



## Motion Triggered Recording

One method to extend recording time is to use motion triggered recording. For most users using a mix of motion recording and continuous recording is ideal. The NVR can be setup to continuously record at lower settings and when motion is triggered recording would switch to a maximum resolution and highest interval of pictures per second. Making the following settings changes can result in a significant increase in the number of available days in playback.

Keep in mind that after making any changes to the recording settings, the newly recorded video should be reviewed to ensure that the NVR is recording as desired.

**NOTE - A MONITOR AND MOUSE WILL BE NECESSARY TO SETUP THE NVR**

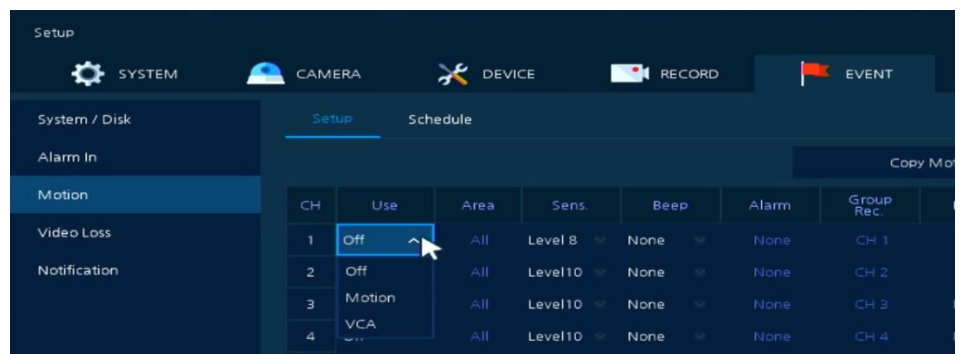
### Motion Setup

In the menu go to the Event tab and click on Motion on the left.

To enable motion select Motion from the dropdown in the Use column for the desired camera.

Select VCA if Video Analytics is used (discussed later).

Next select the Area field for the camera.

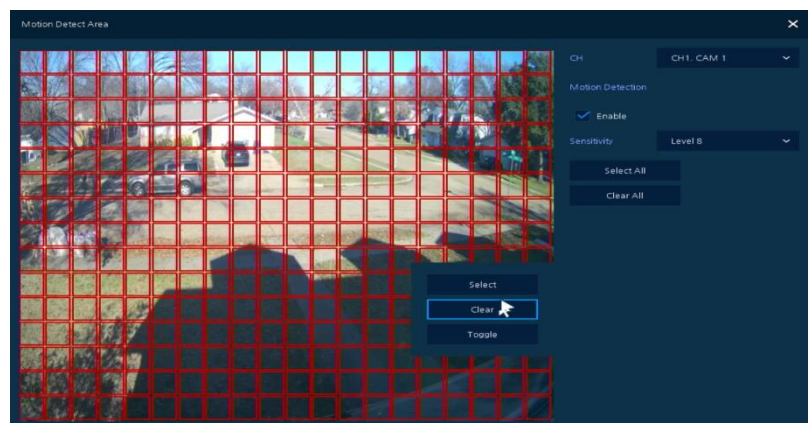


The Motion Detection Area grid will open.

On this screen configure where motion will be detected as well as the motion trigger sensitivity.

Click on the video image and drag the mouse pointer. When it is released the option remove (Clear), add (Select) or swap (Toggle) blocks will pop up.

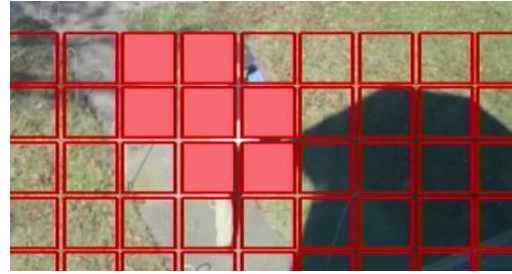
Once complete click on X in the upper right hand corner.



**Note – It is recommended to exclude areas with constant motion. Objects like trees and bushes as well as their shadows can have almost perpetual movement. If your detection grid includes areas like this the NVR will continually record.**



This screen is also useful to test your settings since it will indicate (filling in blocks) where the camera perceives there to be motion.



**Note - Each camera view is unique, so each will require adjustment**

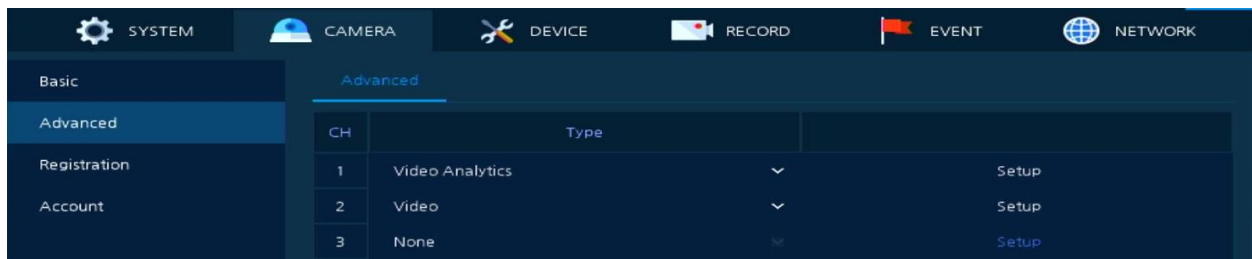
Once all the desired cameras have been configured click on Save at the bottom of the Motion screen.

### Video Analytics – Motion

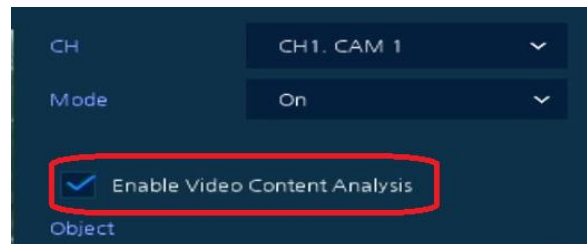
An alternative to basic motion is Video Analytics (VCA). This can filter out undesired motion triggers by allowing users to defining limits on an objects size as well as type of movement in a defined detection area.

To set up VCA go to Advanced under Camera.

For the desired camera click on the dropdown under Type, select Video Analytics and click on Setup.



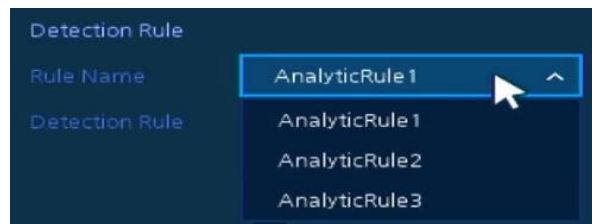
Once the Video Analytics setup screen opens click on the box for the Enable Video Content Analysis and also click on the dropdown beside Mode to select On.



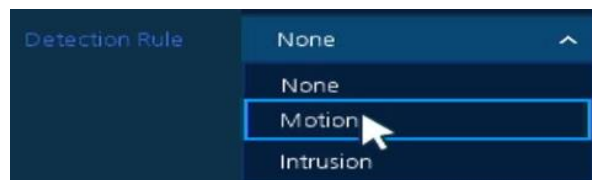
**NOTE – THE ANALYTICS AVILBLE ARE DEPENDENT ON THE CAMERA MODEL.  
ONLY ONE CAN BE SETUP PER CAMERA**

Detection rules are grouped by Rule Name.

To see available detection types click on dropdown beside Rule Name. Select an Analytic Rule and then click on the dropdown beside Detection Rule.



The detection types most commonly available and often used are Motion and Intrusion. Only these will be discussed in this tech note.





### Motion Detection Rule

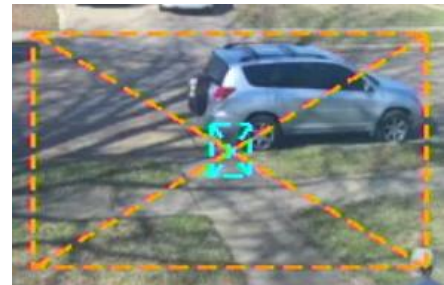
Adjusting limits on object size, sensitivity and threshold permit users to limit what triggers motion.

Object	
Sensitivity	80
Min width size	3
Min height size	7
Max width size	31
Max height size	31
<input checked="" type="checkbox"/> Show object size	

Detection Rule	
Rule Name	AnalyticRule 1
Detection Rule	Motion
Threshold	2
Sensitivity	85

To aid in setup select Show object size to see the current minimum and maximum height and width restrictions.



As well selecting View Rule provides setup assistance by indicating how motion is triggering including the size of a moving object. A green box surrounds the moving object.

Make all desired settings changes.

Once setup is complete, click on Apply at the bottom of the screen and then the X in the upper right corner to exit.



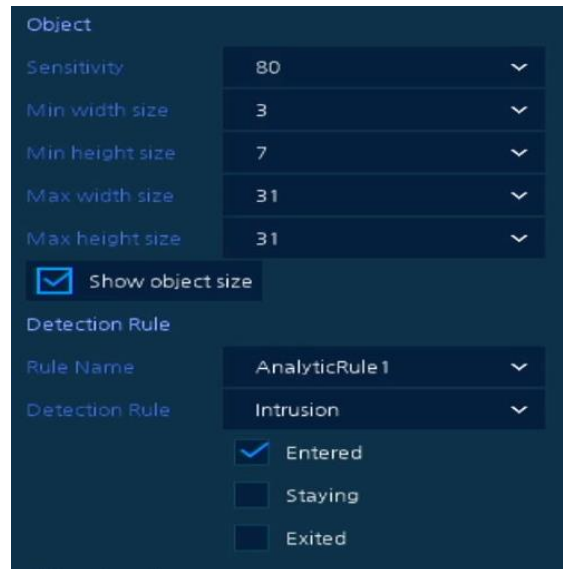


### Intrusion Detection Rule

Adjusting limits on object size, sensitivity, type of action and allowable area, permit users to limit what triggers motion.

Just like Motion Detection Rule, select Show object size to aid in setup and see the current minimum and maximum height and width restrictions.

With intrusion there are the trigger options; if a moving object is Entering, Staying or Exiting a defined area.



Click on the check box beside Intrusion in View Rule to see and define the intrusion area.

It will also indicate how motion is triggering and the size of the moving object.

Make all desired settings changes.


Once setup is complete, click on Apply at the bottom of the screen and then the X in the upper right corner to exit.







### Recording Settings

Click on the Record tab and then on Schedule on the left side of the screen.

The default setting is continuous, motion and alarm. 

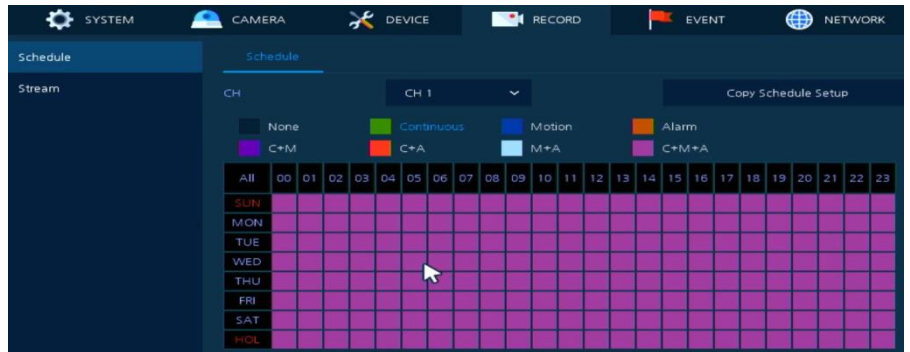
Select the desired camera from the CH dropdown box.

If recording on motion only click on the blue block  beside motion.

If recording motion and continuous click on the purple block  beside C+M.

After clicking on the desired type, click on the schedule to change the blocks.

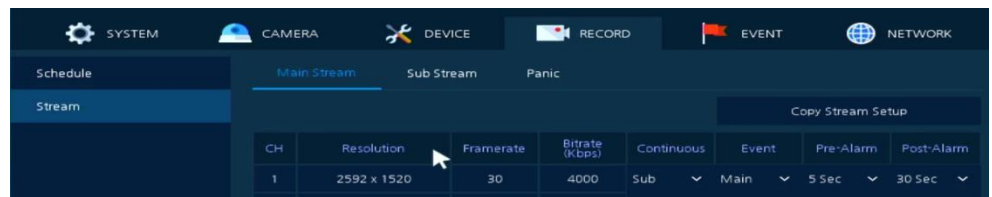
Once complete click on Save at the bottom of the screen.



Next click on Stream on the left side of the screen.

If recording motion and continuous, in the Continuous column click on the drop down for the desired camera and select Sub. Making this change will record the camera at the Sub resolution and frame rate when no motion is detected and at the higher Main resolution and frame rate when motion is detected.

Click on Save at the bottom of the screen when done.

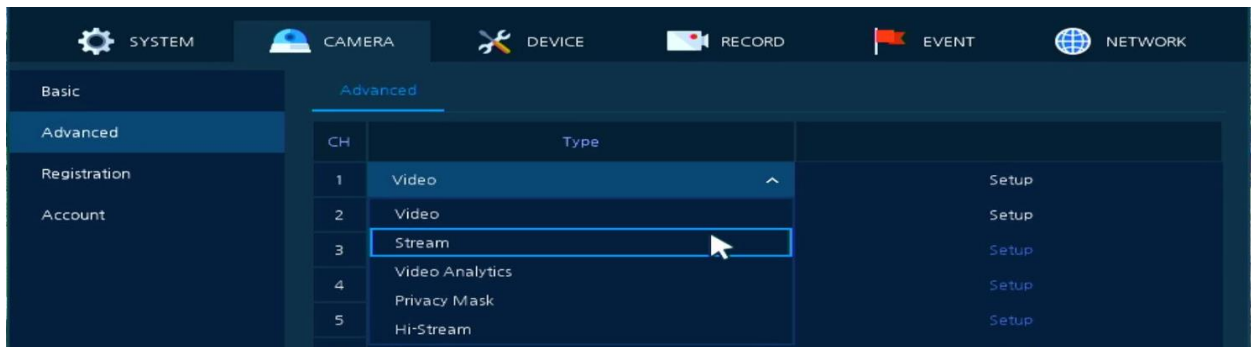




## Stream Settings

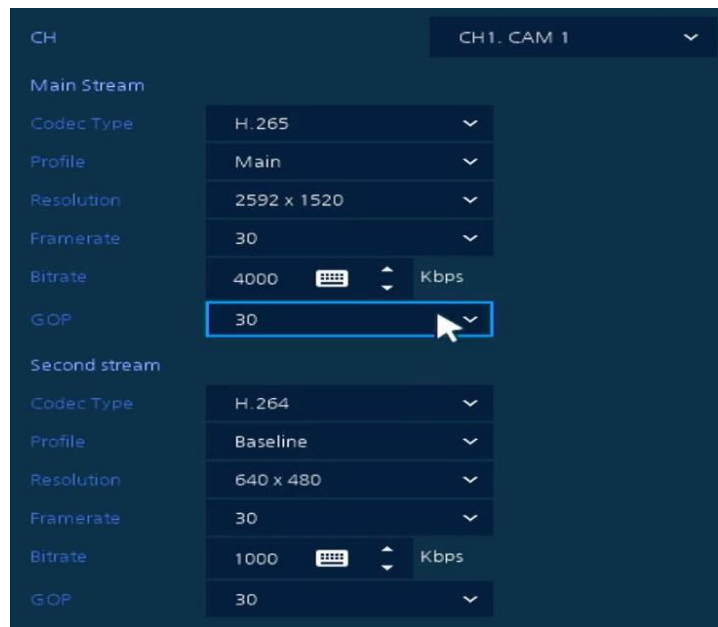
For most users, changes to video stream settings are unnecessary. It's recommended to only make a slight change to Frame Rate (number of pictures per second). No lower than 20 on the main stream and 15 on the sub stream. Large decreases could prevent capturing an event. Slightly decreasing the Frame Rate will slightly increase recording time.

Click on the Camera tab. Then on Advanced on the left side of the screen. Next click on the Type drop down for the desired camera. Select Stream. Next click on Setup.



The Stream Setup screen will open. It is recommended to only make a change to Frame Rate and to not go lower than 20 on the main stream and 15 on the sub stream.

Once you have completed making the desired changes click on Apply at the bottom of the page. Next click on the X in the upper right corner.





## **Playback**

Keep in mind that after making any changes to recording settings, the newly recorded video should be reviewed to ensure the NVR is recording as desired.

To playback recorded video, from the live video screen right click anywhere on the screen, put the mouse pointer over Search and select Time.



This will bring up a calendar and time bar.

Click on the desired day and the time bar will populate.

Click on the time bar to bring up that time and then click on Play in the bottom of the screen.



## **Notes on Playback**

Continuous recording is indicated in green and Motion recording is indicated in blue



If recording is Motion only there will be gaps (black) where there was no recording so there is no playback for those times.



If recording is Continuous and Motion the entire time bar will have recording that can be played back.



If the recording recommendation was followed as mentioned earlier in this tech note, the video playback of Continuous recording is not as clear and movement is not as fluid as the Motion recording. As such the Continuous file size is much smaller and takes up much less space on the hard drive which will result in much more available recording.