Installation Guide

License Plate Recognition Camera

Version: 1.2

Date: May, 2018

It is important for the machine to quickly and accurately output license plate recognition results and capture high-quality license plate pictures. Adjust the angle and distance of the camera to ensure that complete and clear license plate pictures are captured.

- **Installation location**

  It is recommended to install the camera on the safety island near the lane in front of the barrier gate host. Make sure that the camera is installed on the safety island and close to the barrier gate host. It should not affect the operation of barrier gate.

- **Installation height**

  The camera should be installed at a height of 0.9m ~ 1.2m to ensure a valid recognition distance of more than 2m. The optimal recognition distance is 3.5m ~ 5m.

- **Installation angle**

  The recommended angle between the camera shooting direction and the road is in the range of 0-15 degree. The recommended angle between the LED lighting direction and the road is in the range of 0-15 degree.

✍ **Note:** 0-15 degree is only the recommended value, the specific debugging angle is based as per the test environment.

✍ Note:

1) If the external fill light is installed very close to the camera (less than 30cm), the light from the fill light will be directly reflected to the lens by the reflective coating on the license plate, causing overexposure of the license plate in the video image and thus affecting the final recognition result.

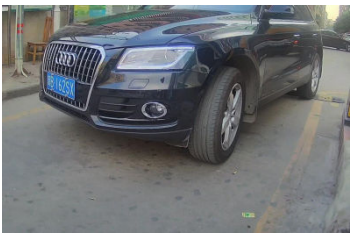
NC2 COM2 NO2	Connection indicator light (Red and Green).
AUX1 GND AUX2	Auxiliary input
CLOSE GND OPEN	Barrier Switch status
GND 485A2 485B2	Reserved port for RS485 transparent transmission function
485A1 485B1	Display/voice driver board connection
WD1IN WD0IN	Wiegand in
WD0 WD1 GND	Wiegand out

3. Adjusting the vehicle imaging angle

Enter the IP address of the camera (default IP address: **192.168.1.88**; default User Name and Password: **admin**) in the address bar of the browser. View the vehicle imaging angle in real time on the **Liveview** page to adjust the installation angle. **Side angle:** ≤50°; **depression angle:** ≤70°.

Correct installation

Incorrect installation



✍ **Note:** As shown in the correct installation figure, the camera should be in parallel to the lane as much as possible. In case of incorrect camera installation, the license plates can still be recognized, but the recognition rate is affected.

Correct drawing

Incorrect drawing

Note: The best recognizable area is at the lower part of the video image with the width of the license plate of about 90 to 150 pixels, while the vehicle is running from top to the bottom with a long distance (the virtual line is usually drawn here).

To adjust the brightness of the internal fill light, click **[Images]**on the **Liveview** page, or click **[Config]** → **[Video Settings]** → **[Video Parameter]**. However, the brightness should not be set too high as it can cause over-exposure. The default value is **128**.

8. FAQs

Q: **What should we do when the camera is not getting connected.**

A: Check the label on the camera, the default IP address must be changed to avoid conflicts; or check whether the host IP address of the management PC is in the same network segment as the camera and whether IP addresses conflict with each other if they are in the same network segment; or restore the factory settings of the camera.

Q: **The login page is not properly displayed after a user logs in to the device.**

A: Ensure that Microsoft Internet Explorer version is 6.0 or later.

Q: **No video is played after a user logs into the real-time video page.**

A: No control is installed. The real-time video can be played only after a control is downloaded and installed.

Q: **Two cameras are installed; a user can access the first camera successfully but cannot access the second one.**

A: The default IP address is set to 192.168.1.88 for all cameras to facilitate operation. However, their MAC addresses are different. The operating system caches the IP address and MAC address of the previous network camera. As a result, the second network camera with the same IP address may not be accessed.