LPR Quick Start Guide

LPR/ANPR is a technology that uses optical character recognition on images to read vehicle registration plates. To ensure an accurate recognition result, here are some tips to help install and use Milesight LPR cameras.

Installation Angle

To increase the accuracy of license plate recognition, the LPR cameras should be installed properly to capture the license plates with the correct camera angle:

Proper Installation Position for Full Plate Images:

The captured image should contain full width of the vehicle.

Proper Installation Angle for Accurate Capturing:

To avoid capturing unnecessary contents in the image, the camera should be installed in a higher position (Vertical angle is less than 30°; Horizontal angle is no more than 30°; Tile angle is less than 5°) to capture the front part of the vehicle.
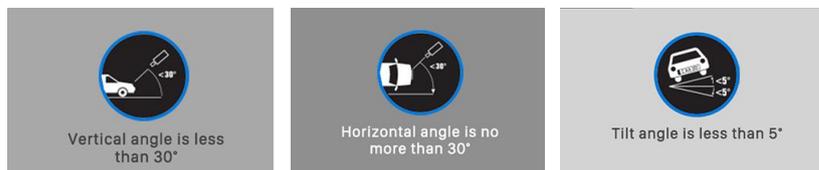
Parameter Configuration

Please configure these LPR settings and adjust for proper image quality to ensure the normal working of the LPR function.

Set Detection Region (ROI):

You can draw the screen to set up to 4 areas to detect vehicle plates. For PTZ series cameras, you can also set detection areas for different specific preset positions.

Choose Detect County/Region (only for LPR1):

Before using LPR function, please select country/region to use the related detection algorithm.

Detection Settings:

[Detection Trigger]: If you choose "**Always**", camera will always detect the license plate. If you choose "**Alarm input**", camera will only detect the license plate when Alarm Input is being triggered.

[Confidence Level]: You can set the confidence level from 1 to 10. When the confidence level of the license plate is higher than the set confidence level, it will push the license plate image to the logs interface.

[Repeat Plate Checktime]: Set the time interval for repeatedly reading license plates to effectively avoid duplicate identification of parking vehicles.

[Feature Identification]: Check Region (only for LPR2), Direction, ROI_ID or All to enable Features Identification. It will display the corresponding information on the logs interface.

Set Proper Image Quality:

It's necessary to ensure a proper lighting environment for LPR function. In the day time, please ensure there is no light reflection in the detected area. In the evening, exposure time and level are quite important to get a clear vehicle plate picture. If other image issues occur, please check Troubleshooting or contact with Milesight technical support for further detailed settings.

FAQ:

Q: How to improve the recognition accuracy?

A: Usually the image quality and detected plate size will influence the results accuracy most. You can try to adjust the camera angle or zoom level (for motorized and AF lens) to ensure the plate width in the proper range. Usually it should be around 100~150px in the image.

Q: How to avoid mistake results?

A: Sometimes it may detect some non-vehicle things as vehicle plates, such as wall, grass, or other regular patterns. Please try to adjust the **Confidence Level** to higher value for the reliability. **Note:** If the level is too high, it may also filter out some correct results.

Q: How to stop the camera pushing the same result all the time?

A: You can configure **Repeat Plate Checktime** to filter out same results in the specific duration. It can be from 0ms~60min.

Q: Does it support to detect multiple vehicle plate rules?

A: Considering many countries have multiple vehicle plate rules, the algorithm contains these rules as much as possible. For detailed supported rules, please contact with Milesight technical support.

Q: Does it support any other vehicle features recognition?

A: If you need to get other features like driving direction, ROI_ID, etc. Please enable **Feature Identification** and you will get there features results in Logs details.

Q: How to search all the LPR records?

A: You can go to "LPR" →" Logs" to search all the vehicle records, such as plate, detect time, plate type, and other features. It can support up to 10,000 logs up to now, and support export or auto export these logs.