

# AiDANT Spark User Guide



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## 1. Overview

The AiDANT Spark application developed by [AiDANT.ai](#) is an AXIS ACAP application that can be used to monitor an area and notify the user if a vehicle stays in an area of interest for too long. This application can be installed into any AXIS camera with a DLPU (a.k.a TPU) processor, eg: the Q1615 Mark3 and P3255.

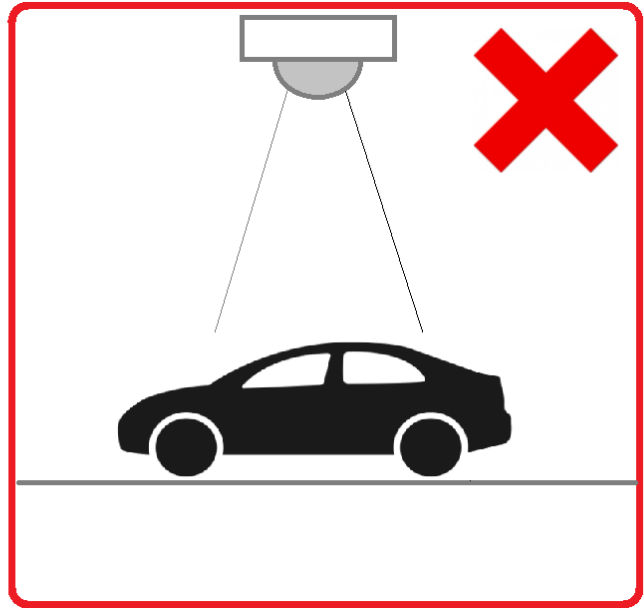
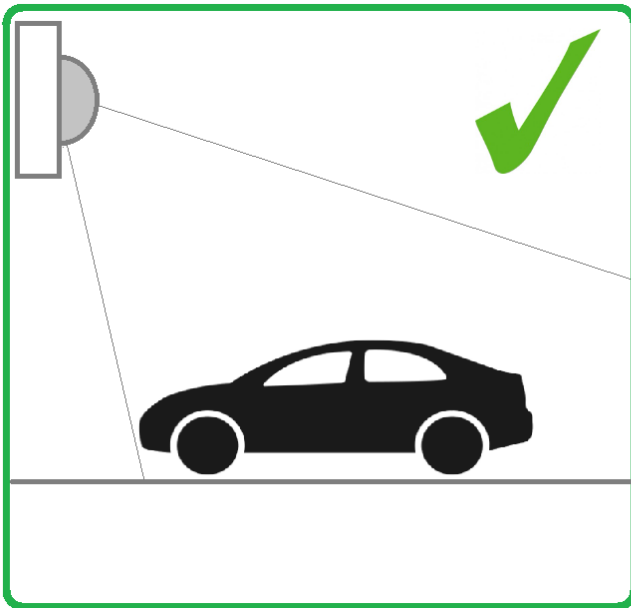
## 2. Glossary

Area of Interest	Spark functionality module that detects presence of vehicles in a determined area. The Area of Interest module allows for three exclusion areas.
AI Threshold	A value which controls how selective we want to be in identifying a person.

## 3. Requirements

In order to run the AiDANT Spark application, you will need:

1. An AXIS camera with a DLPU chip and a non-fisheye lens. eg: the Q1615 Mark3 and P3255.
2. Update the AXIS camera firmware to the latest version.
3. Purchase a license from AiDANT.
4. Download and extract (unzip) the eap application file through the link <https://downloads.aidant.online/>.
5. The minimum Pixel Per Foot requirements are: 20 PPF.
6. **Important!** Camera positioning: The camera needs to be positioned in such a way that it can see as much of the vehicle as possible. The software is **not intended to be used in top-view** (ceiling mounted, facing straight down).

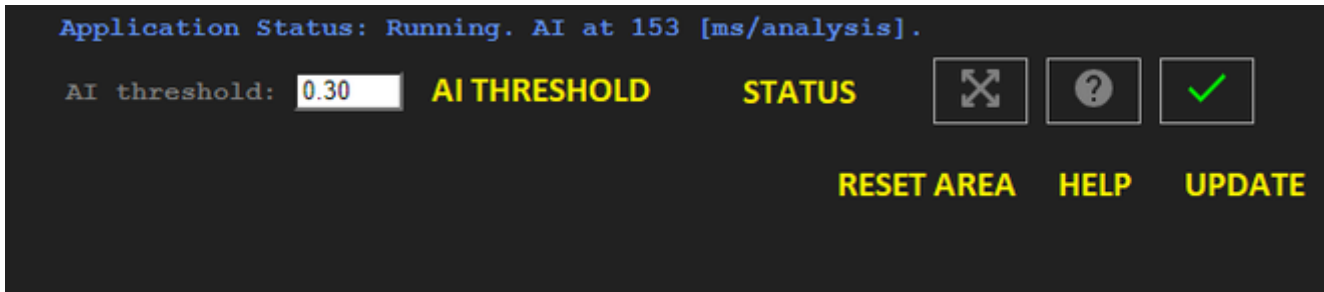


#### 4. Installation

Once all the requirements are satisfied, please do the following:

1. Access the camera through any web browser.
2. Go to *Settings->Apps*.
3. Click on *Add* and install the .eap application file.
4. Click on *AiDANT Spark* and install the license key file provided to you.

#### 5. Main Controls



- The '*AI Threshold*' field can be modified to indicate how selective we want to be in identifying a vehicle (i.e. the higher the number, the more discriminate it becomes to determine if an object on the screen is the desired object and the less positives that we will have). A value of 0.40 is the default as it minimizes false positives and increases true positives for detection.
- Press the '*Reset Area*' button to restore all areas to their default positions.
- Press the '*Help*' button to open the user guide.
- Press the '*Update*' button to save your configuration changes.

#### 6. Area of Interest

- To configure the '*Area of Interest*' functionality, select an area to monitor by dragging the control points until the polygon shape covers the area of interest. You may add up to three exclusion areas. The exclusion areas are denoted by a dashed (----) line in the user interface. The Areas of Interest can have 4, 6 or 8 control points.
- Indicate the minimum number of vehicles in the area of interest needed to trigger the alarm by using the '*Notify only when count is at least*' field. The user can also indicate the minimum amount of time needed for a vehicle to linger in an area of interest by using the '*Alert Time*' field. There are three possible alerts, named 'First', 'Second' and 'Third' accordingly. Each alert will trigger a separate Axis Event.
- The '*Maximum seconds a lost vehicle is still tracked*' value enables the user to configure what happens to the tracking mechanism once a vehicle is not detected anymore. For example, if a vehicle goes behind a pillar in the field of view.
- Remember to save your changes by pressing the '*Update and Save*' button (the green checkmark).

**Warning:** If the value of '*Maximum seconds a lost vehicle is still tracked*' is too high, then a vehicle exiting the camera field of view might 'transfer' the tracker to a different vehicle entering the field of view within a few seconds, affecting accuracy. It is recommended to keep this value below three seconds.

When a target is detected, a bounding box will be shown on the stream in the application. The default color for the markers is green. If a target enters the area of interest, then the marker color changes from green to yellow and a timer displays just below the marker. If the timer surpasses the time set in the *Alert Time* field, then the marker changes to red.

When the breach has lasted more than the set time and the number of persons/objects lingering in the areas of interest is greater than the minimum number of persons/objects, then a notification will be sent.

## 7. Overlays

- You can choose to display the bounding boxes as an overlay in a camera video stream by clicking "*Include detection overlays in this video stream*" and selecting the desired stream.
- You can choose to anonymize the bounding boxes as an overlay in a camera video stream by clicking "*Include anonymization overlays in this video stream*" and selecting the desired stream.

## 8. Vehicles

The application can detect the following objects:

Motorcycles, Cars, Trucks, Buses, Bicycles, Trains, Boats, Airplanes.

## 9. Event Triggering

To setup event triggering:

1. Go to *System->Events*.
2. Click on + under *Rules* and select *AiDANT Spark First Alert* under the *Condition* field.
3. Fill in the *Name* field and select an *Action*.

If you wish to set up email notification, click on the *Recipients* tab. Press the + button and fill in the fields.

Once done, you can go back to *Actions* under the *Rules* tab and select the appropriate action you want that requires a recipient.

Repeat for Second and Third Alerts accordingly.

## 10. Appendix

### Troubleshooting

- The application log can be accessed through the Apps/AiDANT Spark page.
- Please contact [AiDANT Technical Support](#) if you have any questions or comments.

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