

LILIN NVR with LILIN AI Camera Intrusion Detection Guide

Human Detection in an Intrusion Zone

To add your AI camera to your LILIN NVR to detect and log AI events in Intrusion Zones, follow the steps below.

AI Camera

Log in to your AI camera and select the AI module icon. This will ask you to login to the camera's AI module. Enter the camera's administrator username and password.

Select 'Alarm' from the top bar.

This screen is where you will configure the desired AI behaviour and AI classifications that will trigger an event to an NVR.

In the example below the camera is set to trigger when a person enters the designated zone.

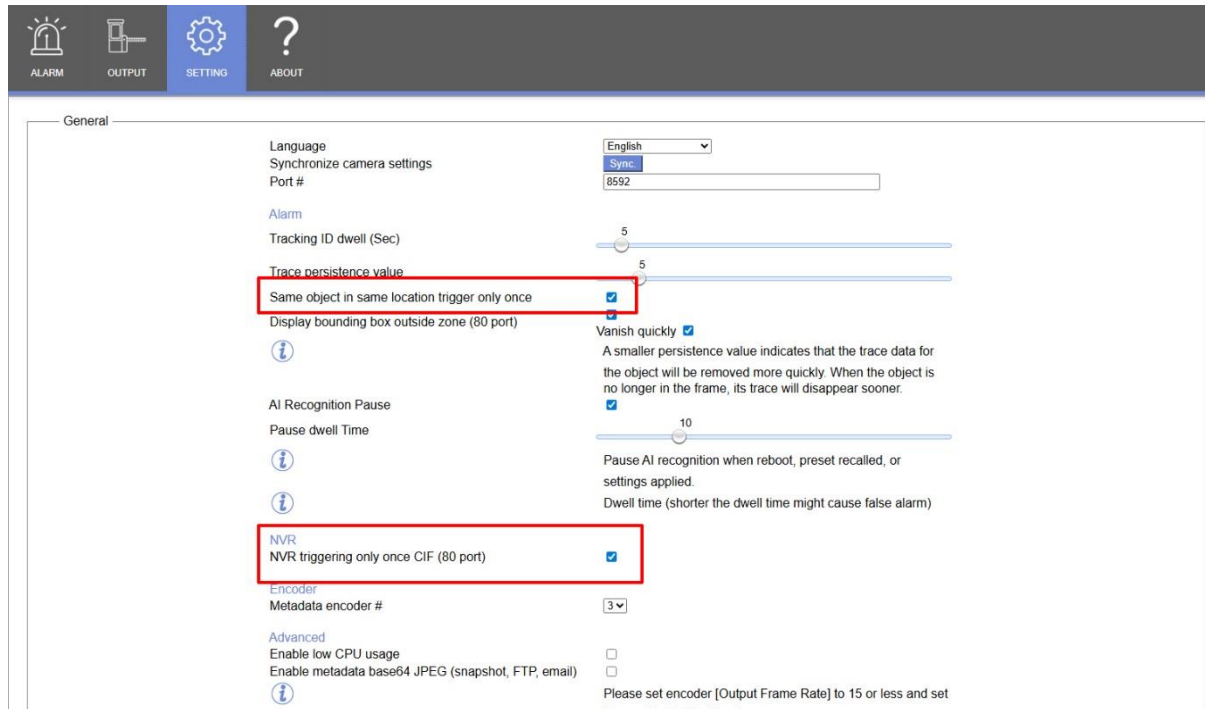
Selected classifications (such as person) will appear green when the AI detects them, they will turn red once the behaviour has been activated (such as entering the intrusion zone), this is when the alarm trigger will happen

You can set up to 4 different AI zones with different behaviours and classifications.

Next select 'Settings' from the top menu bar.

Within this menu, you have the option of:

Same ID Object in same location trigger only once



Same ID Object in same location trigger only once ON:

If this option is ticked the AI engine will trigger the first time a classification enters an area of your behaviour detection zone. If the same classification re-enters the scene in the same location the AI engine will ignore and not trigger alarm. This is for 400 seconds. If the classification enters before the 400 seconds is finished the clock resets to zero (so another 400 seconds) without an alarm trigger

Note: If the camera is a V1W warm light series, the Warm light LED will activate at the start of the classification entering the detection zone, it will only stay on for time that has been set in the camera menu. It will not reactivate until the AI engine send another alarm trigger (400 seconds).

Same ID Object in same location trigger only once OFF:

If this option is off, the alarm will continue to trigger whilst the classification is moving within the detection zone. The NVR will usually log this as one event whilst the target classification is moving. If the classification is still, then resumes moving this will trigger another event.

Note: If the camera is a V1W warm light series, the Warm light LED will activate at the start of the classification entering the detection zone, it will stay on for the time set in the camera menu once the target classification stops moving.

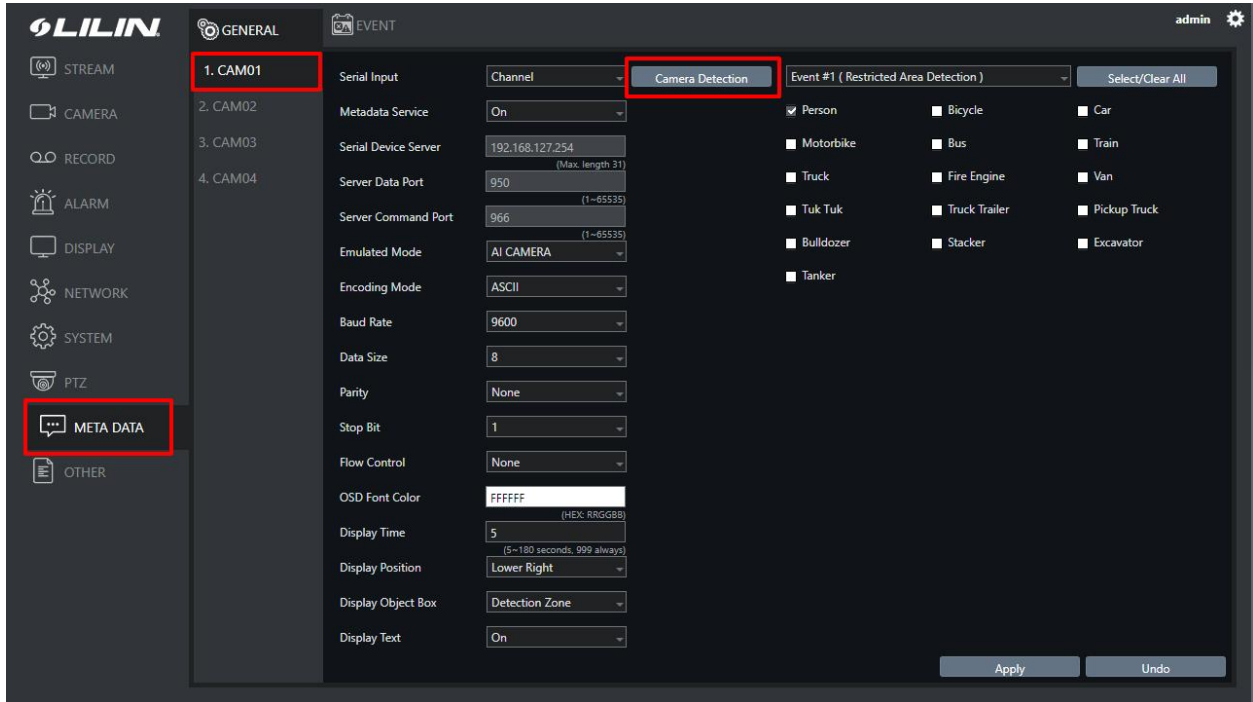
For a basic configuration, these should be the only options to change on this menu.

NVR

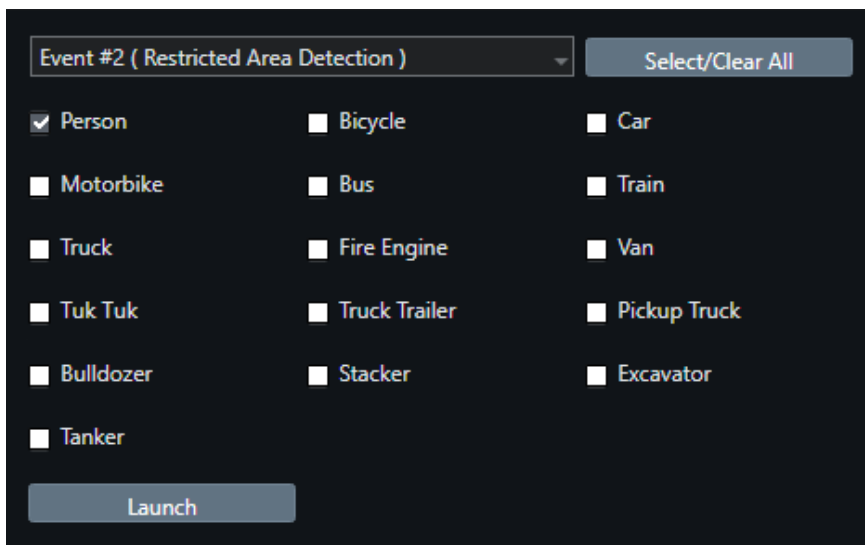
Next log in to the NVR (this guide assumes the camera has already been added to the NVR).

Once logged in to the NVR, select 'Meta Data' and select the channel your AI camera has been added to.

Once selected click the 'Camera Detection' button. This will talk to the camera and automatically match the AI engine licence to what has been enabled on the camera.



Next select the classifications/objects that you have enabled on the camera.

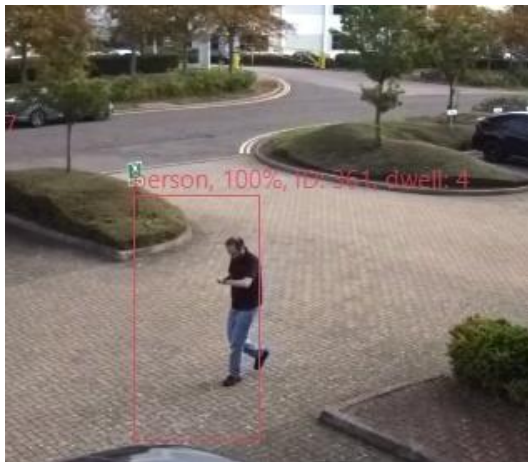


There are some options at the bottom of the page that will change how AI objects are displayed on the NVR.

You have the option Display Object Box:

- Object Box
- Detection Zone
- Object Box / Detection Zone
- Off

Enabling object box means that an object box (coloured square) is displayed around the classified object once they enter the detection zone.



Enabling Detection Zone means the camera will display the detection zone set from within the camera over the video displayed on the NVR. (None of these options are shown when a video backup is taken.)



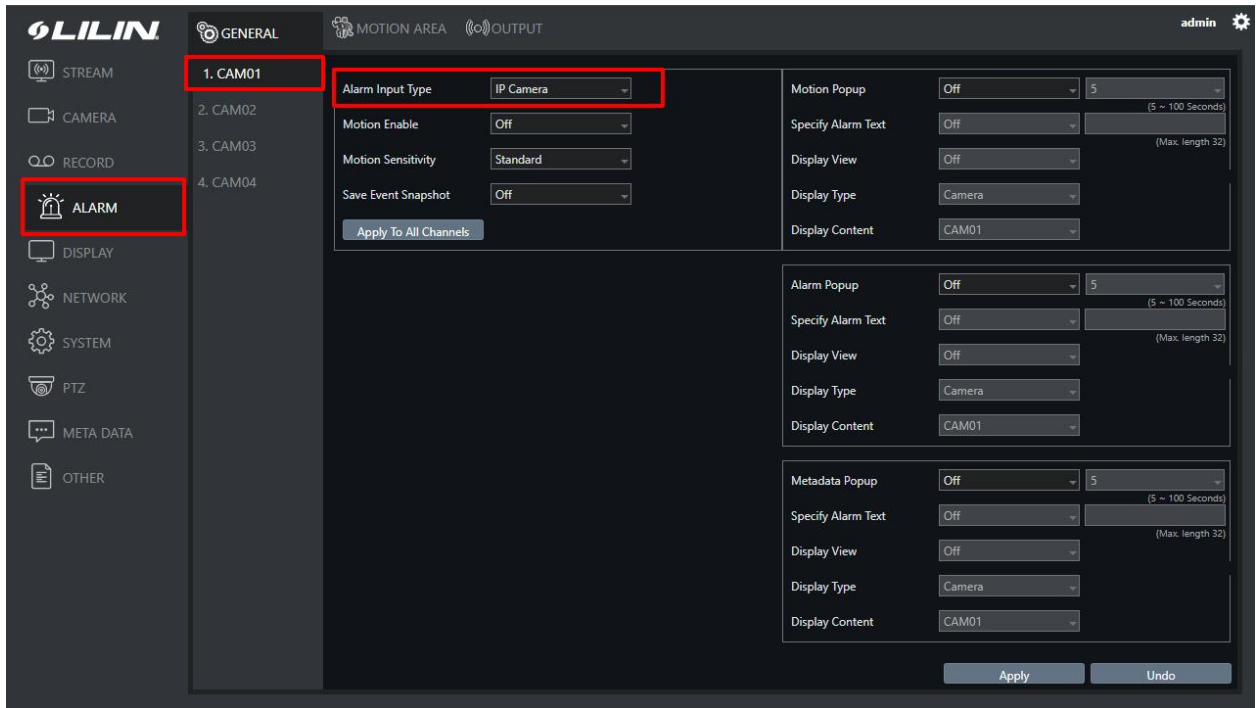
Enabling Object Box / Detection Zone simply means both are enabled and visible.

Click Apply.

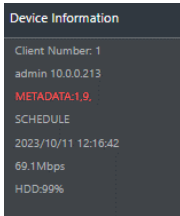
Please note that enabling Object Box or Detection Zone will cause the NVR to use more resources and may impact performance. The object box and detection zone are not visible on backups.

Next, select the 'Alarm' menu and select the channel your AI camera has been added to.

Next turn 'Alarm Input Type' to 'IP Camera' and click Apply.

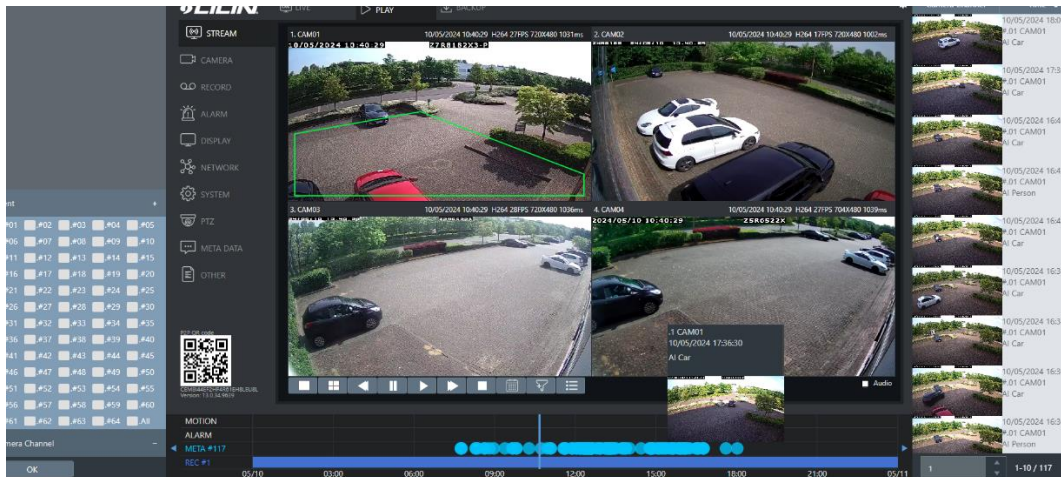


Your camera is now logging AI events to the NVR.



When watching the NVR via browser red meta data text will appear every time an AI alarm/trigger is activated

The NVR has many ways to search and filter AI alarm events. Below is just one example.



Alarm Outputs

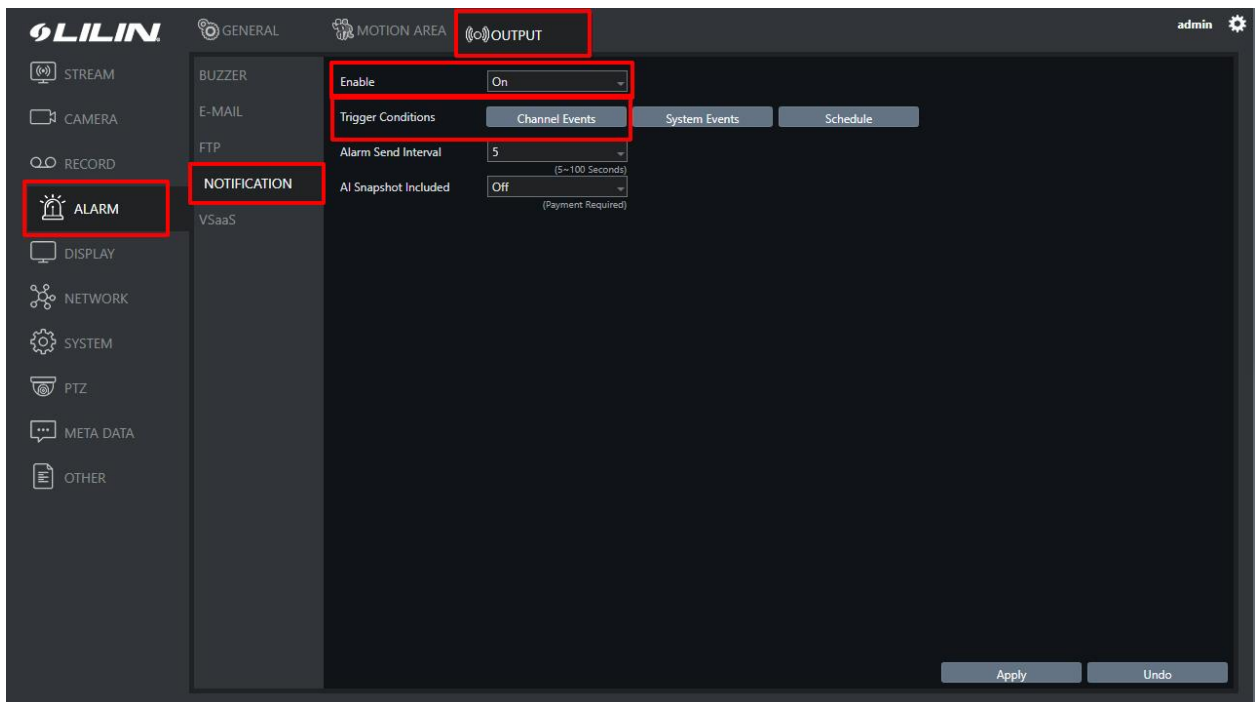
Some of the outputs include Email, Buzzer and Push Notifications alerts
(In this guide we will cover push notification configurations)

To enable push notifications for detected AI events, select 'Alarm' from the NVR menu.

Select the 'Output' tab from the top menu bar.

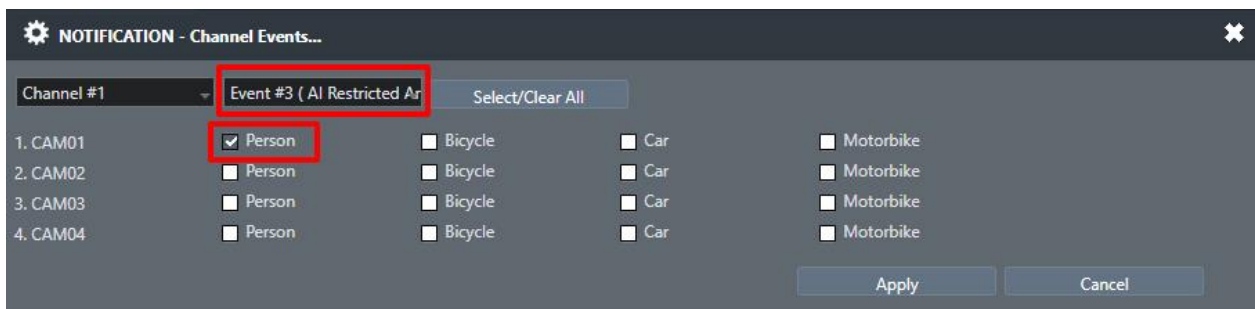
Next select 'Notification' from the sub menu bar.

Turn 'Enable' to On and click the 'Channel Events' button.



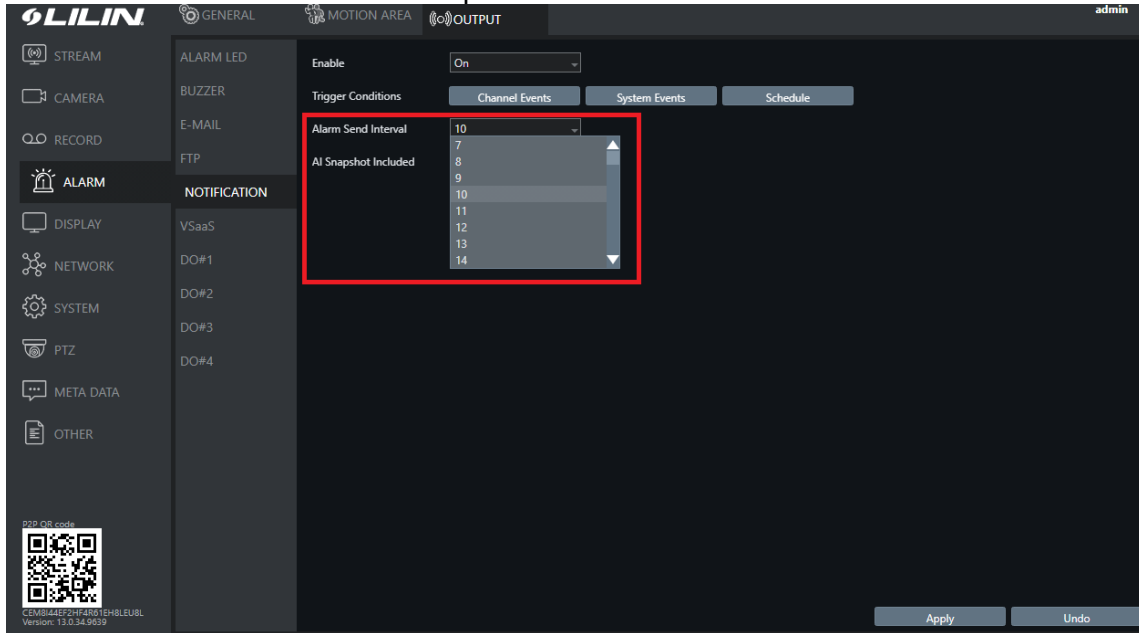
From the Events dropdown select '(AI Restricted Area) and tick 'Person' (we select person because this is the classification set on the AI camera module). You may see multiple Restricted Area options within the dropdown, but only one will have person and car.

Then click Apply.



Push Notifications can also be added to a schedule (so you can specify time of the day they would be active)

Alarm Send Interval can be set between 5 to 100 seconds and means even if another alarm on the same camera is triggered and logged by the NVR it won't send another push notification until the set time has expired.



If a mobile app already has the NVR configured within it and the app is set to receive 'Alarm Events' you will start to receive push notifications when an AI event is triggered.

Enabling push notifications will also enable the 'Events' option on the LILINPro app. This is a list of historical alarm events on the NVR.

