CMS Mobile

for Blackberry phones

user's manual

User's manual version 1.0 (March 2012)

This manual applies to program version 2.2.7

TABLE OF CONTENTS:

1. INTRODUCTION

We present to you next version of CMS mobile system with many new functions and modules. Many of these changes is the effect of our cooperation with You and our Partners. Part of them are our ideas which extend capabilities of digital video recording. Please pay your attention to the possibilities of simultaneous image recording from network cameras and, widely used so far, analog cameras, developed archives and wider capabilities of controlling the whole system.

MENU

RETURN

1.1 SYSTEM DESCRIPTION

Net Hybrid is a digital video recorder designed for cooperation with CCTV cameras. It uses PC class computers which work under control of Microsoft Windows VISTA/7 operating system. New Net Hybrid system version can record image from up to 32 cameras, servicing 32 output switches and 32 alarm inputs. Moreover the system can be hybrid, that is one system can service both analog an IP cameras – thanks to this it is possible to upgrade an existing installation and add IP or analog cameras. Managing the video server through the network is possible. Program allows wide possibilities of motion detection settings, searching the motion in archives, servicing alarm events. Differential image-compression method guarantees image recording longer than in other systems of that type without changing the image quality and storage space.

Software for managing CMS MOBILE system consists of two independent applications:

1. NET Hybrid *(Video Digital Recording - Server)*

2. CMS PROFFESIONAL (*Client)*

The first application is a server: processes image from the cameras, manages user accounts, tasks, controls the cameras. The second one is used as a client. We can connect to the server by a any network and do remote monitoring. Client application is available on mobile devices which allows access to camera images from any place in the world.

2. RUNNING THE APPLICATION AND INTERFACE DESCRIPTION

The program is designed to work with the Blackberry Operating System, and works with phones equipped with that system. This user's manual is based on program version 2.2.7 CMS MOBILE installed on Blackberry Bold (9900) with 7.0.0.585 OS. This program can be downloaded free of charge from the mobi.alnetsystems.com website. After copying it to the blackberry and setting the permissions, the program is ready to run. In order to run it, just click the **CMS** icon in the main menu. You can also download the program from the **App World** application form your BlackBerry device.

The main camera window looks like this.

Camera number

Camera name and model

Digit 4 and red figure means that there is a movement in camera 4

Main screen displays the cameras picture.

After pressing **T** button the number of frames and actual hour is being displayed

Picture 1: Program's main window

3. USING THE APPLICATION

3.1 BASIC OPTIONS

Picture 2: Basic program options

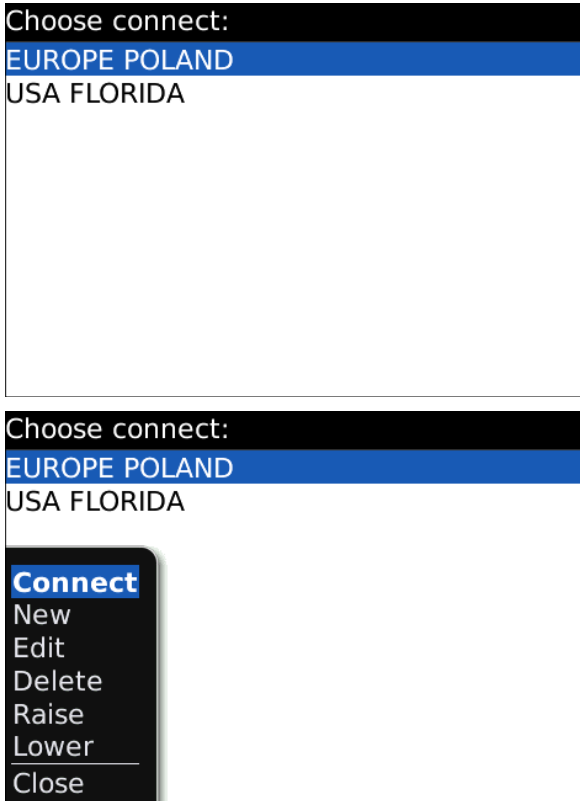After program start, in the main window, the following options are available after pressing **MENU** button:

🕭 **Connect –** opens the address book with the list of defined Net Professional servers and establishes connection with selected one

🕭 **Camera -** opens the list of active cameras

🕭 **Settings** – additional program settings

🕭 **Output switches –** output switches

🕭 **Input alarms** – input alarms

🕭 **Recorded video** – access to the archive recordings

🕭 **About** – information about the program version

🕭 **Close** – exits the program

Select the option with joystick and confirm selection with **ENTER** button (or by pressing the joystick).

3.2 ESTABLISHING THE CONNECTION

Selecting the **Connections** option opens the address book with the list of NET Professional servers. Pressing the joystick in the main program window has the same effect.

Select the server and confirm the selection by pressing the joystick (or selecting **Options** and then **Connect**)

The Internet connection should be configured according to the information you have received from your GSM provider.

After the connection is established, the picture from the camera 1 will be shown.
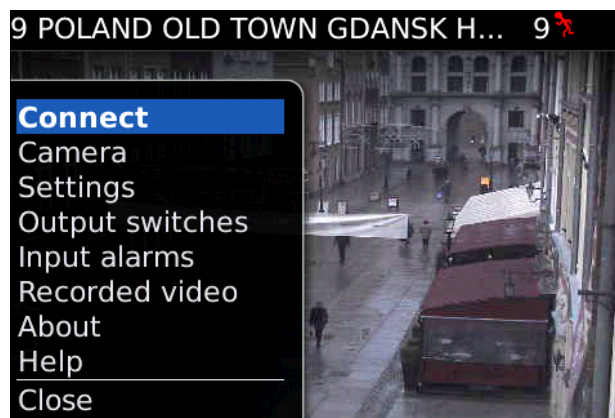
Picture 3: Establishing connection

During the active connection with server, the following additional options are available by pressing **MENU** button.

🕸   **Connect –** opens the address book with the list of defined NET Professional servers and establishes connection with selected one.

🕸   **Camera –** camera selection

🕸   **Settings –** picture quality settings, connection, language, layout.

🕸   **Output switches –** controlling the output switches

🕸   **Input alarms –** displaying the actual and archive states of available alarm inputs

Picture 4: Connection established

🕸   **Recorded video –** access to the archive recordings

🕸   **About –** displays the about window

🕸   **Help –** displays the help window

🕸   **Close** – exits the program
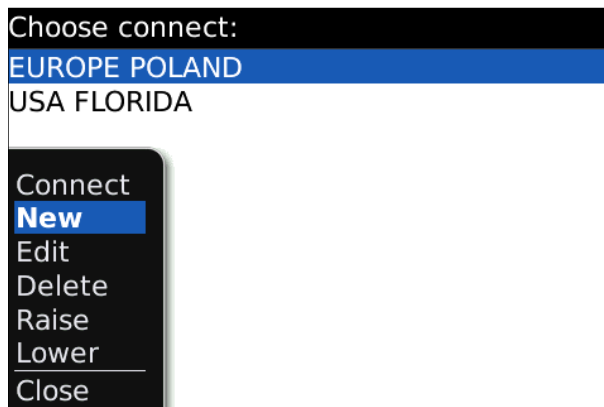

Picture 5: Additional options during connection

⚠️ **ATTENTION:** the number of available cameras, alarm inputs, relay outputs, etc. depends on connected user's rights.

3.4 MANAGING THE ADDRESS BOOK

In the main program window select **Options**, and then **Connections –** the address book management menu appears:

* **Connect** – establishes connection with selected server

* **Add new –** adding the new entry

* **Edit** – editing the existing entry

* **Delete** – deleting the entry from address book

Picture 6: Managing the address book

* **Raise** – moving the entry one position higher

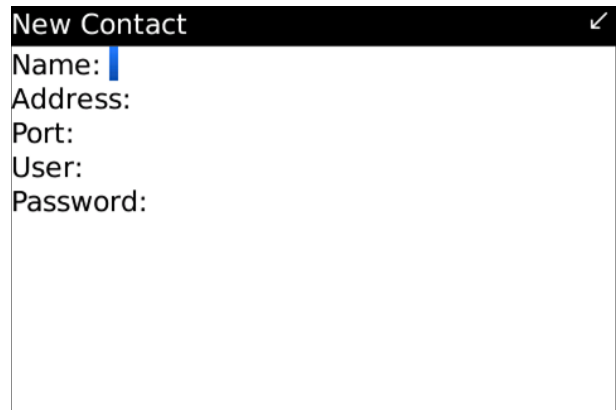* **Lower** – moving the entry one position lower

* **Close** – returns to menu

Select the option with joystick or **MENU.**

3.4.1 ADDING THE NEW ENTRY TO THE ADDRESS BOOK

Select the **New** Option

- ✎ **Name** – enter the connection name

- ✎ **Address** – enter the server address

- ✎ **Port** – enter the server port

- ✎ **User** – enter the user's login name

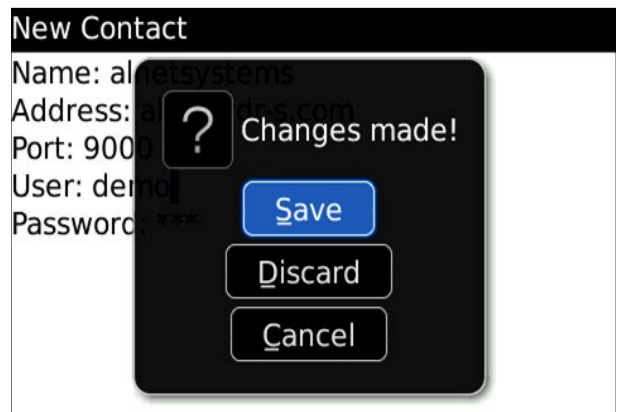- ✎ **Password** – enter the user's password

Picture 7: Adding the new entry to the address book

Del button – deletes the field content

Return button – a new submenu appears:
  1 Save – saves the changes and returns to the previous menu

  2 Discard – discard changes

  3 Cancel – returns to the previous menu without saving changes.

Select and confirm the desired option with the joystick, or press the adjacent letter on the blackberry keyboard.

Picture 8: Editing entry in address book

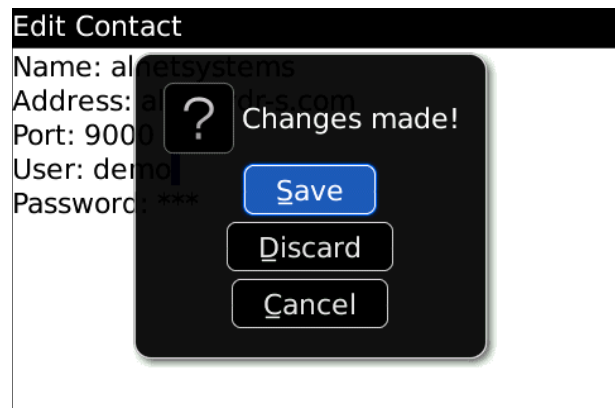**3.4.2 EDITING THE ENTRY IN THE ADDRESS BOOK**

Select **Edit** Option

Available options are identical as described above (see **3.4.1 Adding the new entry to the address book**).

Del button – deletes the field content

Return button – a new submenu appears:

      1 Save – saves the changes and returns to

            the previous menu

      2 Discard – discard changes

      3 Cancel – returns to the previous menu

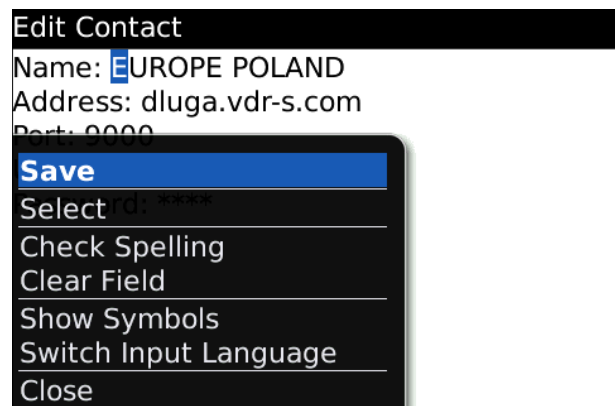   without saving changes.

Picture 9: Changes while editing the contact

Select and confirm the desired option with the joystick, or press the adjacent letter on the blackberry keyboard.
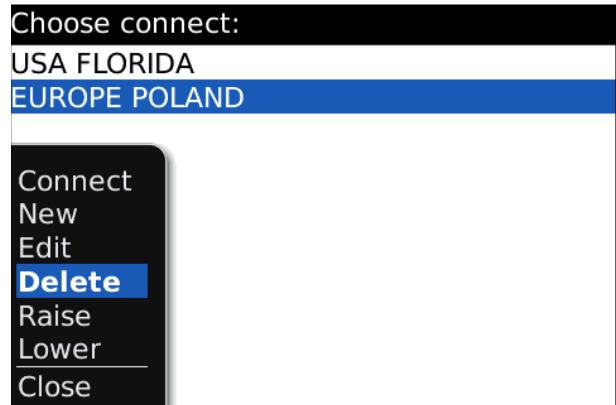
In full menu

1 Save - saves the contact

2 Select - select the entry for edit

7 Close – returns to main menu

Picture 10: Editing the entry in the address book

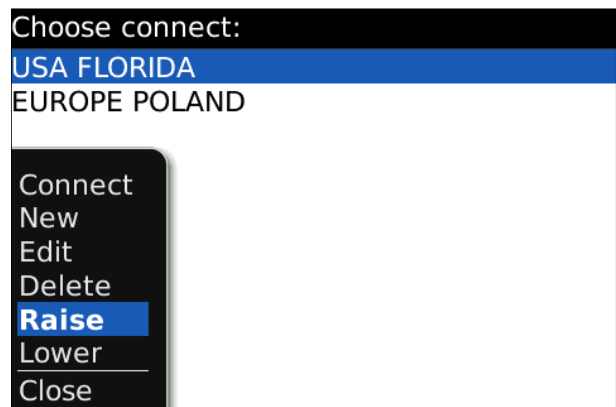### 3.4.3 DELETING THE ENTRY FROM THE ADDRESS BOOK

In order to delete an entry from the address book, select it with joystick, next select **Options** and then **Delete**. A confirmation window will not be displayed.

Picture 11: Deleting the entry from the address book

3.4.4 CHANGING THE ENTRY POSITION IN THE ADDRESS BOOK LIST
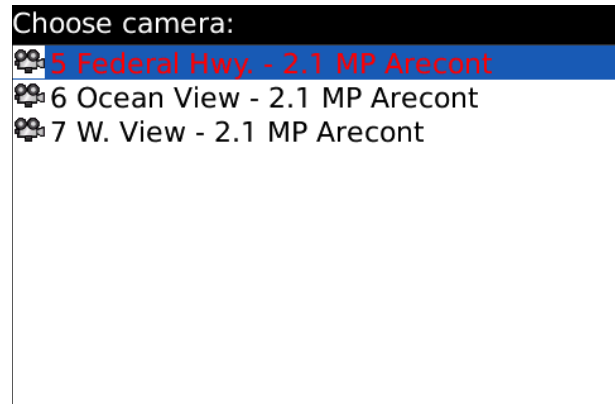
You can move the entry position in the address book list when needed. In order to do that, select the entry, then **Options** and then **Raise** to move the entry one position higher, or **Lower** to move the entry one position lower in the list. This allows setting up the desired entry order in the list.

Picture 12: Changing the entry position in the address book list

3.5 SELECTING THE CAMERA

During the connection select **Options**, and then **Camera**. The list with available cameras appears – select the camera with joystick and confirm with **Select** button (or press the joystick). Red color on the camera model indicates that there is a movement at the moment. During the connection, the active camera can be changed with joystick left / right move – the next / previous camera will be displayed without showing the available cameras list.

Picture 13: Selecting the camera

After pressing **MENU** button the extra menu appears.

Select – select the camera

Sound – play sound after the movement

Close – back to menu

3.5.1 LAYOUT (MULTIVIEW)

There is a possibility to change the main display to multiview. You can do that by pressing **"space".** There are 3 types of layouts to choose. Go to settings to change.

- 4x3 – 12 cameras in view

- 3x3 – 9 cameras in view
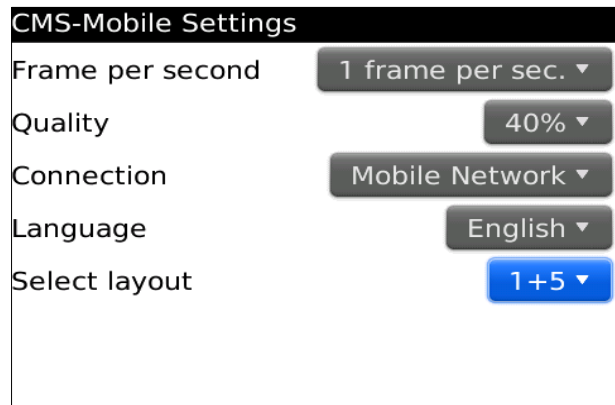
- 1+5 – One large and 5 small

Picture 14: Multiview

3.6 PICTURE QUALITY AND DATA TRANSFER SETTINGS

During the connection, select **Options** and then **Settings**.

A window with quality and data transfer settings appears:

Picture 15: Picture quality and data transfer settings

- ✍ **Frame per second –** setting up the data transfer – change the value with the joystick

- ✍ **Quality** – setting the displayed picture quality – change the value with joystick.

- ✍ **Connection**
    - ✄ Mobile Network – only mobile connection
    - ✄ Wi-Fi – only Wi-Fi connection
    - ✄ Wi-Fi or Mobile Network – both are available but Wi-Fi has priority
    - ✄ Mobile Network or Wi-Fi - both are available but mobile has priority

- ✍ **Languag**e
    - ✄ English
    - ✄ Polski
    - ✄ Deutsch
    - ✄ Italiano
    - ✄ Czech

- ✍ **Select layout.**
    - ✄ 4x3 – 12 cameras in multivew
    - ✄ 3x3 – 9 cameras in multiview
    - ✄ 1+5 – 6 cameras in multiview, one large and 5 small.

- ✍ **Available Frames per second values:**
    - ✄ **1** frame per 4 sec. is displayed
    - ✄ **1** frame per 2 sec. is displayed
    - ✄ **1** frame per 1 sec. is displayed
    - ✄ **2** frames per sec. are displayed
    - ✄ **4** frames per sec. are displayed
    - ✄ **8** frames per sec. are displayed

✎ **Resolution** – setting the resolution of the displayed picture – change the value with the joystick.

Available values:

- �ख **10 %** - Low
- ✖ **40 %** - Medium
- ✖ **70 %** - High
- ✖ **100 % (Max resolution)**

3.6.1 ENHANCE THE CAMERA QUALITY FOR STATIC IMAGES

While in camera view you can press the **"S"** button in blackberry keyboard to activate stabilization for camera image. After waiting couple of seconds the quality of image should be better.

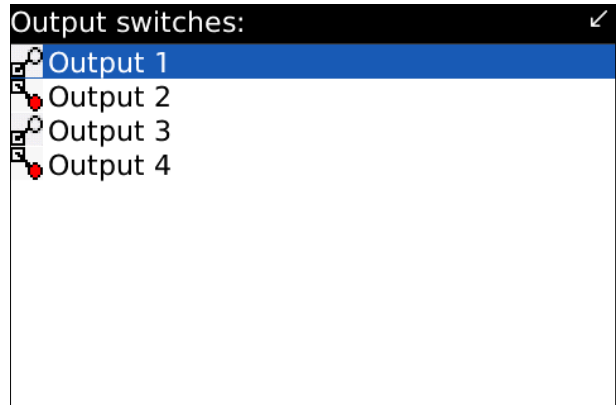*Picture 16: Picture without stabilization*

Picture 17: Picture after stabilization

⚠ Attention: This client program is developed and optimized to work with NET hybrid / Netstation 3.x.x.x Version servers. Support for version 2.x.x.x is not guaranteed.

3.7 CONTROLLING THE OUTPUT SWITCHES

During the connection, select **Options**, and then **Output switches** – the list with available output switches appears. The ⌀ icon describes inactive output switch, while the 🔴 icon means, that the output switch is active. To change between active / inactive state of the output switch, select it and press the **Select** button (after change, it automatically returns to the previous screen) or press the joystick (after change, the output switches list remains open).

Picture 18: Controlling the output switches

3.8 DISPLAYING THE AVAILABLE ALARM INPUTS

During the connection, select **Options**, and then **Input alarms** – the list with available alarm inputs appears:

- 🔍 **Select** – displays alarm data and time list

- 🔍 **Camera** – when this alarm is activated selected camera will be displayed

- 🔍 **Sound** – when this alarm is activated the sound will be play

- 🔍 **Close** – back to main menu

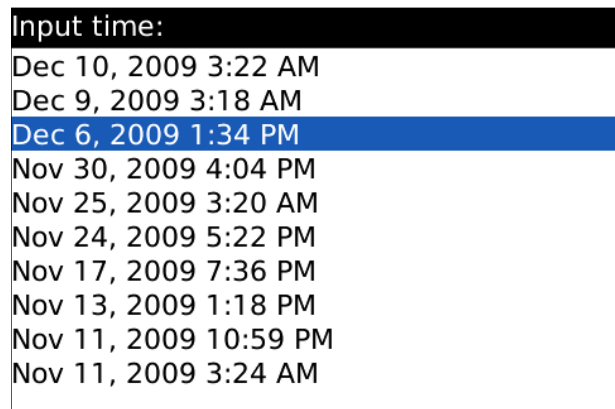*Picture 19: Displaying the available alarm inputs*

Moreover, when the alarm input is selected, and the **Last logs** button (or joystick) is pressed, the list with archive states of selected alarm input will be displayed. Press **Close** button to return to the previous screen.

Picture 20: Displaying the alarm inputs list

Camera – select the camera to be displayed after alarm activation.

Picture 21: Displaying the available cameras
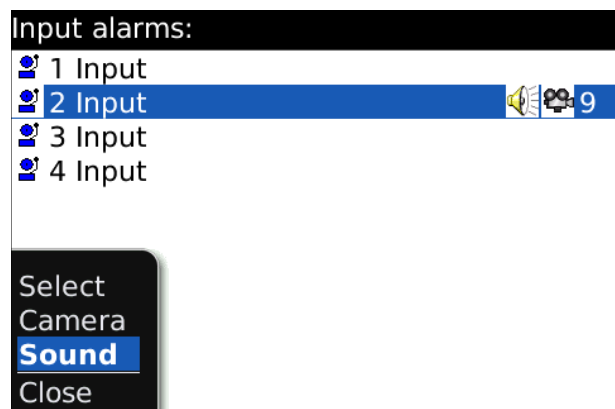
Sound – you can add sound to selected input

As you can see on picture 21 When the "2 input" is activated the camera 9 will be displayed with alarm sound.
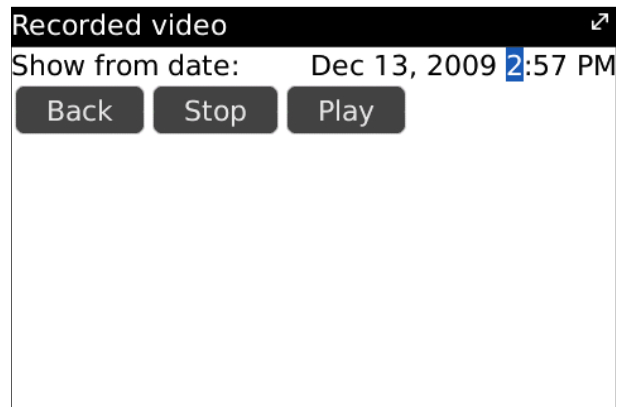

Picture 22: Adding the sound

3.9 ARCHIVE

During the connection, select **Options**, and then **Recorded video**. A new window appears, where the time parameters of the archive recordings should be entered.

- 🖐 **Back** – goes back to camera view.

- 🖐 **Stop** – stop the playback of recordings

- 🖐 **Play** – date and time, from which are the archive recordings available on the server

Setting in play mode:

- 🖐 **Play forward** – play forward mode by pressing **M** in blackberry keyboard

- 🖐 **Play backward** – play backward mode by pressing **B** in blackberry keyboard

- 🖐 **Stop** – pause mode by pressing **C** in blackberry keyboard

- 🖐 **Quit** – return to the previous screen by pressing **Return** in blackberry keyboard

Picture 23: Archive recordings – time parameters

Picture 24: Archive recordings - playing

After selecting the date/time starting point, select the play mode **–** the recordings from selected camera will be displayed. The camera can be changed with joystick (left / right). The „**Rec**" label will be added to the camera name. Additionally, the recording time will be displayed.

The archive display mode can be changed by selecting **Menu** and the desired play mode. In the archive mode there's a Digital Zoom function available – see chapter **3.11 – Zoom.**

3.10 PTZ CONTROL MODE

During the connection, press the joystick or in blackberry keyboard press **"N"** – option is available only if the active camera is the PTZ camera, and the connected user has the rights to control it. The **„PTZ"** label will change to **"PTZ ON"** in the camera name, which indicates the PTZ control mode is active.

The PTZ is controlled with the joystick – the joystick movement in any of it's 4 directions, causes the PTZ movement.

Controlling the **Zoom**– see chapter for more information. **3.11 – Zoom**

Picture 25: PTZ control mode

3.10.1 PTZ PRESET FUNCTION

During the connection, press in blackberry keyboard letter "**e**" and then number of the preset you want. You can recall the available preset number from 1-99.

Picture26: PTZ presets

3.11 ZOOM

During the connection, press the **i** button to Zoom-in, and the **o** button to Zoom-out.

The functionality of **Zoom** mode depends on the type of active camera:

- Cameras without the optical zoom

  - Only digital Zoom is available – controlled with **i** button (Zoom-in, up to 10 zoom-steps), and **o** button (Zoom-out). In that case, only the data which are needed to display the zoomed part of the screen are sent from the server. If the digital zoom mode is enabled, there's a possibility to move the zoomed part of the image with the joystick. Small rectangle in the bottom left side appears with the current screen position.

Picture 27: Digital zoom

Picture 28: Digital zoom

✍ Cameras with the optical zoom / PTZ cameras

Both digital and optical Zoom modes are available (also simultaneously).

✖ **Optical Zoom** – enter the PTZ control mode (see chapter **3.10 PTZ control mode**) by pressing the joystick middle button. In that mode, use the **i** and **o** buttons for optical zoom-in and zoom-out (amount of zoom steps depends on the camera) – a „**PTZ**" label in camera name.

✖ Irrespective of the digital zoom, you can use the **"Shift+i"** and **"Shift+o"** buttons for digital zoom-in and zoom-out (up to 10 zoom-steps). In that case, only the data which are needed to display the zoomed part of the screen are sent from the server. If the digital zoom mode is enabled, there's a possibility to move the zoomed part of the image with the joystick . Pressing the joystick **does not activate** digital zoom mode (as it activates PTZ control mode in that case), but if digital zoom mode is already activated, you can exit it by pressing the joystick.
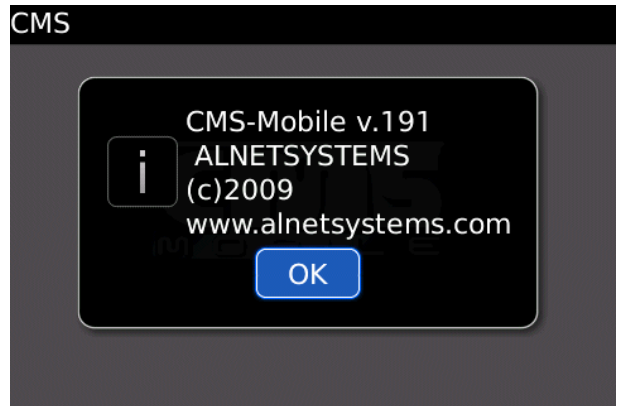

Picture 29: Digital zoom

Picture 30: Digital zoom

3.13 „ABOUT" WINDOW

At any moment select **MENU** button, and then **About**. The window with informations about the software version, manufacturer, etc. appears. To exit press OK.

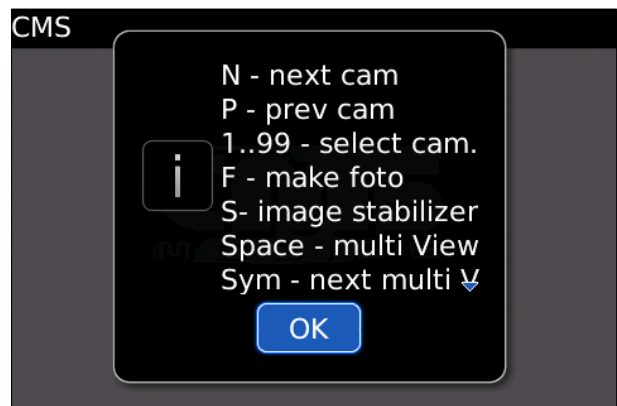*Picture 31: „About" window*

3.14 CLOSING THE PROGRAM

At any moment, select **MENU** button, and then **Close**. A program will exit without confirmation screen. You can exit the program by pressing the **Back** button. A program will exit with confirmation screen. When you press the red(disconnect) button the program will work in background.

Picture 32: Closing the program

3.15 HELP

To access help press "menu' button and then HELP. Inside you can see the shortcuts described in chapter **4. Keyboard shortcuts.**

Picture 33: Help window

4. KEYBOARD SHORTCUTS

In Camera view

Button	Description
I	Zoom in
O	Zoom out
Shift + I	Digital zoom in (in PTZ mode)
Shift + O	Digital zoom out (in PTZ mode)
N	Next camera
P	Previous camera
S	sound
Space	multi view
Sym	Next cameras in multi view
Shift+space	Quick multi view
J	Quality improvement
H	Quality reduction
T	Displays frames and hour
Q	Next connection
A	Opens archive
Shift + A	Quick exit from archive
Y + 1-99	Switch out
E + 1-99	Preset control in PTZ camera
F	Make photo
S	Image stabilizer
1-99	Select camera
alt+L	Change languages

In PTZ control

Button	Description
L	Left
R	Right
U	Up
D	Down

In Archives

Button	Description
M	Play forward
B	Play backward
C	Pause