



# QUICK START GUIDE

TiOC Solution







TiOC



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## 1. What's required?

Equipment	Specification Type	Appearance	Remarks
<b>Cameras</b>	IPC-HFW3249T1-AS-PV IPC-HFW3549T1-AS-PV IPC-HFW3849T1-AS-PV		System Version: V2.800.00AD00.0.R Build Date: 29/07/2020
	IPC-HDW3249T1-AS-PV IPC-HDW3549T1-AS-PV IPC-HDW3849T1-AS-PV		
<b>Recorders</b>	NVR5000-I Series		System Version: V4.000.10BE002.4 Build Date: 10/09/2020
<b>Monitor</b>	DHL22-F600-S		

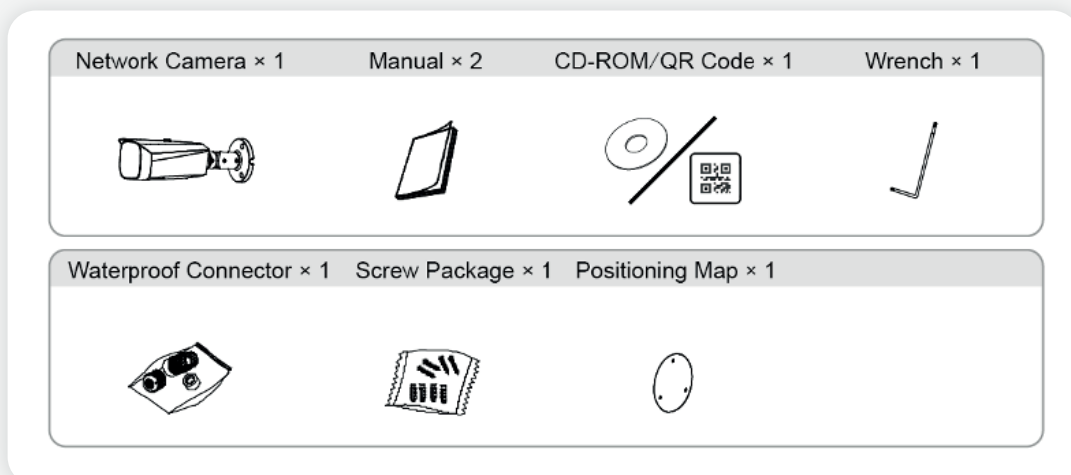
The firmware version is based on the latest version when this document was created and may slightly differ from future versions, however this will not affect any of the functions.

## 2. Installation guide



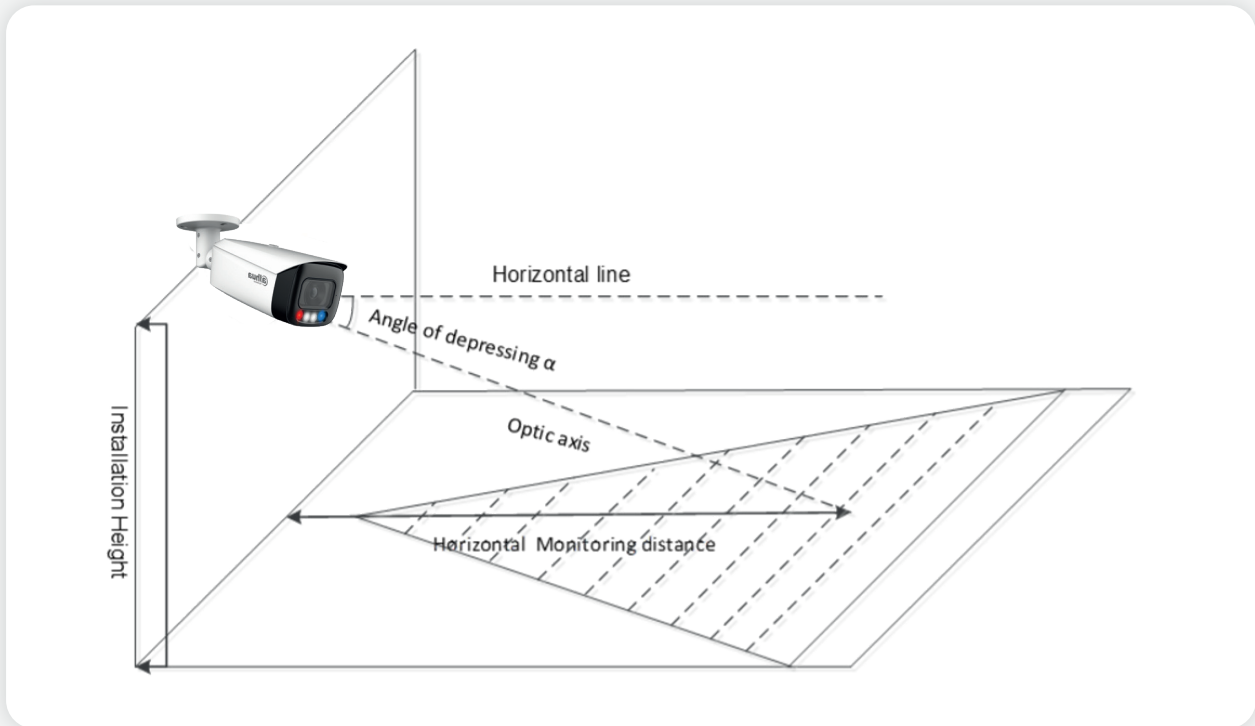
### 2.1 Installing the camera

#### 2.1.1 What's in the box?

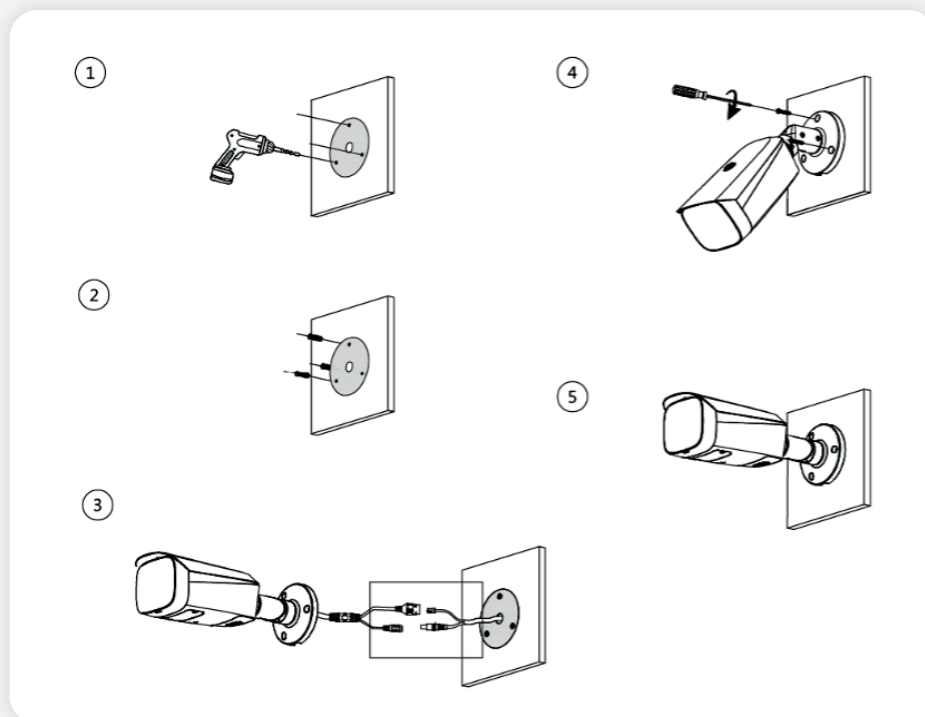


### 2.1.2 Installation requirements

We recommend an installation height and distance from the camera of approx. 3 meters, with the depression angle between 20° and 40°.



### 2.1.3 How to install the camera



## 2.2 Installation of the recorder

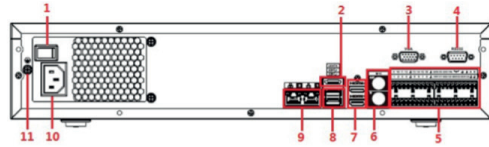
### 2.2.1 Ports on the recorder

#### Front Panel



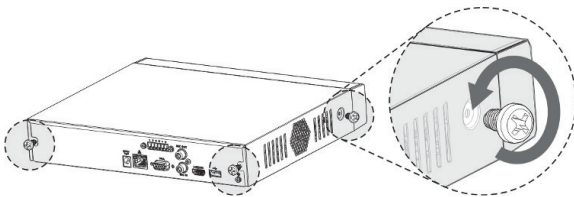
No.	Port Name
1	USB Ports
2	IR Indicator

#### Rear Panel

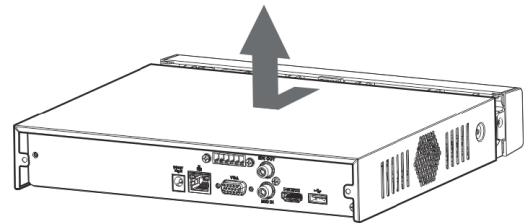


No.	Port Name	No.	Port Name
1	Power Button	6	MIC IN
2	eSATA Port	6	MIC OUT
3	VGA Port	7	HDMI Port
4	RS232 Port	8	USB Port
5	Alarm Input Port (1-16)	9	Network Port
	Alarm Output Port (NO1-NO5, C1-C5, NC5)	10	Power Input Port
	RS485 Port (A, B)	11	
	CTRL		

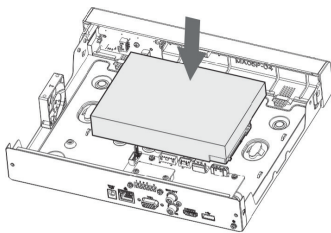
### 2.2.2 How to install the recorder



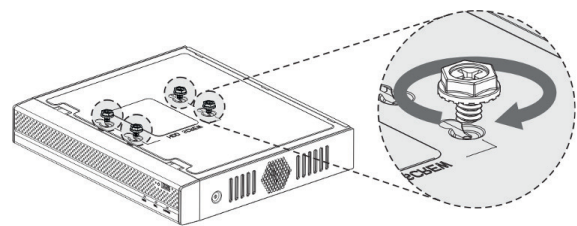
**Step 1:** Remove the fixing screws on the case cover (including the two screws on the rear panel and the two screws on the left and right panels).



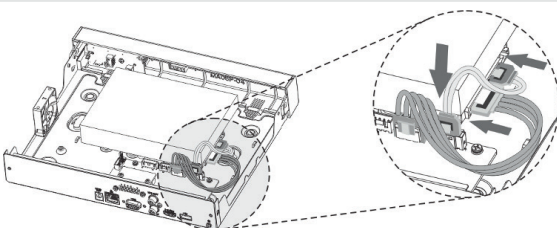
**Step 2:** Remove the case cover in the direction shown by the arrow above.



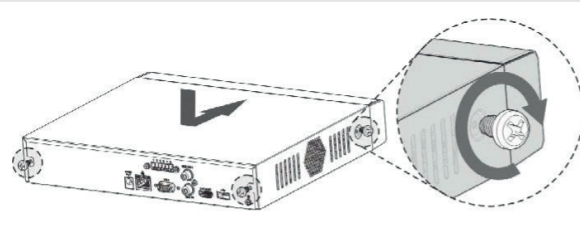
**Step 3:** Match the four holes on the baseboard to position the HDD.



**Step 4:** Turn the device upside down, match the screws with the holes on the HDD and then fasten them. The HDD is fixed to the baseboard.



**Step 5:** Connect the HDD data and power cable to the device.



**Step 6:** Place the cover back and fasten the screws on the rear panel and side panels to complete the installation.

### 3. Connection and Initialisation

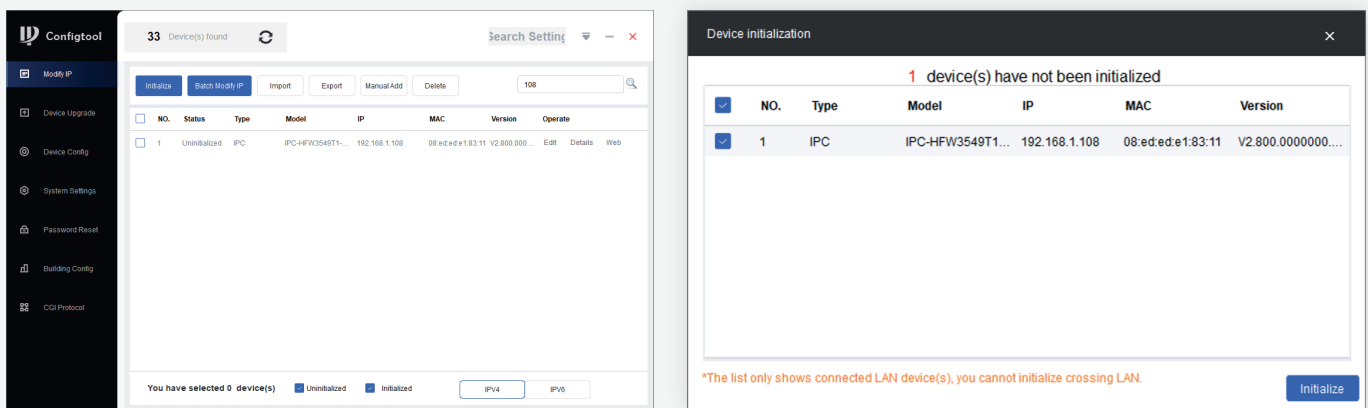
The next steps depend on what system is being installed; camera-only system or the NVR system.

#### 3.1 Deployment of camera-only system

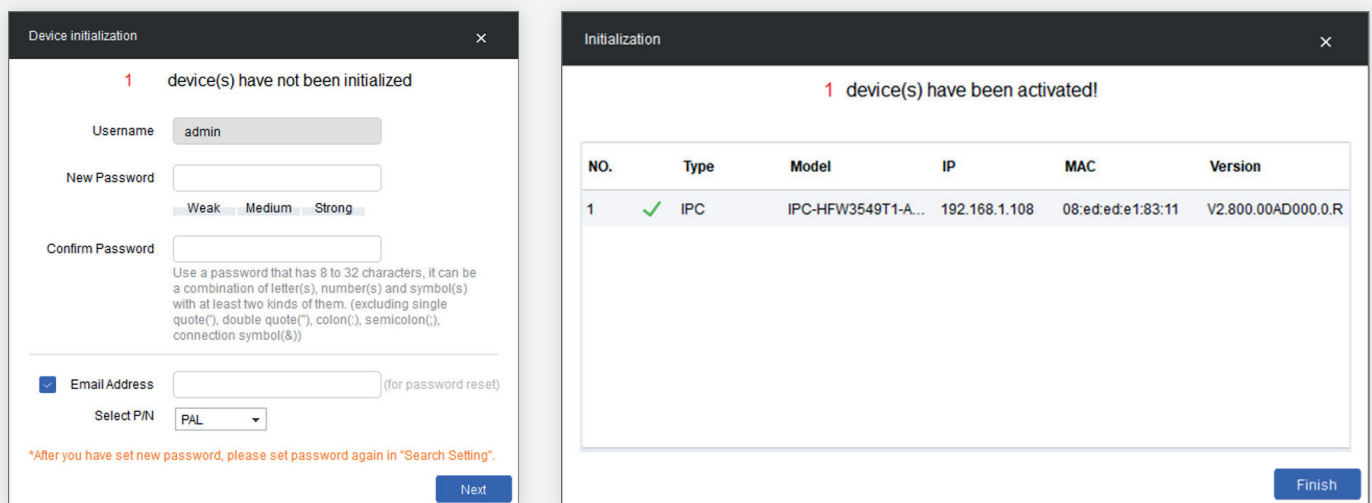
If the camera has already been connected to the power and LAN it can be searched using the Config tool as per the picture shown below (Config tool can be downloaded from the toolbox):

<https://www.dahuasecurity.com/support/downloadCenter/tools/maintenanceTools?path=window>

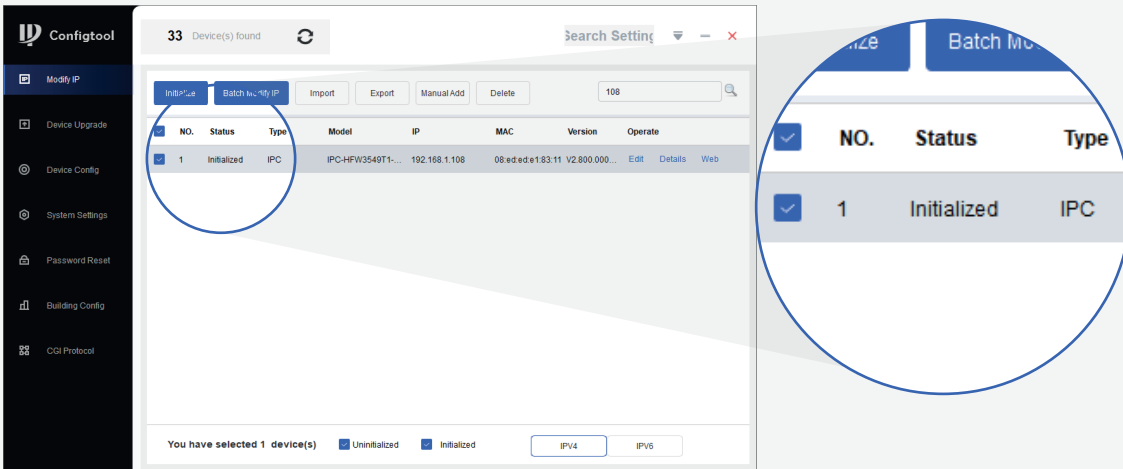
**Step 1:** Select one or several devices in uninitialised status and then click **Initialise**.



**Step 2:** Set the new password.



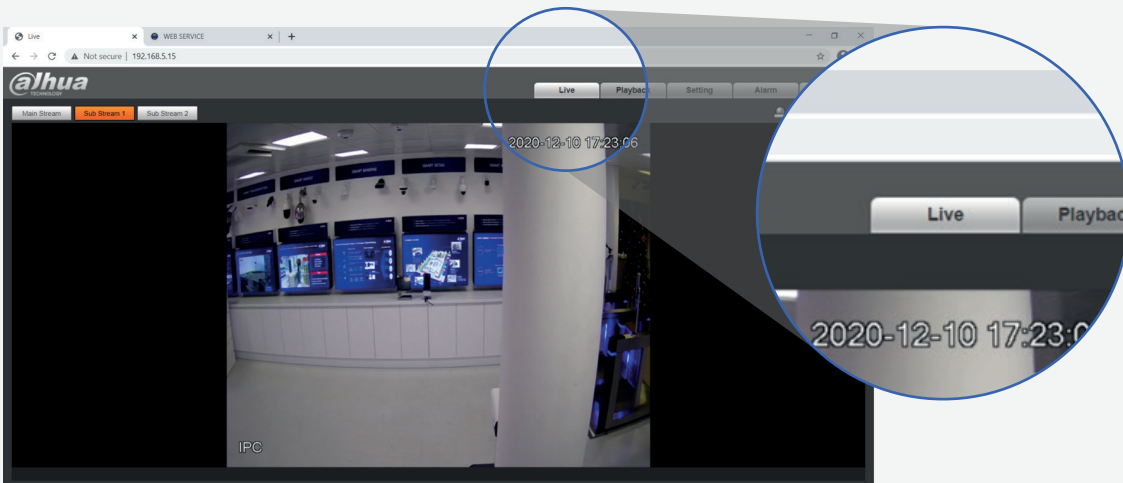
After a while the status will change to initialised and then it is possible to get the IP address.



**Step 3:** Login to the camera using a web browser by entering the IP address.



**Step 4:** Click **Live** in the top right corner and view live camera image.

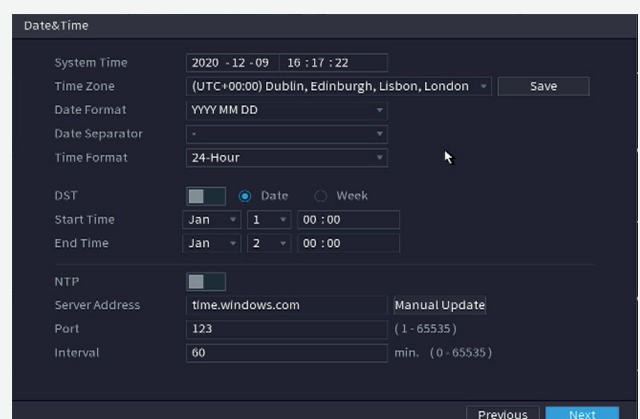
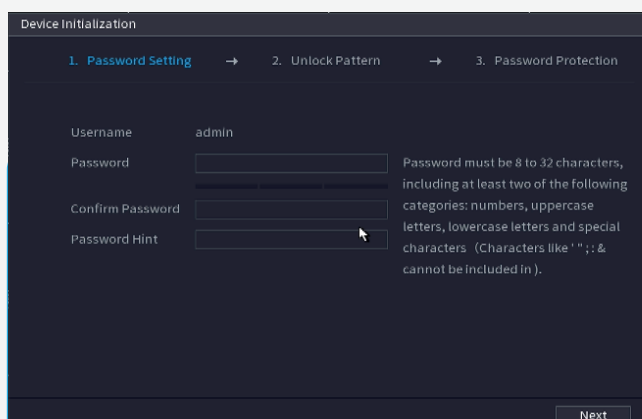
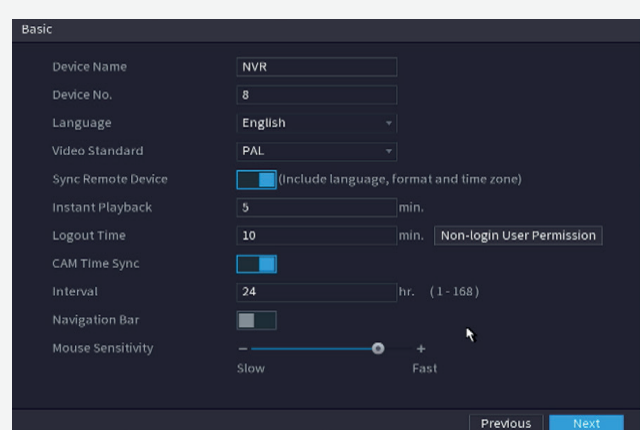
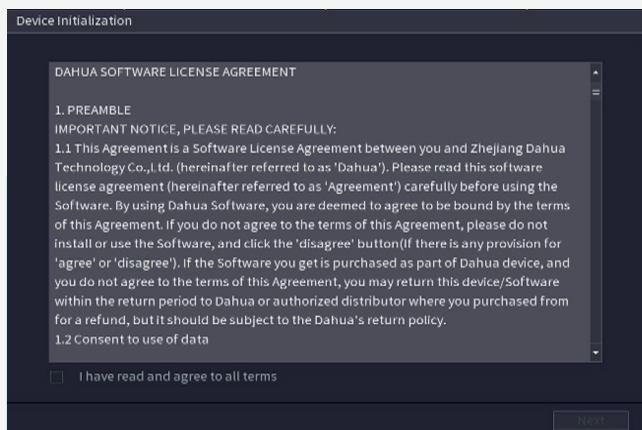
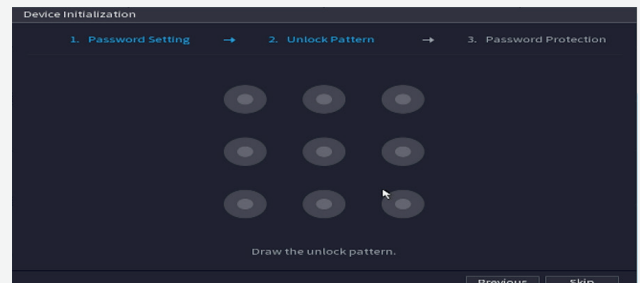
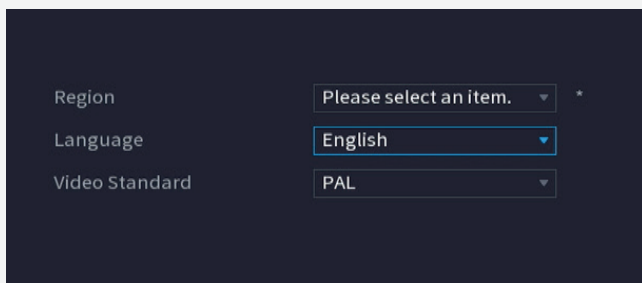


### 3.2 Deployment using NVR-system

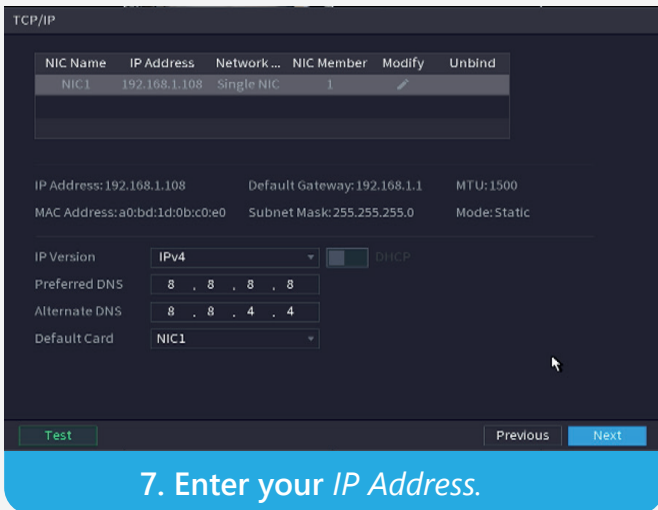
If you are using an NVR-system, the following instruction will show how to initialise it. Once you have entered all of the basic information, there are several ways of initialising cameras.

**Step 1:** Make sure the NVR is connected to the same Internet network as the camera.

**Step 2:** Launch the NVR whilst it is initialising and enter the basic set up information, including country, terms, time, password, unlock pattern and IP address.

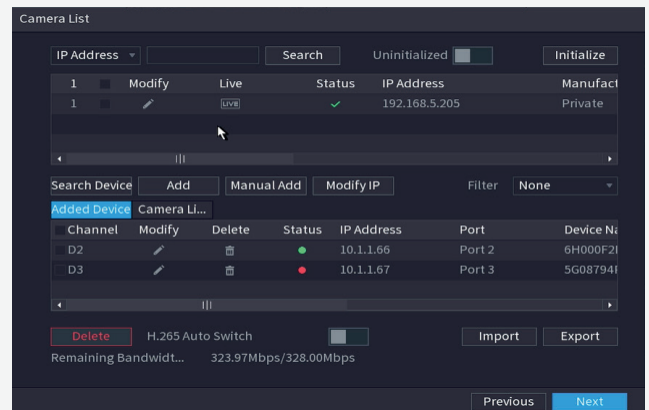




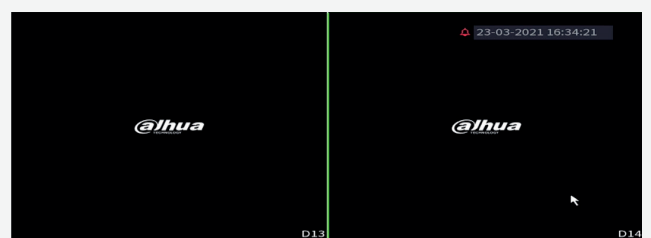


**Step 3:** Add the camera during the initialisation stage.

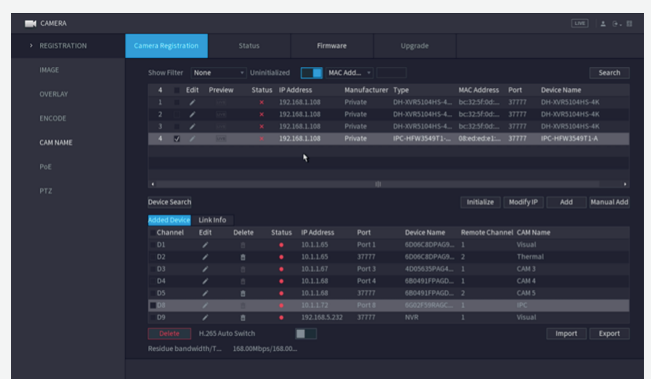
Click **Search Device** and click **Add** after you select the camera you want to add to the device. Cameras can be added at this stage or later. Please make sure the IP address of the camera is within the same range of the NVR's IP address. Click **Modify** to change the IP address of the camera.



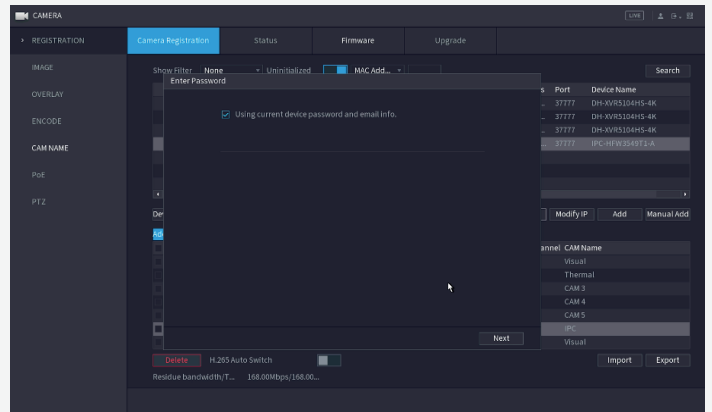
After this initialisation has been completed the NVR will show live monitoring.



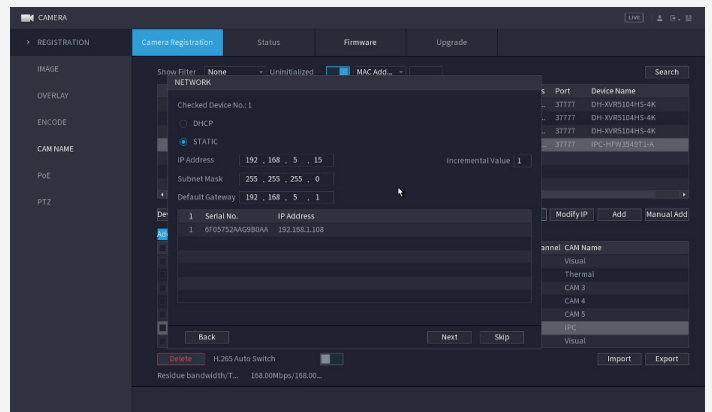
**Step 4:** You can also initialise the camera using the NVR.



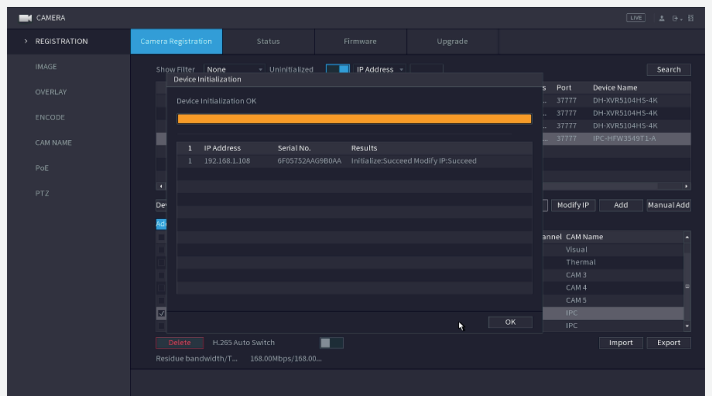
Click **Initialise** and use the original information of the NVR for the new camera.



You can change the new camera's IP address on this screen. Please make sure the IP of camera is within the same range of the NVR's IP address.

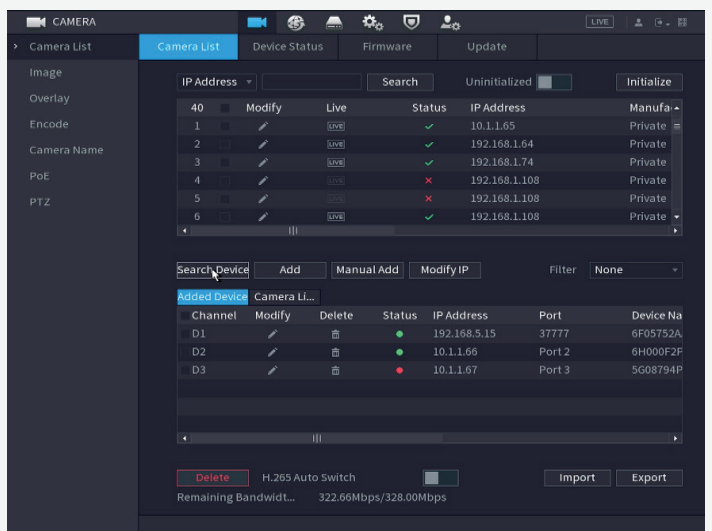


Wait for the initialisation process to complete.



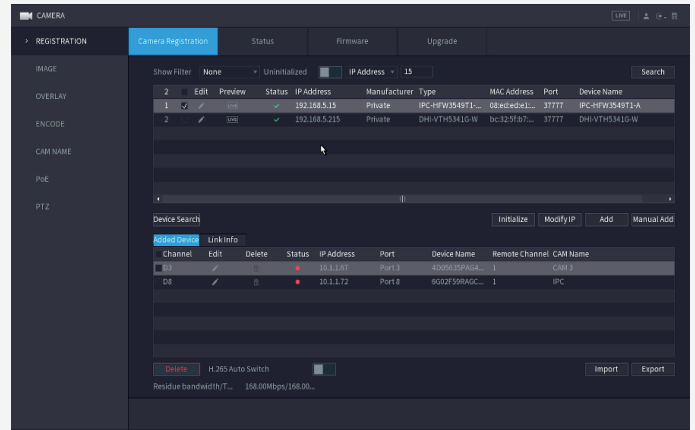
**Step 5:** Adding a camera after initialisation.

Click **Camera** > **Search Device**, and click **Add** to add the device.



You can also manually add the camera by typing the target IP address, user name and password.

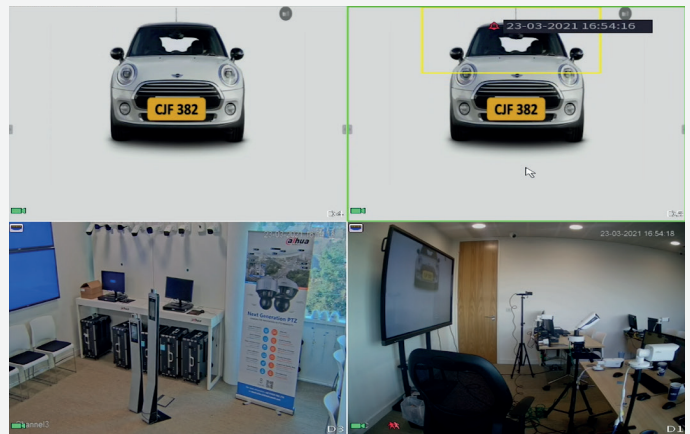
If the camera has been added successfully the new camera will be shown as the last of the added devices.



Channel	Modify	Delete	Status	IP Address	Port	Device Name
D1			●	192.168.5.15	37777	6F05752A



Right *click* back to the screen and the camera images will be displayed.

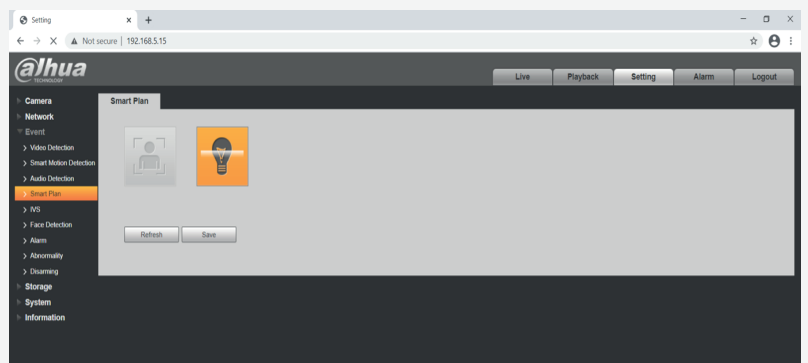


## 4. Key function configuration

### 4.1 For the camera-only system

#### 4.1.1 IVS

**Step 1:** Login to the camera, go to **Setting** > **Event** > **Smart Plan**, click **IVS** to activate the function and click **Save**.

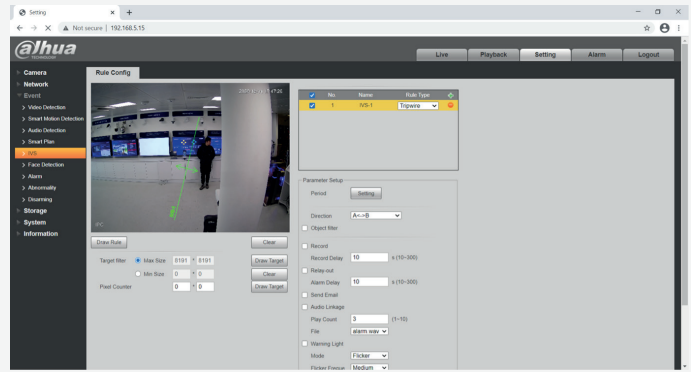


**Step 2:** Go to **Setting** > **Event** > **IVS**, click the green + **Rule Type** + **Tripwire** on the top right hand corner to add new rules.

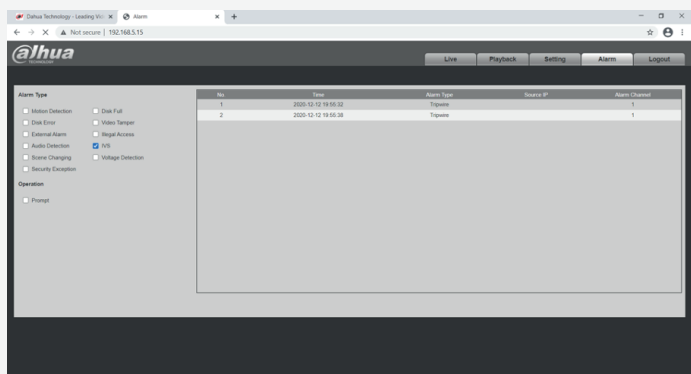
Click **Draw Rule** on the left hand side and use the mouse to draw a line for the target on the scene and set the parameter.

Click **Save** in the bottom right hand corner to complete.

From this moment onwards an alarm will be activated if the line is crossed.

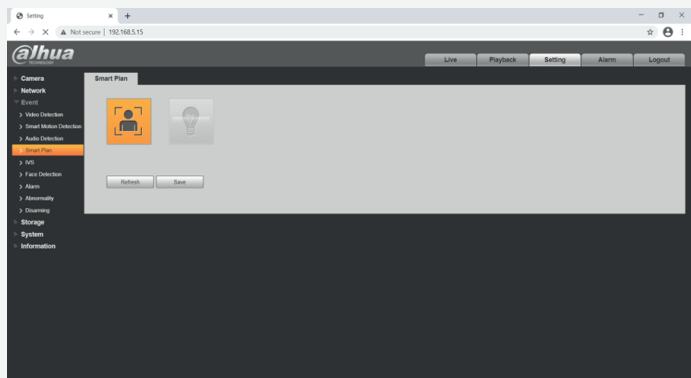


**Step 3:** Click **Alarm** on the top right hand corner if you want to review the type and details of any recorded alarms.



### 4.1.2 Face Mask Detection

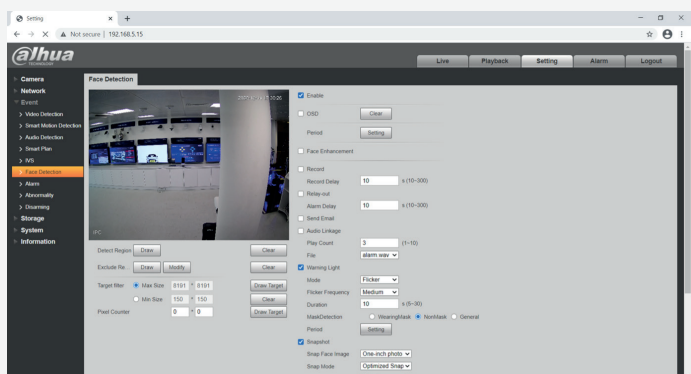
**Step 1:** Login to the camera, go to **Setting** > **Event** > **Smart Plan**, click **Face Detection** to activate the function and click **Save**.



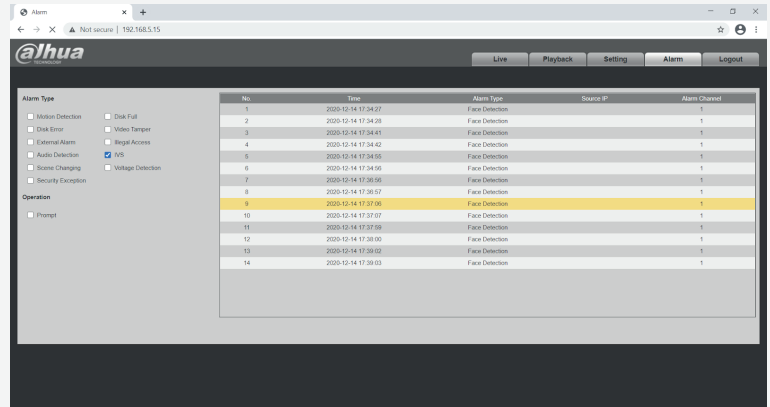
**Step 2:** Go to **Setting** > **Event** > **Face Detection**, click the green **Enable** on the top right hand corner to enable the function.

Click **Draw** on the left hand side to draw the region for face detection by using the mouse to draw a shape for the target on the scene and set the parameter.

Click **Save** at the bottom right hand corner to complete.



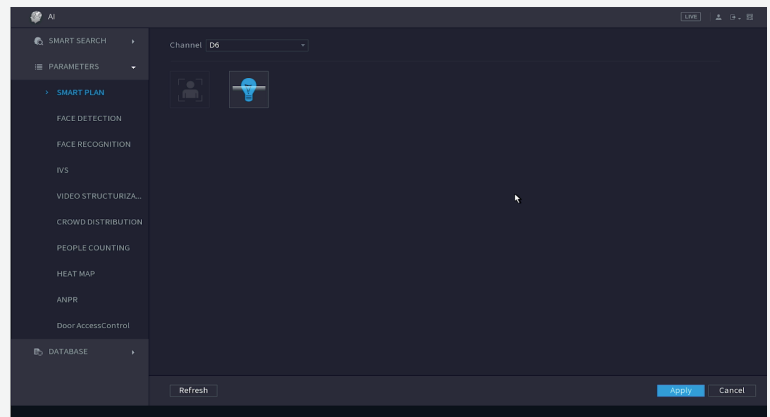
**Step 3:** To check the face detection alarm record details *click* **Alarm** on the top right hand corner and *tick*  **IVS** under the **Alarm Type**.



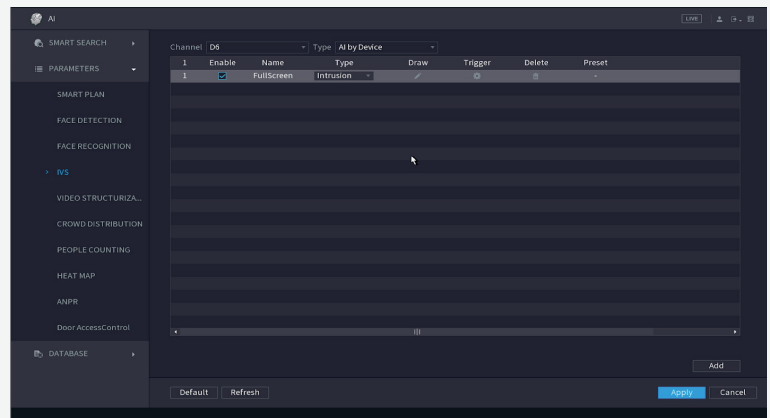
## 4.2 For the system using an NVR

### 4.2.1 IVS

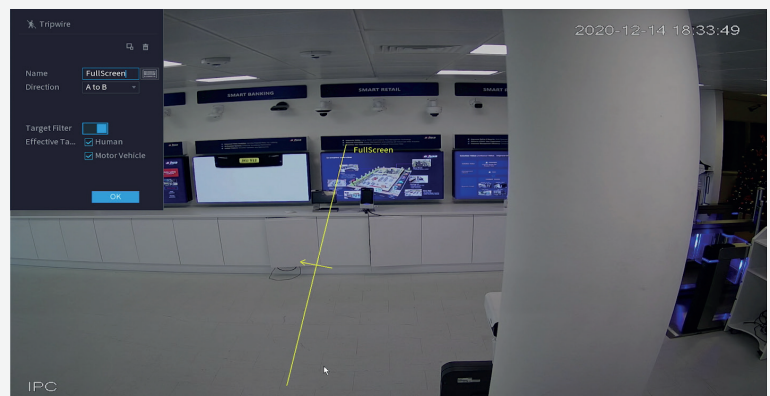
**Step 1:** When using an NVR, go to **AI** > **Parameters** > **Smart Plan**, *click* **IVS** to activate the function and *click* **Save**.



**Step 2:** When using an NVR, go to **AI** > **Parameters** > **IVS**, *click* **Add** on the bottom right corner to add a new rule for IVS function.

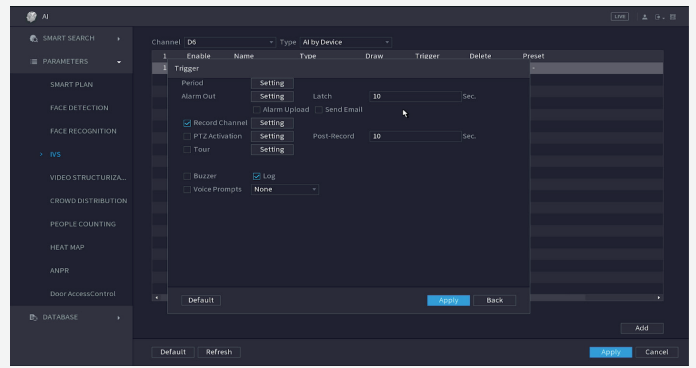


**Step 3:** *Click* **Draw** icon to draw the target line or area for detection and *click* **OK** to confirm the IVS setting.



**Step 4:** Click **Trigger** to decide the detailed settings for the rule.

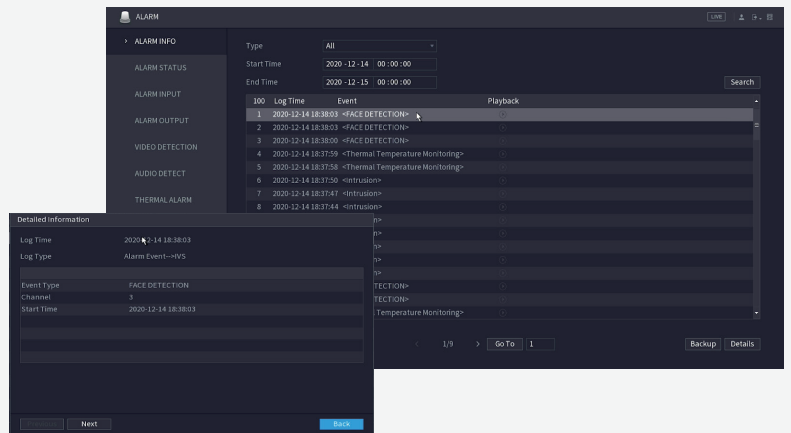
Click **Apply** in the bottom right hand corner to save settings.



**Step 5:** Check the alarm.

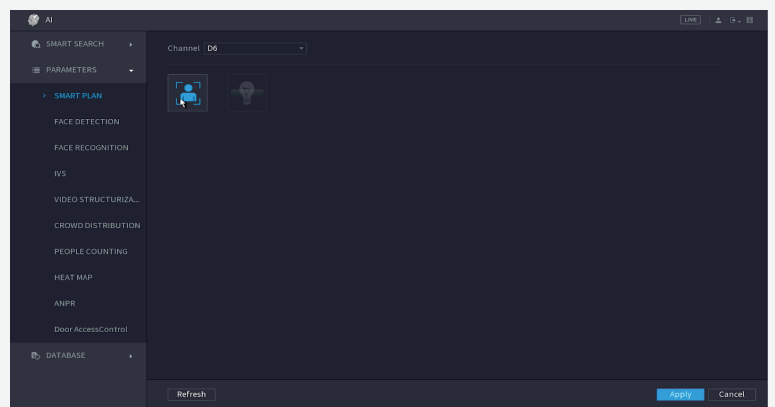
After rules have been set up, the system will record automatically. You can click **Alarm** on the top right hand corner of the main page, click **Alarm Info** and you can see it has recordings for **Face Detection**.

Click each record to see more details.

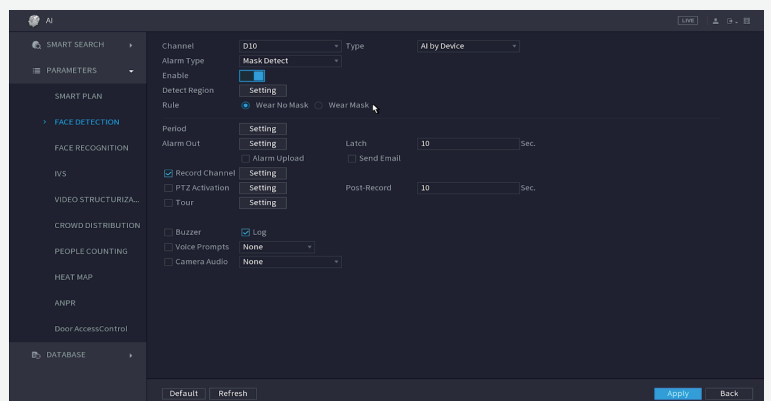


### 4.2.2 Face Mask Detection

**Step 1:** When using an NVR, go to **AI** > **Parameters** > **Smart Plan**, click **Face Detection** to activate the function and click **Save**.



**Step 2:** Go to **AI** > **Parameters** > **Face Detection** and then choose type as **AI by Device**, alarm type as **Mask Detect**, enable the function and then click **Apply** in the bottom right hand corner.

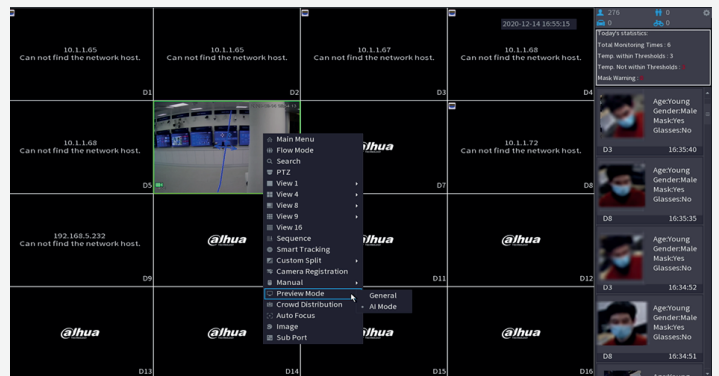


**Step 3:** Click **Detect Region** and choose the region in which you would like to detect masks.

Click **OK** to confirm the face detection settings.

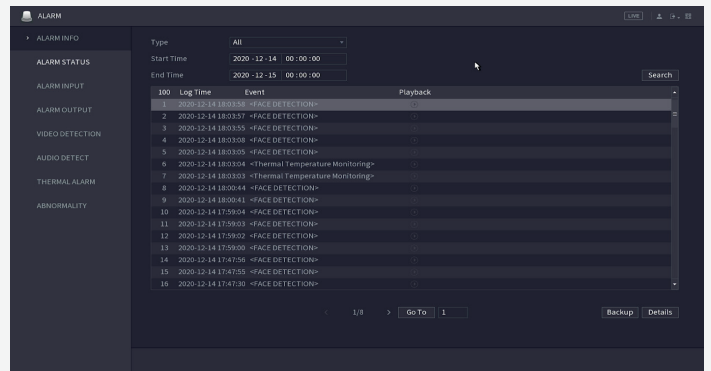


**Step 4:** Right click to go back to the monitoring interface, right click and change **Preview Mode** to **AI Mode** and then you can see the details of the mask detection on the right hand side.



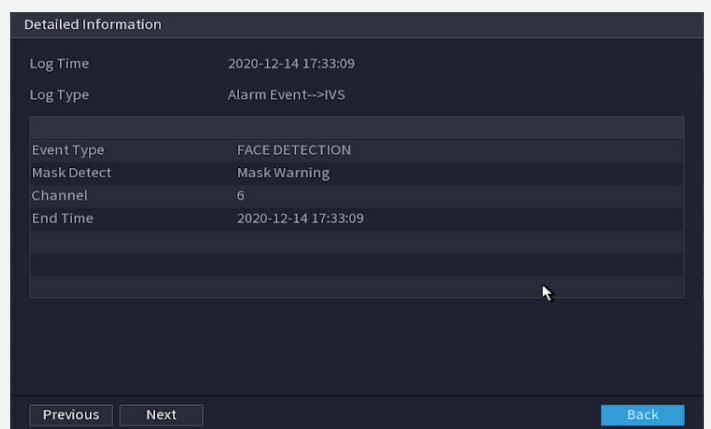
**Step 5:** Check the alarm.

Click **Alarm** on the top right corner of the main page, if you want to check the details of recorded alarms with different types, click **Alarm Info**, and you can see it has records for **Face Detection**.



Click each record to see more details. For example, the following record is about mask warning.

If you want to know more information about how this system works using the DSS application, or need help setting up any of Dahua's products, please call **+44 (0)1628 613 500** or email **support.UK@dahuatech.com**



\* Design and specifications are subject to change without notice.

