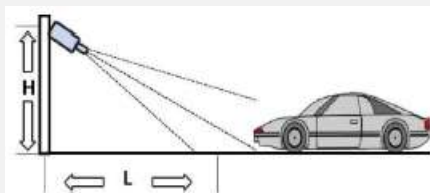
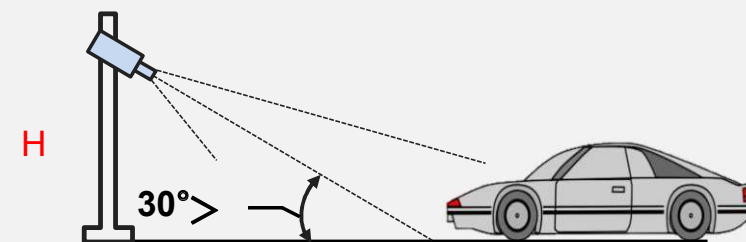


Základní instalační podmínky – doporučená instalace

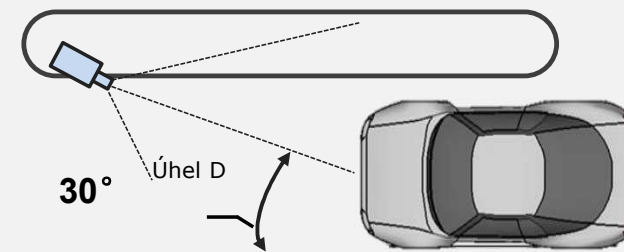
HIKVISION



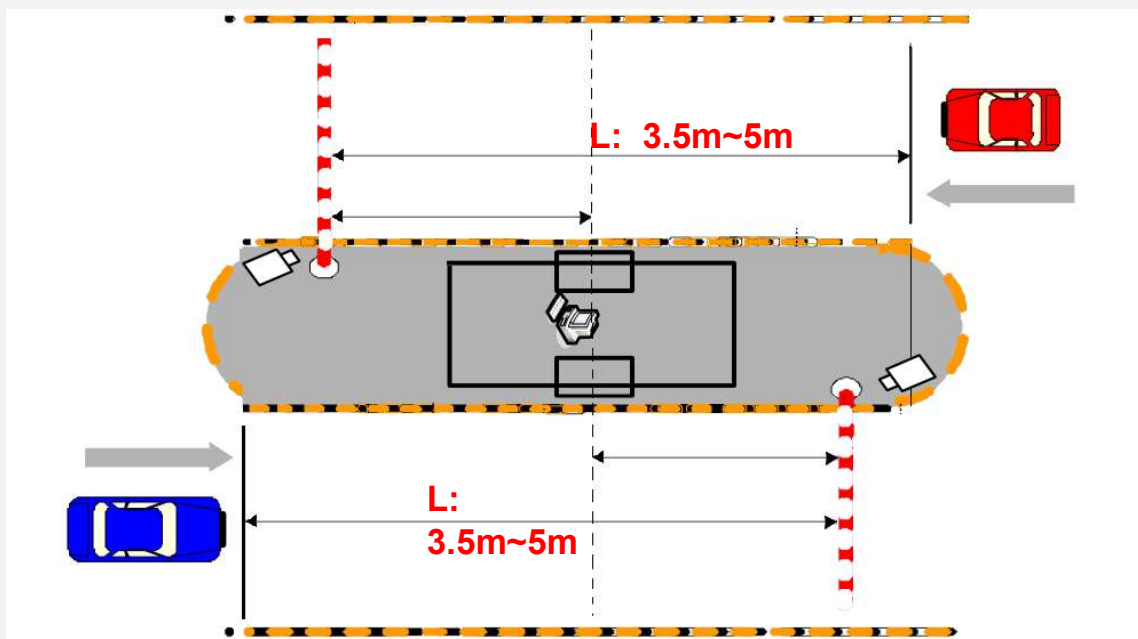
Type	Height(m)	Min L (m)
Entrance/Exit	1.5	2.5
	2	3.5
City Street	3	5
	4	7
	5	8.5
	6	10



Instalační výška: 1.5m ~ 2.5m

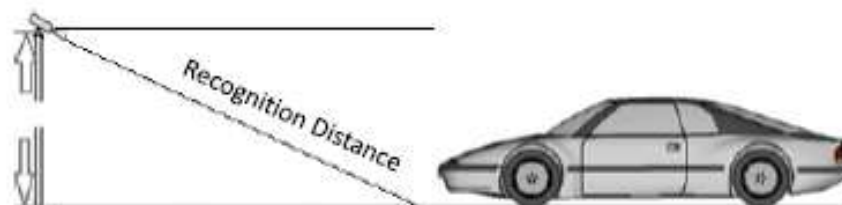


Úhel pohledu kamery by měl být max do 30 stupňů k dráze pohybu vozidla.



Základní instalační podmínky – LPR detekční vzdálenost

HIKVISION



Lens (mm)	Min recognition distance (m)	Max recognition distance (m)
2.8~12	2	18
8~32	6	48
3.8~16	3	24
11~40	8	60

Požadavky na RZ vozidla

- Úhel sklonu RZ musí být v rámci tolerance +/-5 stupňů
- Výška RZ v rozsahu 20 ~40 pixelů

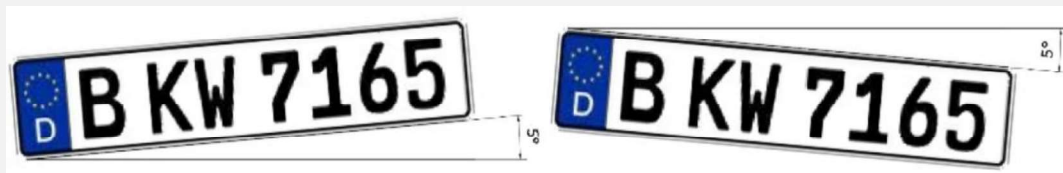
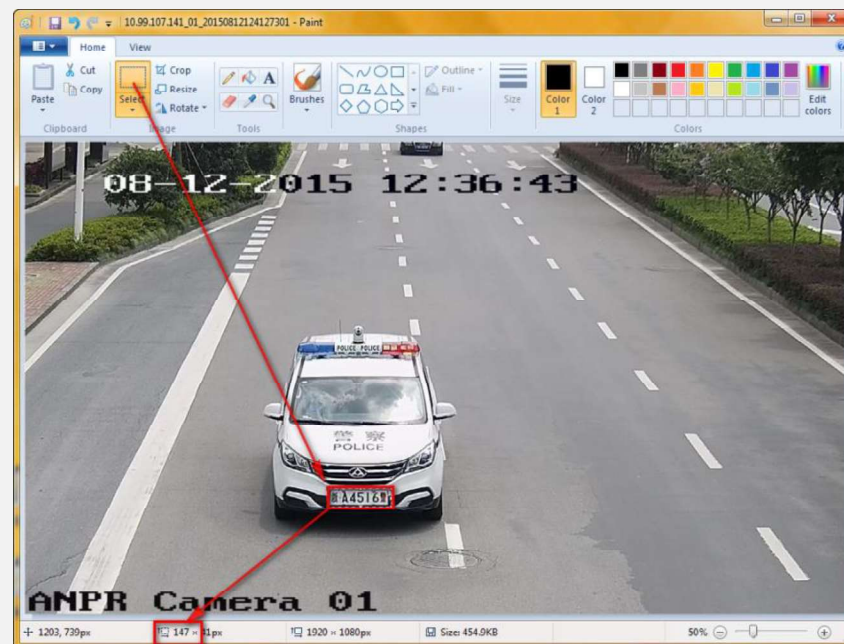
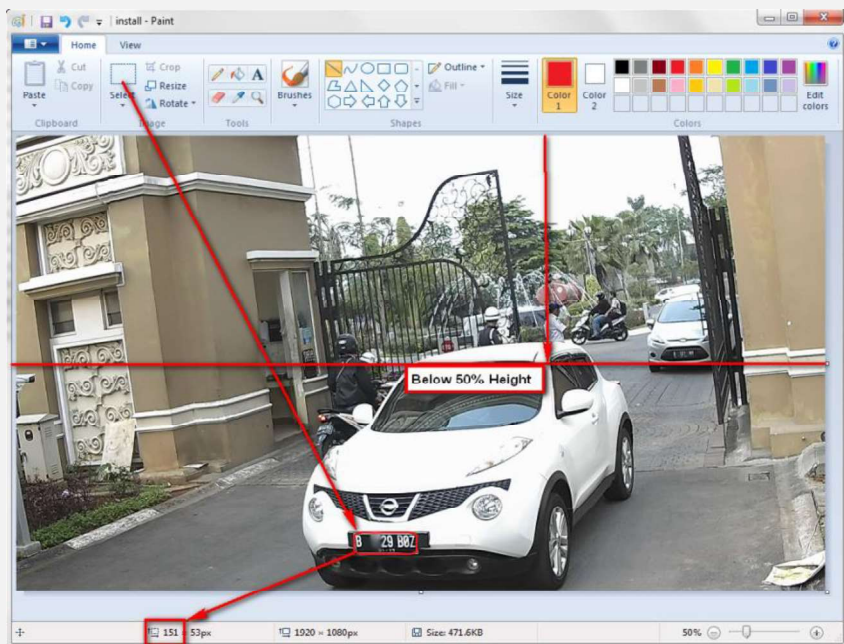


	Plate Characters Recognition	Vehicle Logo Recognition	Vehicle Type Recognition(*)
2 MP Camera	20<Height<30 100<Width<200	>25 x 25	>256
4 MP Camera	27<Height<40 135<Width<270	>34 x 34	>345



OBSAH

- **Základní rozdělení ANPR aplikací**
- **Řešení vjezdů a výjezdů**
 - ANPR kamera
 - ANPR kamera + NVR
 - ANPR kamera [+ NVR] + HCP
- **Základní rysy ANPR řešení**
- **Instalační podmínky & konfigurace**
- **Ukázka konfigurace – kamera GUI a HCP**
- **HCP Entrance & Exit modul**





**Konfigurace
ANPR na straně
kamery**

**Konfigurace
ANPR na straně
NVR**

Konfigurace ANPR kamery

HIKVISION

1. Nastavení obrazu

2. Detection Configuration

3. Captured Picture Setting

4. Import Blacklist & Whitelist

5. Real-time LPR Result

6. Picture Export

The screenshot displays the Hikvision web interface for configuring an ANPR camera. The top navigation bar includes 'Live View', 'Playback', 'Picture', 'Application', 'Configuration', and 'Smart Display'. The 'Configuration' menu is expanded, showing 'Display Settings', 'OSD Settings', 'Privacy Mask', 'Picture Overlay', and 'Image Parameters Switch'. The 'Image' sub-menu is selected, and the 'Day/Night Switch' is set to 'Triggered by Video'. The main content area shows a live video feed of a blue car with a license plate, and the 'Day/Night Switch' dropdown menu is highlighted with a red box. The 'Sensitivity' is set to 4, 'Filtering Time' is 5, and 'Smart Supplement Light' is OFF. The 'Backlight Settings', 'White Balance', 'Image Enhancement', 'Video Adjustment', and 'Other' sections are also visible.

Konfigurace ANPR kamery

HIKVISION

Doporučené parametry dle rychlosti vozidla

Vehicle speed(km/h)	Exposure time(s)	Gain	WDR	BLC
5	1/100	20	OFF	OFF
40	1/500	20	OFF	OFF
100	1/1000	20	OFF	OFF
200	1/2000	20	OFF	OFF

Pozn: V tabulce uvedeny doporučené hodnoty. Může se lišit dle konkrétní aplikace

Konfigurace ANPR kamery – nastavení detekce

HIKVISION

1. Image adjustment

2. Nastavení detekce RZ

3. Captured Picture Setting

4. Import Blacklist & Whitelist

5. Configure recording

6. Picture Export

The screenshot displays the HIKVISION web interface for configuring an ANPR camera. The main menu includes Live View, Playback, Picture, Application, Configuration, and Smart Display. The Configuration menu is expanded to show Detection Configuration, Picture, Camera, Blacklist & Whitelist, and Real-time LPR Result. The Detection Configuration page is active, showing the following settings:

- Type: Vehicle Detection (highlighted with a red box)
- Enable:
- Area Settings: Arming Schedule and Linkage Method

The Arming Schedule section features a calendar grid for days of the week (Mon-Sun) with time slots from 0 to 18. The grid shows blue bars indicating the arming schedule for each day. The Linkage Method section shows the following options:

- Direction: All (selected), Forward, Reverse
- Normal Linkage:
- Trigger Alarm Output:
- Notify Surveillance Center:
- A->1:
- Upload to FTP/Memory Card:

Red boxes and arrows highlight specific elements in the interface:

- 'Vehicle Detection' dropdown menu.
- 'System' menu item in the left sidebar.
- 'Kalendář ANPR' (ANPR calendar) section.
- 'Návazná událost' (Linkage event) section.
- 'Návaznost na IO' (IO linkage) section.

Konfigurace ANPR kamery nastavení detekční oblasti a režim detekce

HIKVISION



Detekční oblast by měla obsahovat všechny možné oblasti, kde by se mohla objevit RZ, nejen úsek samotné vozovky...



Total Number of Lanes

Plate Mode

Total Number of Lanes

Region

Area/Country

Select Mode

Detection mode

Remove Duplicated License Plates

Time Interval minute(s)

Entry& Exit : Vstup/výstup: Optimalizace ANPR pro tento typ detekce. Detekce probíhá v rámci jednoho jízdního pruhu. K detekci dochází ihned při vjezdu vozidla do detekční oblasti.

City Street: Ulice: Detekce až pro 2 jízdní pruhy. K vyhodnocení dochází až v okamžiku, kdy vozidlo opustí detekční oblast (optimalizace detekovaných snímků).

Alarm Input: Alarmový vstup: Detekce a rozpoznání RZ vozidla je vyvoláno externím zdrojem (např. indukční smyčka ve vozovce) pomocí sepnutí alarmového vstupu kamery.

Konfigurace ANPR kamery – kontrola velikosti RZ vozidla

HIKVISION

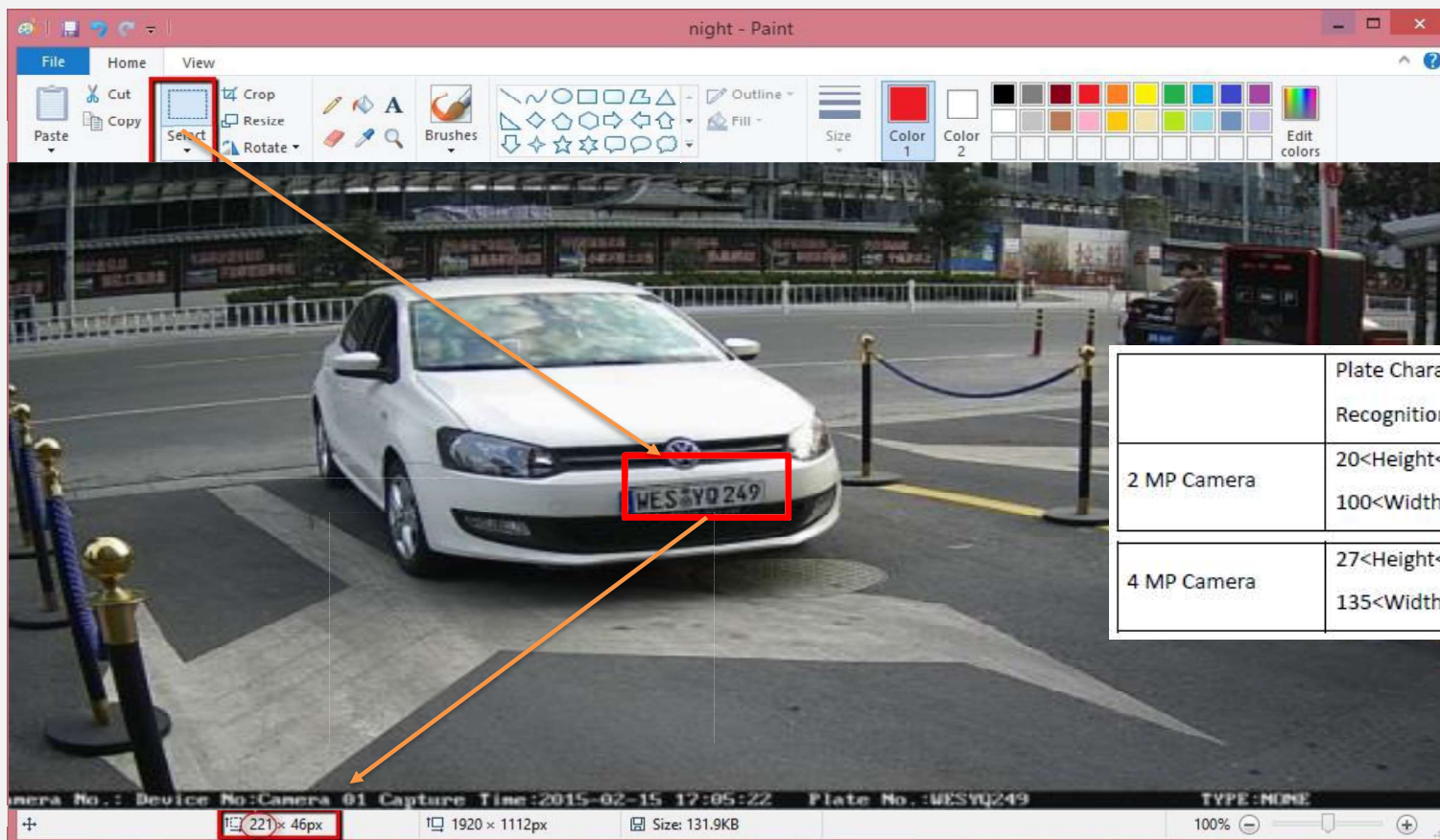


	Plate Characters Recognition	Vehicle Logo Recognition	Vehicle Type Recognition(*)
2 MP Camera	20<Height<30 100<Width<200	>25 x 25	>256
4 MP Camera	27<Height<40 135<Width<270	>34 x 34	>345

CONFIGURATION ON ANPR CAMERA

HIKVISION

1. Image adjustment

2. Detection Configuration

3. Parametry zachyceného obrázku

4. Import Blacklist & Whitelist

5. Real-time LPR Result

6. Picture Export

The screenshot shows the Hikvision configuration interface for an ANPR camera. The 'Configuration' tab is active, and the 'Picture' sub-tab is selected. The interface includes a left sidebar with navigation options: Local, System, Network, Video/Audio, Image, Event, Storage, Road Traffic (highlighted), and Counting. The main content area is divided into sections: 'Detection Configuration' (with sub-tabs for Picture, Camera, and Blacklist & Whitelist), 'Text Overlay' (highlighted), and 'FTP Picture Name'. The 'Text Overlay' section contains a table of fields to be displayed on the captured images.

Type	Sorting
Camera No.	↑ ↓
Camera Info.	↑ ↓
Device No.	↑ ↓
Capture Time	↑ ↓
Plate No.	↑ ↓
Vehicle Color	↑ ↓
Vehicle Type	↑ ↓
Brand	↑ ↓
Direction	↑ ↓
Validity	↑ ↓

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CONFIGURATION ON ANPR CAMERA

1. Image adjustment

2. Detection Configuration

3. Captured Picture Setting

4. Seznam povolených a zakázaných RZ

5. Real-time LPR Result

6. Picture Export

HIKVISION® Live View Playback Picture Application **Configuration** Smart Display

Detection Configuration Picture Camera **Blacklist & Whitelist**

Import Blacklist & Whitelist

Blacklist & Whitelist File Browse Import

Status **2: Import**

Note: You can set at most 10,000 license plates in whitelist and blacklist in total.

Export Blacklist & Whitelist

Export **1: Export**

Blacklist & Whitelist Content

No.	Plate No.	Type	Creation Time	Expiry Date
1	SAU830	blackList	2020-05-29 11:26:30	2022-12-01
2	WAN859	blackList	2020-05-29 11:26:30	2022-12-02
3	4Z68355	blackList	2020-05-29 11:26:30	2022-12-03
4	2640067	blackList	2020-05-29 11:26:30	2022-12-04
5	3SJ0924	blackList	2020-05-29 11:26:30	2022-12-05

No.	Plate No.	Group(0 black list, 1 white list)	Expiry Date (Format: YYYY-MM-DD, e.g., 2017-12-07)
1	SAU830	0	2022-12-01
2	WAN859	0	2022-12-02
3	4Z68355	0	2022-12-03
4	2640067	0	2022-12-04
5	3SJ0924	0	2022-12-05

CONFIGURATION ON ANPR CAMERA

HIKVISION

1. Image adjustment

2. Detection Configuration

3. Captured Picture Setting

4. Import Blacklist & Whitelist

5. Real-time výsledek ANPR

6. Picture Export

The screenshot displays the Hikvision VCA software interface. The main window shows a live camera feed of a road with a barrier gate. The top navigation bar includes options like Live View, Playback, Picture, Application, Configuration, Smart Display, and VCA. The right sidebar shows 'Real-time Analyze' with a license plate '4AK 5174' and details: Camera 01, Capture Time: 2022-03-28 13:04:28, License Plate Type: Unknown, Vehicle Type: SUV/MPV, Vehicle Color: White, Vehicle Brand: Benz, Moving Direction: Forward. A 'Vehicle Capture Info' window is open, showing a captured image of a car and details: Device No.: Camera 01, Capture Time: 2022-03-28 13:01:10, Plate No.: 2SM3656, License Plate: Unknown, Vehicle Type: SUV/MPV, Vehicle Color: Green, Vehicle Brand: KIA, Moving Direction: Forward. The bottom of the interface shows a list of captured license plates: 4AK 5174, 6AZ 2784, 8AZ 3912, 2SM 3656, 3AE 5947, and 1AD 3638.

CONFIGURATION ON ANPR CAMERA

HIKVISION

1. Image adjustment

2. Detection Configuration

3. Captured Picture Setting

4. Import Blacklist & Whitelist

5. Real-time LPR Result

6. Vyhledávání a export

The screenshot displays the Hikvision web interface with the 'Picture' tab selected. The interface includes a navigation bar with 'Live View', 'Playback', 'Picture', 'Application', 'Configuration', and 'Smart Display'. Below the navigation bar, there is a 'Download by File' section with search conditions and a file list table. The 'File Type' dropdown is set to 'Vehicle Detection'. The 'Export' button is highlighted with a red box and a callout 'Export ANPR událostí'. The 'Download' button is also highlighted with a red box and a callout 'Stážení obrázku'. The file list table contains 16 rows of data.

No.	File Name	Time	File Size	Progress
1	20200529111008_WNDXD777	2020-05-29 11:10:08	6 KB	Downloaded
2	20200529111008_WNDXD777_1	2020-05-29 11:10:08	686 KB	Downloaded
3	20200529111034_3SJ0924	2020-05-29 11:10:34	13 KB	
4	20200529111034_3SJ0924_1	2020-05-29 11:10:34	793 KB	
5	20200529111042_2640067	2020-05-29 11:10:42	12 KB	
6	20200529111042_2640067_1	2020-05-29 11:10:42	767 KB	
7	20200529111051_4Z68355	2020-05-29 11:10:51	7 KB	
8	20200529111051_4Z68355_1	2020-05-29 11:10:51	784 KB	
9	20200529111057_WAN859	2020-05-29 11:10:57	4 KB	
10	20200529111057_WAN859_1	2020-05-29 11:10:57	739 KB	
11	20200529111057_SAU830	2020-05-29 11:10:57	5 KB	
12	20200529111057_SAU830_1	2020-05-29 11:10:57	739 KB	
13	20200529111112_WNDXD777	2020-05-29 11:11:12	6 KB	
14	20200529111112_WNDXD777_1	2020-05-29 11:11:12	688 KB	
15	20200529111120_3SJ0924	2020-05-29 11:11:20	13 KB	
16	20200529111120_3SJ0924_1	2020-05-29 11:11:20	770 KB	

Total 54 Items

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Nastavení NVR

HIKVISION

1. Nastavení detekce RZ (Web GUI)

Vehicle Detection Configuration

Camera: [D3] Camera 01

Enable Vehicle Detection

Type: Black List

Area Settings | Arming Schedule | Linkage Method

1. Výběr kamery,
2. Povolení detekce vozidla - RZ
3. Nastavení detekční oblasti
4. Nastavení B/W listu

2. Query the license plate on NVR)

Vehicle Detection Configuration

Channel No.: IP Camera1

Enable Vehicle Detection

Type: Black List

Area Settings | Arming Schedule | Linkage Method

<input type="checkbox"/> Normal Linkage	<input type="checkbox"/> Trigger Alarm Output	<input type="checkbox"/> Trigger Channel
<input type="checkbox"/> Audible Warning	<input type="checkbox"/> A->1	<input checked="" type="checkbox"/> D1
<input type="checkbox"/> Send Email	<input type="checkbox"/> A->2	<input type="checkbox"/> D2
<input type="checkbox"/> Notify Surveillance Center	<input type="checkbox"/> A->3	
<input type="checkbox"/> Full Screen Monitoring	<input type="checkbox"/> A->4	
	<input type="checkbox"/> D1->1	

Návazná událost

3. Configure recording

Nastavení NVR

HIKVISION

1. Vehicle Detection Configuration

2. Vyhledávání záznamů detekce (Web GUI)

3. Configure recording

The screenshot displays the Hikvision NVR web interface with the 'Picture' tab selected. The search results table is as follows:

File Name	Start Time	End Time	File Size	Progress
ch0003_01000000095056838707200236579_KY56NAD	2019-10-13 21:38:08	2019-10-13 21:39:08	228 KB	
ch0003_01000000095056810035200285975_AK60WNF	2019-10-13 21:38:57	2019-10-13 21:38:57	248 KB	
ch0003_01000000095056793958400160023_AK59SVN	2019-10-13 21:38:54	2019-10-13 21:38:54	231 KB	
ch0003_010000000950566778752000151496_AJ03FXF	2019-10-13 21:38:37	2019-10-13 21:38:37	148 KB	
ch0003_01000000095056761036800176403_BK07WCU	2019-10-13 21:38:30	2019-10-13 21:38:30	172 KB	
ch0003_01000000095056738252800227099_BJ08FNV	2019-10-13 21:38:24	2019-10-13 21:38:24	222 KB	
ch0003_01000000095056713728000244395_N500GES	2019-10-13 21:38:21	2019-10-13 21:38:21	239 KB	
ch0003_01000000095056689561600240959_VE54CTY	2019-10-13 21:38:18	2019-10-13 21:38:18	235 KB	
ch0003_01000000095056666112000233727_YK11UHB	2019-10-13 21:38:08	2019-10-13 21:38:08	228 KB	
ch0003_01000000095056639488000285527_AO56SMX	2019-10-13 21:38:01	2019-10-13 21:38:01	259 KB	
ch0003_01000000095056615036000234987_KY56NAD	2019-10-13 21:37:55	2019-10-13 21:37:55	229 KB	
ch0003_01000000095056599961600159151_AK59SVN	2019-10-13 21:37:42	2019-10-13 21:37:42	155 KB	
ch0003_01000000095056575692800241943_noPlate	2019-10-13 21:36:46	2019-10-13 21:36:46	236 KB	
ch0003_01000000095056547072000285651_AK60WNF	2019-10-13 21:36:34	2019-10-13 21:36:34	279 KB	
ch0003_0100000009505652638720026283_AJ61BVF	2019-10-13 21:36:18	2019-10-13 21:36:18	201 KB	
ch0003_01000000095056510668800156391_AJ03FXF	2019-10-13 21:36:15	2019-10-13 21:36:15	153 KB	
ch0003_01000000095056491622400189739_BK07WCU	2019-10-13 21:36:05	2019-10-13 21:36:05	185 KB	
ch0003_01000000095056468992000225395_BJ08FNV	2019-10-13 21:35:58	2019-10-13 21:35:58	220 KB	
ch0003_0100000009505644057600248383_N500GES	2019-10-13 21:35:55	2019-10-13 21:35:55	243 KB	
ch0003_01000000095056420864000231023_VE54CTY	2019-10-13 21:35:49	2019-10-13 21:35:49	226 KB	
ch0003_01000000095056397363200234019_YK11UHB	2019-10-13 21:35:42	2019-10-13 21:35:42	229 KB	
ch0003_01000000095056370790400264863_AO56SMX	2019-10-13 21:35:36	2019-10-13 21:35:36	259 KB	

Nastavení NVR

HIKVISION

1. Vehicle Detection Configuration

2. Query the license plate on NVR

3. Nastavení (NVR GUI 4.0)

NVR 4.0

Camera: [D3] Camera 01 Save VCA Picture

Face Detection Vehicle Line Crossing Intrusion Region Entrance Region Exiting Unattended Ba... Object Removal

Defocus Sudden Scene...

Enable Vehicle Detection

Area Settings Arming Schedule Linkage Action Picture Overlay Content Blacklist and Whitelist

Lane Num... 2

10-15-2019 Sun 22:14:26

Apply

Povolení detekce ANPR

Nastavení parametrů

Nastavení oblasti detekce

NVR: REAL-TIME ZOBRAZENÍ detekovane RZ vozidla (NVR GUI) **HIKVISION**

The screenshot displays the Hikvision NVR 4.0 user interface. At the top, the title 'NVR 4.0' is visible. Below it, there are navigation icons for camera selection, playback, folder, search, camera, storage, settings, and help. The main video window shows a red car with license plate A056 SMX driving on a road at night. The timestamp '10-13-2019 Sun 22:29:54' is overlaid on the video. In the bottom right corner of the video, it says 'Camera 01'. On the left side, there is a 'Target Detection' sidebar with a list of detected vehicles. The first entry is highlighted with a red box and a callout pointing to it that says 'RZ vozidla'. The list includes:

Channel	Target Detection
	D3 2019-10-13 22:29:53 A056SMX
	D3 2019-10-13 22:29:47 KY56TK
	AK6UWVF
	D3 2019-10-13 22:29:34 AK59SVN

At the bottom of the interface, there are additional control icons for camera, playback, search, zoom, volume, pan, tilt, and other functions. The bottom right corner shows navigation arrows and a '1/8' indicator.

NVR: vyhledání záznamu dle RZ vozidla (NVR GUI)

HIKVISION

The screenshot displays the NVR 4.0 web interface. At the top, a dark navigation bar contains the 'NVR 4.0' logo and various icons for camera, playback, search, and settings. Below this, a search panel on the left includes a sidebar with 'All Files', 'Human Files', and 'Vehicle Files' (the latter being selected). The main search area contains fields for 'Time' (set to 'Custom' with a range from 2019-10-10 00:00:00 to 2019-10-13 23:59:59), 'Camera' (set to '[D1] IPCamera 07'), 'Plate No.' (empty), and 'Area/Country' (set to 'None').

The main content area shows search results for 'Target Picture' and 'Source Picture'. It features a grid of 15 thumbnail images of cars, each with a white bounding box and a play button icon. The thumbnails are arranged in three rows of five. Below each thumbnail is a timestamp, such as 'D3 11-10-2019 21:35:39 ~ 11-10-2019 22:07:51'. The interface also includes a 'Group' dropdown set to 'Channel', a 'Select All' checkbox, and a 'Total: 2460 P: 1/25' indicator at the bottom.

Doporučené instalační podmínky a nastavení ANPR kamery



Vše shrnuto v PDF dokumentu, který vám bude zaslán

Installation & Configuration Guidance of H8 ANPR Camera

Installation & Configuration Guidance of H8 ANPR Camera

1 / 16

Installation & Configuration Guidance of H8 ANPR Camera

(4) The pitch angle (the angle between camera-vehicle line and the road) should be larger than 15° and less than 30°

4 / 16

Installation & Configuration Guidance of H8 ANPR Camera

(11) Select a direction here. The Forward means vehicle moves toward the camera; Reverse means vehicle moves away from the camera. Only the vehicles moving as the selected direction can trigger selected linkage methods. We highly recommend you choose All if there is no special use;

(12) You can set linkage here, including Send Email, Notify Surveillance Center or Upload to FTP/xxxx;

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