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raising technologies™

AutoCode for VMS



LICENSE PLATE RECOGNITION MODULE FOR VIDEO
SURVEILLANCE SYSTEMS

MAINCONSOLE

About AutoCode VMS



Optimization and automation of work for territories with limited access

Building integrated event control systems

AutoCode for VMS

Building distributed systems to manage parkings with hundreds of cars and lots of passages

Building centralized systems for parking management

Fields of Application



Parkings

Passageways



Auto
Transportation
Companies



Business-centers



Customs
Terminals



Airports



Features



Surveillance

- Displaying “live” video from MainConsole and plate numbers recognition;
- Work with video from MainConsole archives.

Analytics

- Vehicle entry and exit automatic control;
- Detailed log of events;
- Statistics collection, creation and export of reports.

Access control

- Card file for unlimited number of groups, owners and vehicles;
- Automatic barrier opening for the vehicle from the specified group.

Automation

- Generation and sending events to VMS (Video Management System) MainConsole;
- Visual and audio messages to the operator.

Security

- Distributed access to the system;
- Operator’s control system;
- Export of settings.

Technical Characteristics



Recognition coefficient $\geq 96\%^*$

Frame processing time ≤ 16 ms

Plate number recognition time ≤ 2 ms

Number of plates recognized at the same time in one frame: up to 10 pcs.

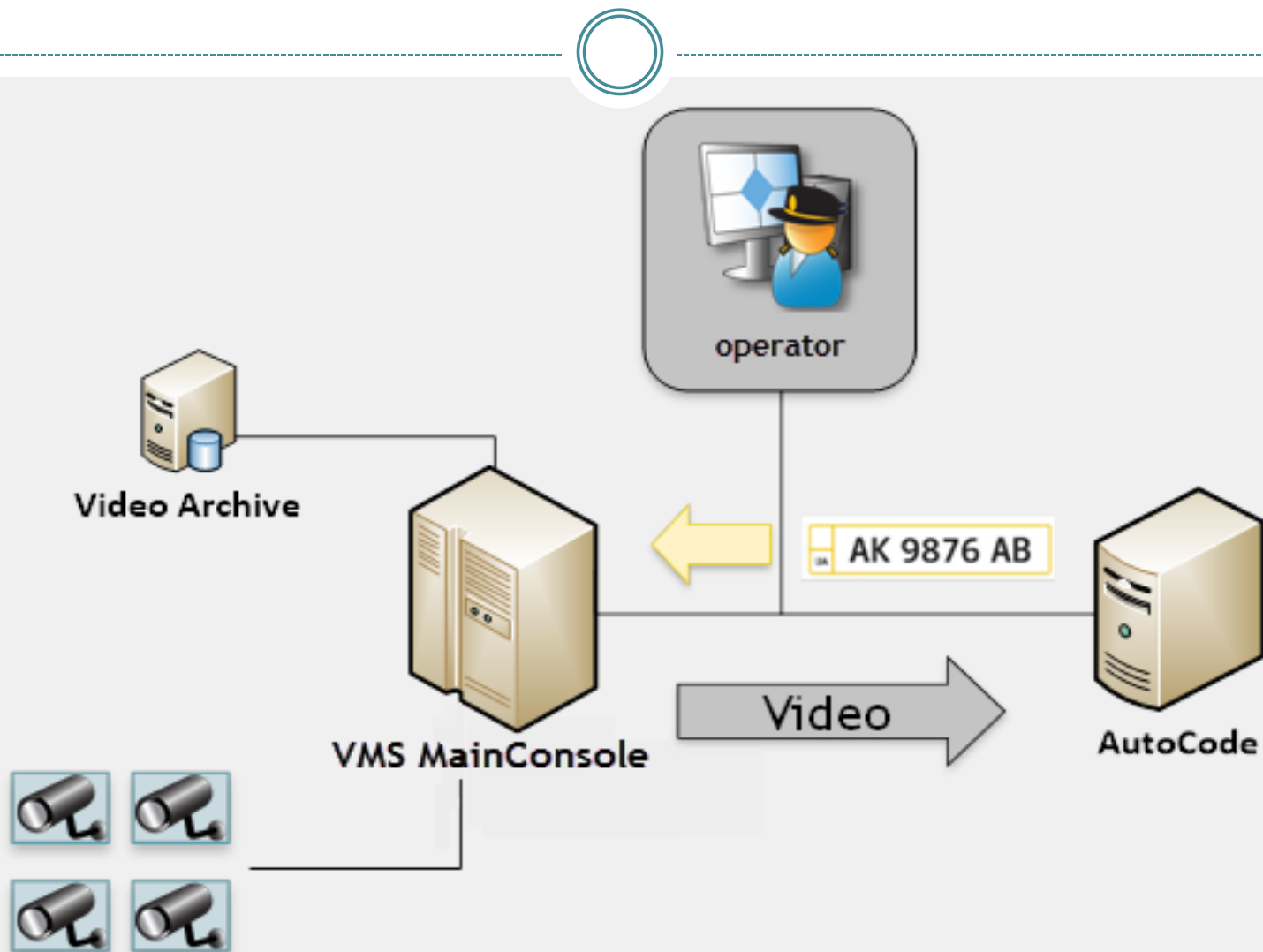
Number of recognition channels processed on one computer: up to 32 channels.

*The result was obtained in an open independent testing at the "Interpolitex" exhibition in 2007 in single-channel mode for the recognition of license plates of Russia (PRO System CCTV №05[29] 2007 September - October)

Supported Countries



Integration with VMS MainConsole

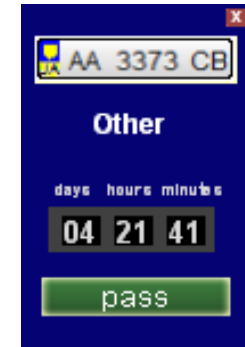
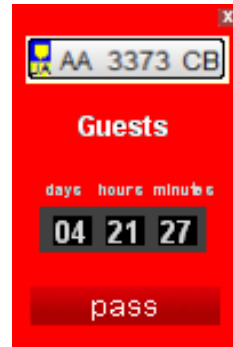




Work with live video

Interface customization for user's needs

Alerts on events that occurred



Work with events

List of all events

Details about selected event

Quick access to the selected machine in the card file

The screenshot displays the AutoCode software interface. At the top, there are navigation tabs: 'live', 'events', 'card file', 'rates', 'statistics', and 'settings'. The current time is 18:51.18 on 20 Apr. The main area is divided into two sections. The left section is a table titled 'tester' with columns for 'channel', 'time', 'owner', 'group / plate', and 'plate type'. The right section shows a detailed view of a selected event, including a video feed of a black car with license plate DDF-028, and a summary of the event details.

channel	time	owner	group / plate	plate type
1	18:57:46	Nike Lonorgen	AA 8521 CB	civil Ukraine
1	18:57:46	Merlyn Keno	267 - 92KT	civil Ukraine
1	18:57:45	Marina Logor	AE 3212 AA	civil Ukraine
1	18:57:42	Virtual Client	AI 8211 AH	civil Ukraine
1	18:57:42	Marina Logor	AA 4959 AP	civil Ukraine
1	18:57:40	Max Voros	AA 8543 BE	civil Ukraine
1	18:57:40	No data	AA 4446 AI	civil Ukraine
1	18:57:37	Nike Lonorgen	AA 3728 AB	civil Ukraine
1	18:57:36	Alex Petrov	AB 5322 AK	civil Ukraine
1	18:57:36	Olga Melin	673 - 77KT	civil Ukraine
1	18:51:12	Nike Lonorgen	DDF028	civil Ukraine
1	18:40:34	Virtual Client	566 - 29AH	civil Ukraine
1	18:40:34	Max Voros	AA 8543 BE	civil Ukraine

channel: 1
time: 20 Apr 18:51:12
plate number: DDF-028
owner: Nike Lonorgen

edit in card file

event viewer
Post: WALLE-2CO...

Controller I o.m.



Work with groups

Unlimited number of groups, owners and cars

Determines the color and sound for the group



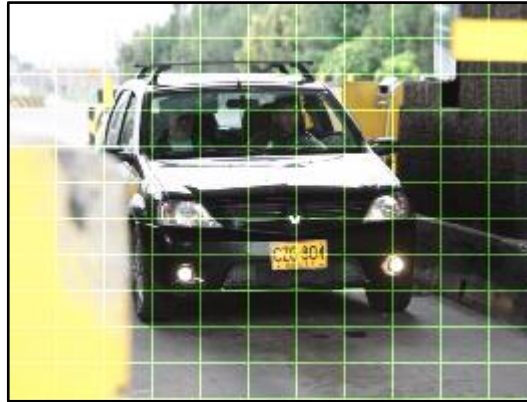


Recognition settings

Adjustment of recognition and detection zones

Usage of motion detector

Configuration of recognition quality settings



1 plate recognition

size of numbers

size of numbers

Specifies the estimated size of numbers on the frame. Used to improve the performance of the system by cutting off those areas which clearly can not be plate numbers.

2.99 minimum, %

57.89 maximum, %

identify strongly skewed

templates

channel name

1

description

1

sound alert

select viewport to display the current channel

1, 1 plate recognition

2, 2 plate recognition

3, 3 undetermined

4, 4 undetermined

5, 5 undetermined

6, 6 undetermined

7, 7 undetermined

8, 8 undetermined

9, 9 undetermined

10, 10 undetermined

11, 11 undetermined

12, 12 undetermined

13, 13 undetermined

14, 14 undetermined

15, 15 undetermined

16, 16 undetermined

system settings

Post: 23

Controller

3 1.3.



Application settings

Setting of basic system configuration

Capture modes for each specific type of source

Creation and editing of users' data, access levels and rights

1
plate recognition

channel settings
direction: undefined
channel assignment: parking
source type: ip camera
type: VMS
ip address: 192.168.100.200:5150
username: admin, password: *****
camera: 192.168.100.200_Axis 13
archive access port: 5160
server port: 5001

channel name: 1
description: 1

select viewport to display the current channel

sound alert

1, 1 plate recognition
2, 2 plate recognition
3, 3 undetermined
4, 4 undetermined
5, 5 undetermined
6, 6 undetermined
7, 7 undetermined
8, 8 undetermined
9, 9 undetermined
10, 10 undetermined
11, 11 undetermined
12, 12 undetermined
13, 13 undetermined
14, 14 undetermined
15, 15 undetermined
16, 16 undetermined

Settings in VMS MainConsole

Titres with
information about
event

Configuration of
the information
displayed

The screenshot displays the VMS MainConsole interface. The central video feed shows a black car with a yellow license plate 'DDF 028' at a toll booth. The top-left corner of the video feed contains event metadata:

- CAM1 Axis
- Plate number: DDF 028
- Event confidence: 91
- Event time: 2012-05-15T14:35:03.966+03:00
- Post: t
- Camera info: IP 192.168.100.200-(0,10062)
- GlobalID: 0
- LocalID: 10000
- Event type: Plate lost
- Info: Channel info:0
- PostID: 844560981
- EventID: F0ACC48E-3545-4B82-A7DB-69171978C8D3

The top-right corner features the 'nvv' logo and 'SECURITY CRYSTAL BOARD'. On the right side, a mobile device interface shows the date and time '2012/05/15 14:35:06' and the user 'admin'. A settings menu is open over the mobile device, listing the following options:

- Setting
- License Manager
- Save/Load Configuration
- Video Analytics
- Metadata Application
- Metadata Search
- Log Viewer
- Backup
- Network Service
- Help
- About Main Console...

The bottom of the interface includes a control bar with a power button, a grid of camera views, and playback controls (stop, play, full screen, zoom, and pan).

View and search events in VMS MainConsole

All events list

Events search and filtration

The screenshot displays the VMS MainConsole interface. At the top, it shows 'CAM1 Axis' and 'Plate number: DDF 028'. A 'Metadata Search Dialog' window is open, featuring a list of channels with 'test-channel1' and 'test-channel2' selected. The 'Date Time Period' is set from '2012/09/17 00:00:00' to '2012/09/24 18:59:11'. Below this, there is a 'Keyword' search field and checkboxes for 'Using regular expression' and 'Search within result'. A 'Search' button is located at the bottom right of the dialog. The main console area shows a 'Transaction' list with columns for 'Date Time', 'Metad...', and 'Transaction'. The list contains 15 entries with timestamps from 2012/09/17 11:23:17 to 2012/09/17 11:23:36. The 'Transaction' column contains details such as 'Plate number: 05662KA...' and 'Event confidency: 91...'. A video player is visible on the right side of the console, currently showing a black screen. The bottom of the interface features a control bar with various icons for power, zoom, and navigation.

Date Time	Metad...	Transaction
2012/09/17 11:23:17	test-ch...	Plate number: 05662KA...Event confidency: 91.
2012/09/17 11:23:18	test-ch...	Plate number: AA7223AP...Event confidency: 6.
2012/09/17 11:23:18	test-ch...	Plate number: 05662KA...Event confidency: 91.
2012/09/17 11:23:18	test-ch...	Plate number: AA7223AP...Event confidency: 6.
2012/09/17 11:23:23	test-ch...	Plate number: AA7900AO...Event confidency: 9
2012/09/17 11:23:24	test-ch...	Plate number: AA7900AO...Event confidency: 9
2012/09/17 11:23:29	test-ch...	Plate number: AA8825MH...Event confidency: ...
2012/09/17 11:23:30	test-ch...	Plate number: AA8825MH...Event confidency: ...
2012/09/17 11:23:31	test-ch...	Plate number: AA1831IE...Event confidency: 6..
2012/09/17 11:23:31	test-ch...	Plate number: AA0222KX...Event confidency: 8.
2012/09/17 11:23:31	test-ch...	Plate number: AA1831IE...Event confidency: 6..
2012/09/17 11:23:36	test-ch...	Plate number: AA6443EB...Event confidency: 7
2012/09/17 11:23:36	test-ch...	Plate number: AB3516BB...Event confidency: 6

Contact us



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