

# Troubleshoots

## EDGE module for VIVOTEK

Software version:

1.0.8.

Troubleshoots version:

1.0.1



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# 1. Environment/installation issues

## 1.1 What components do I need for LPR solution

- Compatible camera with LPR plugin and LPR license
- Client PC with compatible LPR software installed and configured

## 1.2 Do I have LPR compatible camera?

- Supported models are: Vivotek IB9165-LPC, IB9365-HT, IB9172-LPC.

## 1.3 What Client software do I need to see events on Client PC

- VAST2 software
- EDGE Cumulator software

## 1.4 I have problems during LPR plugin installation.

- Check that microSD card is inserted and recognized by camera
- Check that microSD card is formatted in EXT4
- Check that "Save to SD card" selected when you install a Package

## 1.5 I get "Connection was closed" error in browser during installation

- There is insufficient free RAM in the camera. Reboot the camera and try again

# 2. Licensing issues

## 2.1 How should I install my LPR license?

- Go to EDGE - License page
- Download c2v file (customer to vendor)
- Send it to LPR vendor then get back v2c file (vendor to customer)
- Upload v2c file

## 2.2 How to check whether my LPR license is correct?

- Go to EDGE - License page
- You should see "Freeflow" or "Parking" in "Groups" section with number of available licences
- You should see one or more keys in "Keys" section

## 2.3 Http failure response

What is "Http failure response for http://\*\*\*/EDGE/cgi-bin/conf.cgi/services/license/0/key/v2c: 400 Bad Request" while applying license?

- You're trying to apply wrong license file (not compatible with this device)

# 3. Recognition does not work.

All issues when everything is installed but we can't have recognition events. Here are all possible reasons:

## 3.1 Invisible (partially visible \ not enough visible) license plates, unfocused image.

- License plate recognition module (LPR) is optical character recognition (OCR) module. Meaning it works similar to human eye. So in case when we can't see license plate by eyes while pausing live stream (on particular screenshot) then engine can't for sure.

You must follow document "LPR camera selection guide" and configure camera settings according to LPR requirements and conditions.

Check paragraph 4.

## 3.2 License problems.

- License is missed or wrong. Check paragraph 2.

## 3.3 Wrong settings.

- Either recognition settings or selected license plate templates are wrong.  
Go to EDGE - ANPR page  
Check whether numbers match recognition zone.  
Check if "license plate width" settings match real license plate.  
Select correct license plate templates from your region.  
Check if "min validity" is not too high.

## 3.4 Too big license plate

- The license plate width shouldn't be bigger than **500 px**

## 3.5 Can't see LPR events

- Check settings in "Rules" and "Recipients" tabs.

- In fact recognition process works but events storage system fails so we can't see events list GUI. Check Client software communication.

### **3.6 Check that the package is running**

- Go to the "Configuration - Applications - Package management" tab. Check that the package named "EDGE" has status "ON". If it is in the "OFF" status choose it with the appropriate radio button and press "Start"

## **4. Camera problems**

Image quality issues, meaning number plate region of interest.

### **4.1 Image is too light.**

- Check exposure settings, probably shutter value is too low (long shutter) or iris value is too low (open iris) or gain value is too high.  
Use 1/200 or shorter for Parking mode  
Use 1/1000 or shorter for Traffic mode

### **4.2 Image is too dark.**

- Situation is opposite to previous case. Also check external illumination options (IR, white light, etc.).
- Check whether number plates have IR reflective features. If not – can't use IR here.
- Check IRIS value. Open it to make more light.
- You can also add more "gain control" (up to 50%) but check image quality due to noise artifacts.

### **4.3 Motion blur detected.**

- Shutter value is too long.
- WDR mode enabled (disable it in *Configuration - Media - Image - Exposure -WDR*)

### **4.4 Image too noisy.**

- Check "gain control" value. Use up to 20% of maximum value.

## **5. Recognition errors.**

Meaning recognition works but having accuracy issues.

## 5.1 Recognition errors occurs

- Check list of supported countries.  
<https://vitcompany.atlassian.net/wiki/display/vitdocs/AutoSDK%3A+list+of+supported+countrries>
- Consider this to estimate expected recognition accuracy depending on countries.

## 5.2 Some plates were never recognized (even detected).

- Probably we have not added this license plate template to the engine yet. Probably you've just missed to enable this template in templates configurator.

## 5.3 Too many duplicates.

- Duplicates are equal or pretty similar results during short period of time. This means engine lost number plate out of the history storage interval then detected it again. You can extend history storage time ("Trajectory timeout" parameter) or in addition use extra filter to hide duplicates for timeout or similarity.

## 5.4 Too many false detections.

- False detections are non-number detections (trees, gates, radiator grilles, road marks, vehicle ads, etc.). First, exclude camera field to view all mentioned obstacles, extend event output timeout and output probability, disable short and rare plate templates. You can also set up including and excluding recognition zones.