

AXIS Radar Data Visualizer

User manual

AXIS Radar Data Visualizer

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About the application

About the application

AXIS Radar Data Visualizer combines 180° radar detection and 180° panoramic images for monitoring large open areas. Connecting a radar and a panoramic camera extends the detection distance of people up to 60 meters (200 feet) and vehicles up to 85 meters (280 feet). The application can then present the object class, distance and speed as visual, customizable overlays in the camera view. The data can also be used to trigger events.

The radar and the panoramic camera need to be mounted and configured according to their respective installation guide.

The panoramic camera needs to be mounted over or under the radar at a maximum distance of 50 cm (1.6 feet) .

Note

The application supports AXIS P3827-PVE and newer panoramic cameras. For a list of compatible cameras see . For a list of radars, go to

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Get started

Get started

Calibrate the radar

When the radar is installed, the default live view of the radar will show the radar coverage and any detected movement, and you can add detection zones and rules right away. Before you set up the connection with the radar and configure the application overlays, calibrate the radar for the scene.

Check that the mounting height of the radar corresponds with the set height in the radar's web interface. If the radar is mounted on a different height, you need to calibrate the radar to compensate for the mounting height.

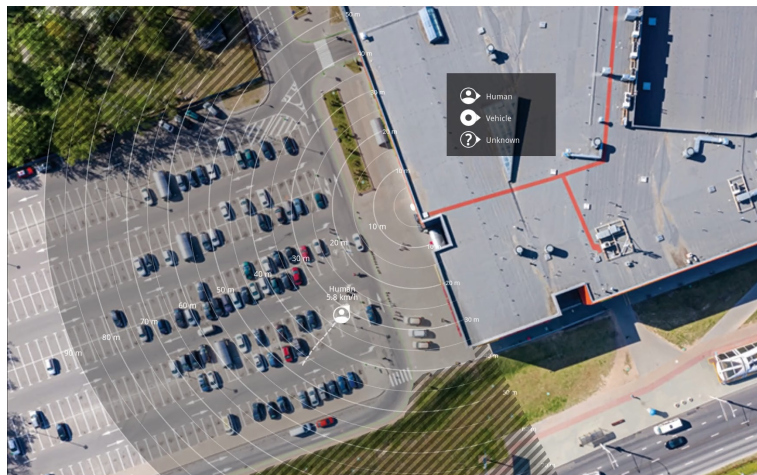
To calibrate the radar:

1. Log in to the radar's web interface.
2. Go to **Radar > Settings > General**
3. Enter the mounting height.
4. Under **Radar > Settings > Detection**, turn on **Ignore swaying objects** to exclude bushes, trees and signs from your scenarios. Avoid having a road sign just in front of the radar.

Note

If you for example only want statistics of vehicles, go to **Radar > Scenarios** and create a scenario. Edit your scenario, and under **Trigger on object type**, uncheck **Human**.

Map calibration



Example of a reference map in AXIS D2110-VE Security Radar.

To make it easier to see where objects are moving, upload a reference map, for example a ground plan or an aerial photo, that shows the area covered by the radar.

Image requirements:

- Supported file formats are jpeg and png.
- The image can be cropped in the radar.
- The orientation is not important, since the radar coverage shape will move to adapt to the image during calibration.

Go to **Radar > Map calibration** to upload your reference map and follow the setup assistance to calibrate it.

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For more information about the settings in the radar's web interface, see the user documentation for your radar on axis.com.

Select a radar profile

You can use AXIS D2110-VE Security Radar for area protection.

1. Log in to the radar's web interface.
2. Go to **Radar > Settings > Detection > Radar profile**
3. Select **Area protection** .

For information about detection ranges, installation examples and use cases, see the user manuals for the radar: *AXIS D2110-VE Security Radar user manual*

Download and install the application

To install the application, go to axis.com/products/axis-radar-data-visualizer and download the latest version. Log in to the panoramic camera you want to connect to the radar and follow these steps:

1. Log in to the panoramic camera's web interface.
2. Go to **Apps**.
3. Click **Add app**.
4. Select the file in your downloads folder.
5. Click **Install**.
6. Turn on the app to activate the application.

Note

To upgrade the application, just install the new version. There is no need to uninstall the previous version.

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Configure the application

Configure the application

Pair camera with radar

For Radar Data Visualizer to work, you need to pair the panoramic camera to a radar. In the panoramic camera's web interface:

1. Go to **Apps**.
2. Go to **AXIS Radar Data Visualizer** and click **Open**.
3. Go to **Radar pairing**.
4. Enter the radar's **address**, **username** and **password**.
5. Click **Connect**.

Configure bounding boxes and metadata

You can choose to hide or show bounding boxes and metadata. In the app:

- Go to **Video stream settings**.
- Click the button to show or hide bounding boxes
- Click the button to show or hide metadata

To adjust an incorrect alignment in the vertical positioning of the bounding boxes:

- Go to **Calibrate bounding boxes**.
- Click the arrow buttons to adjust the vertical position of the bounding box.

The default position is based on the configuration of the **Horizon straightening** setting configured in the panoramic camera.

Note

To calibrate the bounding boxes, a person or a vehicle has to be present in the scene.

Create event trigger zones

A trigger zone for the whole scene is automatically added as soon as you start the application and open the configuration window. The size and shape of the trigger zone can be adjusted and the zone can be placed across the view area. The zone can also be used for event management.

In the application:

- Go to **Event trigger zone**
- Click **+**. A yellow box will appear on the live view.

To change the shape of the zone, click and drag the anchor points in the corners of the yellow box.

- Type a name for zone
- Select the types of objects the zone should trigger on.

To delete a zone, select the zone in the list and click on the trashcan icon.

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Set up rules for events

Set up rules for events

You can create rules to make your device perform an action when certain events occur. A rule consists of conditions and actions. The conditions can be used to trigger the actions. For example, the device can start a recording or send an email when it detects motion, or show an overlay text while the device is recording.

To learn more, check out our guide *Get started with rules for events*.

Trigger an action

1. Go to **System > Events** and add a rule. The rule defines when the device will perform certain actions. You can set up rules as scheduled, recurring, or manually triggered.
2. Enter a **Name**.
3. Select the **Condition** that must be met to trigger the action. If you specify more than one condition for the rule, all of the conditions must be met to trigger the action.
4. Select which **Action** the device should perform when the conditions are met.

Note

If you make changes to an active rule, the rule must be turned on again for the changes to take effect.

Note

If you change the definition of a stream profile that is used in a rule, then you need to restart all the rules that use that stream profile.

