# 1 Parking Lot Management

## 1.1 Add ANPR Camera

Before using parking lot system, please add ANPR cameras first. The ANPR camera is use to capture the license plate of the vehicles entering or exiting the parking lot.

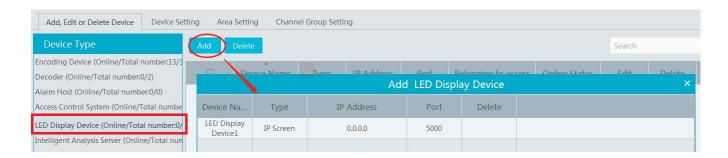
There are two ways to add ANPR camera.

- Click Home→Resource Management→Add, Edit or Delete Device→Encoding Device to enter the encoding device adding interface.
   Click [Add] to add your ANPR camera.
- 2. Add the ANPR camera to your NVR with license plate recognition function and then add this NVR to the platform.

# 1.2 Add LED Display Screen

Before using parking lot system, please add the LED Display Screen which is used to display the information of the vehicles entering or exiting the parking lot.

Click Home → Resource Management → Add, Edit or Delete Device → LED Display Device to go to the LED display device adding interface.



Port: the default port is 5000.

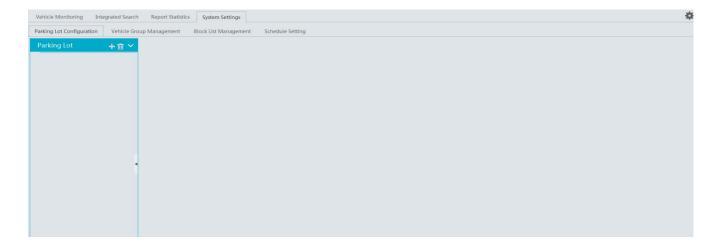
Type: please select IP screen.

IP address: enter the IP address of the IP screen.

# 1.3 System Settings

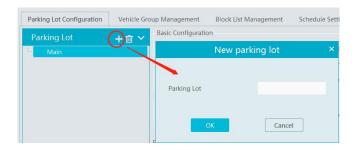
## 1.3.1 Parking Lot Settings

Go to Parking Lot Management→System Settings→ Parking Lot Configuration as shown below.



#### Add or Delete Parking Lot

Click to add a parking lot as shown below.



Select the parking lot and click it to delete it. Note that there must be no entrance or exit or vehicle group under the parking lot, or it cannot be deleted.

### • Basic Configuration

Select the parking lot and then set the relevant parameters for it. You can modify the parking lot name, set whether to allow temporary vehicle access even if the parking space is full, total parking space, number of the current vehicles (in order to ensure the accuracy counting of remaining parking space, please make sure that no vehicle entering or exiting), remaining parking space, number of overflow vehicles, barrier gate opening duration and repeated license plate waiting time. After that, click [Apply] to save the settings.

Total Parking Space: the set total parking space

Number of the current vehicles: the number of vehicles staying in the parking lot

**Remaining parking space:** Total parking space minus the number of the current vehicles (if the number of the current vehicles is more than or equal to the total parking space, the reaming parking space will be "0").

**Number of overflow vehicles:** the number of the current vehicles minus total parking space (if the number of the current vehicles is less than the total parking space, the remaining parking space will be "0").

Repeated license plate waiting time: the same license plate will be identified once within the set waiting time

### • Temporary Vehicle Timeout Settings

Overtime Parking of Temporary Vehicles: if enabled, timeout threshold and daily alarm email sending time should be set. Once the temporary vehicles that stay in the parking lot exceed the set timeout threshold, an email will be sent according to the set time.

## License Plate Settings

Local license plate and special license plate can be set (Charge will be made).

#### • Entrance and Exit Settings

Click [Add] next to "Entrance/Exit Setting" to create an entrance/exit. You can directly modify the entrance name and click [Apply] to save the setting.

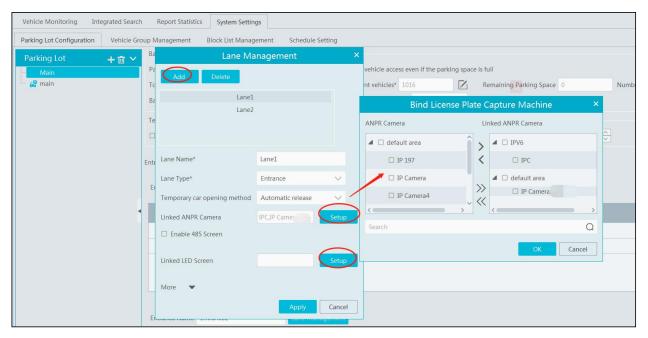
For the added entrance/exit, click into delete it. Before deletion, please ensure that there is no lane information under it, or it cannot be deleted.

#### • Lane Management

Click [Lane Management] next to the entrance name. This will bring a lane setting window. Click [Add] to add a new lane. Set the lane name, lane type and temporary car release way (manual/auto release). After that, click [Apply] to save the settings.

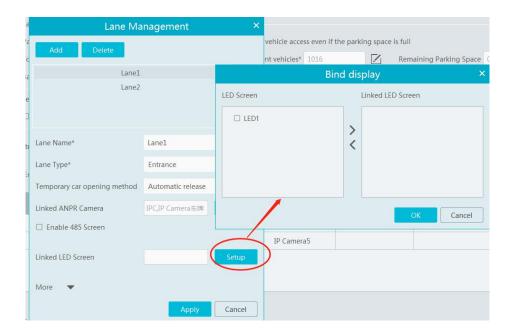
#### • Binding ANPR Camera

In the lane management window, click [Setup] of the linked ANPR camera line to bind the ANPR camera as shown below. Multiple cameras can be bound to one lane.



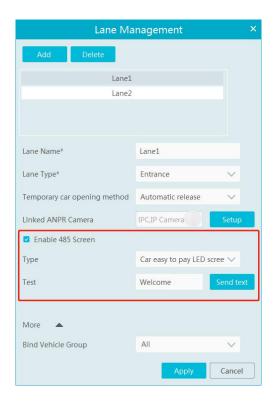
### • Binding LED Screen

In the lane management window, click [Setup] of the linked LED screen line to bind the LED screen as shown below. One screen can be bound to one lane only.



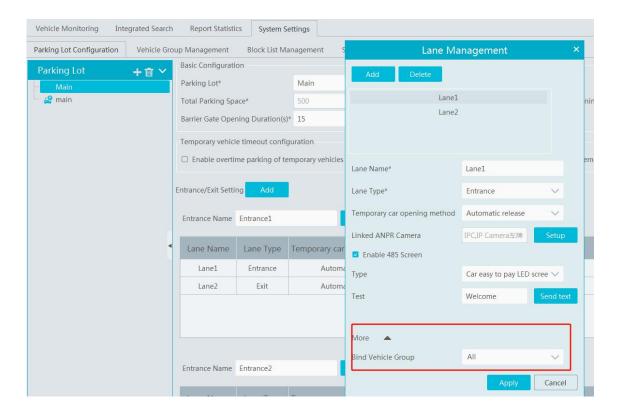
## Binding RS485 Screen

In the lane management interface, you can also bind RS485 screen. Enable RS485 screen, select the screen type and then click [Apply]. Before binding RS485 screen, please ensure that the license plate capture camera has been connected to the screen via RS485 interface.



### • Binding Vehicle Group

In the lane management window, click "More" to bind vehicle group. Select the vehicle group as needed. Then click [Apply] to save the setting. All vehicles in the vehicle group bound to the lane will be allowed to enter/exit in the parking lot.

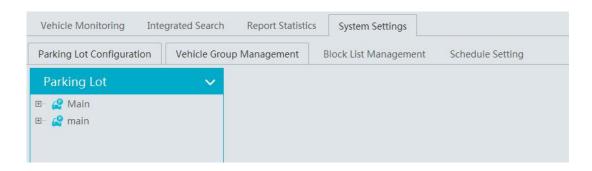


Note: A parking lot can add multiple entrances and exits; an entrance/exit can add multiple lanes; a lane can bind multiple license plate capture camera; but one license plate capture camera only can be bound to one lane of the entrance/exit in the parking lot. The name of the parking lot cannot be repeated; the names of entrances/exits in the same parking lot cannot be the same; the names of the lanes in the same

entrances/exits cannot be the same.

## 1.3.2 Vehicle Group Management

Go to Parking Lot Management → System Settings → Vehicle Group Management interface as shown below.

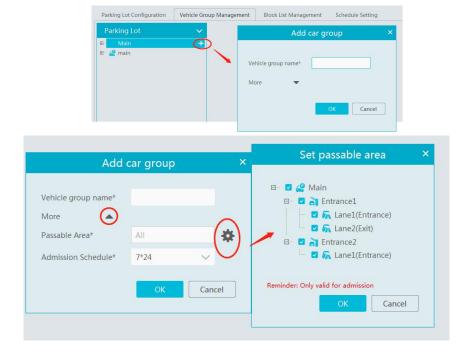


### • Add, Modify or Delete Vehicle Group

### **Add Vehicle Group:**

Move the cursor onto the parking lot name and then will be shown. Click this icon to add a vehicle group.

Click to edit the vehicle group. Click to extend the remaining menu and then click to set the passable area of the vehicle group and admission schedule.



### **Modify or Delete Vehicle Group:**

Move the cursor onto the vehicle group name and then will be shown. Click this icon to delete. If there are vehicles added in the vehicle group, it cannot be deleted. You must delete all vehicle information first and then this vehicle group can be deleted.

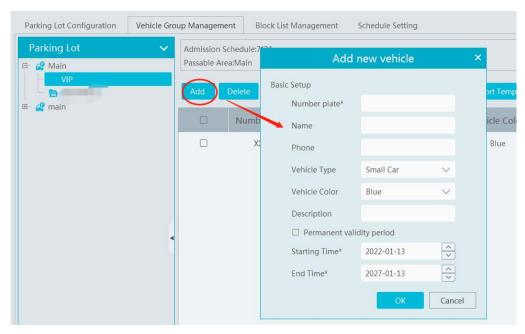
Move the cursor onto the vehicle group and then will be shown. Click it to modify the vehicle group name, passable area and admission schedule. After that, click "OK" to save the settings.

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#### **Vehicle Information Settings**

Add Vehicle Information: Select the vehicle group, click [Add] to add a new vehicle. Fill in the relevant vehicle information. The number plate must be entered.



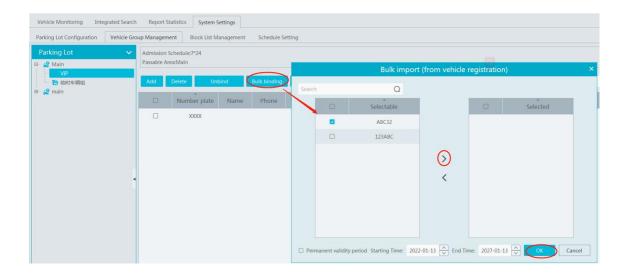
#### **Delete Vehicle Information:**

Select the vehicle information and then click [Delete] to delete the vehicle information.

Note: If the vehicle information you want to delete is bound to other vehicle groups, it will be deleted too in other vehicle groups.

Bulk Binding: in the vehicle group management interface, select the vehicle group and click [Bulk Binding] to bind other vehicles to this vehicle group.

**Note**: one license plate only can be bound to a vehicle group of other parking lots. It cannot be bound to other vehicle groups of the same parking lot.



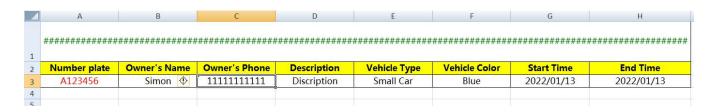
File Import: Click [Export Template] to export a. cvs or .xlsx file. Then open the template, edit all vehicle information and then save it.

Click [File Import] and then select the edited file to import all vehicle information.

.cvs template file includes three attributes, including plate number, owner's name, owner's phone.

	A	В	С	D
1	(B1) Numbe	(B2) Owner	(B3)Owner's Phone	
2	A123456	Simon	11111111111	
3				
4				

.xlsx file includes many attributes, including plate number (compulsory), owner, owner, phone, vehicle color, vehicle type and so on.



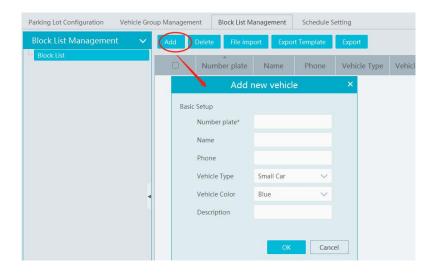
Unbind Vehicle: Select the vehicle you want to unbind and then click [Unbind selected]. In the pop-up window, click [OK]. This vehicle will be removed from the current vehicle group. The vehicle information will not be deleted and the binding relationship between the vehicle and other vehicle groups will not changed. This vehicle also can be bound to the other vehicle group of this parking lot. You can also click to unbind.

Modify Vehicle Information: in the vehicle group management interface, select a vehicle and then click information.

Vehicle Search: in the search bar, enter the key words to search the vehicle information.

## 1.3.3 Block List Management

Go to Parking Lot Management → System Settings→Block List Management interface as shown below.



Block list is created by default. Click [Add] to add the vehicle information. The plate number must be entered. The vehicles added to the block list cannot be added to any other vehicle groups.

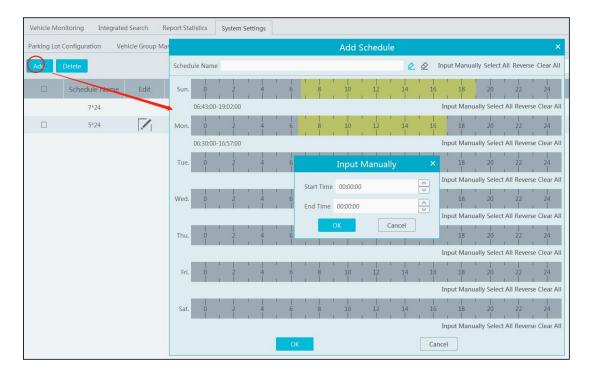
Select the vehicles and then click [Delete] to delete the vehicles from the block list. Import the vehicles to the block list is the same as vehicle import to other vehicle groups.

Click local to modify the vehicle information in the block list. Click [OK] to save the settings.

## 1.3.4 Schedule Settings

Go to Parking Lot Management -> System Settings -> Schedule Setting interface as shown below.

Click [Add] to pop up schedule adding window. Click "Input Manually" to enter the start and end time. Then click "OK" to create the schedule. Choose the schedule and then click [Delete] to delete the schedule. Click to modify the schedule. 7\*24 is created by default schedule which cannot be deleted.

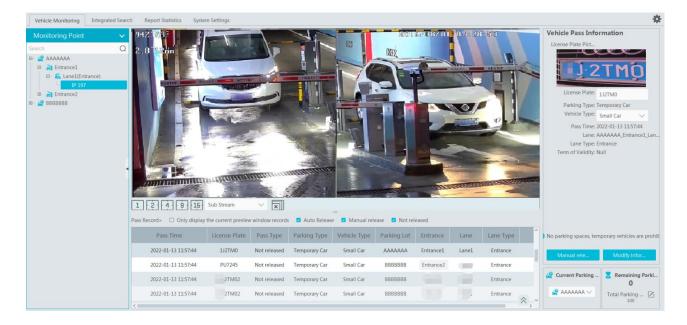


# 1.4 Vehicle Monitoring

Click Parking Lot Management > Vehicle Monitoring. Then you can view the real-time lane monitoring video, vehicle passing information, remaining parking space and so on.

#### 1.4.1 Real-time Vehicle Preview

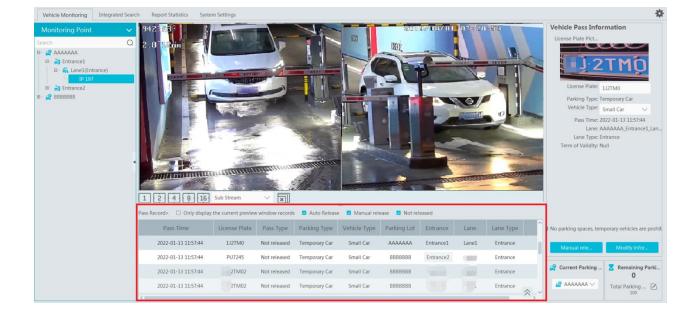
Drag the camera on the left panel to the preview window to view the real time video. 1/2/4/9/16 screen display mode and stream can be selected. Click to close all previews.



### 1.4.2 Pass Records

Under the preview window, you can view the real-time vehicle passing records. If "Only display the current preview window records" is checked, the system will only display the vehicle information identified by the camera that is playing in the preview window. If disabled, the vehicle information identified by all cameras under all parking lots will be displayed. You can also filter the passing record by selecting "Auto Release", "Manual Release" or "Not Released".

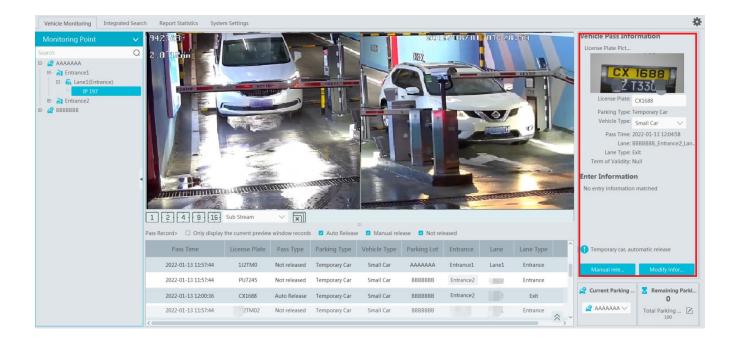
When the scrollbar on the right of the passing record area is in the top or bottom, the passing record may not refresh; when the scrollbar in the middle, it will stop refreshing and the current passing record page will not change.



### 1.4.3 Pass Information

On the right panel of the vehicle monitoring interface, it shows vehicle passing information. In the current area, you can view the vehicle image, license plate, lane type, vehicle type, term of validity, enter information and the vehicle status. You can also modify the information of vehicles unreleased (or manually released), including license plate, vehicle type and so on.

Select a preview window and then the passing record area will refresh the vehicle information identified by the camera; Select a passing record, vehicle pass information area will display the selected vehicle information and the passing record will not refresh. Re-select the preview window to continue refreshing.



On the lower right of the vehicle monitoring, it is remaining parking space display area. You can select the parking lot as needed. Click to select the parking lot you want to display and then edit the total parking space and remaining parking space. Please make sure there is no vehicle entering or exiting before modification in order to guarantee the accuracy counting of the remaining parking space.

#### 1.4.4 Search Pass Information

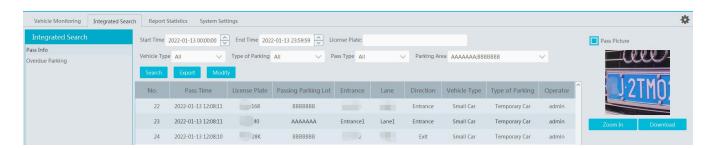
In this interface, the information of the vehicles entering and exiting the parking lot can be searched.

Set the filtering condition, such as the start and end time, license plate, vehicle type and lane. Click [Search] to search the records.

Click a passing record and then the corresponding license plate image will be displayed on the right. You can zoom in and download it.

At present, up to 3,000,000 passing records can be stored and 120,000 vehicle passing images can be matched to these passing records. To modify passing record: select a passing record, click [Modify], select the vehicle type and click [OK].

To export the parsing record, search the desired passing record and then click [export] to export the records to the specified file named after "Integrated Search + data" (eg. Integrated Search\_20220112\_11233555). The export file is .xls file.



## 1.4.5 Search Overdue Parking

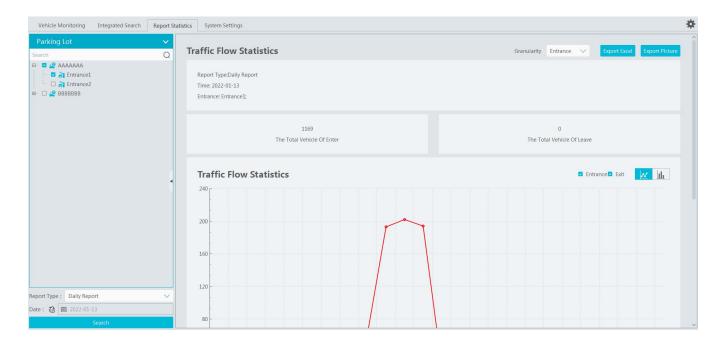
In this interface, you can check the information of the vehicles which stay in the parking lot longer than the predefined parking duration.

Before searching, please make sure you have enabled overtime parking of temporary vehicles in the parking lot configuration interface.

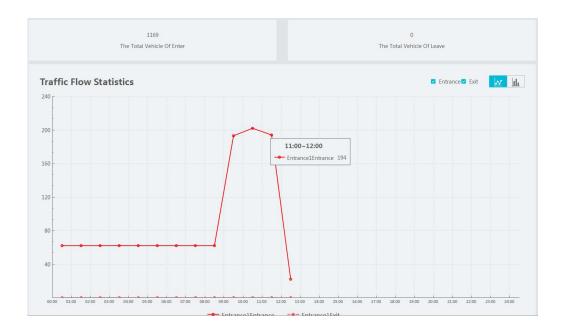
(Click Home → Parking Lot Management → System Settings → Parking Lot Configuration)

# 1.5 Report Statistics

Go to Parking Lot Management Report Statistics interface. In this interface, vehicle flow statistics of all parking lots can be searched and viewed via line chart, bar graph and pie chart.

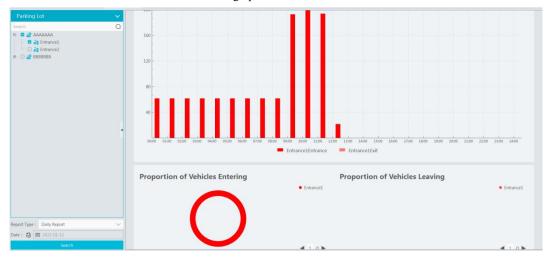


On the left panel, select the parking lot and entrances/exits you want to view the statistical information. Then select the report type and data. Click to select the desired date; click to select the date range. After that, click [search] to display the statistical information.



The default granularity is "Entrance". You also can select "Parking Lot" and click [Search] to refresh the vehicle flow data. The report type, time and granularity will be shown on the top of statistical information. The total number of vehicles entering or leaving can be viewed too.

Click us to view the data statistics in the line chart; click to view the statistics in the bar graph. You can view the entrance or exit information as needed. Put the cursor on the statistic chart/graph to view the detailed information.



Export: You can choose to export Excel or image as needed. Click [Export Excel], select the path and then click "Save" to export the files(.xls). The file name format is "Report Statistics\_ Date".

Click [Export Picture] to export pictures (.png format).