ANPR Application
Application Setup

Initial Settings

Intro

This document provides guidelines on **ANPR application installation and setting up** to achieve best LP readings.

The guide covers the following topics
- application launch and autostart options
- basic settings
- test operations

Latest edition always available as
PDF (https://goo.gl/eyCF6Q) and
Power Point (https://goo.gl/ZGdA3B)

Last updated **2018-08-20**
(Latest update: Slide #5 - ROI Settings)

Other useful resources

Application Launch

You may need to launch the app manually every time camera reboots if **Auto start** option was not checked.

Make sure to:
1. set Priority to **High**
2. check **Auto start**
3. **Apply** changes
4. **Start** application
5. Status will change to **Started but not running**
6. Wait for 5 seconds and refresh the page
7. Click **Go App**

To relaunch the application just click **Stop** and then **Start** again.

Allow Pop-up windows if your browser alerts so

Application Launch
Troubleshooting: No video
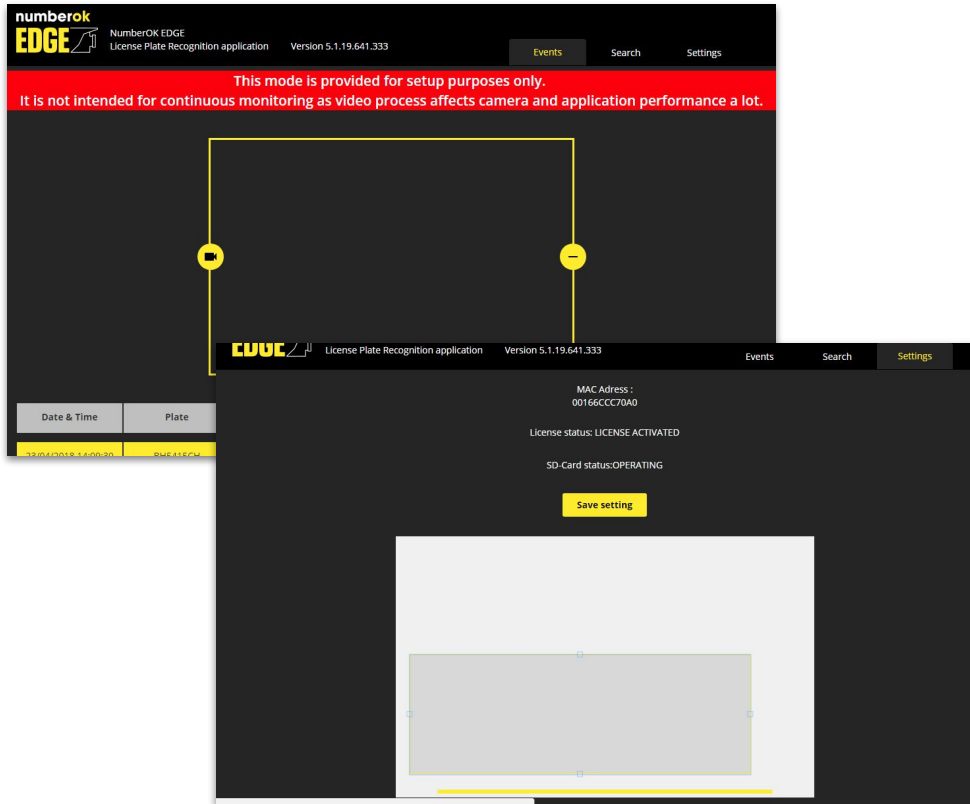
To save bandwidth the app shows frames from MJPEG camera stream.

The application expects the stream from URL `http://<IP_address>:6162/livemjpeg?<timestamp>`

Video may be unavailable for the reasons:
1) port 6162 is not forwarded 1:1 on the router to get video from outside the network local to the camera;
2) browser in use is other than recommended Chrome, Firefox or Safari;
3) browser may use cached app web page.

<u>Solutions:</u>
1) Check the app is running at WiseNet WebViewer and refresh the app web page by pressing Ctrl-F5.
2) Use Chrome, Firefox, or Safari to access the app.
3) Set up port forwarding on the router.
4) Navigate to the app from the network local to the camera (e.g. via TeamViewer access to one of the computers in the network).

Application Setup
ANPR Settings - Recognition Area and Plate width

Adjust recognition zone (ROI) as appropriate:
- click and drag to reposition
- click inside recognition zone frame to activate resize controls, and drag frame midpoints to resize

Avoid having OSD text and obstacles between camera and traffic within the ROI.

For better ANPR results ensure that plates enter and exit the zone through upper and lower borders of the frame.

Recommended ROI parameters to start with:
- ROI height - approx. ⅓ of frame height
- ROI location - middle of the frame

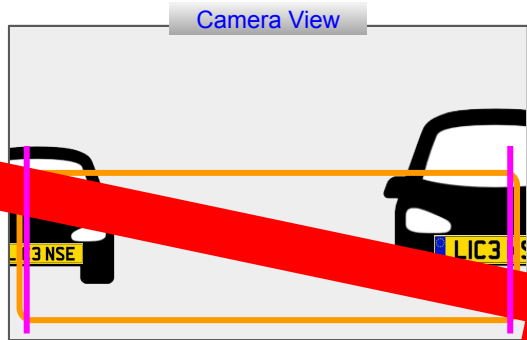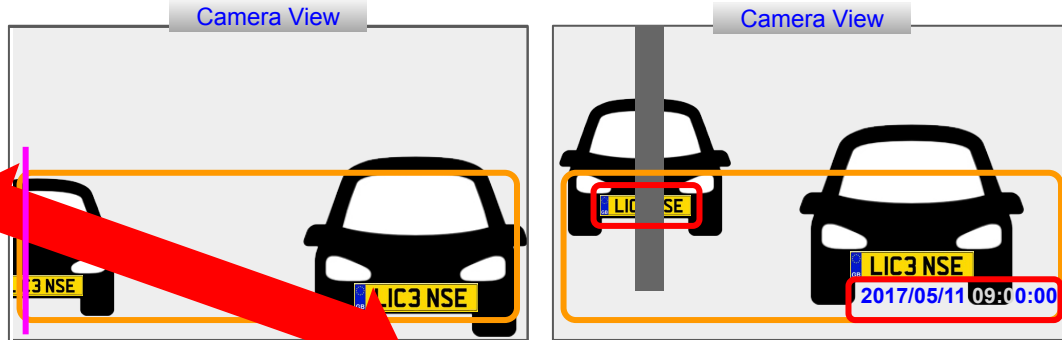Adjust **Min plate width** as appropriate. Refer to Camera Mounting guide (Plate number dimensions) https://goo.gl/RNchBX for more details.

Click **Save setting**

5

Application Setup
Recognition zone - Motion paths

ANPR unfriendly motion paths
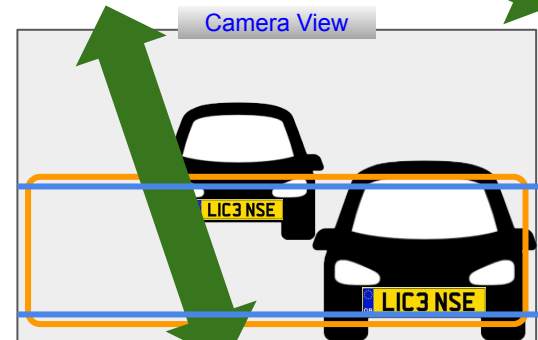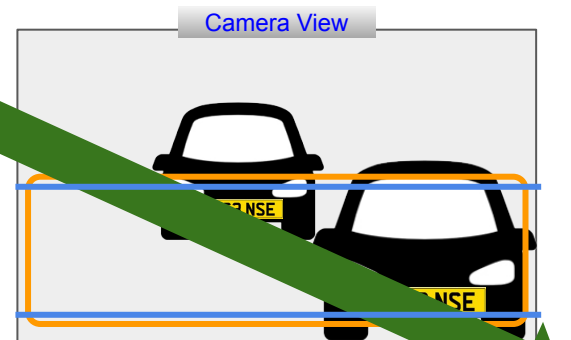(partial plate number recognition may occur)

ANPR friendly motion paths

Also avoid having within the recognition area:
- any obstacles that can appear between plate numbers and camera;
- OSD.

Application Setup
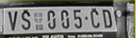## Test operations
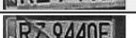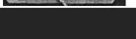
Date / Time	Plate	List	Action	Photo	Country
05/07/2017 15:14:19	VSnn5CDl	Not in list	Saved to SD Sent to NVR	VS 005 CD	No Country
05/07/2017 15:14:16	VS005CD	Not in list	Saved to SD Sent to NVR	VS 005 CD	SRB
05/07/2017 15:00:38	EK86	Not in list	Saved to SD Sent to NVR	RZE 2K86	DEU
05/07/2017 15:00:33	RZELW90	Not in list	Saved to SD Sent to NVR	RZE LW90	POL
05/07/2017 15:00:31	RPZY325	Not in list	Saved to SD Sent to NVR	RPZ Y325	POL
05/07/2017 15:00:15	RZ3958J	Not in list	Saved to SD Sent to NVR	RZ 3958J	POL
05/07/2017 15:00:02	RZ24791	Not in list	Saved to SD Sent to NVR	RZ 24791	POL
05/07/2017 14:59:58	RZE2CV9	Not in list	Saved to SD Sent to NVR	RZE 2CV9	POL
05/07/2017 14:59:55	RZ9440F	Not in list	Saved to SD Sent to NVR	RZ 9440F	POL
05/07/2017 14:59:54	3R9440F	Not in list	Saved to SD Sent to NVR	RZ 9440F	No Country

Events watch

Click camera/plus icons to reveal video stream.

Please, avoid permanent monitoring as video streaming affects overall system performance. Hiding video just saves some space on the screen but it doesn't stop video stream consumption. Prolonged monitoring affects the camera performance even more if accessed from multiple browsers simultaneously.

Video playback would stop in approximately 20 min. It is not a malfunction but rather a measure to save resources. The application on camera will keep on recognizing license plates.

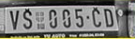Refresh web page to resume video.

Application Setup
Test operations

Events watch

Cross-check licence plates appearance with recognition results.

Adjust camera settings (exposure, zoom, focus, tilt) or ANPR application settings (recognition zone, plate width) as appropriate.

Please, refer to the following guides:
Camera Mounting - PDF, Power Point
Camera Settings - PDF, Power Point

Useful resources

Next step	**Application Core Features** as [PDF](#) or [Power Point](#)
Product page	https://www.hanwha-security.eu/business-security-products/xno-6120rfnp/
Product wiki	ff-group.org/hanwha
Installation Checklist	PDF: https://goo.gl/v29ZTW
ANPR Application quick access link template	http://<IP>/home/setup/opensdk/html/NumberOkEdgeHanwha/index.html?AppName=NumberOkEdgeHanwha
Tech support contacts	https://www.hanwha-security.eu/support/support-faqs/
Online tools	https://www.hanwha-security.eu/online-tools/
More resources	https://www.hanwha-security.eu/support/