

HOW to install LPR?

Learn from other people's mistake!



Some typical failed images for LPR recognition





Some typical failed images for LPR recognition





Original
image



Captured by
normal color
camera



Captured by IR
Camera

Key to success in license plate capture:

The quality of the license plate image!



- ⦿ Used dedicated cameras
- ⦿ Properly Position the Camera
- ⦿ The importance of Infrared
- ⦿ 24h/7D
- ⦿ The suitable capture card
- ⦿ One camera, One Lane

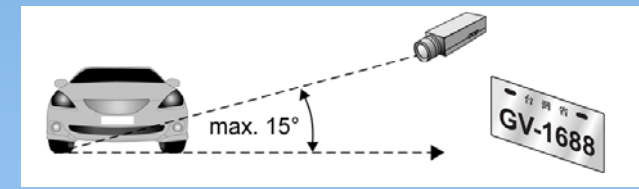
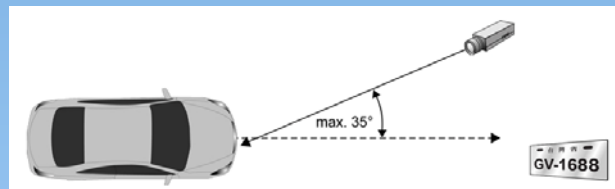
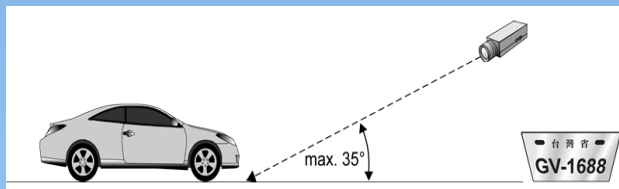
Is it possible to let the camera to capture license plates and at the same time provide surveillance of the surrounding area?

NO!

- the camera cannot deliver high-resolution images of the license plates
- The camera cannot cope with changing environmental conditions over time

Solution: DUAL CAMERA!

- ⊙ Ideally : At vehicle “bottlenecks” or by control points such as barriers
- ⊙ Ideally: the license plate should be viewed from NOT more than 35 degrees
- ⊙ Ideally: the width of the license plate should be 1/5 to 1/3 of the width of the image (min. 120 pixel)



How to solve the serious problems caused by glare on the license plates from factors such as headlights, sunlight and reflections from roads?

GOOD IR lighting – day and night!

Because all visible light is cut-filtered and only IR light is used by camera!



TWO ways to recognize:

- ⦿ With software motion detection (30 frames/sec)

The LPR system monitors vehicle passing through the camera and illuminator zone constantly and analyze it autonomously

- ⦿ By I/O activation (15 frames/sec)

I/O devices: magnetic loop detector, overhead laser scanner, or infrared sensor, which output their command through RS 232/485

	GV-250	GV-600	GV-650	GV-800	GV-1120	GV-1240	GV-1480
Frame Rate	20/15 fps	30/25 fps	60/50 fps	120/100 fps	120/100 fps	240/200 fps	480/400 fps
Ports	X	4	4	4	X	8	16
Motion detection	X	Max. 1 Lane	Max. 2 Lanes	Max. 4 Lanes	X	Max. 4 Lanes	Max. 1 Lane
Ports	X	4	4	4, 8	8	8, 16	16
I/O activation	Not suggest	Max. 2 Lanes	Max. 4 Lanes	Max. 8 Lanes	Max. 8 Lanes	Max. 8 Lanes	Max. 8 Lanes