如何安装配置 DS-TCG406-E/
How to configure DS-TCG406-E

1、相机安装/ Camera Installation

相机的安装高度在 1.5~3 米之间
安装高度低于 1.5 米，容易造成车灯直接照射相机导致画面过曝
安装高度高于 3 米，容易因为相机和车牌的角度太大导致识别率下降
不同的焦距型号安装距离不同，2812 的焦距型号是 3~12 米,0832 的焦距是 8~30 米,保证车牌字符高度的像素在 25~35 之间
The installation height of the camera is between 1.5 and 3 meters
The installation height is less than 1.5 meters, which is easy to cause the headlights to directly illuminate the camera, resulting in over-exposure of the picture
The installation height is higher than 3 meters, which is easy to reduce the recognition rate because the Angle of the camera and the license plate is too large
Different focal length models have different installation distances, the focal length model of 2812 is 3 to 12 meters, and the focal length of 0832 is 8 to 30 meters, ensuring that the pixel height of the license plate character is between 25 and 35
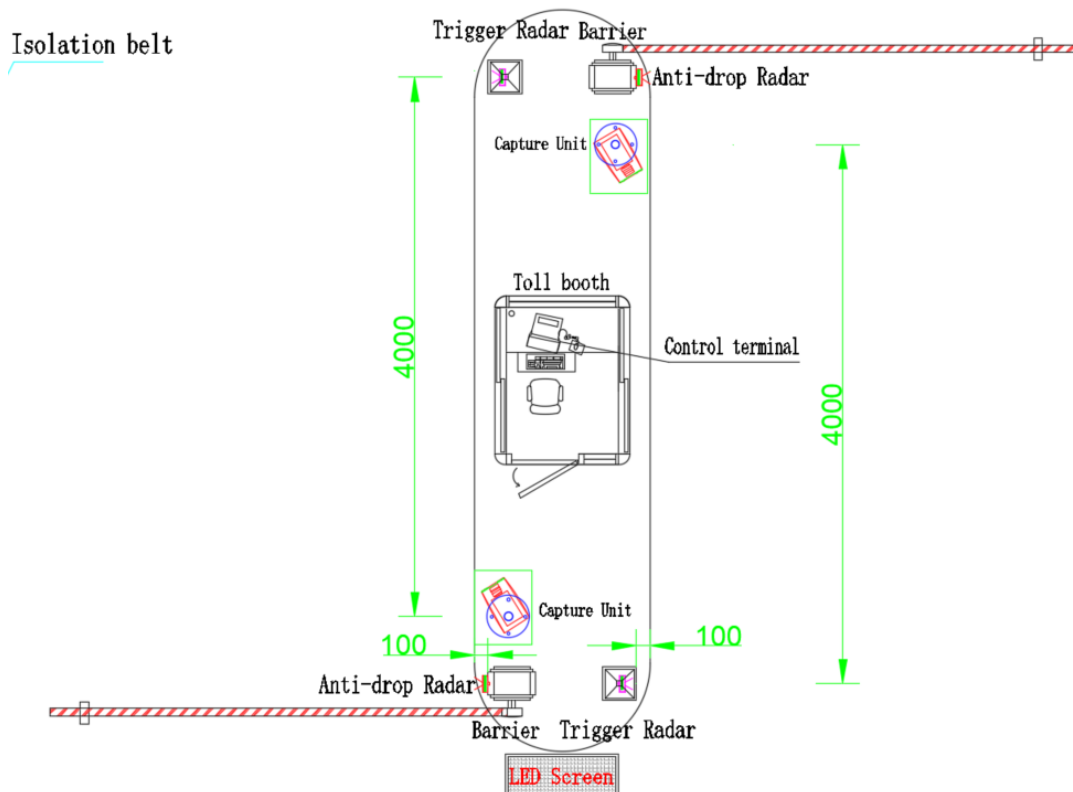
2、供电以及接线/ Power Supply and Wiring

①相机支持 POE 或者 DC12V 独立电源供电

The camera supports POE or 12V independent power supply

②道闸连接/ connection with barrier

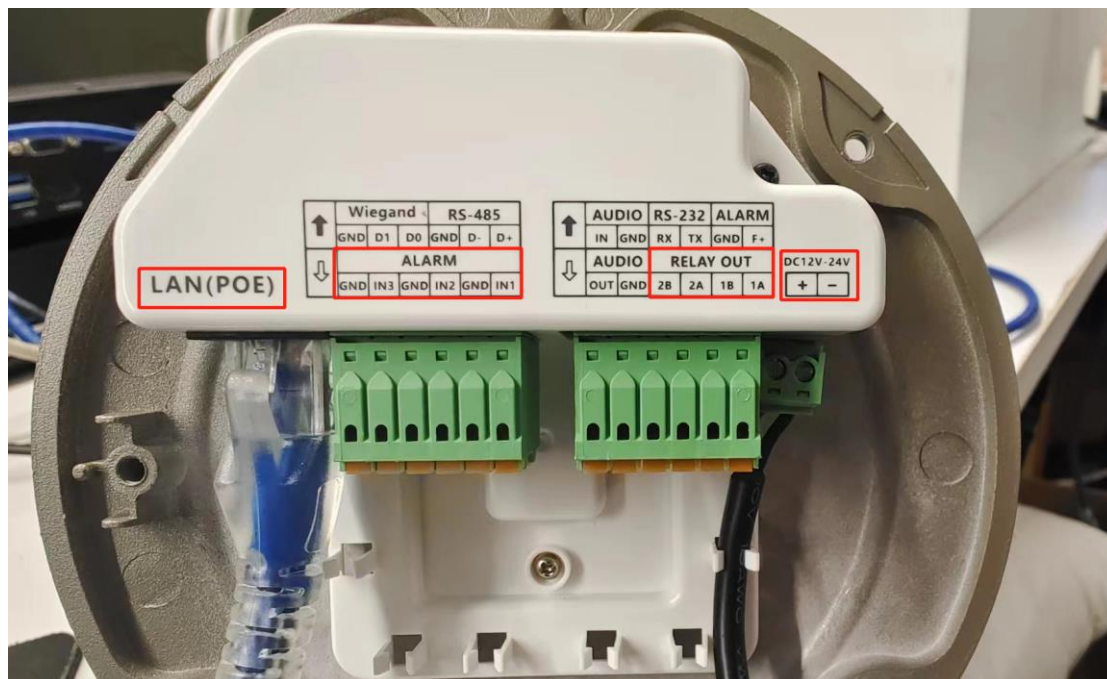Relay out 接口的 1A1B 对应的开闸端口，2A2B 对应的落闸端口

1A1B connecting with Raising Control in barrier

2A2B connecting with Falling Control in barrier

③触发设备连接/ connection with trigger device

IO 接口接对应的触发设备（雷达或车检器）

IO port connecting with trigger device（radar or coil）

3、相机调试/ Camera Adjustment

（1）角度调整/ angle adjustment

相机安装之后，登录相机预览界面，将测试车辆停在触发位置附近，通过调整相机的角度，使车牌位置在相机画面的下 1/3 处，并尽量让车牌保持水平

After the camera is installed, log in to the camera preview interface and park the test vehicle at the trigger position. Adjust the camera Angle so that the license plate position is in the lower 1/3 of the camera screen, and try to keep the license plate level
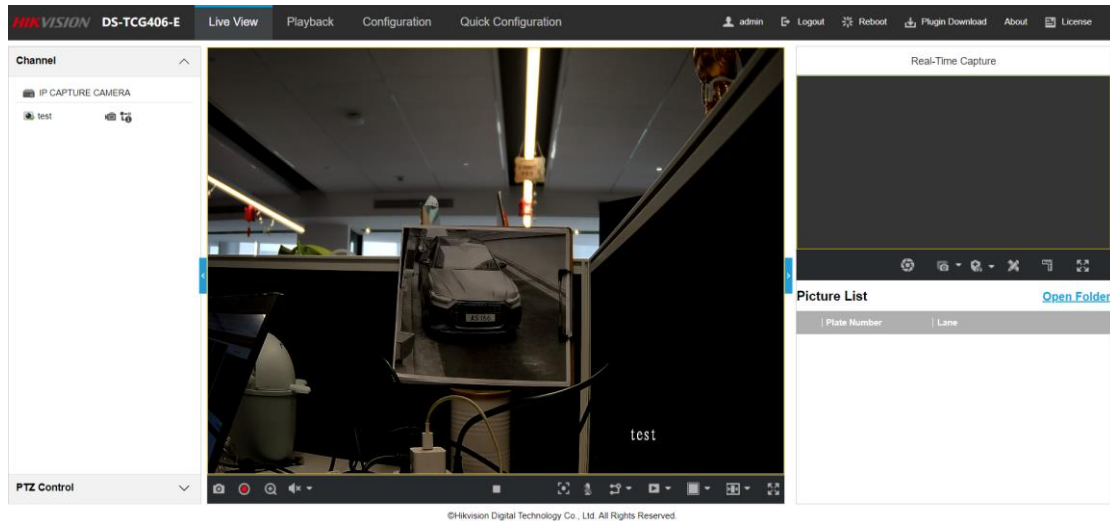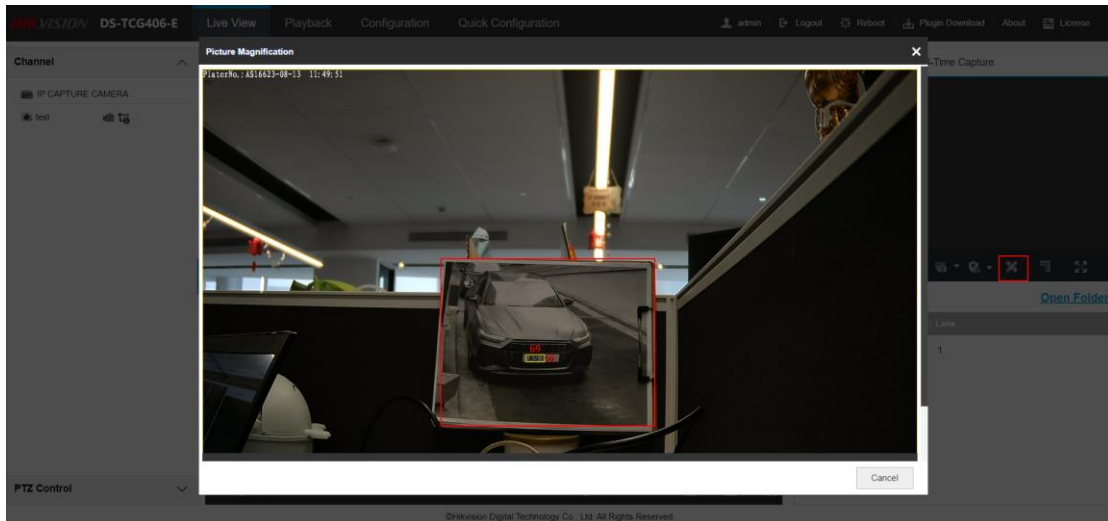
（2）焦距调整/ focal setting

a）在相机预览界面，通过手动抓拍并打开抓拍图

a）In the camera preview screen, manually capture the picture and open the picture
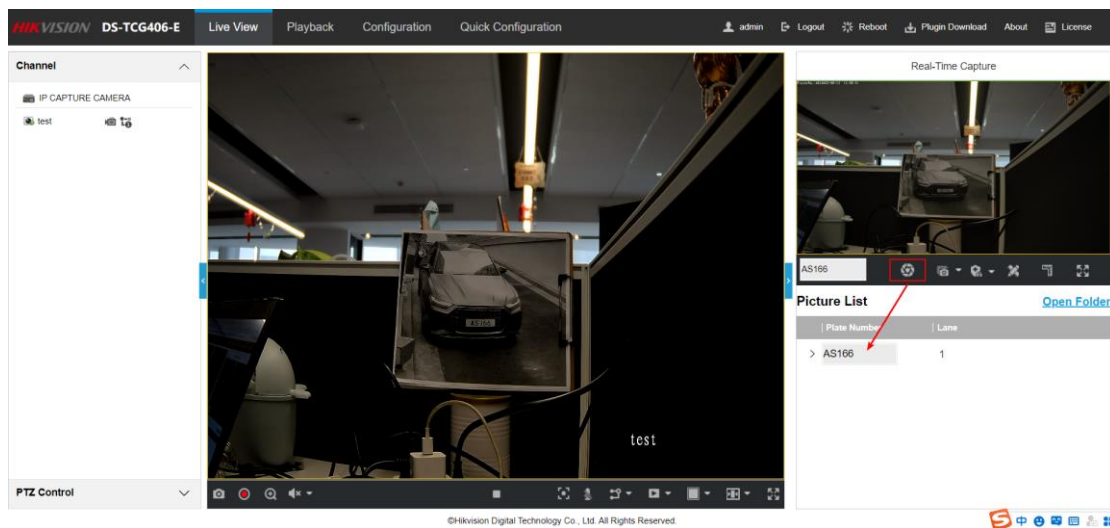
b）右侧点击像素测量功能，测试车牌的字符高度，检查像素是否在 25~35 之间

b）Click the pixel measurement function on the right side to test the character height of the license plate and check whether the pixel is between 25 and 35

c）进入相机焦距调整界面，调整现场画面大小，使车牌像素在 25~35 之间

c）Enter the camera focal length adjustment screen and adjust the size of the live picture to make the pixel between 25 and 35
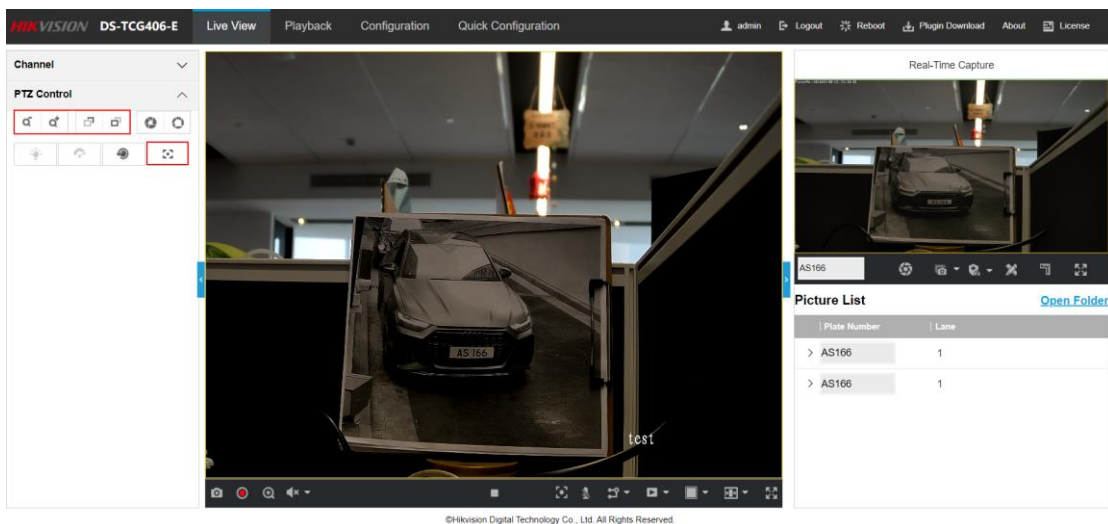

4、版本信息以及程序升级/ Version Information and Program Upgrade

①系统配置中确认相机程序版本信息，反馈问题前先确认程序版本以及是否为基线程序

①Confirm the version of the camera program in the system configuration, and confirm the version of the program and whether it is a baseline program before feedback
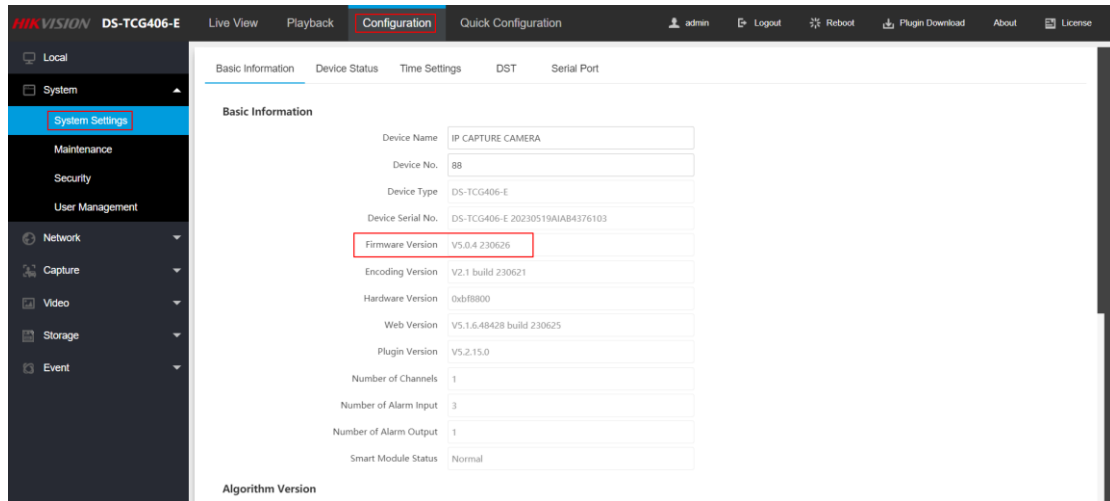
②抓拍参数中可以确认算法识别的区域，基线算法程序分为亚太、欧洲、中东和非美
②The regions identified by the algorithm can be confirmed in the capture parameters. The baseline algorithm program is divided into Asian, Europe, Middle East and Africa&Latin America
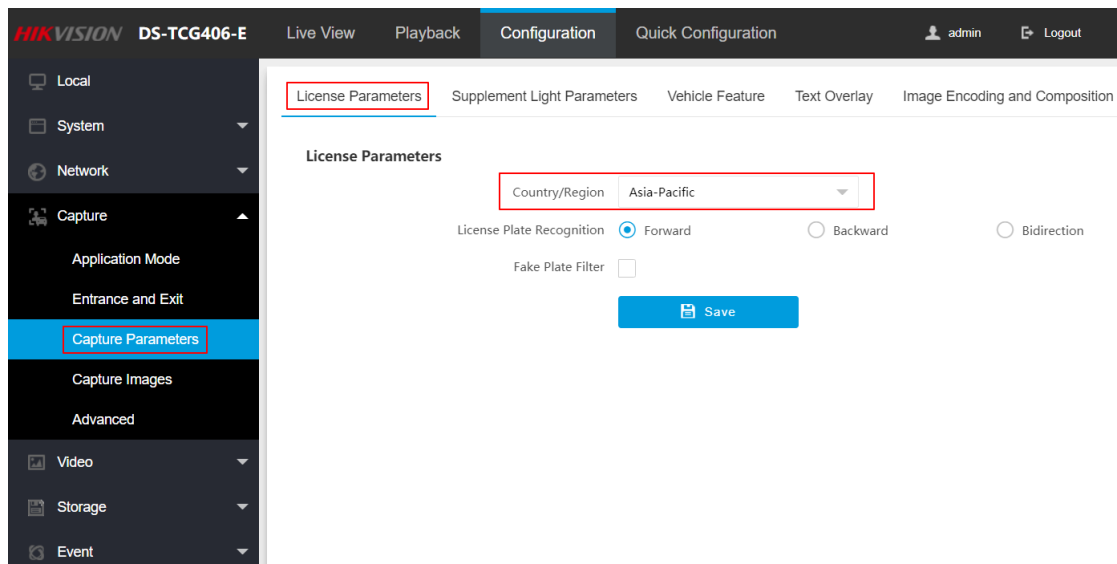
③如现场程序不支持该区域的车牌识别，在系统维护中升级程序。
注意：升级路径不能包含中文
③If the camera version does not support license plate recognition in this area, upgrade the program during system maintenance
Note: The upgrade path cannot contain Chinese characters
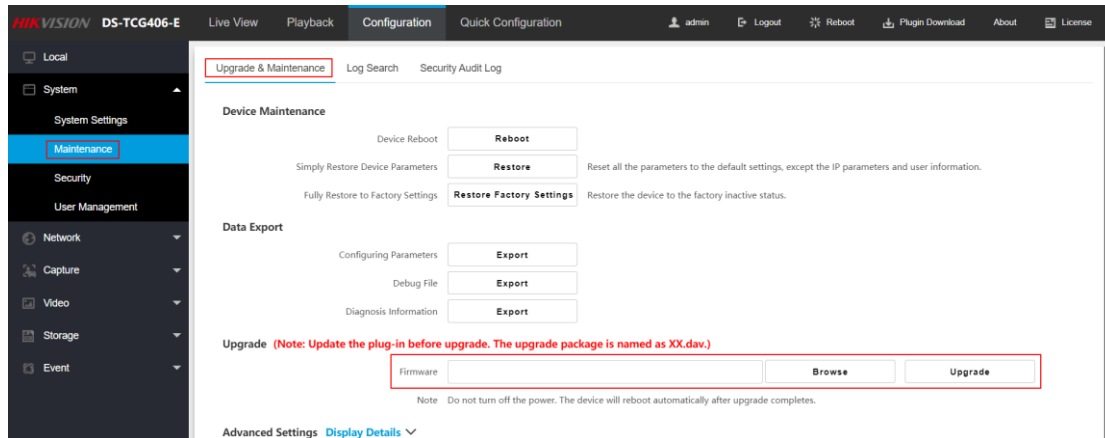
5、应用模式/ Application Mode

①触发模式/ trigger type

根据现场设置正确的触发模式。

视频触发：无需触发设备，车辆经过车道线完成抓拍

IO 触发：需要雷达或线圈等触发设备，车辆经过雷达或线圈后触发抓拍，触发稳定

雷达混合触发：用于混合车道，并且使用了触发雷达和逻辑雷达来判断进出方向

Setting the correct trigger type according to the site.

Video detection: Without triggering device, the vehicle passes the lane line to complete the capture

IO coil: The need for radar or coil trigger device, the vehicle after the radar or coil trigger capture, the camera can trigger stability

Radar Mixed Traffic: Used for mixed lanes, and the trigger radar and logic radar are used to determine the direction of entry and exit
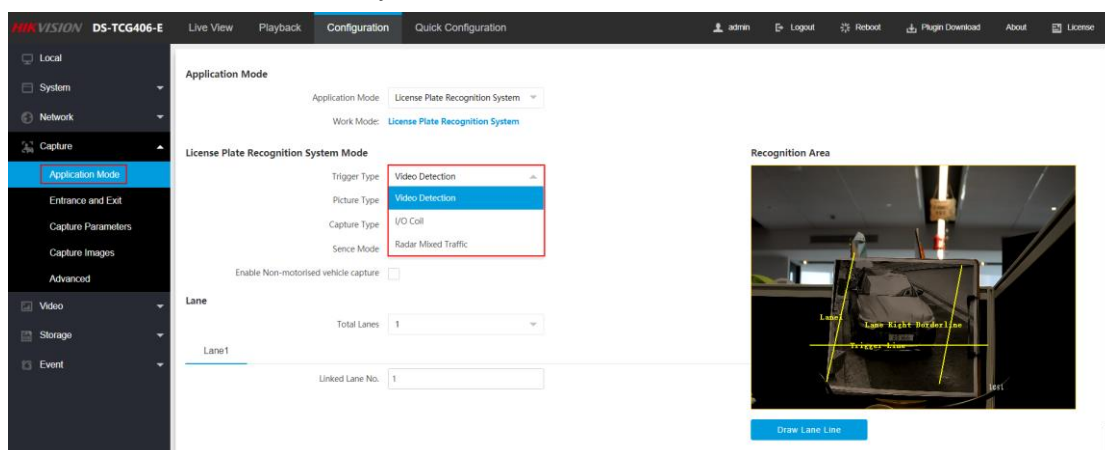
②车道线配置/ draw LPR area

车道线配置对于车牌识别非常重要，一定要根据现场实际场景绘制，禁止用默认区域或者随意乱画

a）抓拍时，车牌与车头本身必须在识别区域内部

b）识别区域包含抓拍前的轨迹区域；无关区域不要过分绘制，会影响识别速度

c）车道线和触发线形成的区域为检测区域

Lane configuration is very important for license plate recognition. It must be drawn according to the actual scene, and it is forbidden to use the default area or random drawing

a) When capturing, the license plate and the car itself must be inside the recognition area

b) The recognition area includes the track area before capturing，do not overdraw irrelevant areas, which will affect the recognition speed

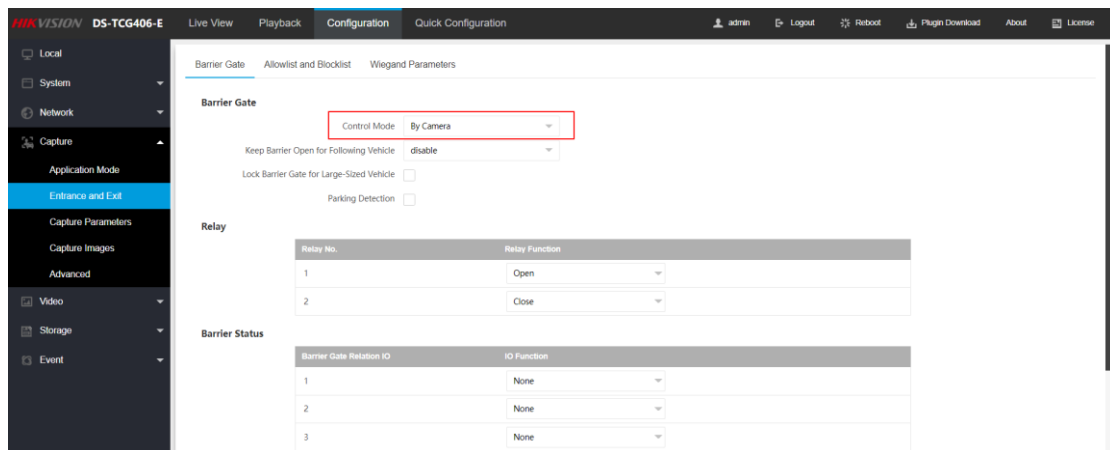c) The area formed by the lane line and trigger line is the detection area
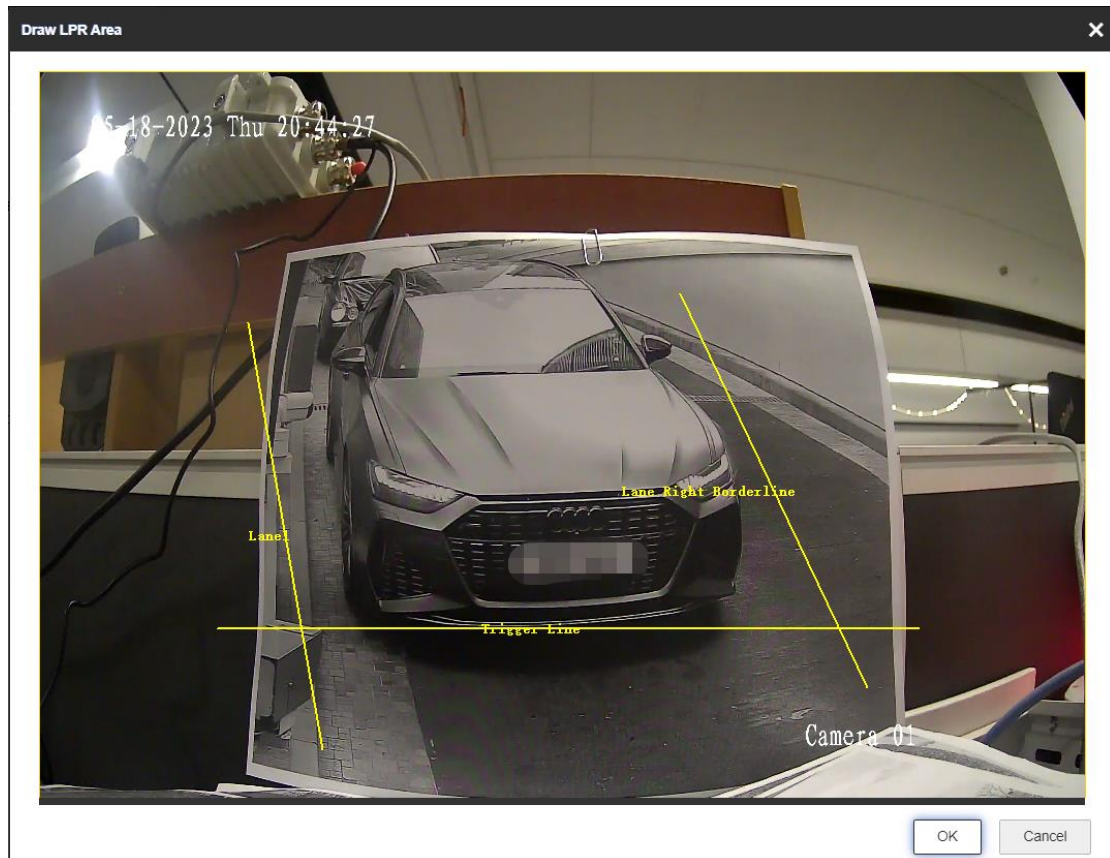
## 6、出入口配置/ Entrance and Exits

（1）相机控制

若相机不添加到平台，可以通过相机的黑白名单设置开闸规则，需要将道闸的控制模式设置为相机

If the camera is not added to the platform, you can set the control rule through the blacklist or whitelist of the camera. You need to set the control mode of the gate by camera
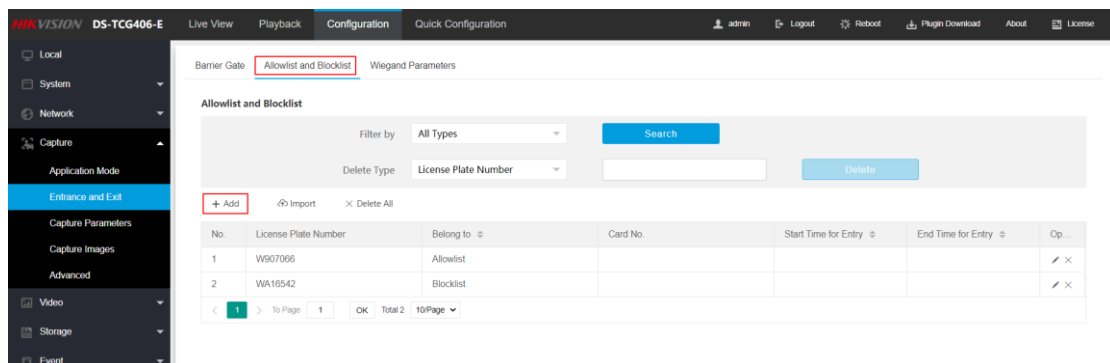
然后在车辆管理中设置临时车、黑名单车辆、白名单车辆的放行规则。在下方手动控制道闸开关可以测试相机和道闸是否接线正常

Then set the control rules of temporary vehicles, black list vehicles and white list vehicles in vehicle management. Manually control the barrier close and open in below to test whether the camera and barrier are properly connected
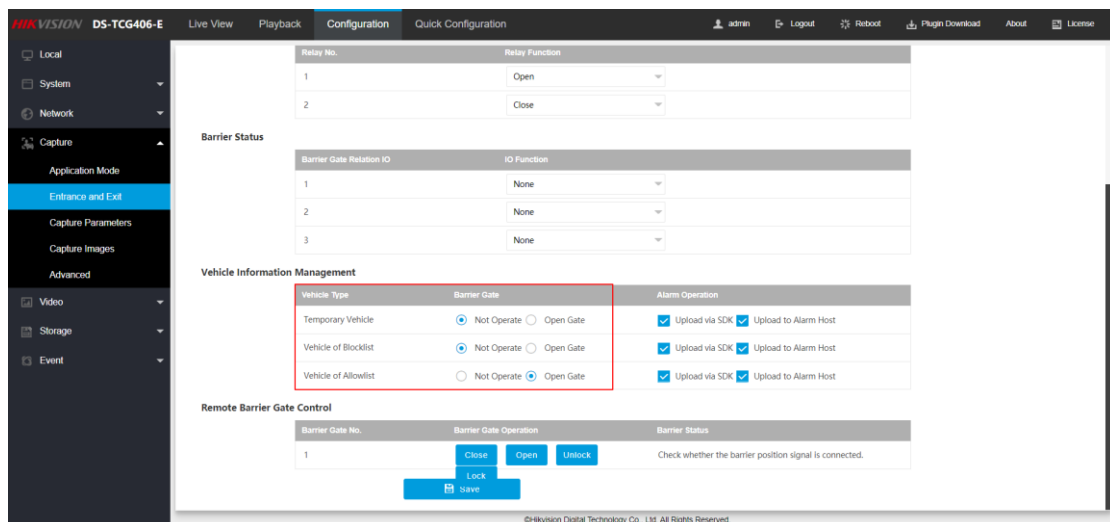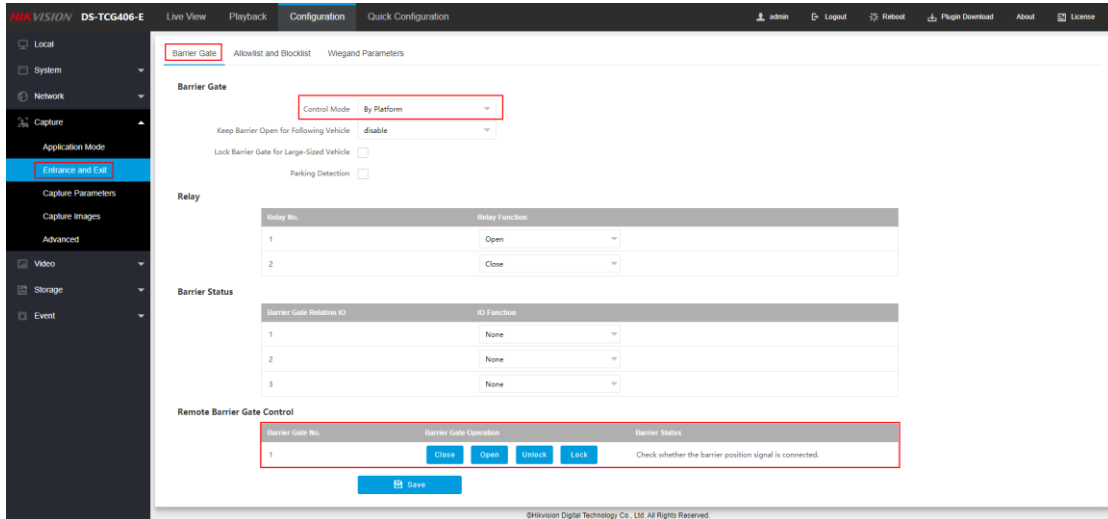

最后在黑白名单管理中添加对应的车辆名单

（2）平台控制

若相机需要添加到平台，需要将控制模式设置为平台。同时也可以在下方手动控制道闸开关

When the camera needs to be added to the platform, the control mode need set by platform. After setting, the platform can control the opening and closing of the channel gate, you can also use the camera to test the gate on and off in this page
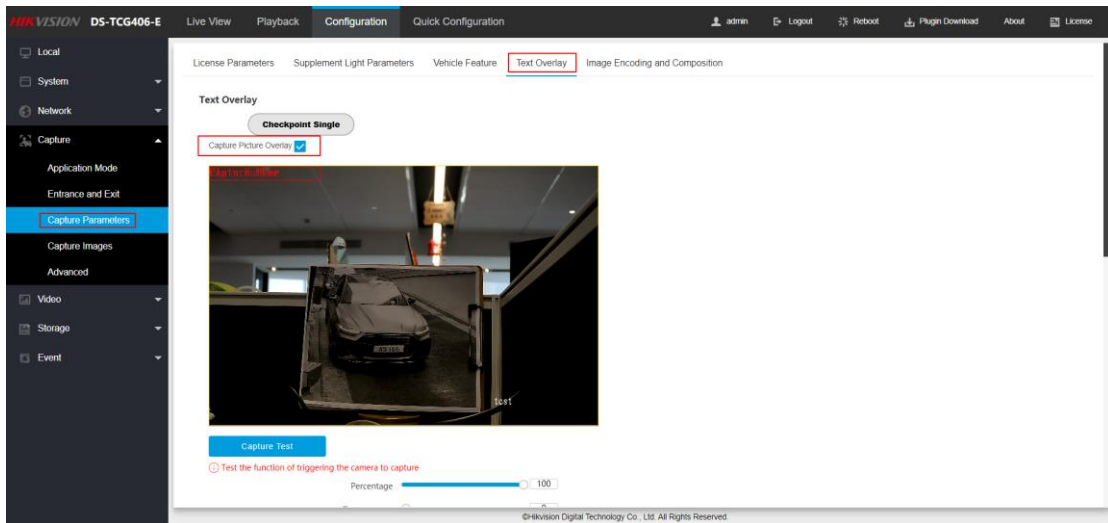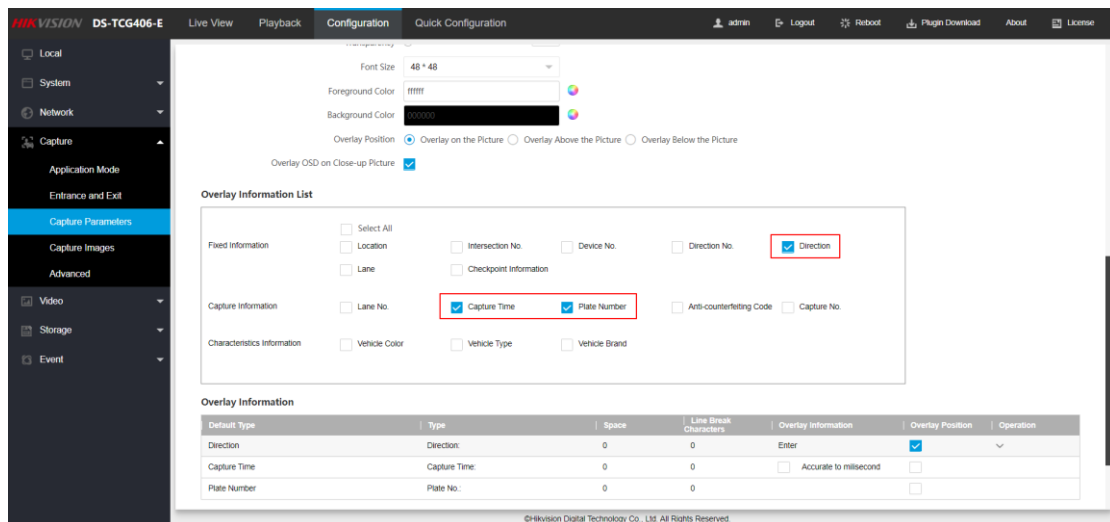
7、字符叠加/ Test Overlay

开启后在抓拍图中显示设置的信息，如车牌号、抓拍时间、设备编号等，方便分析抓拍图的识别结果

After this function is enabled, the set information, such as license plate identification and capture time, can be displayed in the snapshot to facilitate the analysis of the recognition result of the snapshot

8、图像参数/ Image Parameters

①宽动态：当现场环境存在明暗差距较大时，如车牌处于背光的情况，开启宽动态，并设置开始结束的时间段。

其他：保持默认设置

①WDR mode: When there is a large gap between light and dark in the field environment, such as the license plate is in the backlight situation, turn on the lights at night caused by the license plate is too dark, open the wide dynamic, and set the start and end of the time period.

Others: Keeping the default Settings
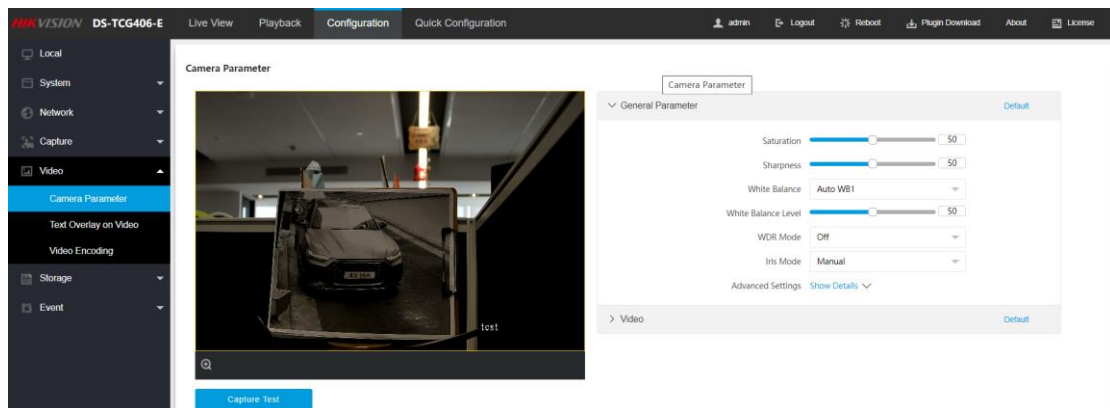
②亮度：默认设置 50，当现场环境过暗，可以增加亮度

③增益：默认设置 50，当现场环境过曝，可以降低增益

④快门速度：默认 4000，当车辆速度过快，抓拍图存在残影时，需降低快门速度，但是降低快门速度会导致抓拍图亮度降低，需要对应增加亮度。

其他：保持默认设置

②Brightness: The default value is 50. If the environment is too dark, you can increase the brightness

③Gain: The default value is 50. When the field environment is overexposed, the gain can be reduced

④Shutter speed: default: 4000. When the vehicle speed is too fast and there are residual

images in the snapshot, you need to reduce the shutter speed
Others: Keeping the default Settings
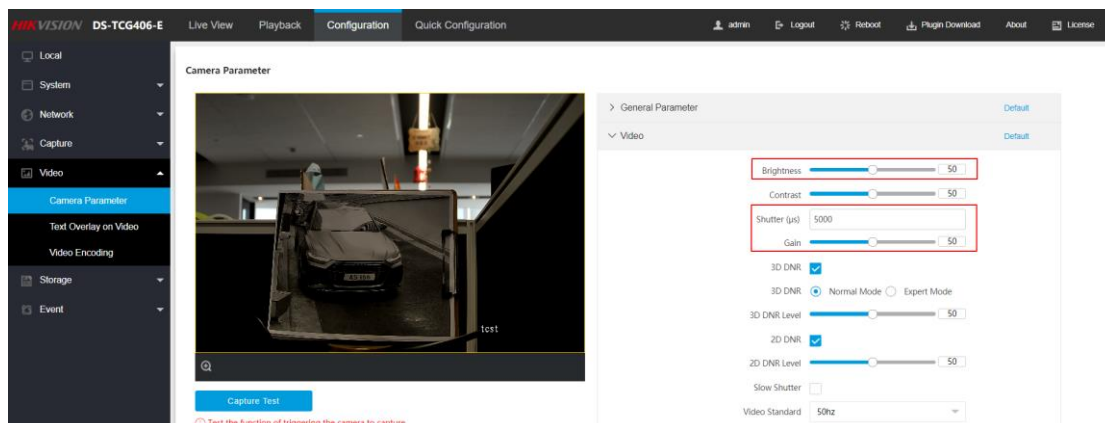
⑤白光灯/红外灯：支持白光灯/红外灯的相机，可以在夜间开启红外模式的同时，开启白光灯/红外灯进行补光，增加车牌的亮度，提高夜间车牌的识别能力。
⑤White light/IR light: the camera supporting white light/infrared light can turn on the infrared mode at night at the same time, turn on the white light/infrared light to fill the light, increase the brightness of the license plate, improve the recognition ability of the license plate at night
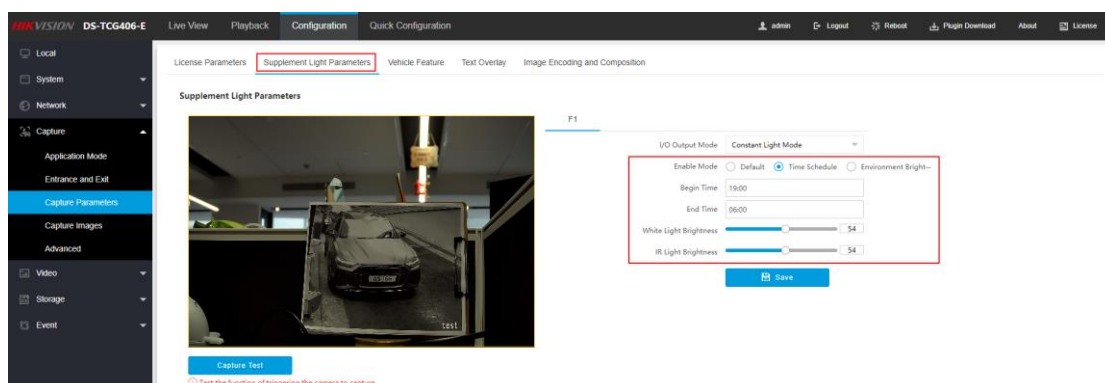
8、SD 卡设置

相机支持插入 SD 卡进行录像存储或者图片存储，第一次插入 SD 卡，需要将卡格式化
You can insert an SD card into the camera for video storage or picture storage. If you insert an SD card into the camera for the first time, format the card
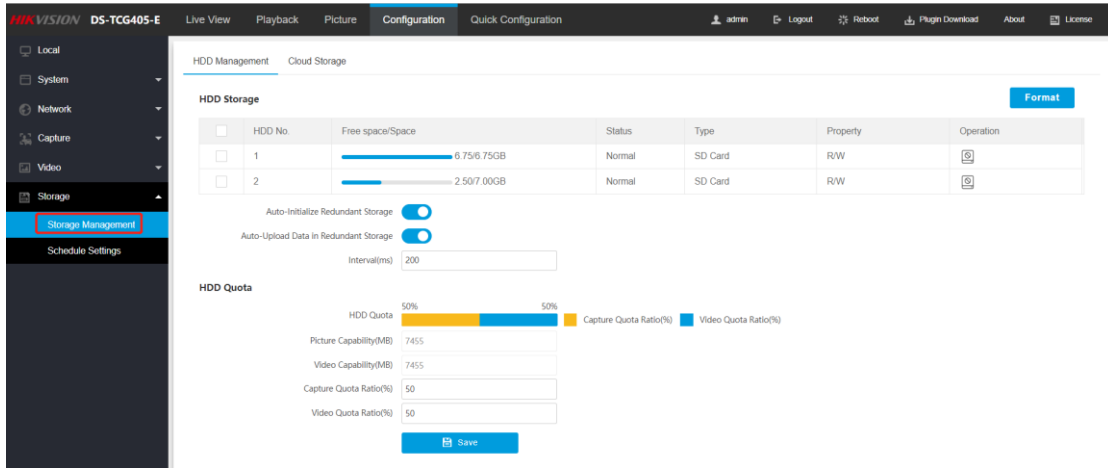
9、布防状态/ Arming Status

相机添加至平台后，从设备状态中可以看到是否正确被平台布防

After the camera is added to the platform, the device status shows whether the camera is properly armed by the platform