



Merit LILIN Application Note

IVS2.2 Human & Vehicle Detection

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Internet Explorer 11 must be used to configure the camera.

- Enter Setup/Advance Mode/Smart Event in the top menu. Then IVS in the menu on the left-hand side. The following page will load.

The screenshot shows the LILIN camera web interface. At the top, there is a navigation bar with the LILIN logo and links for Live, Basic Mode, Advance Mode, Language, and Logout. Below this is a menu bar with tabs for System, Video / Audio, Network, SmartEvent, Notification, and Maintenance. The SmartEvent tab is selected. On the left side, there is a sidebar menu with options: SmartEvent, IVS, IVS Setting, Detection Zone for Car and Human, Network Detection, and Push Service Setting. The main content area shows the path 'Advance >> SmartEvent >> IVS'. Below this, there is a table with the following information:

IVS Status	Enable
IVS Version	v2.2

Below the table, there is a list of detection options with radio buttons:

- Motion Detection, Tampering Detection
- Advanced Motion Detection (Less false alarm at night)
- Traffic Light Detection
- Tripwire Detection
- Object Counting
- Unattended Object Detection
- Missing Object Detection
- Crowd Detection
- Loitering Detection
- Face Detection
- Detection Zone for Car and Human

Below the list, there is a red warning message:

The OSD of streaming #4 is disabled, if Detection Zone for Car and Human gets enabled. If enable Detection Zone for Car and Human function, Tampering detection will be disabled in the SmartEvent page. Rotate is disabled, if Detection Zone for Car and Human gets enabled.

At the bottom of the page, there is a 'Submit' button.

Select 'Detection Zone for Car and Human' and press Submit. The camera will reboot.

Note: The camera must have an IVS2.2 license to see these options. In optimal conditions the expected read rate can be up to 85%

- Select **Detection Zone for Car and Human** in the left-hand menu.

LILIN Live | Basic Mode | Advance Mode | Language | Logout

System Video / Audio Network SmartEvent Notification Maintenance

SmartEvent
 IVS
 IVS Setting
 Detection Zone for Car and Human
 Network Detection
 Push Service Setting

Advance >> Event >> Detection Zone for Car and Human

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Detection Zone for Car and Human
 Detection Type
 Select Area
 Sensitivity

Enable Disable
 Car and Human
 Zone
 Normal

Edit Clean

Your image will load with the as above.

Select Edit and enable.

Select **Detection Type** from the drop-down menu.

Car and Human: This will recognize both Vehicles and Humans.

Car: This will only recognize vehicles.

Human: This will recognize only Humans.

Your selected detection type will be recognized anywhere on the screen (you can adjust the required sizes of objects in IVS Settings)

Next draw an area that will create an alarm when your detection type enters or moves over.

There are 2 types of areas **Zone** or **Rectangle**.

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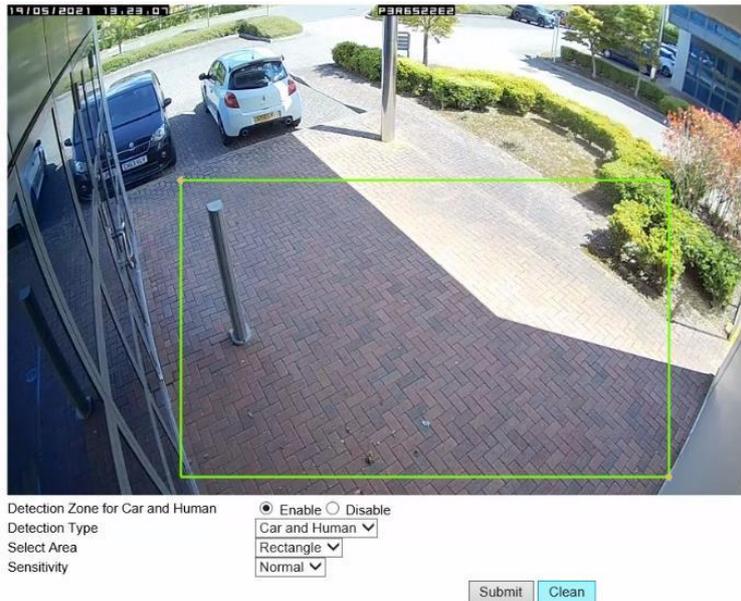
Detection Zone for Car and Human
 Detection Type
 Select Area
 Sensitivity

Enable Disable
 Car and Human
 Zone
 Normal

Submit Clean

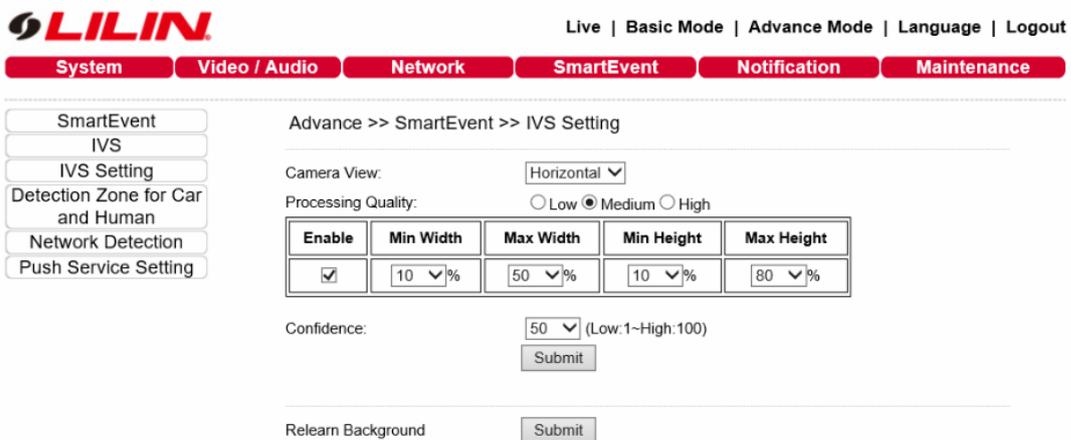


With **Zone** you can draw up to 8 lines on your screen. An alarm is activated when your detection type moves over any of these lines.



With **Rectangle** you can draw up to 8 rectangles. An alarm is activated when your detection type enters the rectangle or moves once inside the rectangle.

- Select **IVS Settings** in the left-hand side menu. Here you can adjust settings to optimize the IVS performance for your scene.



Camera view has 3 options in the drop-down menu.

Horizontal: This is the default and is suitable for most IP camera installations

Overhead: When the camera is installed below the target object (as below)



Angle: When the camera is installed above the object but with a very narrow angle (as below)

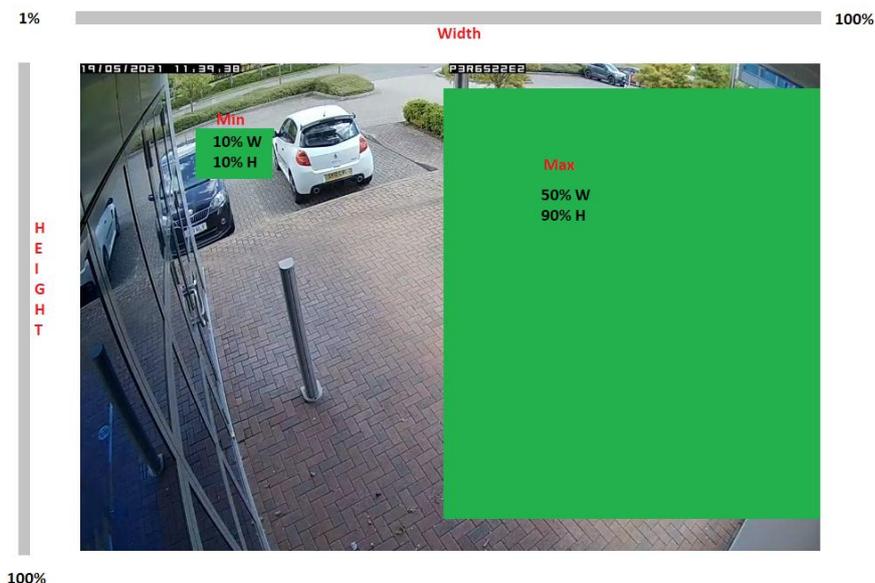


Processing Quality can be set to low, medium (default) or High depending on the quality of your image.

Confidence: adjust this between 1 (low) and 100 (high), to optimize your recognition rate based on how confident the camera is that the object is Human or Vehicle. It is recommended to start at 50%

You can select the size that an object needs to be before it is recognised in your image. Select a Minimum and Maximum Width and Minimum and Maximum Height between 0% and 100% of the image.

Enable	Min Width	Max Width	Min Height	Max Height
<input checked="" type="checkbox"/>	10 %	50 %	10 %	90 %



The above image shows the minimum and maximum size an object could be to be detected based on
 Min width 10% - Min Height 10%
 Max width 50% - Max Height 90%
 So any object between the 2 green boxes should be read.

Relearn Background: Select this once you have changed settings.

- If objects are not being recognized

Check you have the correct Detection Type set

Adjust your confidence rate.

Try changing the min and max object sizes.

Avoid the top and corners of the image to detect objects.

The cameras generally perform best if the target is within 15 meters of the camera.



Contact
Contact lilin.zendesk.com for technical support.