -Select.

Intelli	gent Analytics		Add		×	×
R R R	No. Group 1 vp(0) Add Modiy		 Male 2228/83/19   D Card   ↓ Vip Vip ▼	Add Group     Add Group	Bellect Face	ExpandiCollapse
	Face Recognition 🖈			Add Face	Add Group	Import and Export



### Add external faces

Save the face pictures in your USB storage device and then insert the USB storage device into the USB port of the NVR. Go to the face database screen. Click to expand the group and then click -Add. Select -External faces to select face pictures you are wanting to add.

**To add multiple faces**: **a**. put face pictures and the description file (.csv or .txt) to one specific folder (please edit the detailed descriptions of these pictures according to the personal

information description); **b**. click -**All** to select all face pictures; **c**. click -**Full Entry**. **Note**: the added image must be less than 70KB, 128px x 128px, 1920x1080 and the image format should be either -.jpg and -.jpeg. After that, add the corresponding information, like name, gender, birthday, ID number, phone number and so on.

Having saved the target image, click the image and then the detailed information will be listed on the right.

No. 1	Group vip(1)				Operation	Expand/Collapse
Add	Modify Delete	Clear Al	Search face by name Q	] ₩AII	Name Birthday Native Place ID Type ID Number Mobile No. Remark	1 2020/03/19 ID Card
Face Recogn	ition 1			Add Fa	nce	Add Group Import and Export

### Import and Export Face database

Insert your USB stick or removable drive into the USB port of the NVR and then click –**Import and Export** to import or export the face database settings.

### **Face Recognition Settings**

After the face database and face pictures are added, click –**Face Recognition** to return to the face recognition setting screen. Click the –**Recognition** tab to go to the following screen.

Camera Name	IPC006			
Face Recognition				
Detection Recogn	ition			
Enable Succe	ssful Recognition 🗹 Stranger Successful Recognition Stranger			Al Resource: 50%  + -
	*			
	Face Group	Similarity	<u>م</u>	
			۵	
Please set the simil	arity of the matching face group.			
Disable live disp				

(1)Enable -Successful Recognition or -Stranger. Click -Parameter Settings to set the similarity of the matching face group.

**Disable live display**: if checked, the live view screen (target detection tab) will not display captured faces in real time.

### (2) Set the alarm linkage items on successful recognition.

arameter Settings	Successful Recognitio	n Stranger				
Face Group						
Schedule 24x		✓ Mana	ige			
Text Prompt			Voice Prompt		~	
Enable alarm outp	ut pulse(Access Con	rol)				
Trigger General	Reci	ord Configu	re Alarm-out	Configure	Snapshot	Configu
Push	IPC006				IPC006	
Buzzer						
Pop-up Video						
Pop-up Video						
	e Box					

Select one or more face groups and then choose the schedule. Click -**Manage** to set the schedule.

Set the text prompt and voice prompt. When the captured face is matched successfully, the text will appear on the right of the live view screen and broadcast the audio.

Enable alarm output pulse (access control)

Trigger record, snapshot, alarm-out, buzzer, push, pop-up video, E-mail and pop-up message box as needed.

Click -Apply to save the settings.

③ Set the stranger alarm linkage options. When the captured face picture doesn't match the face pictures in the face database or their similarity is lower than the set value, the captured person will be regarded as a stranger.

Enable Successful Recogni Parameter Settings Successful I							
Schedule None		Manage					
Text Prompt							
Trigger General	Record	Configure	Alarm-out	Configure	Snapshot	Configure	
Push							
Buzzer							
Pop-up Video							
E-mail							
Pop-up Message Box							

# Configure the schedule

Set the text prompt and voice prompt. The text will show on the captured picture and the voice will be broadcasted when detecting a stranger.

Trigger record, snapshot, alarm-out, buzzer, push, pop-up video, E-mail and pop-up message box as needed.

Click -Apply to save the settings.

(4) Click ""+" to add more successful recognition tasks. Select the added task and then click '-" to delete it.

# LPR

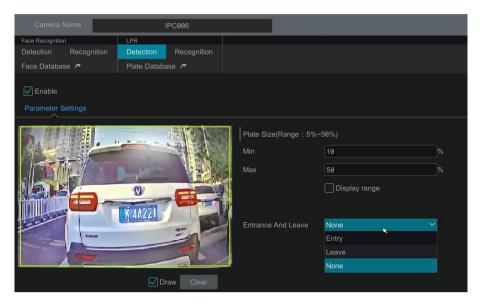
# License Plate Detection Settings

Click Start> AI/Event> AI Event> LPR to go to the following screen. Select an ANPR camera and click the -**Detection** tab as shown below.

Set the plate size by defining the maximum value and the minimum value (The default size range of a single plate occupies from 5% to 50% of the entire image).

Display range: if enabled, the set maximum detection box and the minimum detection box can be displayed on the left window.

Please select the entrance and exit according to the actual scene.



Set the alarm area. Click **-Draw** and then drag the mouse to draw a detection area. Click **-Clear** to delete the alarm area.

### Plate Database Management

In the LPR screen, click the -**Plate Database** tab to go to the plate database management s c r e e n as shown below.

For the first time, you can click "+" or -Add Group to add groups.

Face Plate	+			
			×	
		Group Name		
	LPR ×		Add Group Import and Export	

# Add plates to each group:

(1) Click I to extend the group. Click – Add Plate to pop up the following window.

Face									
6		vip(0)				• î			
Plate									Add Plate
	No.	Plate	Ad		×	/lobile		Operation	
			Plate Vehicle Type Vehicle Type Group Vehicle Group Ve Validity Period 1	v Finable OK	Add Group				
							Current Page: 1 / 1,		
							Guirene Fage. 171,		
	LPR #				Add Plate		Add Group	Import an	d Export

- Enter the plate, vehicle owner and mobile phone number.
   Select the vehicle type and group.
- $(\overline{4})$  Enable validity period to set the start and end time
- (5) Finally click -**OK** to complete.

Select the added plate and then click 🔎 to modify its information; click 🎟 to delete this plate. The plates can be imported and exported in bulk by clicking -Import and Export. You can click -Plate Information Description to view the detailed information about how to import or export the plate list.

# License Plate Recognition Settings

(1) In the LPR screen, click the -Recognition tab. Then enable -Successful Recognition or -Strange Plate.

Camera Name	IPC006	3					
	PR Detection Rec	ognition					
	Plate Database 🗡	100 <b>0</b> 000000000000000000000000000000000					
Enable 🖌 Successful Reco	nition Strat	nge Plate					
Enable 💟 Successful Recognition 🗌 Strange Plate Successful Recognition Strange Plate + -							
Plate Group							
Schedule 24x7		Manage T	ext Prompt				
Trigger General	Record	Configure	Alarm-out	Configure	Snapshot	Configure	
Push	IPC006				IPC006		
Buzzer							
Pop-up Video							
E-mail							
Pop-up Message Box							
							Apply

2 Set the successful recognition alarm options.

Select one or more plate groups and then choose the schedule. Click -**Manage** to set the schedule.

Set the text prompt. When the captured plate is matched successfully, the text will appear on the right of the live view screen.

Enable alarm output pulse (access control).

Trigger record, snapshot, alarm-out, buzzer, push, pop-up video, E-mail and pop-up message box as needed.

③ Set the strange plate alarm options. When the captured plate picture doesn't match the plates in the plate database or their similarity is lower than the set value, the captured plate will be regarded as a strange plate.

### Tripwire

### Tripwire/Line Crossing:

Alarms will be triggered if the people or vehicles cross the pre-defined alarm line.

① Click Start> Settings> AI/Event> AI Event > Tripwire to go to the following screen.

Camera Name	IPC008					
Face Recognition	LPR	People/Vehicle Perimete	r Detection			
		Intrusion				
C Enable Detection by IPC						
Parameter Settings Trigge	r Mode					
		Rule				
S. Market	and the second s		20 Secs			
	11					
	1/2		A->B			
- I HUUUUUUU	3. 1 3	Detection Targe				
		People	Sensitivity	50		
Chan 1	, 18	Vehicle	Sensitivity	50		
		Non-vehicle	Sensitivity	50		
	Draw line Clear					
					Apply	

② Select the camera, enable tripwire detection by IPC and set the duration.

Note: Some models may support tripwire detection by NVR.

3 Select the direction.

**Direction**: A<->B, A->B and A<-B optional. It is the crossing direction of the target that crosses over the alert line.

A<->B: the alarm triggers when the target crosses over the alert line from B to A or from A to B. A->B: the alarm triggers when the target crosses over the alert line from A to B.

A<-B: the alarm triggers when the target crosses over the alert line from B to A.

(4) Draw line. Refer to the screen as shown above. Check – Draw line and then drag the

mouse in the image to draw an alert line. Uncheck the –**Draw line** if you finish the drawing. Click the -**Clear** to delete the alert line.

(5) Click –**Detection Target** to choose the detection target and the sensitivity. The detection target includes people, vehicle and non-vehicle. Only some IPCs can detect human or vehicle separately. If the camera doesn't support this function, please skip this step.

6 Click '..." to choose – **Save original picture** or – **Save target picture** on the SD card of the camera. (If your camera doesn't support this function, please skip this step).

⑦ Click – **Trigger Mode** to configure tripwire alarm linkage items.

Enable or disable -Record, -Snapshot, -Push, -Alarm-out, -Preset, -Buzzer, -Pop-up Video and -E-mail. Enable -IPC Audio or -IPC Light as needed (only some IPCs support these two functions).

8 Click - **Apply** to save the settings.

### Intrusion Detection

Alarms will be triggered if the people or vehicles intrude into the pre-defined area.

① Click Start> Settings> AI/Event> AI Event> Intrusion to go to the following screen.

② Select the camera, enable the intrusion detection by IPC and set the duration.

Note: Some models may support tripwire detection by NVR.

③ Select regional activities. -**Appear** or -**Cross** can be selected (if your camera doesn't support region entrance/exiting detection, -**Cross** will not be enabled). If -**Cross** is selected, you can choose the crossing direction.

④ Select the alarm area. Up to 4 alarm areas can be set up.

(5) Draw the alarm area of the intrusion detection. Refer to the screen as shown below. Check –**Draw Area** and then click around the area where you want to set as the alarm area in the image, it should be a closed loop, similar to the image below. Uncheck the –**Draw Area** when you have finish so the area doesn't become altered. Click the –**Clear** to delete the alarm area.

Camera Name	IPC008	8			
Face Recognition	LPR	People/Vehicle Perimeter Dete	ection		
Detection Recognition					
Face Database 🏞		Intrusion			
Enable Detection by	IPC Trigger Mode				Al Resource: 43% 🗎
6.200		Rule			
		Regional Activities	Appear		
1 MEL	1 = - 1				
1	alle a se		5 Secs		
I MULUUM					
		Detection Target			
Chan 1		People Se	nsitivity	50	
			nsitivity	50	
	V Draw area Clear	Non-vehicle Se	nsitivity	50	
					Apply

6 Click – **Detection Target** to choose the detection target and the sensitivity. The detection target includes people, vehicle and non-vehicle.

⑦ Click -**Trigger Mode** to configure intrusion detection alarm linkage items.

Enable or disable -Record, -Snapshot, -Push, -Alarm-out, -Preset, -Buzzer, -Pop-up Video and -E-mail.

Enable -IPC Audio or -IPC Light as needed. (Only some IPCs support these two functions).

- 8 Click **Copy To** will copy all settings to other cameras.
- 9 Click **Apply** to save the settings.

# Abandoned/Missing Object Detection

(1) Click Start> Settings> AI/Event> AI Event> Object Abandoned/Missing to go to the following screen.

② Select the camera, enable the object detection and set the duration and detect type. There are two detection types: Abandoned object and missing object.

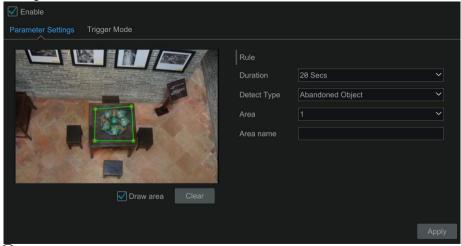
Abandoned object: Alarms will be triggered if there are articles left in the pre-defined detection area.

**Missing object**: Alarms will be triggered if there are articles missing in the detection area drew by the users.

③ Select the alarm area and area name. A maximum of 4 alarm areas can be set.

 $\overline{(4)}$  Draw the alarm area of the object detection. Refer to the screen as shown above. Check

-**Draw Area** and then click around the area where you want to set as the alarm area in the image (the alarm area should be a closed area). Uncheck the -**Draw Area** if you finish the drawing. Click the -**Clear** to delete the alarm area.



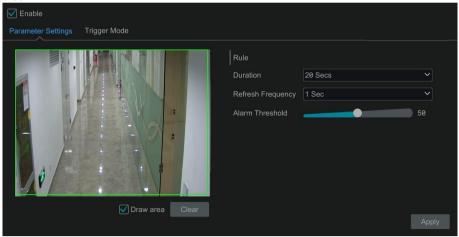
5 Click – **Trigger Mode** to configure abandoned/missing object detection alarm linkage options. Enable or disable -**Record**, -**Snapshot**, -**Push**, -**Alarm-out**, -**Preset**, -**Buzzer**, -**Pop-up Video** and –**E-mail**.

6 Click - Apply to save the settings.

### **Crowd Density Detection**

Only some IPCs may support this function.

Alarms will be triggered if the crowd density exceeds the set threshold value in the predefined area. 1 Click Start> Settings> AI/Event> AI Event> Crowd Density to go to the following screen.



② Select the camera, enable the crowd density detection and set the duration, refresh frequency and alarm threshold.

**Refresh Frequency**: It refers to the refresh time of the detection result report.

**Alarm Threshold**: Alarms will be triggered once the percentage of the crowd density in a specified area exceeds the pre-defined threshold value.

3 Select the alarm area. Draw the alarm area of the crowd density detection. Refer to the

interface as shown below. Check – **Draw Area** and then drag the mouse to draw a rectangle area. Uncheck the –**Draw Area**|| if you finish the drawing. Click the –**Clear** to delete the alarm area.

(4) Click Store to configure crowd density detection alarm linkage items. Enable or disable -Record, -Snapshot, -Push, -Alarm-out, -Preset, -Buzzer, -Pop-up Video and -E-mail.
 (5) Click -Apply to save the settings.

### Line Crossing Counting

Only some IPCs may support this function.

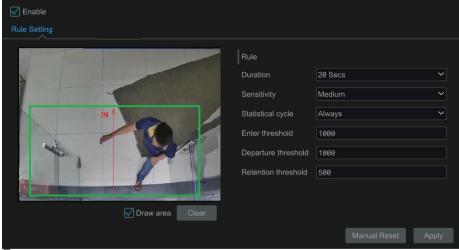
### People counting in the pre-defined area:

This function is to calculate the number of people entering or exiting in the detected area on the video by detecting, tracking and counting the head shapes of people. **Note**: Only some specific IPCs may support this function. 1 Click Start> Settings> AI/Event> AI Event> Line Crossing Counting to go to the following screen.

(2) Select the camera, enable the line crossing people counting detection and set the duration, sensitivity, statistic cycle, enter threshold, departure threshold and retention threshold. **Statistic cycle**: Always, daily, weekly and monthly are optional.

**Manual Reset**: The current number of people counting will be cleared and the statistic cycle will restart by clicking –**Manual Reset** button.

③ Set the alarm area and entrance direction. Click –**Draw Area** and drag the mouse to draw a rectangle area. Drag the rectangle to change its position. Uncheck the –**Draw Area** if you finish the drawing. Click –**Clear** to clear the area. Click and drag the arrow or the other end of the arrow line to change the people entrance direction.



6 Click - Apply to save the settings.

# Line Crossing People/Vehicle/Non-Vehicle Counting

Only some IPCs support this function. If your camera doesn't support this function, please skip the following instructions.

(1) Click Start> Settings> AI/Event> AI Event> Line Crossing Counting to go to the following screen.

<b>Enable</b>							
Rule Setting	Detection Targe						
IP Canera03		Entrance human-# c Exit human-# der-# b		Pass Line Info			
	p .	CAR, HUTRII''' OBI''' L	IT WATER	Alarm Line			~
				Direction	A->B		~
	I TI		1	Reset Information	on		
		14	7	Auto Reset	Enable		
		A	-				
			2				
Statistica	al OSD	🗹 Draw line	Clear				
						Manual Reset	Apply

(2) Enable line crossing counting.

③ Check – **Draw line** and then drag the mouse on the small window to draw the crossing line. Uncheck – **Draw line** to finish the drawing. Click -**Clear** to delete the alert line.

**Direction**: A->B and A<-B are optional. It is the crossing direction of the target that crosses over the alert line.

(4) Check -Statistical OSD, the statistical information will be displayed on the live view interface.

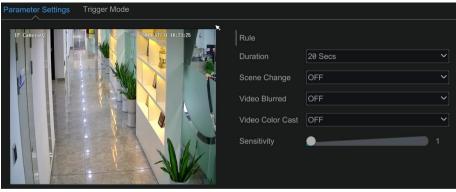
(5) Set the reset information. You can set reset information manually or enable -Auto Reset as needed.

6 Click the -**Detection Target** tab to set the detection target, including people, vehicle and non-vehicle.

⑦ Click - Apply to save the settings.

# **Exception Detection**

1 Click Start> Settings> AI/Event> AI Event> Exception Detection to go to the following screen.



2 Select the camera and detection duration and then enable the relevant detection as needed.

Scene Change: Alarms will be triggered if the scene of the monitor video has changed. Video Blurred: Alarms will be triggered if the video becomes blurry.

Video Color Cast: Alarms will be triggered if the video becomes obscured.

(3) Set the sensitivity of the exception detection.

(4) Click -Trigger Mode to configure exception alarm linkage items. Enable or disable -Record, -Snapshot, -Push, -Alarm-out, -Preset, -Buzzer, -Pop-up Video and -E-mail.

(5) Click -**Apply** to save the settings.

# **Intelligent Analytics**

# **Target Detection View**

Only some models support target detection view. If your device doesn't support it, please skip the following instructions.

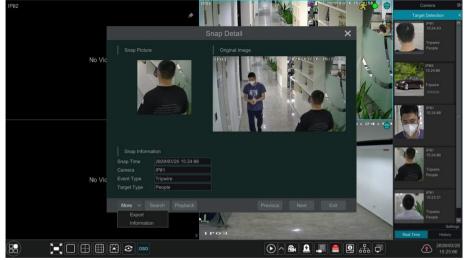
# Human Body/Vehicle Detection View

Only when the camera supports human body/vehicle detection, can you view the real-time captured people or vehicle pictures. The setting steps are as follow:

1 Enable the Tripwire/Intrusion function of IPCs/NVR, draw the line or area and choose the detection target.

② Go to live view screen and then click 🖺 to go to the target detection screen of this

channel. In this screen, you can switch the channel on the top right. You can also click on the top right corner of the live view screen and then choose the target detection tab to go to the target detection screen of multi-channel as shown below. Click the captured picture on the right of the live screen to see the snapshot detailed information, such as snapshot time, camera, event type and target type.



Click -**More** to bring up a dropdown list. You can export the captured pictures by clicking -**Export** or view the target ID by clicking -**Information**. Click -**Search** to go to smart human body/vehicle search screen. The system will automatically search captured people/vehicles. Click -**Playback** to go to the playback screen.

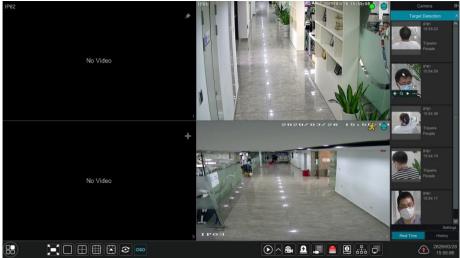
# Face Detection/Match View

Only the face recognition NVR supports the following functions. If your NVR doesn't support them, please skip the following instructions. The setting steps are as follow:

(1) Enable face detection function.

(2) Enable face recognition function and set the alarm linkage items.

③ Go to live view screen and click on a face detection channel. This will bring a toolbar under the channel. Then click 🖼 to go to the target detection screen of this channel. In this screen, you can switch the channel on the top right. You can also click 📑 on the top right corner of the live view screen and then choose the target detection tab to go to the target detection screen of multi-channel as shown below.

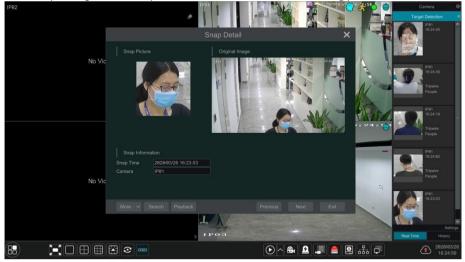


For unknown faces, you can select this face and click under the captured face to register this face (see the following picture); click to quickly go to the smart face search screen where you can search the matching face information; click to quickly go to the smart face playback screen; click to view snapshot details.

	Register		×
Snap Pictur	•		
Name Sex	Male ~		
Birthday	2020/03/26	0	
Native Place	2020/03/20		
ID Type	ID Card V		
ID Number	ib card		
Mobile			
No.			
Remark			
Group	1 ~		
ology			
			Cancel

Before registering target face pictures, please add groups for them in advance.

After the face pictures are registered, the system will compare them automatically once the corresponding faces are captured next time. Refer to the following picture.



Double click the face picture to see the snapshot details, such as snapshot picture, original image, snapshot time and camera. Click **-more** and then a dropdown list will display. Click **-Register** to register the current snapshot. Click **-Search** to go to face search screen. Click **-Playback** to go to the playback screen. Click **-Export** to export this snapshot details. Click **-Information** to view face ID.

In the face match screen, click -Settings to pop up the following window.

Settings	×
Target Detection Display     Target Detection Display     Face     Display Strategy     Comparison Priority     Vehicle	
Video Overlay Display     ✓ Target Box     Rule Line and Area	

**Target Detection Display**: Face, human body and vehicle can be enabled. If disabled, the captured target picture will not be displayed under the target detection tab in the live view screen.

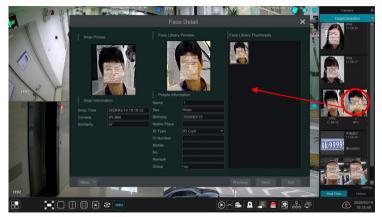
Display Strategy: Comparison priority and only comparison.

### Video Overlay Display:

If -Target box is clicked, you will see the target traced by a little red box.

If –**Rule Line and Area** is checked, you will see the rule line of tripwire detection and detection area of intrusion detection displayed on the screen. You can select the color of the rule lien and area as needed.

When the captured face pictures are successfully recognized, click the picture on the right to pop up a face detail window as shown below. In this window, you can see the captured face picture, the matched picture of face library and the relevant information. You also can view the original image, search image by snapshot, play back by snapshot and export the face details by clicking **-More** button.



Additionally, you can view the historical captured face pictures and face match information in the face match screen by clicking -**History** tab. Besides registering face pictures in the live view screen, you can also add target face pictures in the face database screen.

# License Plate Detection/Recognition View

Only when the ANPR camera is added and enabled, can license plates be captured and matched. The setting steps are as follows

(1) Enable the plate detection function.

Then you can see the captured plates displayed in the live views screen as shown below.



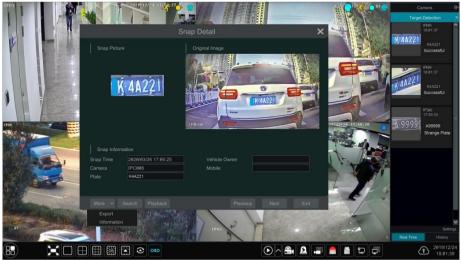
Put the cursor on the captured plate picture and then click **t** to register this plate as shown below.

	Add		×
Plate Vehicle Type Vehicle Owner Mobile Group Validity Period	K4A221	> > >	
		ОК	

Click to quickly enter the vehicle search screen. You can search the matched plate information in this screen. Click to go to the smart playback screen.

(2) Enable license plate recognition function and set the alarm linkage items.

③ Go to live view screen and click k I on the top right corner of the live view screen and then choose the target detection tab to go to the target detection screen of multi-channel as shown below. When the plate is captured, it will be displayed on the right panel. If this plate is successfully matched, it will show **successful** beside the plate picture. The strange plate will show —strange plate beside the plate picture.



Click the captured plate picture and then it will pop up the detailed information window. You can view the snapshot picture, original picture, snapshot time, camera, etc. Click -**More** to view the ID information of the target and export the captured picture. Click -**Search** to go to the vehicle search screen. Click -**Playback** to go to the playback screen.

# Smart Search

# Face Search

Only some models support this function. If your device doesn't support it, please skip the following instructions.

Face Search by Event

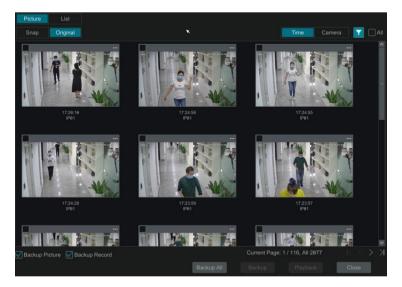
① Click Start> Intelligent Analytics> Search> Face to go to the following screen.

🛞 Inte	elligent Analytics							×
Face		Picture						
[A] Human Body	Day Week Customization Today 2828/83/26	Snap					Time	Camera T All
Vehicle								
				90		ARY	A Start	196
		17:26:18 IP81		17:24:58 IP81	17:24:55 JP81	17:24:29 IP81	17:23:59 IP81	17:23:57 IP81
	Q Search	KENIN	NWC	AREAT				
	Playback		M				Pa	
	- Naj Mauri	A CONTRACT	814	HERE			-901	
		A				APA		
				CA-	0			
	•						urrent Page: 1 / 116, All 2	
						Backup All		Close

- 2 Click T to choose face detection cameras.
- ③ Select all events, successful recognition or stranger.
- (4) Click -Search to search face pictures. You can view face pictures by time or by camera.

(5) Click the searched face picture to play in the small playback window; select a face picture and click -**Backup** to export it.

Click -Original to see the original image as shown below.



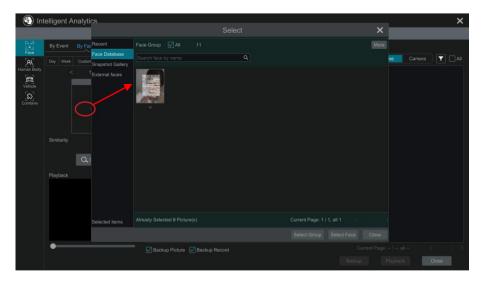
Click -List to view the snapshot information list. Click 🗎 to view the detail information; click

Picture	e image.				
				Time Camera	
No.					
1	2020/03/26 17:26:10		□ ≧		
2					
3	2020/03/26 17:24:55		□ ≥		
4			_ ≧		
5	2020/03/26 17:23:59				
6					
7	2020/03/26 17:23:56	B			
8	2020/03/26 17:23:54				
9	2020/03/26 17:23:29	È			
10	2020/03/26 17:23:29				
11	2020/03/26 17:21:20				
12	2020/03/26 17:21:17		■ ≥		
13	2020/03/26 17:21:17				
14	2020/03/26 17:21:14		□ ≧		
15	2020/03/26 17:21:12		□ ≧		
16	2020/03/26 17:20:57				
			»		

### Face Search by Face

In the face picture search screen, click –**By Face** to go to the following screen. ① Click III to add the target face which can be searched and added from recent, face

database, snapshot gallery and external faces. A single face picture or multiple face pictures can be added and searched. (Take a single face picture for example)



To add target face from recent Choose the face. Click -**Select Face**.

To add target face from face database: Click -**More** to choose groups. Select a target face and click -**Select Face**.

To add target face from snapshot gallery: Select time and click -**More** to choose cameras. Click -**Search**. Check a face and click -**Select Face**.

To add target face from external face:

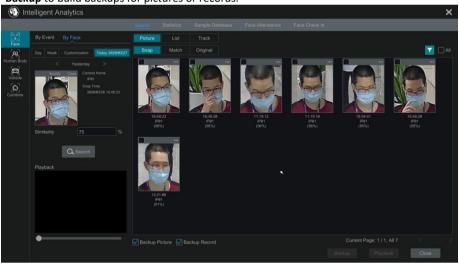
Save the target face to the mobile storage device and then insert this device into the USB screen of NVR.

Select -External Face to import the face in this screen.

2) Set similarity and then click -Search.

③ Click the searched image to play records in the small window.

(4) Select the searched image and click -Backup Picture or -Backup Record. Then click



-Backup to build backups for pictures or records.

# View Image by List

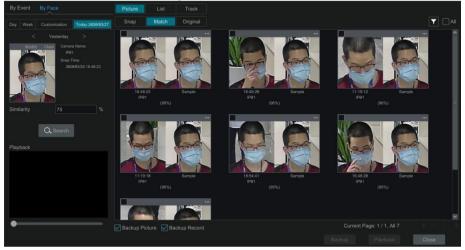
Click —List tab to view images by time as shown below.

By Event By Face	Picture	Track			
Day Week Customization Today 2020/03/27					IIA 🗌 🔽
< Yesterday >	2020/03/26				^
Modify Clean Carnets Name: IP91 Snip Time: 2929/05/26 16.48:23			IP01	□ ≥	
Similarity 75 %			IP01	4	ġ.
Q. Search			IP01	□ ≧	
Playback			IP01	□ ≧	
			IP01	□ ≱	
•	Backup Picture Bac				$K \leq > \lambda$
				Playback	Close

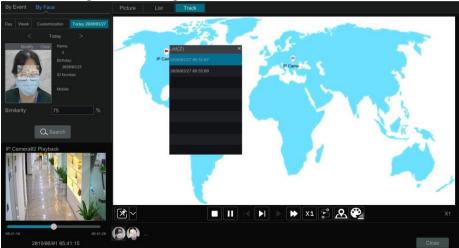
Click the searched image to play. Click the view the detail information of the compared target face.

### **View Match Images**

Click -Match tab to view match images as shown below.



# **Track Playback** Select —**Track** to go to the following screen.



**Note**: Only when two or more cameras detect this person, can his/her track can be viewed here. Descriptions of buttons on the track screen

×	Fixed Window		Frame
<b>.</b>	Followed Window	₩	Fast Forward (x2;x4)
	Exchange Window	X1	Normal Speed
	Stop	3	Start/Stop Track
	Play	<u>&amp;</u>	Edit Map
	Previous	e in the second	Edit Color
	Next		

Click on the camera name and then an event list appears. Click one item to play the record.

Click ■ button beside the fixed window icon to show –**Followed Window** and –**Exchange Window** icons. The small playback window will float on the map window by clicking –**Followed Window** as shown below.



Click to switch play speed. 1x and 2x can be switched. Click Eto view event list. Click one item to play this event.

Click -Exchange Window to switch the position of the map window and the playback window.

Click Button to go to the following screen.

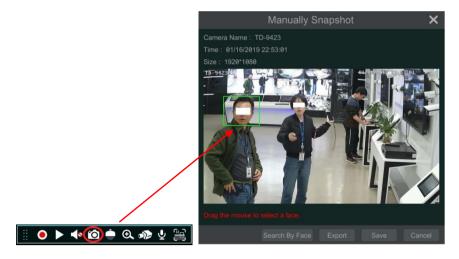


Click –Load Map to add a map. Then drag the camera names on the map to change their locations. Choose a color on the left color list to set your favorite color for camera names. Load Map: ① Save the map to the USB storage device and then insert the USB storage device into the NVR. ② Click –Load Map button to upload the map.

Click 🗳 button to modify the colors of camera name and track line and set the line width.

### Face Search by Snapshot

In the live or playback screen, click on a face detection camera and then select on the toolbar. This will bring the following window.

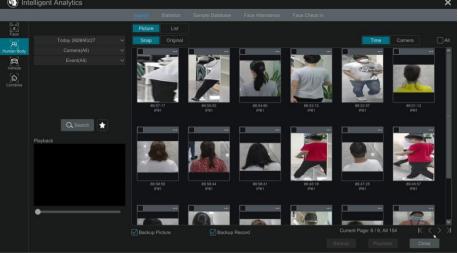


Drag the mouse to select a face and then click –**Search by Face** to go to the face search by face screen. You can see its snapshot pictures, match pictures, original pictures and so on by clicking the corresponding tab.

### **Human Body Search**

Click Start> Intelligent Analytics> Smart Search> Human Body to go to the human body search screen.

Select the search time, camera and event and then click -**Search** to view the searched pictures.



Click the searched picture to play the record in the small window. Select pictures and check **-Backup Picture** and/or **-Backup Record** and then click **-Backup** to back up the pictures and/or records. Click **-Original** to view the captured original pictures. Click **-List** to view the file list of the captured pictures.

Click and select -Add to favorite to add a favorite group and save the current searched

pictures to the favorite group. Then you can quickly view these figure pictures by clicking 📩 and choosing the group name.

			Add		×
Q Search		Name			
	Add to favorite			ОК	Cancel

# Vehicle Search

1 Click Start> Intelligent Analytics> Smart Search> Vehicle to go to the vehicle search screen.

(2) Select the time, camera, event and vehicle type. Then click -Search to search vehicles.

**Event**: Intrusion, Tripwire, Line Crossing Counting, Plate Detection, Plate Match-Successful Recognition and Plate Match-Strange Plate can be selected.

Attribution: Vehicle or non-vehicle can be selected. You can view face pictures by time or by camera.

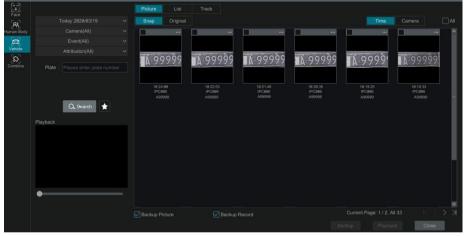
🛞 Int	elligent A	nalytics								×
			Search	Statistics	Sample Database	Face Attendance	Face Check In			
Face			Picture							
81			Snap	Original				Time		
[R] Human Body										^
Vehicle								and the second se		
Vehicle				ALC: N		11	1000	The state		
Combine				8:07	84:18:86 IPC	84-18-95 PC	04-18:85 IPC	64:18:05 IPC	84:18:84 IPC	
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			84:1	8.63	64:18:83	64:18:83	04:17:59	84:17:57 IPC	84:17:57	
	•				þ					×
									sk Close	

Click a searched vehicle picture to play it in the small window. Select vehicle pictures and check **-Backup Picture** and/or **-Backup Record** and then click **-Backup** to back up the pictures and/or records.

③ Click -Original to see the original pictures; click -List to view the snapshot information list.

Click Division to view the detail information; click to back up the image.

Select –**Plate Detection** or –**Plate Match** to view plate image. You can also enter the plate number to search the plate pictures. Then you can view the track of this vehicle.



Click -Track to view the track of the vehicle.

**Note:** Only one plate can be traced at a time and there must be two or more ANPR cameras that have detected this vehicle; thus, you can view the tracking of this vehicle.

The track setting steps are similar to the face track settings. Please refer to face track settings for details.

Click to add a favorite group and save the current searched pictures to the favorite group.

Then you can quickly view these vehicle pictures by clicking and choosing the group name.

# **Combination Search**

If you want to view the human body, vehicle or face pictures simultaneously, you can choose combination search.

① Click -**Combine**.

② Select the search time, camera, event and vehicle as needed.

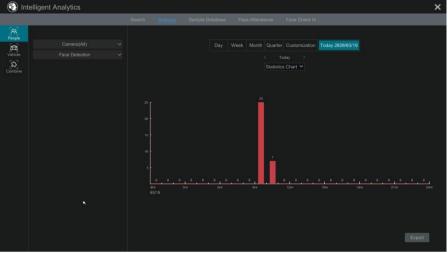
Click a searched picture to play it in the small window. Select pictures and check –**Backup** Picture and/or –**Backup Record** and then click –**Backup** to back up the pictures and /or records.

Click for add a favorite group and save the current searched pictures to it.

Then you can quickly view these pictures by clicking 📩 and choosing the group name.

# **View Statistical Information**

Click Start> Intelligent Analytics> Statistics to go to the following screen. In this screen, you can view the people and vehicle statistical information or you can customize the statistical information.



### View People Information:

Note: The person information includes both face and body information.

- 1 Select the time.
- 2 Select cameras.

③ Select events as needed, such as face detection, face recognition, intrusion, tripwire, etc. Note: Face recognition events (successful recognition & stranger) are available for some models. If Face Recognition-Successful Recognition event is selected, you can choose -**Detail Chart** to view.

### View Vehicle Information:

Click -**Vehicle** Select the time and cameras. Select events as needed. Select the vehicle attribution.

#### To customize statistical information:

Click -Combine and then select events, people and vehicle as needed.

15 4 11			
IP Address Settings			
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Subnet Mask		Mask Length	
Gateway		Gateway	
МТО	1500		
Primary Card	Ethernet Port 1		
Ethernet Port 1 ( Onlin	e )	Ethernet Port 2 ( Offlin	ie)
MAC Address		MAC Address	
Votain DNS autom	atically		
Preferred DNS			
Alternate DNS			
			Apply

If there any aspects of this manual that you would like to discuss or would like to us to expand on please call our technical department.