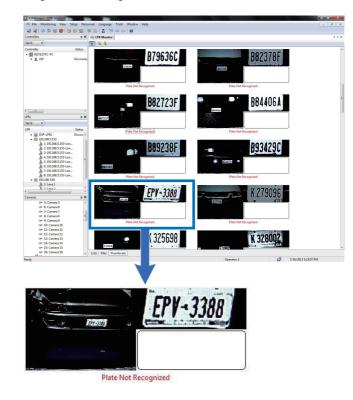


When installing the GV-LPR Camera, consider the guidelines in this document to ensure the captured image is sound for further analysis.

## 1. Important Notice

The GV-LPR Camera comes with free GV-DVR LPR software. Since the free GV-DVR LPR software is a trial edition, it can only capture the license plate images and does not support plate recognition. When you use the access control software GV-ASManager to see the captured plates, you will see "Plate Not Recognized" message as illustrated below.



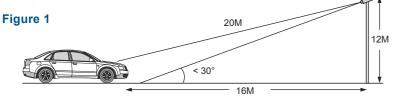
# **GV-LPR Camera Installation Guide**



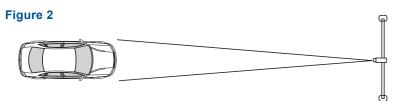
### 2. Installation Site

• The view angle of the camera should be within 30 degrees to the ground. Based on the view angle and the IR distance of your camera, install the camera at a proper height and distance.

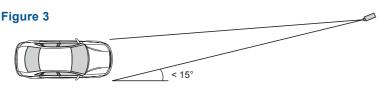
For example, if the IR distance of your camera is 20 meters, the camera should be installed 12 meters at the maximum from the ground and 16 meters from the vehicle.



• Install the camera to the front of the vehicle (Recommended)



• Installing the camera on the side



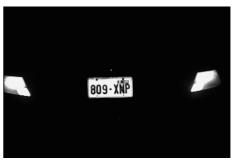
To avoid capturing unnecessary contents in the image, the camera should be installed in a higher position to capture the front part of the vehicle only. When you install the camera at angle to the side, the angle should not exceed 15 degrees

1. For GV-LPC 2210 / 2211 / 2011, only install your camera in such an angle illustrated by figure 1 and figure 3 to ensure image quality.

2. Try to avoid placing the camera where it can be subjected to direct LED light. The LED lighting from vehicles, streetlights, etc. may cause flickering images.

### 3. Criteria for Qualified Car Plate Resolution

• For VGA or D1 image resolution, the full width of the vehicle should fill the



• For 1.3M image resolution, the captured vehicle should occupy approximately half to two third of the image width.



Note: The captured plate should be 30 to 35 pixels in height. To check the height, copy and paste the characters into a Paint file and save it in BMP format (e.g. **01 - D - 86 1-3**). Right-click the BMP file, select Properties and click the Summary tab to find the Height information.

### 4. Common Problems

• Large roll, yaw and pitch angles: adjust the angle and direction of the camera











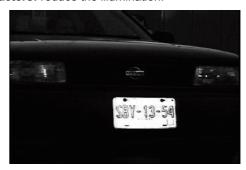


• Low image contrast: adjust image contrast and/or improve lighting conditions.





• Hollow characters: reduce the illumination.



• The plate is in shadow: avoid placing the camera where it is subjected to direct sunlight, reflections or shadows. Recognition may be degraded.



• Overexposed images: reduce the illumination or adjust the angle/direction of the camera.



• Blurry images: adjust the focus or the shutter speed of the camera.



