

Operation User Manual

www.beward.net

BEWARD Intercom Software



Multiaccessible User Operation
Electronic Lock Control
Real-Time Video
Two-Way Audio

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Chapter 1. BEWARD Intercom Overview

1.1. Description

The present User Manual contains information on how to install and set up the **BEWARD Intercom** software which is used for BEWARD IP video door stations control.

An *IP Video Door Station* is a device which combines modern network and multimedia technologies. It allows control of the access to territories or buildings as well as provides video surveillance functions. The call from a *Guest* is sent from the door station to the *Client*'s PC or laptop with the installed application. Several Clients can be connected to one door station.

1.2. Functions

- Playback of video and audio streams from the door station;
- Two-way audio support;
- Control of the devices, such as electronic locks, garage door openers, light switches, alarm systems etc., connected to the door station;
- Setting up Video image parameters;
- Multiple Clients can access multiple door stations simultaneously;
- Setting up Application parameters.

1.3. Minimal System Requirements

It is recommended that your computer meet the following minimal requirements:

Component	Requirements
OS	Windows 7 SP1 / 8.0/ 8.1 / 10
CPU	2.0 GHz or greater
Video card	128 MB, DirectX 9,
Sound card, microphone or headset	Yes
Network card	100 mbps
RAM	Not less than 1 GB
Monitor	Resolution – 1024x768 or higher

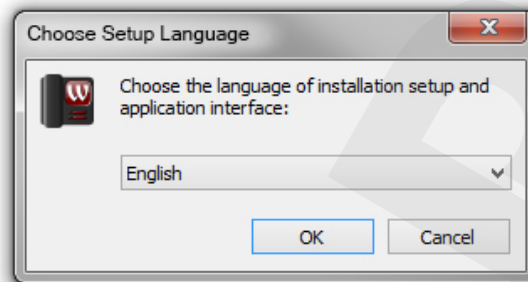
Chapter 2. BEWARD Intercom Installation

Follow the steps below to install the application.

Step 1: insert the CD with software in the disk drive or download the latest application version from our website (<http://www.beward.net/>).

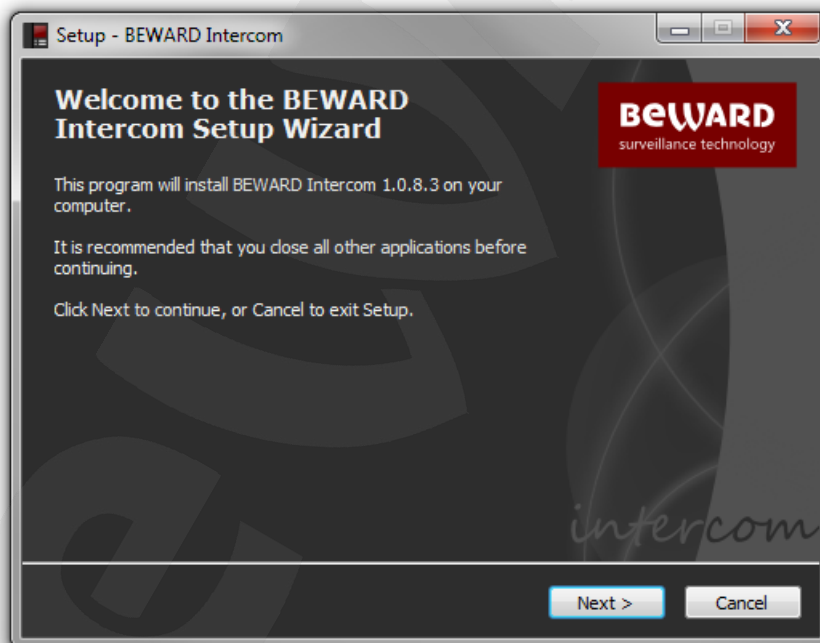
Step 2: run the installation program file (*Beward.Intercom.exe*).

Step 3: choose the language of Setup and application interface and press **[OK]** (*Pic. 2.1*).



Pic. 2.1. Language menu

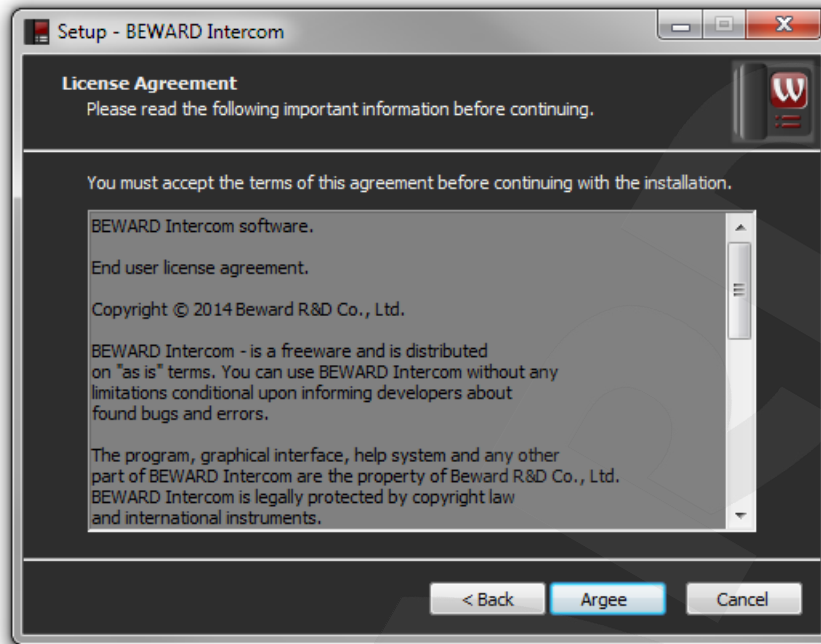
Step 4: the “Welcome” window is displayed on the screen (*Pic. 2.2*).



Pic. 2.2. The Setup “Welcome” window

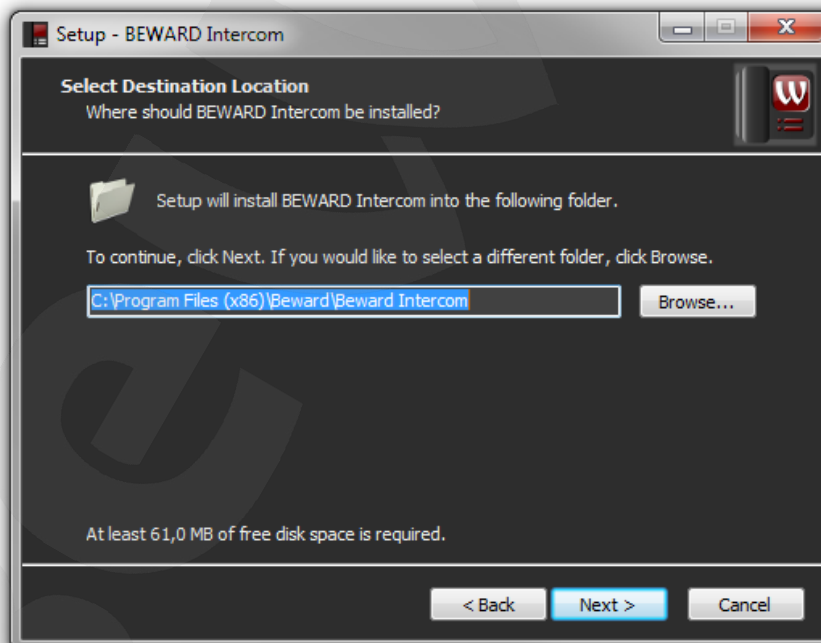
Step 5: press **[Next >]** to continue.

Step 6: the next window contains the License Agreement (*Pic. 2.3*). Read the Agreement and press **[Agree]** to continue. If you have any questions concerning the License Agreement, please contact the Beward technical support service (<http://www.beward.net/support/>).



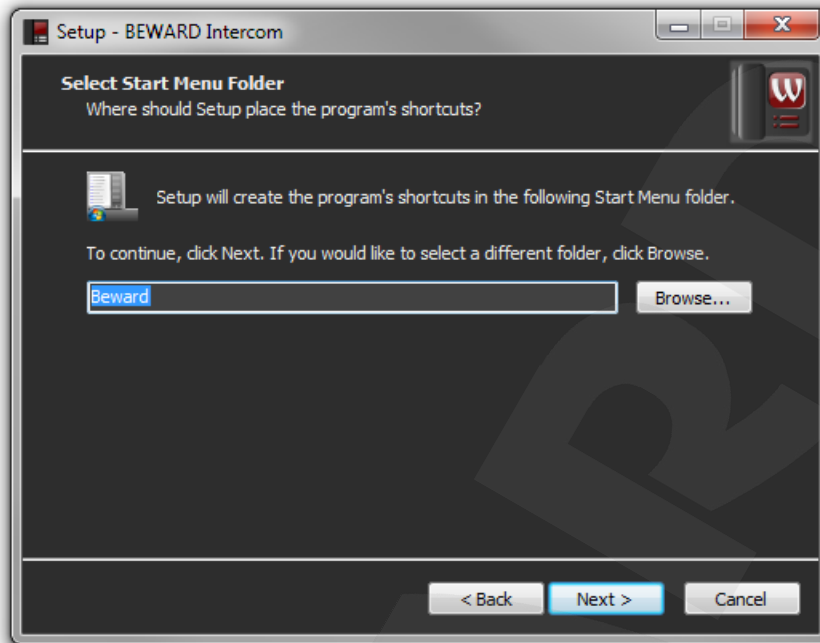
Pic. 2.3. License Agreement

Step 7: select the folder where the application should be installed (Pic. 2.4). You may use the path by default – **C:\Program Files (x86)\BEWARD\Beward Intercom** – or change it pressing the **[Browse...]** button. Press **[Next >]** to continue.



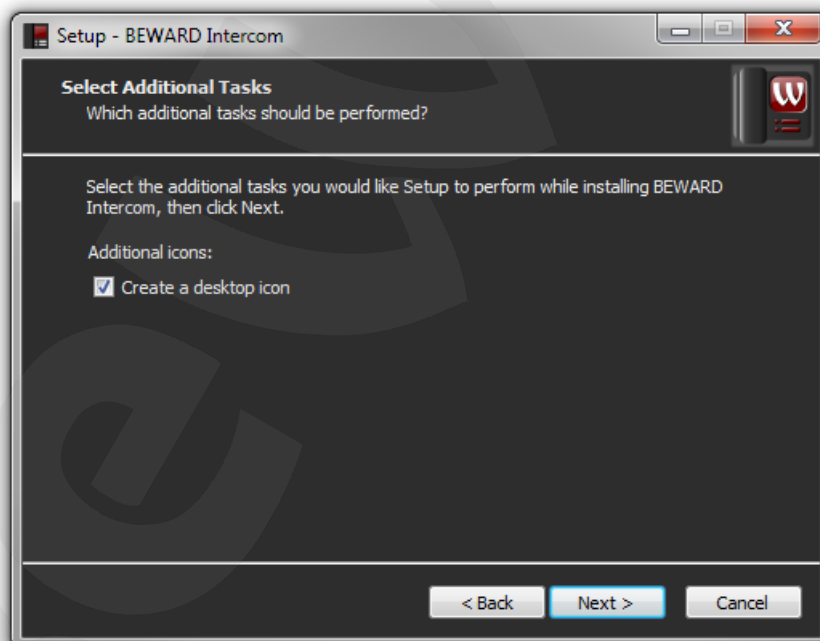
Pic. 2.4. Destination location selecting

Step 8: select a folder in the "Start" menu for the program's shortcuts (Pic. 2.5). The folder by default is "Beward". Press **[Browse...]** to select another folder. Press **[Next >]** to continue.



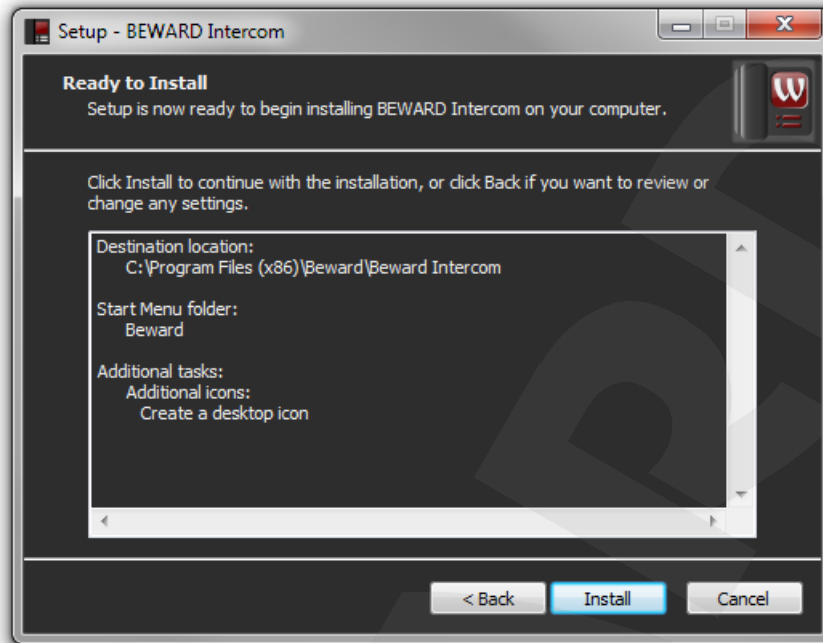
Pic. 2.5. Shortcuts folder selecting

Step 9: decide whether it is necessary to create a desktop icon (*Pic. 2.6*). If yes, mark the “**Create a desktop icon**” item and press [**Next >**] to continue.



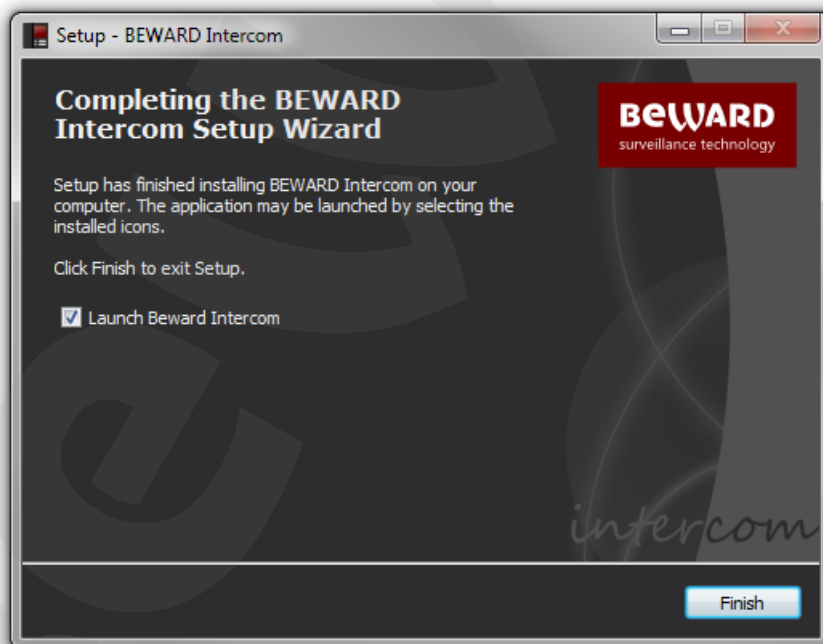
Pic. 2.6. Additional tasks selecting

Step 10: check the Setup settings (*Pic. 2.7*). Press [**< Back**] if you want to make some changes, or press [**Install**] to continue.



Pic. 2.7. Setup settings review before starting the installation

Step 11: mark the “**Launch BEWARD Intercom**” item to run the application right after installation will be finished and press [**Finish**] (*Pic. 2.8*).



Pic. 2.8. Installation completing

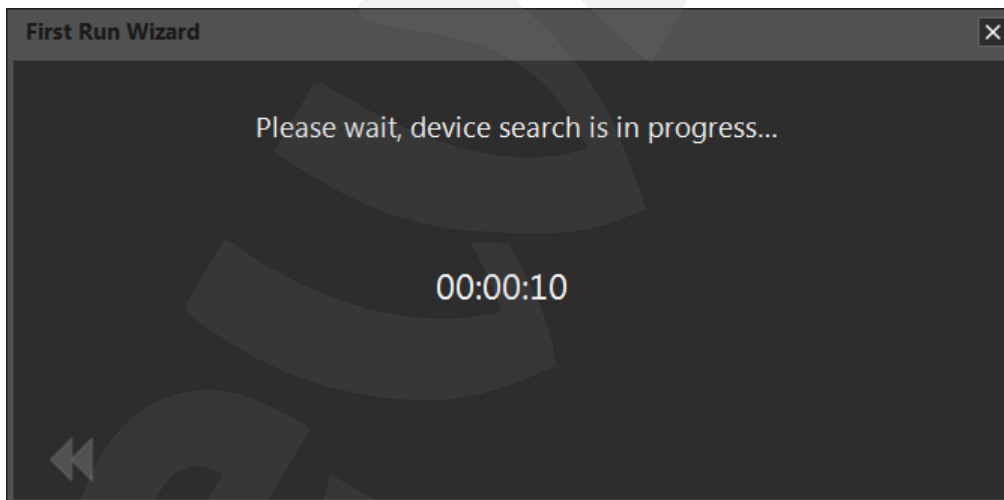
Chapter 3. Application First Run Wizard

Run BEWARD Intercom. The First Run Wizard will help you connect the installed door station to the application or configure SIP account to receive incoming calls from SIP door stations (*Pic. 3.1*).



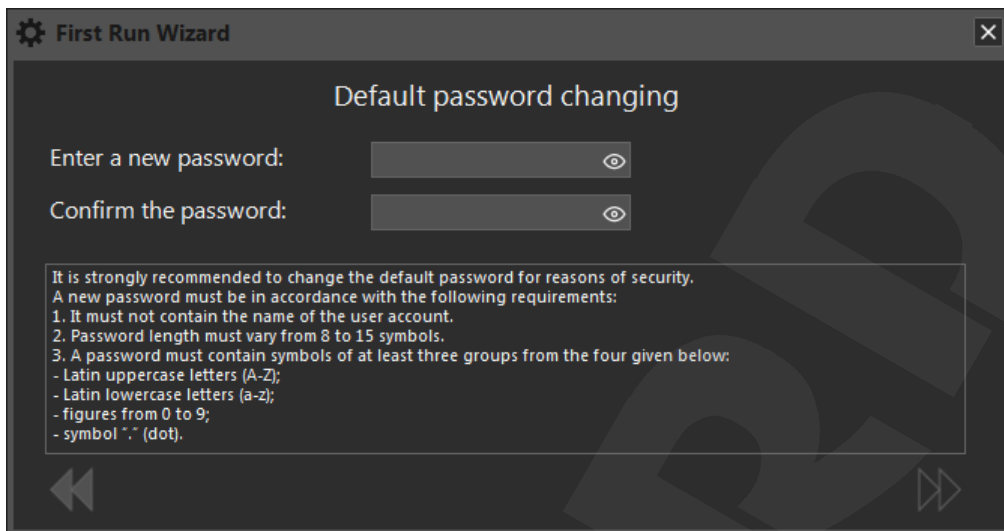
Pic. 3.1. Application First Run Wizard

Press the **[Search]** button to find the door station in your local network (*Pic. 3.2*).



Pic. 3.2. Device search

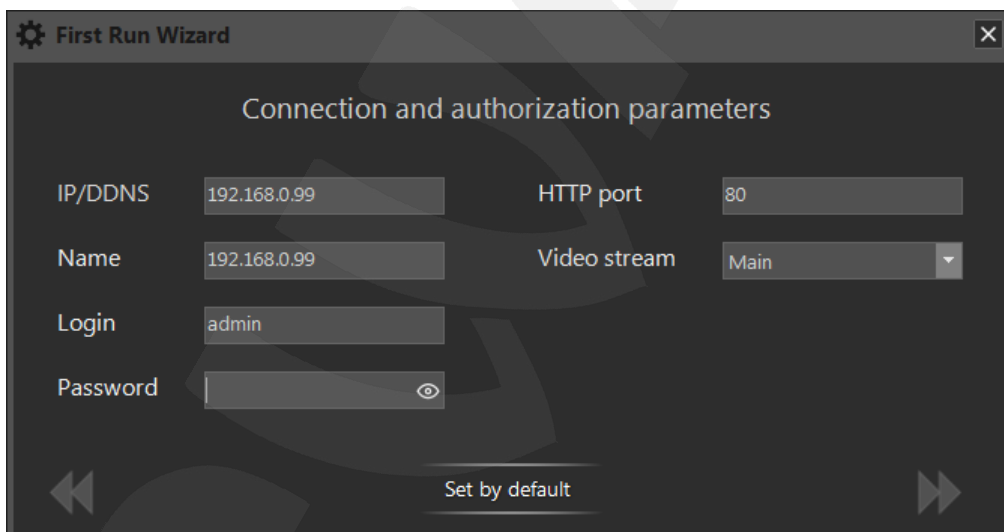
Double-click the detected device or press the ►► button. If door station authorization parameters are set by default, you will be asked to change them (*Pic. 3.3*).



Pic. 3.3. Default password changing

The video stream display window will be displayed after the default password is changed (Pic. 4.1).

You can also connect the installed door station manually. Press the **[Add]** button (Pic. 3.1) and enter connection, authorization parameters and choose the type of a video stream in the following window:



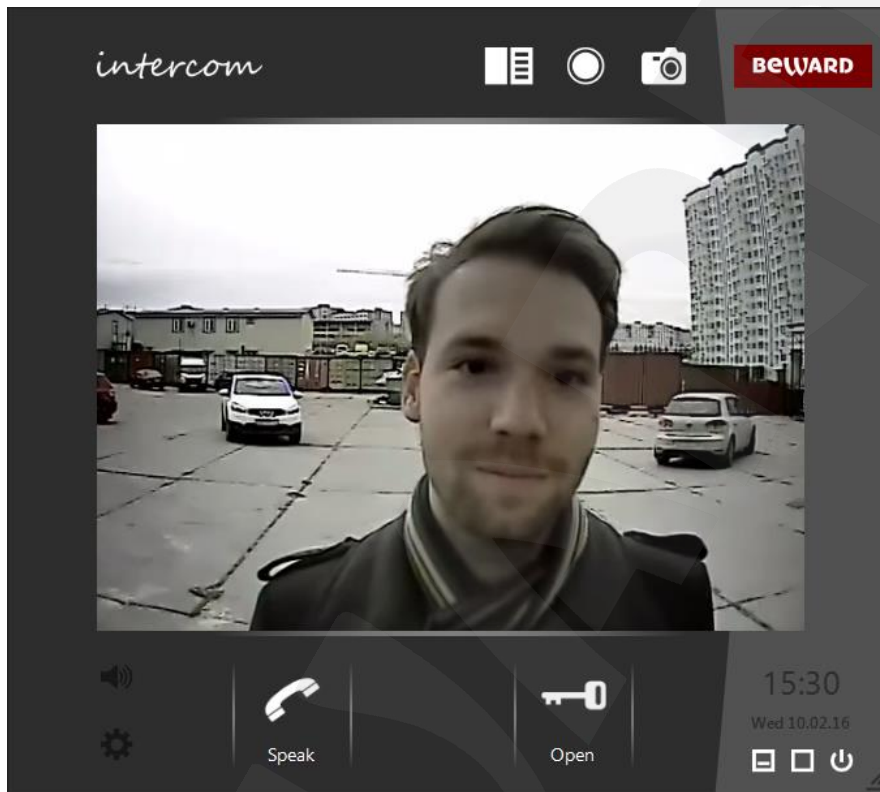
Pic. 3.4. Connection parameters entering

NOTE!

If the detected door station (after pressing the **[Search]** button) has login or password different from the default ones, then the authorization parameters must be entered manually.

Chapter 4. BEWARD Intercom Video stream Display window

The BEWARD Intercom video stream display window is displayed on the screen after a door station is connected to the application (Pic. 4.1).






Pic. 4.1. BEWARD Intercom video stream display window
(with one button for controlling external devices)

As the window opens you can see video and hear sound from the door station.

NOTE!

You can't hear sound from the door station if you hide the application video stream display window.


There are buttons **[Browse log]** , **[Start recording]**  and **[Make snapshot]**  in the upper right part of the video stream display window.


Use the **[Browse log]** button to open a Call Log window.


Use the **[Start recording]** button to turn on recording video and two-way audio in the archive of the Call Log. The file(s) is (are) saved as a "My record" type. You can stop recording anytime clicking the button again.

Use the **[Make snapshot]** button to make a snapshot of video image from the door station and save it as the "My record" type in the archive of the Call Log. The Call Log is described in details in the Chapter [9](#).

There are **[Hide]**, **[Maximize]** and **[Close]** buttons in the bottom right corner of the application video stream display window.

 **[Hide]**: hide the application video stream display window to the notification area of the Windows taskbar.

 **[Maximize]**: expand the application video stream display window to fill up your whole screen.

 **[Close]**: close the application.

There are **[Sound On/Off]** and **[Settings]** buttons in the bottom left corner of the application video stream display window (see Chapter 5).

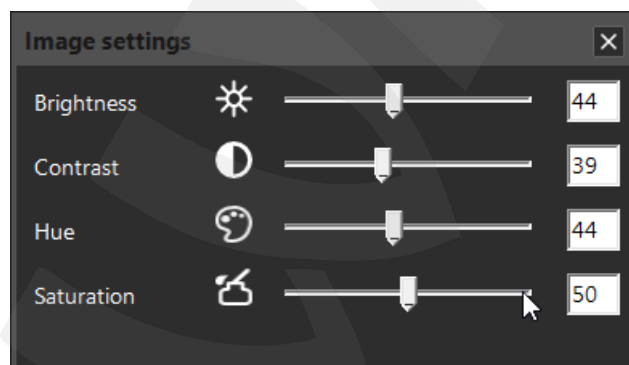
The **[Speak]** and **[Open]** buttons are placed right under the video image window.

Press the **[Speak]** button to transmit sound from your microphone to the door station speaker.

Press the **[Open]** button to unlock the front door.

4.1. Image Settings

As you right-click on the video image window you can set image parameters in the following menu:



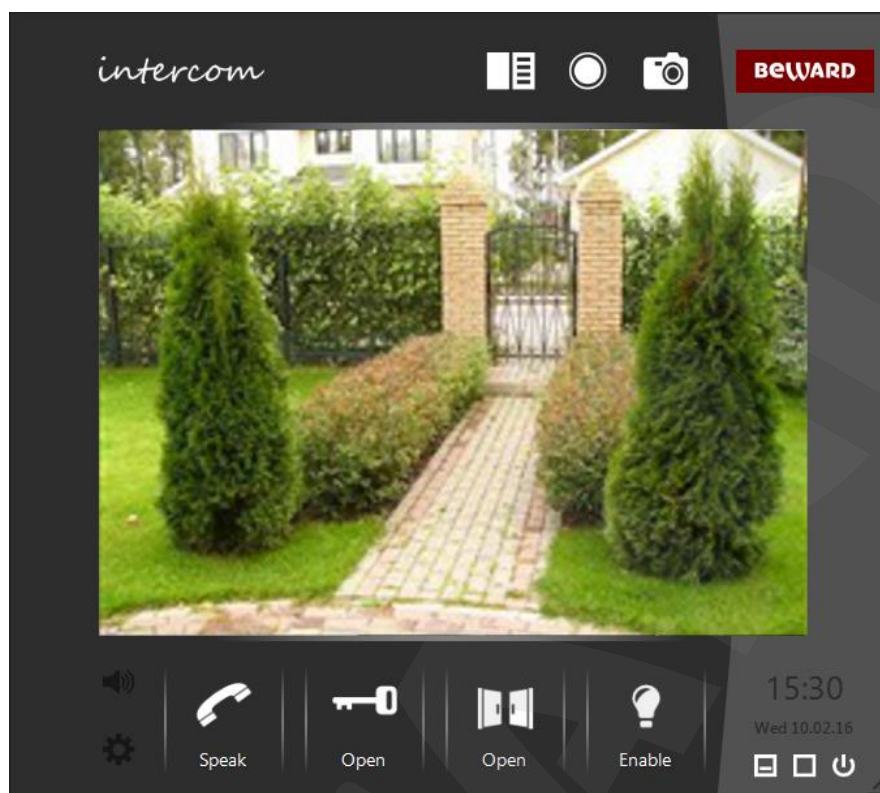
Pic.4.2. Image settings

Brightness, contrast, hue and saturation vary from 0 to 100. To set any parameter by default, click its name or icon.

4.2. Three-channel Door Station Support

Any BEWARD door station with the firmware 3.1.0.0.1.18 and higher can be equipped with a 3-channel controller. This controller has three pairs of pins for connecting three external devices such as electronic locks, garage door openers, light switches, alarm systems etc.

By default, the BEWARD Intercom application operates with the first pair of pins (the **[Open]** button in the video stream display window), and if necessary it allows using additional buttons for the second and third pairs (see paragraph [5.2 "Door Station Settings"](#)). When using door stations with the firmware 3.1.0.0.1.18 and higher the application video stream display window can look like as follows:



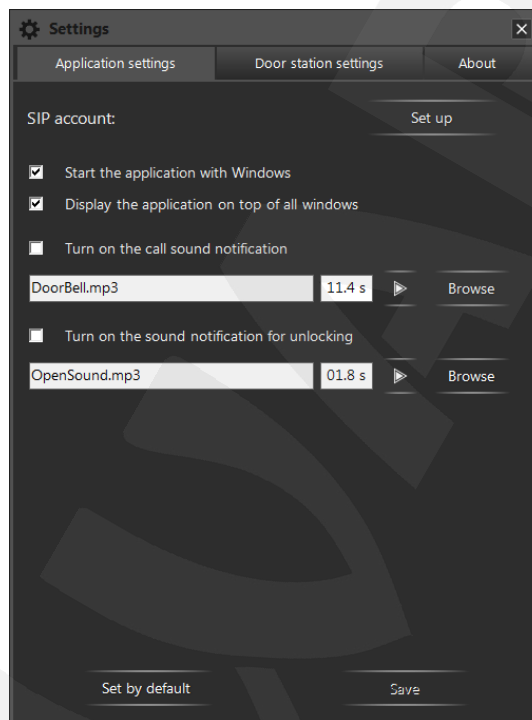
Pic. 4.3. BEWARD Intercom video stream display window with three buttons for controlling external devices

Chapter 5. BEWARD Intercom Setting

Press the **[Settings]** button in the bottom left corner of the application video stream display window or right-click the application icon in the notification area of the Windows taskbar to display an application and door station settings menu.

5.1. “Application settings” tab

This tab contains parameters that allow users to configure notifications for incoming call sounds and door unlocking sounds, as well as startup options for Windows OS.



Pic. 5.1. “Application settings” tab

SIP account: Set up: press the **[Set up]** button to configure BEWARD Intercom settings for SIP protocol. After correctly setting up the account, Beward Intercom software will be able to receive incoming calls from door station without adding them directly beforehand. See more in [“5.4. Setting Up SIP account”](#)

Start the application with Windows: turn on this option to start BEWARD Intercom with your OS.

Display the application on top of all windows: turn on this option to display the application video stream display window above the all others opened.

Turn on the call sound notification: turn on this option to initiate a sound notification when the call button is pressed outside. Press the **[Browse]** button to select a custom MP3 or WAV file instead of the default one. You can also set the duration of playback in seconds. The duration of playback is automatically set equal to the length of the browsed audio track. The maximal duration is 59,9 seconds.

Turn on the sound notification for unlocking: turn on this option to initiate a sound notification when the **[Open]** button is pressed in the application video stream display window (Pic. 4.1). Press the **[Browse]** button to select some MP3 or WAV file instead of the default one. You can also set the duration

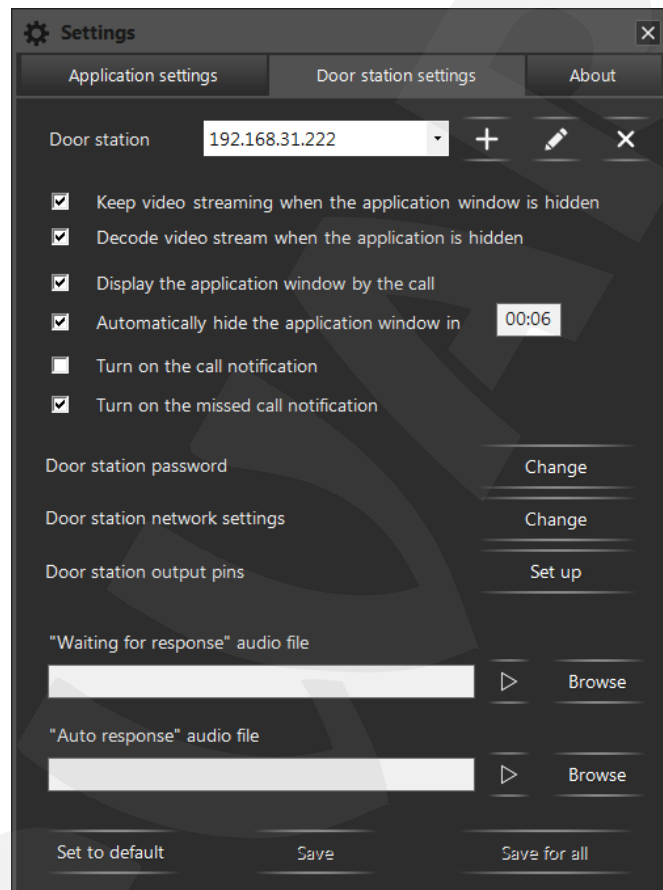
of playback in seconds. The duration of playback is automatically set equal to the length of the browsed audio track. The maximal duration is 59,9 seconds.

[Set to default]: press this button to set application parameters by default.

[Save]: press this button to save the changes.

5.2. “Door station settings” tab

This tab shows settings only for directly connected door stations. These settings do not apply to incoming SIP calls.



Pic. 5.2. “Door station settings” tab

Door station: the application can operate with several connected door stations at once. The directly connected devices are displayed in the drop-down list. The following buttons are situated to the right of the list: **+** [Add a door station], **✎** [Change connection parameters], **✕** [Remove a door station]. Functions of these buttons are described in the Chapter [6](#).

ATTENTION!

All the settings on the “Door station settings” tab relate to the door station, which is currently selected in the drop-down list. Each connected door station uses its own settings.

Keep video streaming when the application window is hidden: turn on this option to allow BEWARD Intercom to be connected to the door station when hiding the application video stream display window to the notification area of the Windows taskbar. In this case a video image displays faster when opening again the application video stream display window, though it requires high network resources.

Decode video stream when the application is hidden (available when the previous function is enabled): turn on this option to keep decoding the video stream when hiding the application video stream display window to the notification area of the Windows taskbar. It allows video to display faster when opening the application video stream display window again, though it requires high CPU resources.

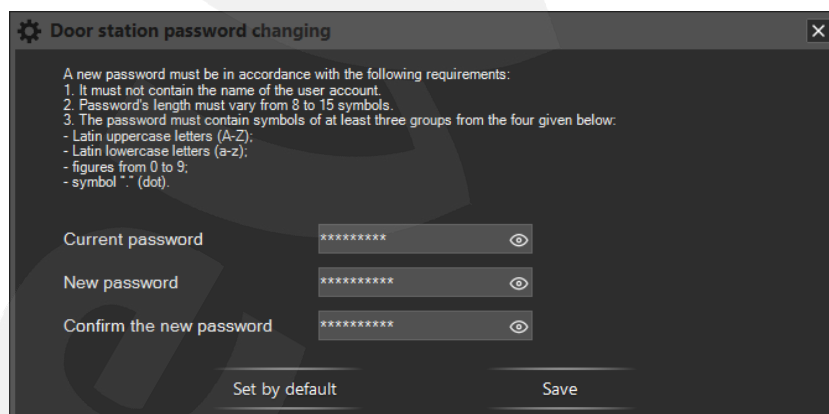
Display the application window by the call: turn on this option to display the application video stream display window when the call button is pressed outside.

Automatically hide the application window in (available when the previous function is enabled): turn on this option to hide the application video stream display window automatically in time (specified in the field beside) after stop talking with the Guest or unlocking the door, as well as if the talk has not been begun or the door has not been opened.

Turn on the call notification: turn on this option to display a notification when the call button of the selected door station is pressed outside (see Chapter 8)

Turn on the missed call notification: turn on this option to display a notification which contains information on missed calls from the selected door station.

Door station password: press the **[Change]** button to change the password of the selected door station in the following window:



Pic. 5.3. Door station password changing

The **[Set to default]** button, which is used for setting the default door station password (it may be useful, for example, when giving the device to the service center), becomes available as you enter the correct current password.

NOTE!

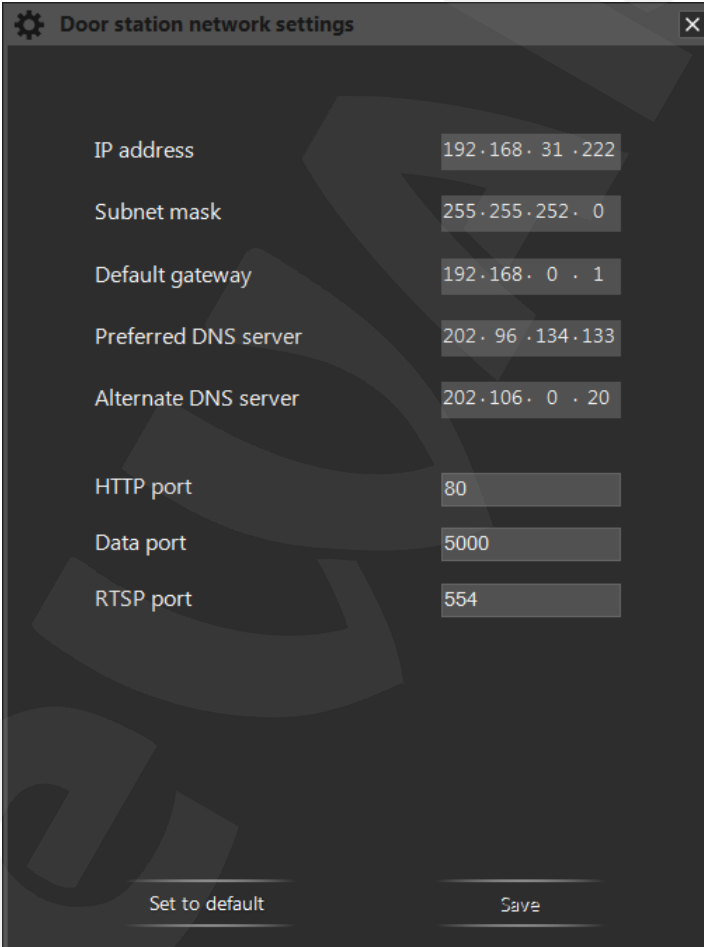
There is no any other way to set the default door station password in the BEWARD Intercom application.

Please, pay attention to the instructions on the top part of the window entering a new password. Fill in the fields and press **[Save]**.

NOTE!

A new password will be applied right after pressing the **[Save]** button in the “Door station password changing” window.

Door station network settings: press the **[Change]** button to change network settings of the selected door station. You can change the following parameters: **IP address, subnet mask, default gateway, preferred and alternate DNS server addresses, HTTP, data and RTSP ports** numbers (*Pic. 5.4*).



IP address	192.168.31.222
Subnet mask	255.255.252.0
Default gateway	192.168.0.1
Preferred DNS server	202.96.134.133
Alternate DNS server	202.106.0.20
HTTP port	80
Data port	5000
RTSP port	554

Set to default Save

Pic. 5.4. Door station network settings

NOTE!

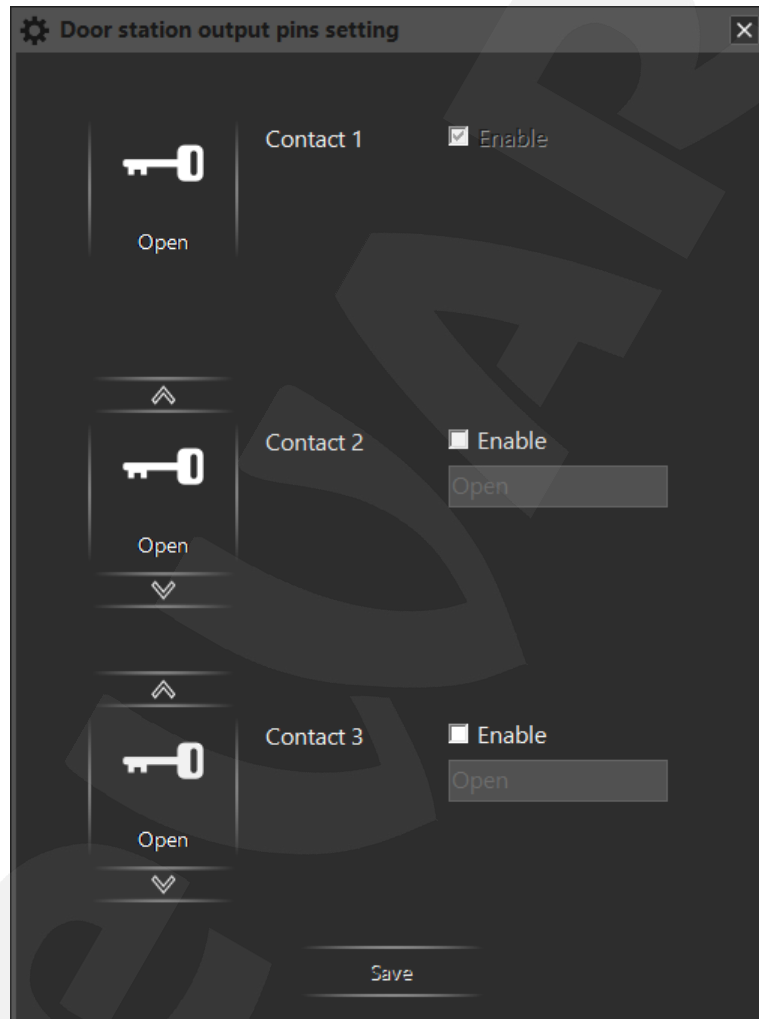
New network settings applying starts right after pressing the **[Save]** button in the “Door station network settings” window. It may require device rebooting and take some minutes.

Door station output pins: press the **[Set up]** button to set two additional buttons for controlling external devices connected to the door station 3-channel controller. In the opened window (*Pic. 5.5*) you

can change the icons and the names (up to 8 symbols) of the buttons, which are used for activation of the output contacts 2 and 3. Put a check mark near “Enable” to turn on the buttons. They will appear in the video stream display window for the selected door station after pressing the **[Save]** button.

NOTE!

New output pins settings will be applied right after pressing the **[Save]** button in the “Door station output pins settings” window.



Pic. 5.5. Door station output pins settings

NOTE!

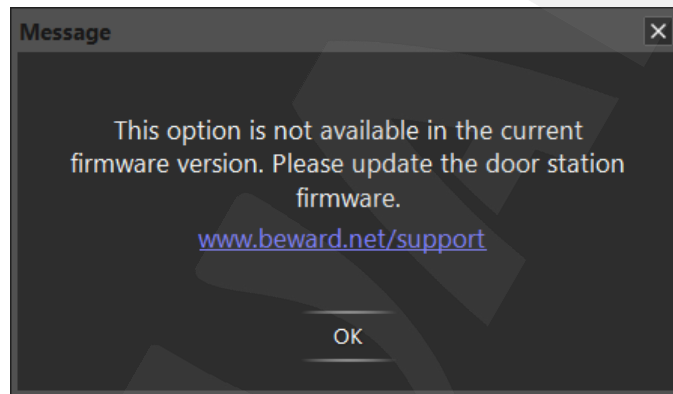
The output pins setting function is only available if the door station's firmware is 3.1.0.0.1.18 and higher, and in case of using the 3-channel controller. Moreover, it is necessary to turn on output pins support in the door station web interface (menu **Config/Controller/Setting** – «**Controller type**» – «**3 channels**»).

If you use a 1-channel controller and press the **[Set up]** button (Pic. 5.2), then you get the following message: “Available for multi-door controller”.

There are two audio options on the “Door station settings” tab below the output pins option. The “**Waiting for response**” option is a playback of a specific audio signal on the door station when the call button is pressed outside and when at least one Client is connected to the station. The “**Auto response**” option is a playback of a specific audio signal on the door station when the call button is pressed outside and when nobody is connected to the station so no one can response.

NOTE!

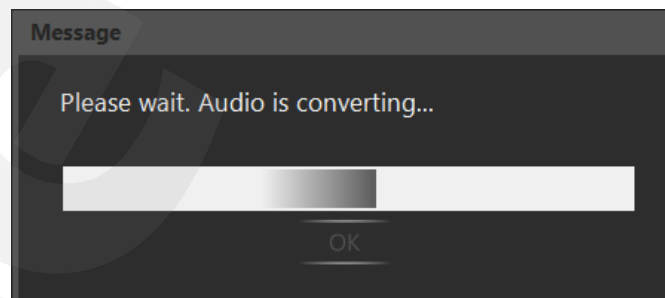
“Waiting for response” and “Auto response” options are available from **2.1.0.1.54.18** firmware version (including) and later. If your door station firmware version is earlier than the mentioned above, then the message given on the *Picture 5.6* appears as you press the **[Browse]** button. Following the link below the message you can download the latest firmware version.



Pic. 5.6

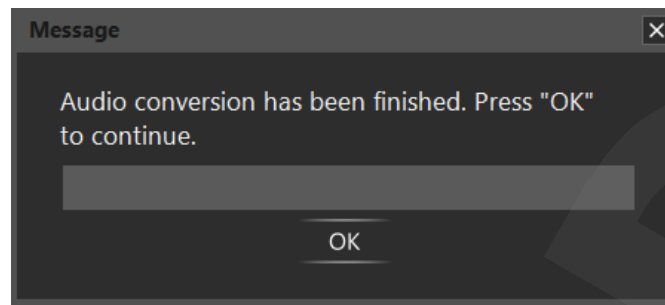
You can select audio files for both options. Press the **[Browse]** button and select an MP3 or WAV audio file, or an AVI video file.

The selected file will be automatically analyzed and converted to an appropriate door station format, if necessary. The following window will appear:



Pic. 5.7. Audio file conversion

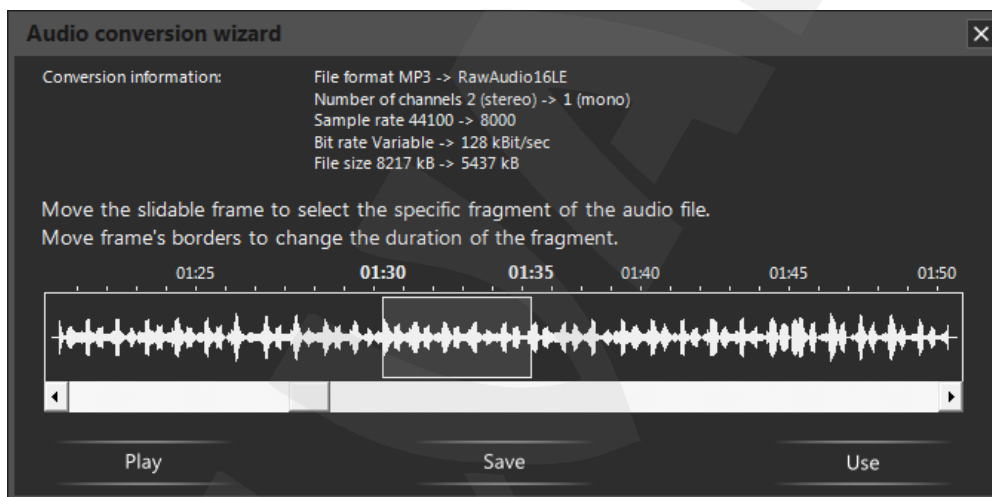
A successful conversion message is given below:



Pic. 5.8. Successful conversion message

Press **[OK]**. If the converted audio files have an appropriate size, then they are automatically saved in the catalog C:\Program Files (x86)\Beward\BEWARD Intercom\Sounds\Intercom with default names as follows: «call.wav» for the “Waiting for response” file and «autoreply.wav» for the “Auto response” file.

If converted audio file’s size is more than 100 kB, then you will see the Audio Conversion Wizard window:



Pic. 5.9. Audio Conversion Wizard

At the top part of the window you can see changes made during audio conversion. You can choose the fragment of the sound track you like in accordance with an allowable size of the audio file. You can move the slide-frame along the track and change its borders for choosing. You can also use the scrollbar for scrolling a soundtrack.

[Play]: press this button to listen the chosen fragment.

[Save]: press this button to save the chosen fragment on your computer.

[Use]: press this button to use the chosen fragment as an audio signal for one of the two options mentioned above and to close the Audio Conversion Wizard window.

If you didn’t move the slide-frame for choosing an audio fragment, then the fragment in the beginning of the track is used by default.

If you didn’t save the chosen fragment (using the **[Save]** button), then it will be automatically saved in the catalog C:\Program Files (x86)\Beward\BEWARD Intercom\Sounds\Intercom with default name as follows: «call.wav» for the “Waiting for response” file and «autoreply.wav» for the “Auto response” file.

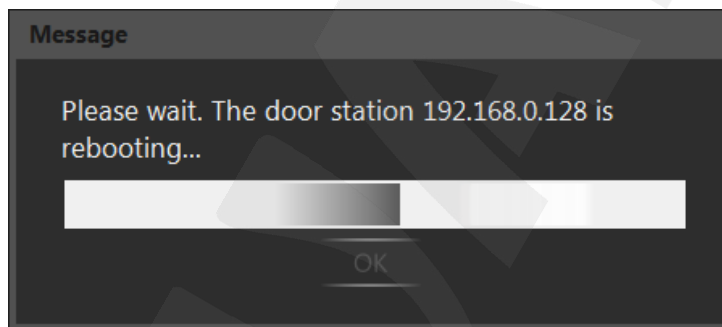
The **[Save]** and **[Save for all]** buttons on the “Door station settings” tab is used for saving changes of the parameters, which are situated right on this tab. All the parameters, which can be changed in additional windows, are applied by pressing **[Save]** buttons in the same windows.

Use the **[Save]** button on the “Door station settings” tab to apply new settings to the door station chosen in the “Door station” drop-down list. Use the **[Save for all]** button to apply new settings to all connected door stations.

NOTE!

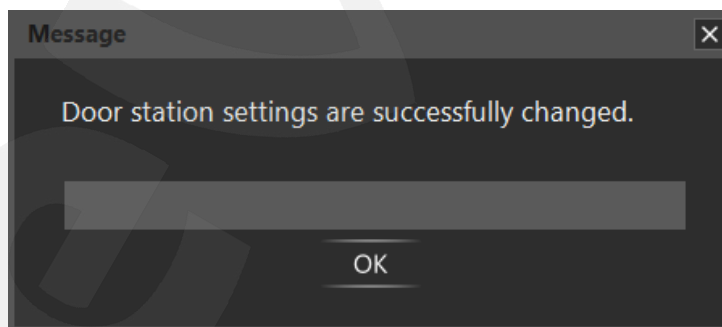
Audio files uploading and other settings, which are situated right on the “Door station settings” tab, do not require device rebooting to be applied.

If a reboot is required for the new settings to be applied, you will see the following message after pressing the **[Save]** button (in any window):



Pic. 5.10. Door station rebooting

If new settings are successfully applied, then you will see the following window:

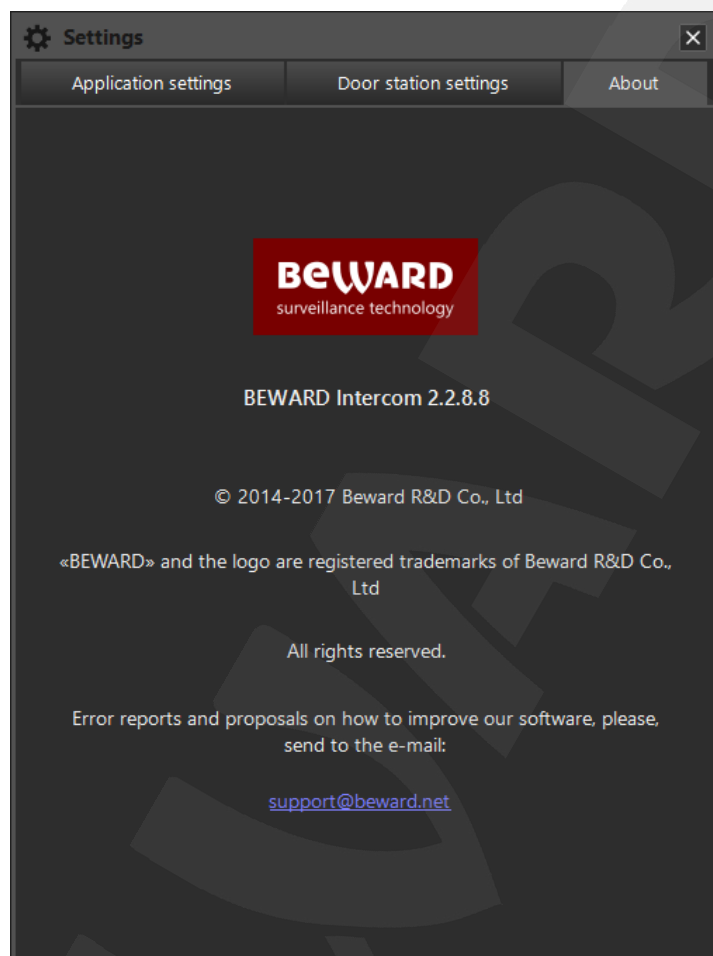


Pic. 5.11

The **[Set to default]** button on the “Door station settings” tab (*Pic. 5.2*) is used to set the parameters located right on this tab to default values. “Waiting for response” and “Auto response” options cannot be set by default.

5.3. “About” tab

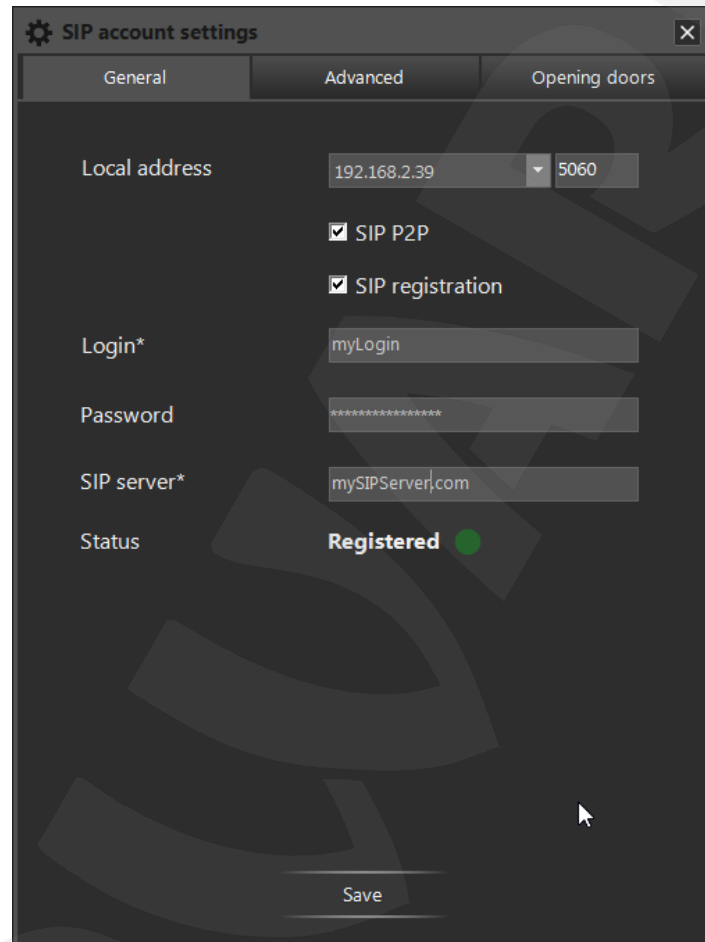
This tab contains information about application’s version, its developer and some notes concerning user technical support (*Pic. 5.12*).



Pic. 5.12. “About” tab

5.4. Setting Up SIP account

To configure the SIP account click the **[SIP account]** button on the **First run Wizard** window (Figure 3.1) or the **[Set up]** SIP account button on the **Application settings** tab of the **Main settings Window** (Fig. 5.1). In the **General** tab (Fig. 5.13) of the **SIP account settings** window the following SIP account parameters can be entered: login, password and address of the SIP server on which the account was registered.



Pic. 5.13. SIP account settings, "General" tab

Local address: select the local IP address from the drop-down list of computer addresses where Intercom is installed. To the right there is a field to enter a local port to be used by Intercom. The local address and port are both used by Intercom when operating in P2P mode, as well as during the registration process on the SIP server. The selected address must be entered in the WEB interface of the door station if support for calls in P2P mode is needed.

SIP P2P: select to receive incoming calls directly from other clients without registration on the SIP server.

SIP registration: select to enable the process of maintaining registration on the SIP server.

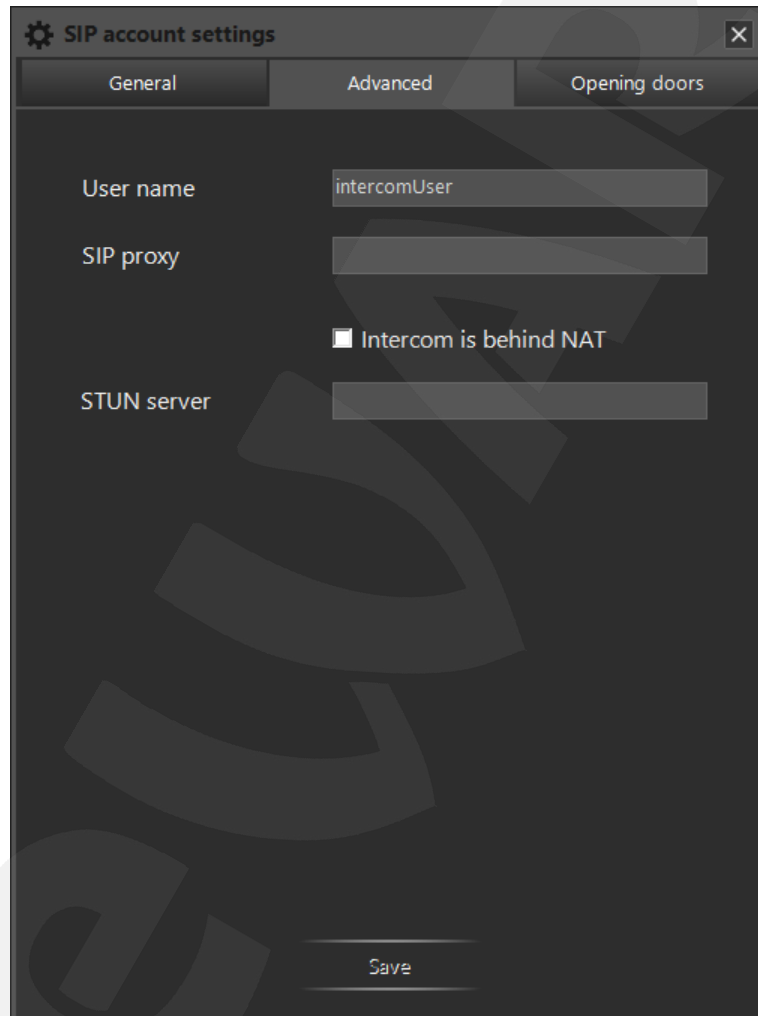
Login: enter the login of your SIP-account. This field is mandatory.

Password: enter the password to register on the SIP server.

SIP server: enter the **SIP server** on which your account is registered (domain names and IP addresses are supported). If needed you can specify the port of your SIP server e.g. “12.34.56.78:5061”. If the port is not specified, then the default value is 5060.

Status: displays information about your registration status.

SIP calls in P2P mode and via SIP server are independent. Receiving SIP-calls is supported if at least one of these modes is enabled.



Pic. 5.14. SIP account settings, «Advanced» tab

The **Advanced** tab (Pic 5.14) includes the following optional parameters:

User name: enter a unique name, assigned to a specific client. Use this parameter if a single SIP account is used on several clients (software) simultaneously, e.g. BEWARD Intercom for Windows and BEWARD Intercom for Android. Username examples: “John S” “Smith Intercom PC”, “Doorkeeper”.

SIP proxy: enter the SIP server which acts as an intermediary in the SIP messages exchange process, required for organizing SIP calls (domain names and IP addresses are supported). If needed you

can specify the port of your SIP server e.g. “mysipproxy.com:5061”. If the port is not specified, then the default value is 5060. If the field is empty, the main SIP server will be used instead (see Pic. 5.13).

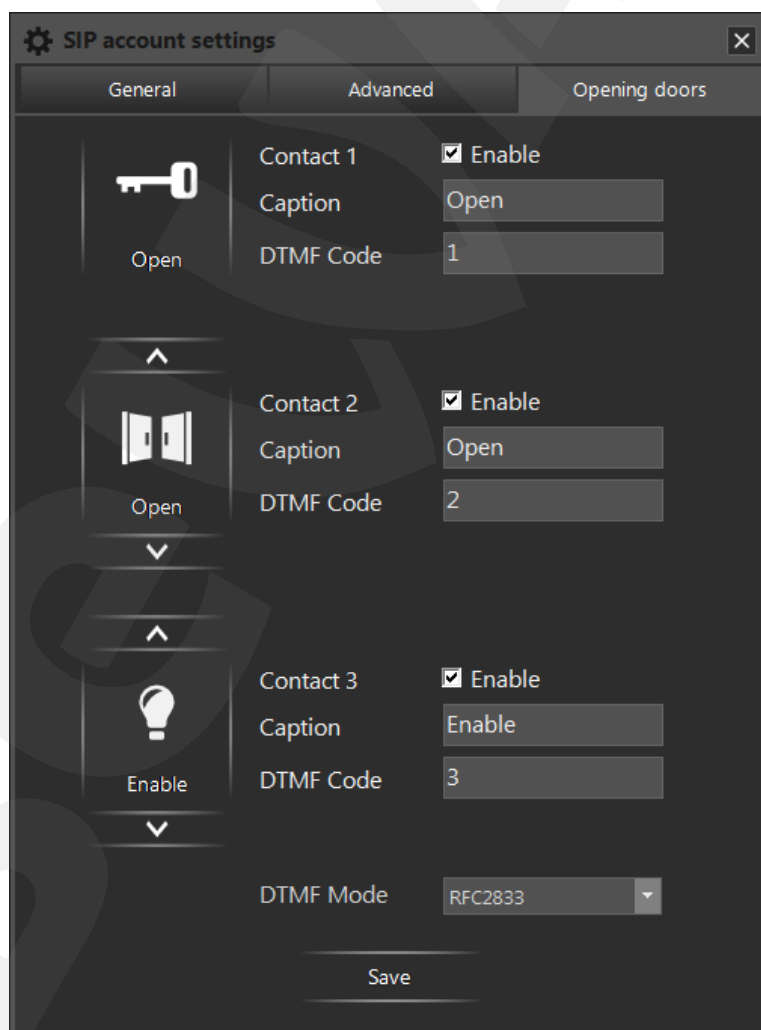
Intercom is behind NAT: select if there is no outgoing audio, incoming audio or video during incoming calls, and the SIP server is in another network. You need to enter a STUN server address after selecting this checkbox.

STUN server: enter the STUN server (domain names and IP addresses are supported). If needed you can specify the port of your STUN server e.g. “mystun.com:3479”. If the port is not specified, then the default value is 3478.

NOTE!

Most of the existing SIP servers can be SIP proxies at the same time with being Registrar servers. You don't need to define the **SIP proxy** when working through these servers.

Also most SIP servers can work with clients behind NAT without using STUN Protocol. You don't need to select the **Intercom is behind NAT** switch when working through these servers.

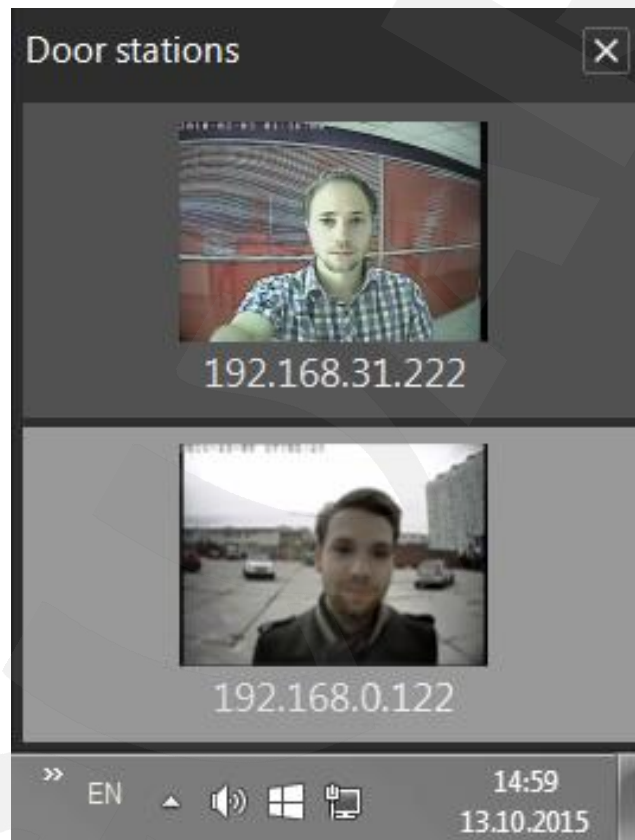


Pic. 5.15. SIP account settings, «Opening doors» tab

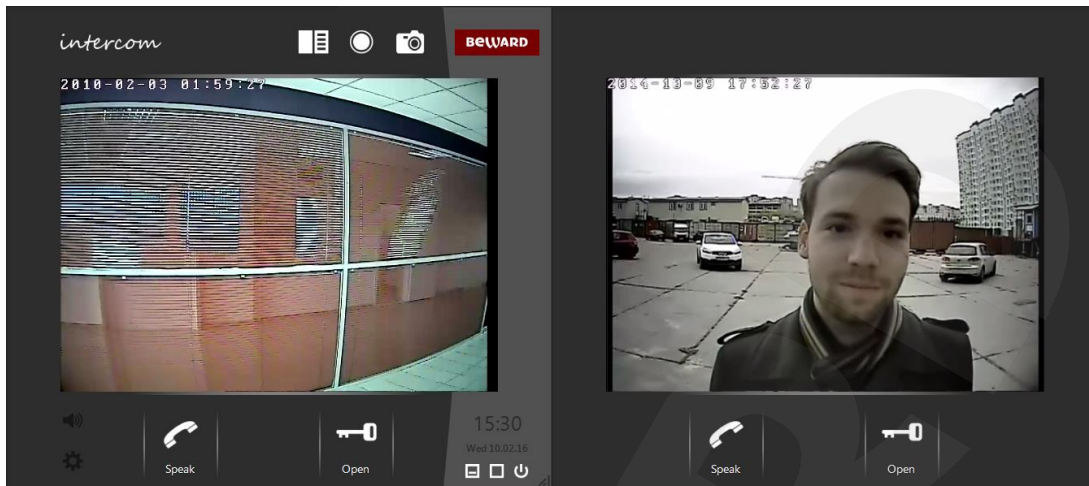
Go to the **Opening doors** tab in the **SIP account settings** window to configure door opening settings during SIP calls (Pic. 5.15). Here you can set DTMF-code values (according to the values set up on the door stations) for different door opening buttons, change button icons and captions, as well as enable/disable them in the videostream display window during SIP calls. You can also select DTMF signal transmission mode (according to the values set up on the door stations) from the **DTMF Mode** drop-down list.

Chapter 6. Operation With Several Door Stations

BEWARD Intercom provides operation with several door stations at one time. The list of directly connected devices is displayed in the bottom right corner of the screen, if a) two or more door stations are added to the application; b) two or more SIP calls are in progress (*Pic. 6.1*). This list is opened with a left-click on the application icon in the notification area of the Windows taskbar and closes by clicking anywhere, excepting the list window. The **[Up]** and **[Down]** buttons appears in the list window, if a) four or more door stations are added; b) four or more SIP calls are in progress. A mouse scroll is also can be used to look through the list. You can change the order of devices in the list, dragging them with a mouse. SIP calls are always located at the bottom of the list and cannot be dragged with a mouse.



Pic. 6.1. The list of connected devices



Pic. 6.2. BEWARD Intercom multi-window mode

In the multi-window mode one window is active (it has a grey-colored right part), others are inactive. A video stream displays in all opened windows. Audio (if it is turned on) only transmits for the door station, whose window is currently active.

The active window also differs from the inactive one by presence of the following elements: «intercom» and «BEWARD» logos, clock, buttons **[Turn on/off audio from the door station]**, **[Settings]**, **[Hide]**, **[Maximize]** and **[Close]**. Moreover, the door station, whose video stream display window is currently active, is highlighted in the list of connected devices (Pic. 6.1). During several simultaneous SIP calls, the sound will transmit only for the call with currently video stream display window.

The video stream display window becomes active when a mouse cursor points to it, when displaying it from the notification area and when receiving an incoming call from the corresponding door station. Activation on pointing with a mouse cursor does not perform when you open the “Settings” window or use the “Speak” mode (**[Speak]** button). Activation on incoming call does not perform when you use the “Speak” mode.




One Client can only use the “Speak” mode on one door station/SIP call at one time. **Situation A:** the “Speak” mode is in progress on the device 1. If the User starts talking using the device 2, you automatically finish the “Speak” mode on the door station 1. **Situation B:** the “Speak” mode is in progress on one of the door stations (direct connection). The user receives an incoming SIP call. Answering the SIP call will automatically finish the “Speak” mode with the directly connected door station.

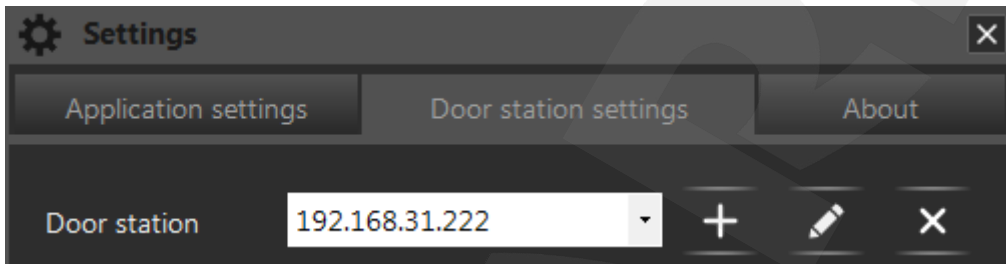
You can switch manually between door stations in the list as follows:

1. Left-click the application icon in the notification area to open the list of connected door stations.
2. Choose from the list the device you need.
 - 3.1. Left-click it, if you want to operate the door station in the current active window.
 - 3.2. Right-click it, if you want to operate the door station in a new separate window.

NOTE!

Double-click the icon of the application in the notification area to hide all the opened windows. Later, when you open the application from the notification area, clicking its icon, and all windows are hidden, the window, that was active before, will be displayed on the screen.

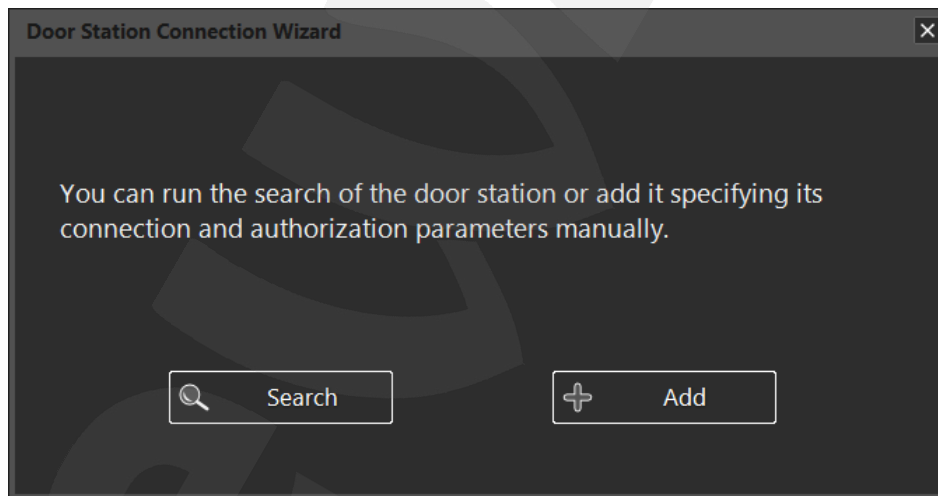
Use the buttons , , , which are situated on the “Door station settings” tab (Pic. 6.3), to add, remove directly connected door stations and change their network parameters or names.



Pic. 6.3. Buttons for editing the list of connected devices

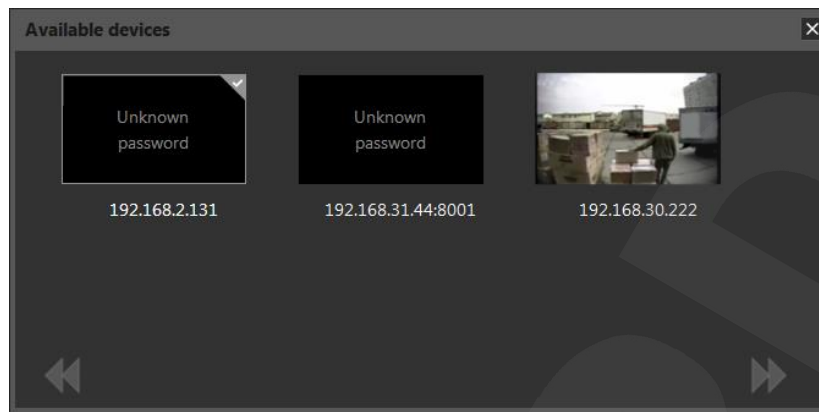
6.1. [Add a door station] button

Press the  button to add a new device. You will see the following window:



Pic. 6.4. Door Station Connection Wizard

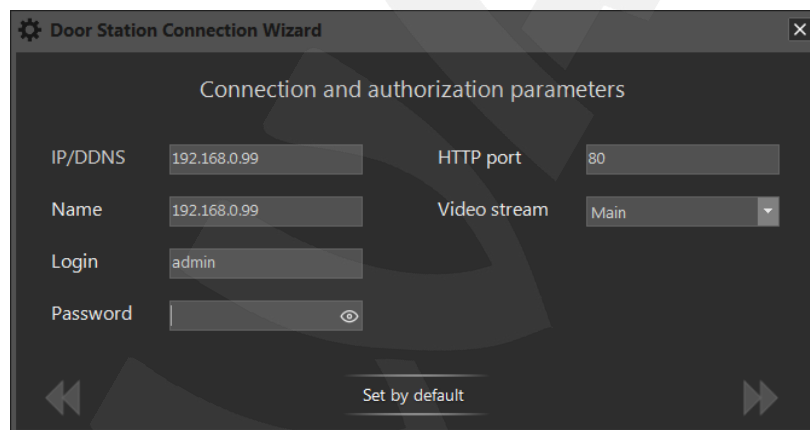
Press the **[Search]** button to run automatic search of available door stations (Pic. 6.4) or press the **[Add]** button to enter connection parameters manually (Pic. 6.5).



Pic. 6.5. Available devices

NOTE!

You can add several devices at once. Press the **[Search]** button, select several door stations (Ctrl +LMB) among the available ones and press the **[Next]** button. Then you need enter connection parameters and change the default password (if necessary) for each device one by one.



Pic. 6.6. Connection and authorization parameters


When you need to connect a device which is belonged to another subnetwork (outside the NAT/NAPT), add it manually, specifying a correct HTTP port. If the device failed to get connected, change its network parameters, specifying true values of Data and RTSP ports (see paragraph [6.2.](#)).

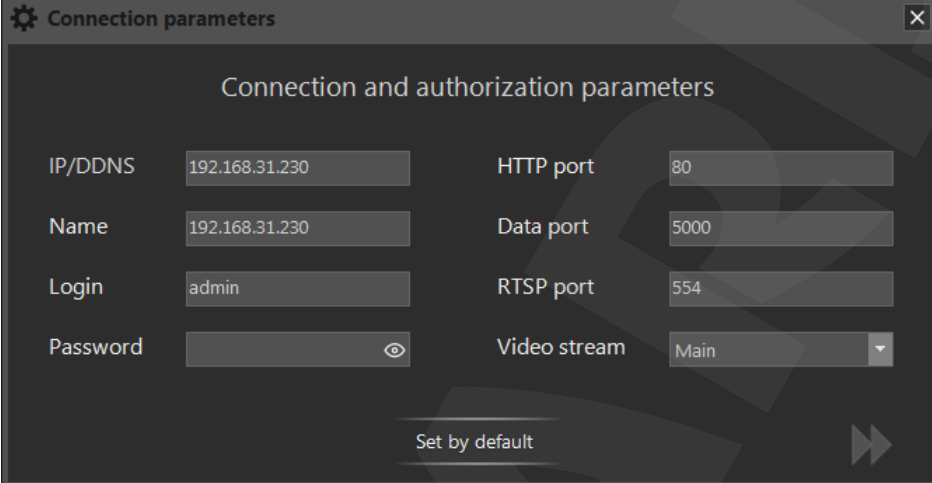
The application starts operating in a multi-window mode when adding the second one and further devices. This mode allows opening a separate video stream display window for each connected door station (Pic. 6.2).

NOTE!

You cannot use the multi-window mode when you expand the video stream display window to full screen. In this case, the list of connected devices is always opened and situated to the left of the image area.

6.2. [Change connection parameters] and [Remove a door station] buttons


 **[Change connection parameters]**: press this button to connect to the door station, which was already added to the application, but whose parameters were changed (through the web interface or by another Client), or to change the name of this device (*Pic. 6.7*).



IP/DDNS	192.168.31.230	HTTP port	80
Name	192.168.31.230	Data port	5000
Login	admin	RTSP port	554
Password	<input type="password"/>	Video stream	Main

Set by default

Pic. 6.7. Connection and authorization parameters changing

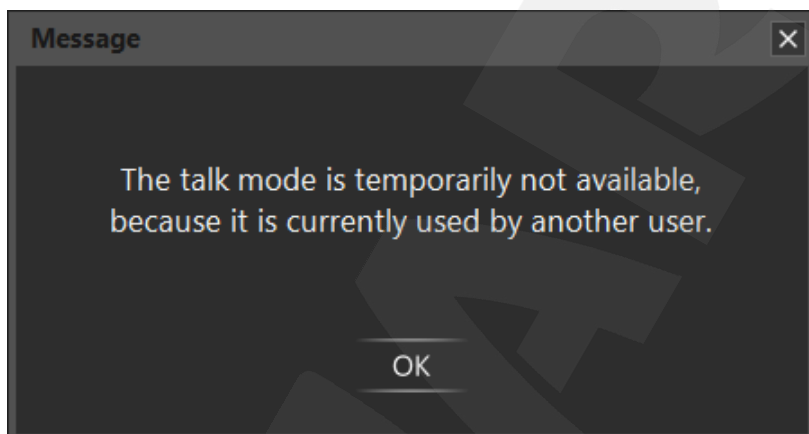
 **[Remove a door station]**: press this button to remove the selected door station from the application. Confirm removing in the opened window. The “First Run Wizard” window automatically appears after removing of the last device.

Chapter 7. Multiaccessible User Operation

BEWARD Intercom provides simultaneous door station access for up to 6 Clients and each of them may use the “Speak” mode and unlock the front door.

NOTE!

When one Client uses the “Speak” mode the others can't do it. In this case they receive the following message:



Pic. 7.1. Notification: “Speak” mode is used by another Client.

Chapter 8. Call Notifications

8.1 Calls from Door Stations (Direct Connection)

The BEWARD Intercom application can notify you of incoming and missed calls. A notification window automatically appears in the bottom right corner of the screen. It can be closed by clicking on the [X] button.

You can enable and disable the notifications for every directly connected door station separately in the “Settings” window, on the “Door station settings” tab. The notifications are placed in the list according to date and time. The latest ones are in the bottom.

Incoming call notification appears, when a Guest presses the call button on the directly connected door station, and it is displayed on the screen during 15 seconds. This notification contains device name, date and time of the call, and a snapshot from the door station made at the moment, when the call button is pressed (*Pic. 8.1*).



Pic. 8.1. Incoming call notification

When moving the mouse to the snapshot, it turns into a button with an image of a key (a button of closing the first outputs of the device; *Pic. 8.2*).



*Pic. 8.2. Incoming call notification.
“Open the door” button mode*

When clicking this button the notification disappears and the door is opened.

A left mouse click within the notification area but outside the snapshot makes the notification disappear as well, and the video stream display window of the corresponding door station is opened.

Missed call notification appears if neither the door has been opened, nor the “Speak” mode has been activated, or nor the incoming call notification has been closed during 15 seconds after receiving the call. This notification contains device’s name, date and time of the call, and a snapshot from the door station at the moment, when the call button was pressed (*Pic. 8.3*). Click the notification to open a Call Log window (see Chapter 9).



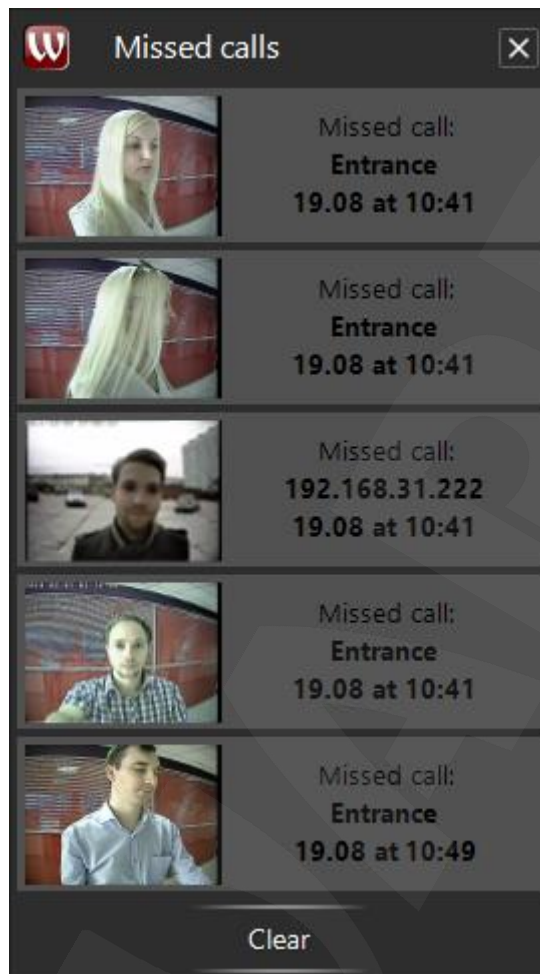
Pic. 8.3. Missed call notification

Missed calls notification appears if four or more notifications were not be reviewed. This notification contains snapshots from the last four missed call notifications, the total amount of missed calls, and device's name, date and time of the last one (Pic. 8.4). The missed calls notification is modified by every further missed call.



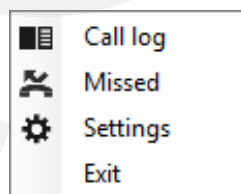
Pic. 8.4. Missed calls notification

Click the notification to open the list, which includes all the missed call notifications since the application was started or since the **[Clear]** button was pressed last time (Pic. 8.5). Use the **[Clear]** button to delete all notifications.



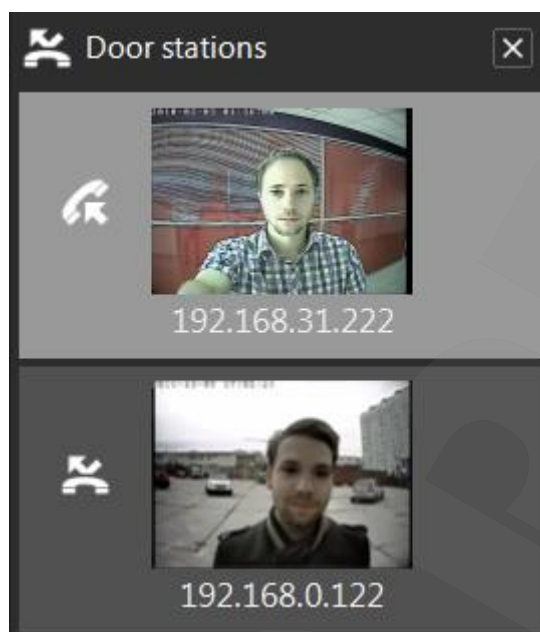
Pic. 8.5. Missed Calls List

You can also open the “Missed calls” window, choosing “Missed calls” in the application context menu, in the notification area (Pic. 8.6). This way allows you to review the missed calls even when the missed call notification option is disabled.




Pic. 8.6. Context application menu
in the notification area

Incoming and missed calls are also indicated in the list of connected devices, when several door stations are added to the application (Pic. 8.7).

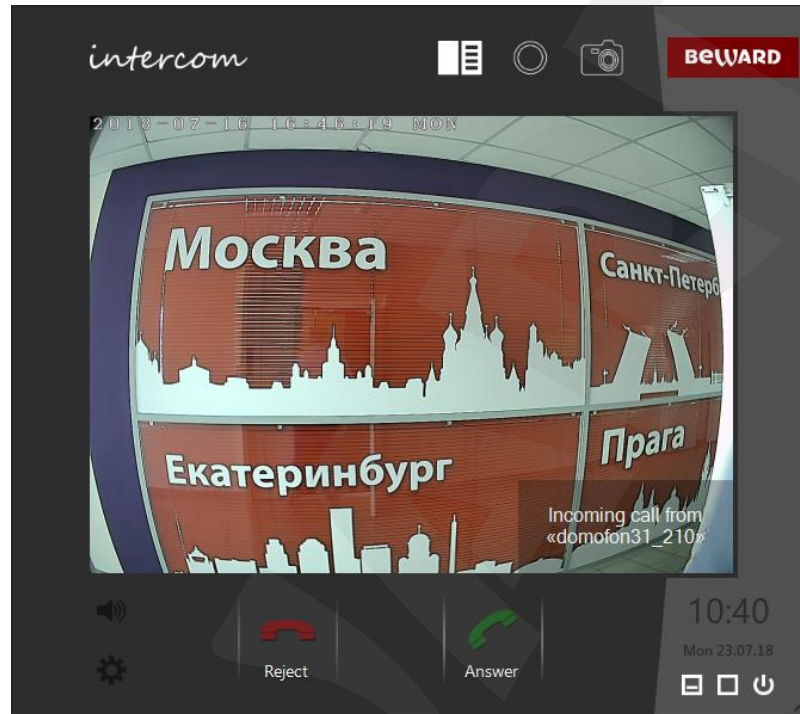


Pic. 8.7. Incoming and missed calls indication in the list of connected devices

The missed call icon () can be used as a button to open the Call Log (see Chapter [9](#))



8.2 Calls from Door Stations (SIP)


During incoming SIP calls an online video display window with **[Reject]** and **[Answer]** buttons will appear (Pic. 8.8). Pressing the **[Reject]** button will reject the call and mark it as “missed”. Pressing the **[Answer]** button will initiate broadcast of the video/audio stream and mark the call as “answered”.



Pic. 8.8. Online video display window with an incoming SIP call notification.

Chapter 9. Call Log

The Call Log of the BEWARD Intercom software is used for saving and viewing information of missed and answered calls from the door stations. A record of the call contains its date and time, the name of the source device, one or a series of snapshot(s) or a video record. The snapshots and video records that are made by the user in the video stream display window ([Make snapshot]  and [Start recording]  buttons) are also saved in the Call Log.

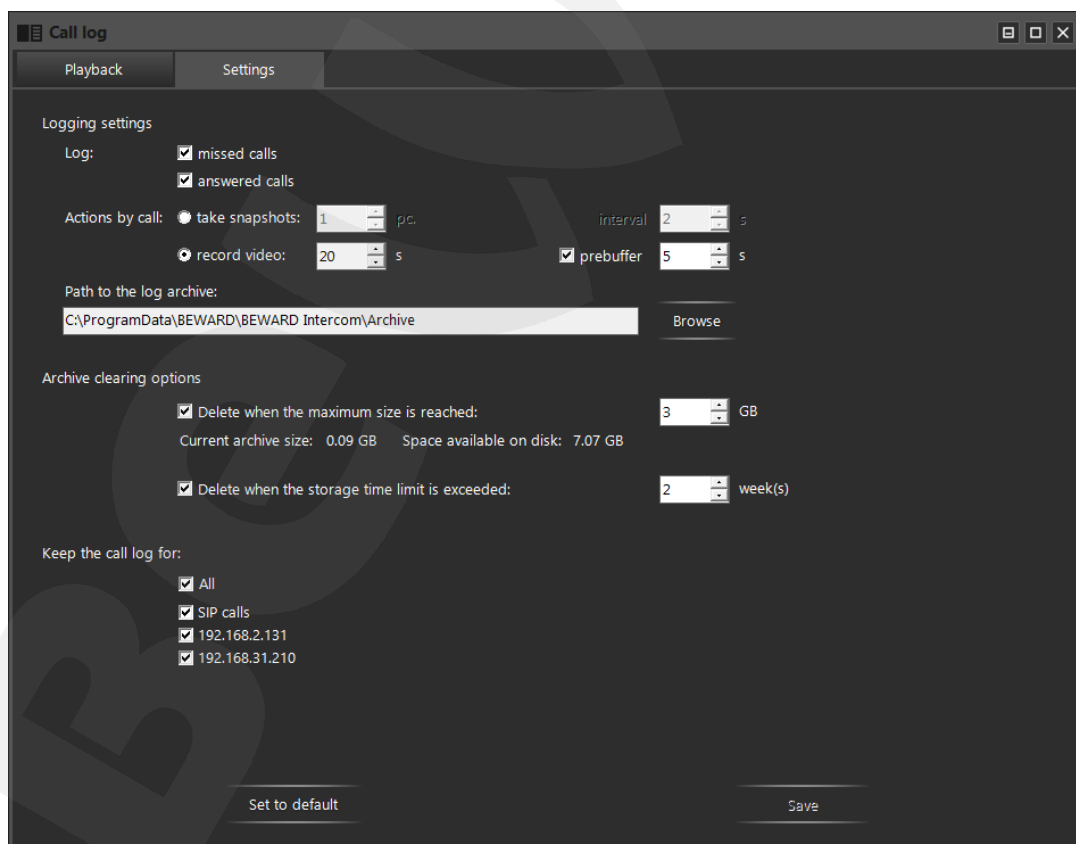
Use the [Browse log]  button in the active video stream display window to open a Call Log window.

9.1. “Settings” tab

ATTENTION!

The “Settings” tab of the Call Log window does not contain any parameters of recording data to SD cards of door stations. Setting this function is available in the door station web interface (refer to the IP Video Door Station DSxxM(P) Operation User Manual).

The “Settings” tab of the Call Log window is shown on the picture below:



Pic. 9.1. The “Settings” tab of the Call Log window

Log missed calls: Enable to save records about missed calls in the Call Log archive.

Log answered calls: Enable to save records about answered calls in the Call Log archive.

Actions by call:

- **Take snapshots:** BEWARD Intercom saves one or a series of snapshots of video image from the door station in the Call Log archive. Here you can specify a number of the snapshots and a time interval between they are made.
- **Record video:** BEWARD Intercom saves one snapshot at the moment of pressing the call button by the Guest and records video and audio from the door station. It is possible to set the duration of the recording after pressing the call button by the Guest as well as before (*prebuffer*).

The recording of audio from the PC microphone to the door station speaker is started automatically on enabling the "Speak" mode and stopped on disabling the mode. The recording of audio from the door station microphone is performed always.

NOTE!

You can set the duration for the records made automatically on the call. But you should use the **[Stop recording]** button for the records made manually. Otherwise, the recording is stopped when its maximum duration is reached (10 minutes for all record types).

If the "Speak" mode is enabled during recording on the call (and the time of the talk is bigger than recording duration you specified), then the record lasts till the mode will be disabled or till its maximum duration will be reached.

Path to the log archive: click the **[Browse]** button to select a folder for saving the records. If the path to the archive folder will be changed, all data from the old folder will not be copied to the new one, so you will not be able watch the records from the old folder in the Call Log.

Archive clearing options are situated next on the "Settings" tab.

Delete when the maximum archive size is reached: Enable to allow removing the oldest records in case the specified archive size is reached during application operation. You can specify the size in gigabytes in the field beside.

Delete when the storage time limit is exceeded: Enable to allow removing the records which are made before the term you can specify in weeks in the field beside in relation to your system date. The removing is performed at midnight or when BEWARD Intercom starts.

ATTENTION!

Do not change a structure of the BEWARD Intercom archive! It is prohibited to rename, copy or remove files and catalogs of the archive as well as to create the new ones! The data can be lost or displayed incorrectly in the Call Log if the structure of the archive is changed.

Door stations for which the Call Log is kept: choose the devices from the present list of connected ones which need to be recorded in the Call Log. You can choose "For all" or several separate

door stations. By default the Call Log is used for all devices, including the ones that are just added in the application.

[Set to default]: use this button to return Call Log settings to the initial default values.

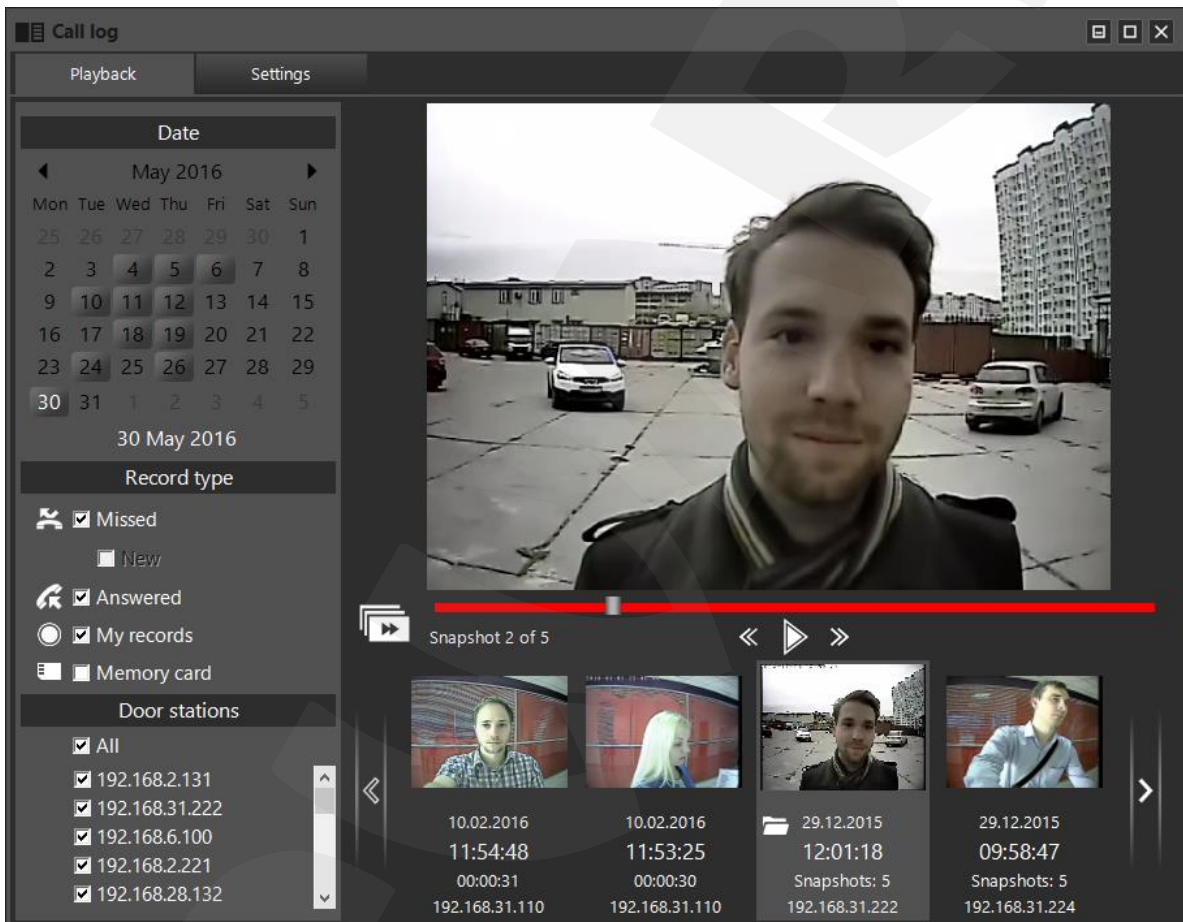
[Save]: use this button to apply new settings.

9.2. “Playback” tab

NOTE!

On the “Playback” tab of the Call Log window you have access to the records made using BEWARD Intercom as well as to the ones that are stored on SD cards of door stations. Enable “Memory card” record type to display SD card records (*Pic. 9.2*).



The “Playback” tab of the Call Log window is shown on the picture below:



Pic. 9.2. The “Playback” tab of the Call Log window

A *record viewing area* is the main part of the “Playback” tab. The view control tool bar is situated below. Using this tool bar you can turn on / off playback of records (slide show for snapshots), go to the previous or next frame. The **“Overview”** mode button is also situated on the tool bar (described in the end of the present chapter).

There is a *Call Record List* below the view control tool bar. Each record is represented by the snapshot made at the moment when the Guest presses the call button. The record contains information on the date, time, call source device, other snapshots or a video record if they were made. You can look through the records in the list using the buttons [**<**] (left) and [**>**] (right) or with a mouse wheel. Records are arranged in the list in accordance with their date and time: the later ones are to the left. The record selected

in the list is highlighted with light grey and has an image bigger than the others. It also has a button, which is used for opening the folder which contains a file (or files) of the selected record in the Windows File Explorer. In case of a record made in the application the button is **[Open in folder]** and it looks like . In case of an SD card record the button is **[Save in archive]** and it looks like .

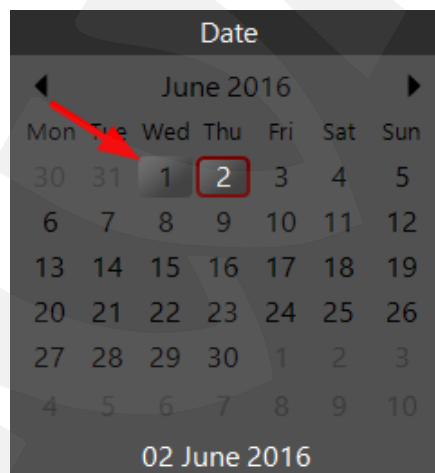
NOTE!

When pressing the **[Save in archive]** button a record is loaded from the memory card of the device and converted. It may need much time if a record file has a big size.

The following three groups of settings are situated on the left side of the “Playback” tab: **“Date”**, **“Record type”** and **“Door stations”**. Use these settings as the filter for records to choose which ones must be available in the list and which ones must not.

1. Filter the records according to the date using the interactive calendar. The dates (days, months, years) when some records were made in the application look like buttons (*Pic. 9.3*). The current date has a white font. The date you choose (the button you click) has a deep red frame.

Click the name of the current month (or the current year) under the title “Date” to display months (years) in the calendar.



Pic. 9.3. The interactive calendar for record filtration according to the date

By default, the current date is chosen in the calendar when you open the Call Log, so the records made current date are shown in the list. Click the button with a number of the day you need to display in the list the records made that day only. You can choose several dates using the **<Ctrl>** key of the keypad. Press and hold **<Ctrl>** and select the number buttons you need, clicking them with a mouse. Use the **<Shift>** key to choose some date interval. Click the number button which is the first in the interval you need, then press and hold **<Shift>** and click the number button which is the last in the interval.

To disable date filtration you need click the number button you chose before again, so the deep red frame disappears.

NOTE!

The records that are stored on SD cards of door stations are not displayed in the calendar. But enabling a “Memory card” filtration in addition to the date filtration starts searching the records on SD cards of door stations, made all the dates, which are currently chosen in the calendar.

2. Filter the records according to their type putting / removing ticks in the check boxes “**Missed**”, “**New**”, “**Answered**”, “**My records**” and “**Memory card**”.

Missed: put a tick to add records of the missed calls in the list; remove the tick to exclude such records from the list.

New: this is an addition to the option “Missed” (not available if the option “Missed” is disabled). Put a tick to leave in the list only the records which are in accordance with the notifications in the Missed Calls List (see Chapter 8, Pic. 8.5); in other words, you leave in the Call Record List the records of all calls missed since the moment when one of the following events happened:

- BEWARD Intercom start;
- click on the **[Clear]** button in the Missed Calls window (see Chapter 8, Pic. 8.5);
- looking through records in the Call Record List (in the “Overview” mode (see below) or manually).

The days in the calendar which have the new missed calls, which are not looked through, only remain as buttons when the option “New” is enabled. There is the same situation with a Call Log door station list (Pic. 9.6): the devices, which the new missed calls came from, are only displayed in that list.

NOTE!

If you enable the option “New” you cannot enable options “Answered”, “My records” and “Memory card” at the same time.

Answered: enable this option to add records of the answered calls in the list; disable the option to exclude such records from the list.

My records: enable this option to add in the list records which were made by the user manually using the **[Start recording]** / **[Stop recording]** and **[Make snapshot]** buttons in the video stream display window (see Chapter 4, Pic. 4.1); disable the option to exclude such records from the list.

Memory card: enable this option to add in the list records from SD cards of the door stations which are currently connected to the BEWARD Intercom application.

The data stored on SD cards of door stations may have a rather big volume. To avoid downloading all the data it's provided downloading only some part of each record, which is needed to preview it in the Call Record List.

While the previews are being downloaded you can see an animated preloader to the right of the filter name (Pic. 9.4 a). You can disable the asynchronous preview downloading by clicking the preloader (Pic. 9.4 b) to reduce network traffic. If disabled, only the previews of the records you selected in the list by

left-clicking and of the several previous records (which are situated to the right of the selected record) are downloaded.

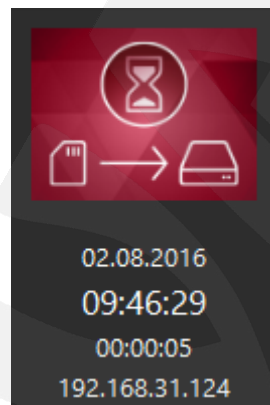


Pic. 9.4. Indication of enabling / disabling asynchronous preview downloading

By default the asynchronous preview downloading procedure starts every time after searching records on SD cards of door stations.

During the asynchronous preview downloading procedure the records which are currently displayed in the list have a priority. If you need some record, find it in the list using information on date and time (the later records are situated to the left) in a way you can see the record cell.

The record in the list, whose preview is not downloaded, looks as follows:



Pic. 9.5. The record in the list, whose preview is not downloaded.

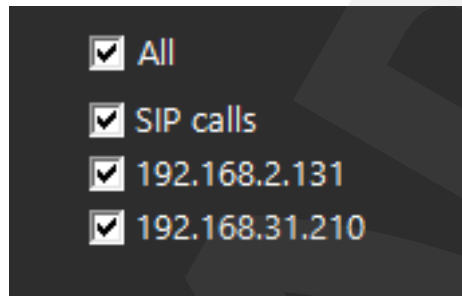
During operation with the records from door station SD cards in the Call Record List there can be situations when some previews are not downloaded or some records can't be played or also record duration has an incorrect value. The files of such records are probably damaged. You can try to play them via the door station web interface (please, refer to the Door Station Operation User Manual).

ATTENTION!

If you control a door station using several PCs, it is necessary to avoid searching/adding to the list records from its memory card simultaneously, because it can interrupt correct operation of the function.

It is also important to mention, that in comparison with the records from the local BEWARD Intercom archive, operation with the records from door station SD cards may need more time, because it requires downloading from the remote devices.

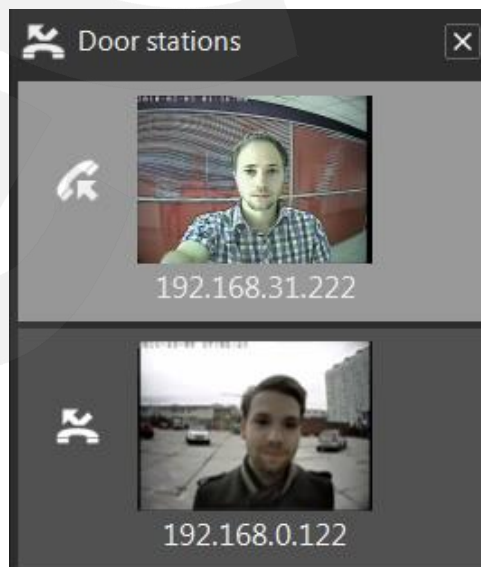
3. Filter the records according to their source device is done by enabling/disabling the check boxes of the door station list (Pic. 9.6).





Pic. 9.6. The door station list for record filtration according to the call source device

This list contains the names of all the door stations which have their records in the Call Log. It can differ from the list of connected devices on the “Settings” tab because some door stations may be renamed or disconnected but their records may still remain in the archive.

The Call Log window can be opened not only from the video stream display window, but it is also possible to do from the list of connected devices in the bottom right corner of the screen when there is at least one missed call (Pic. 9.7; see also Chapter 8).



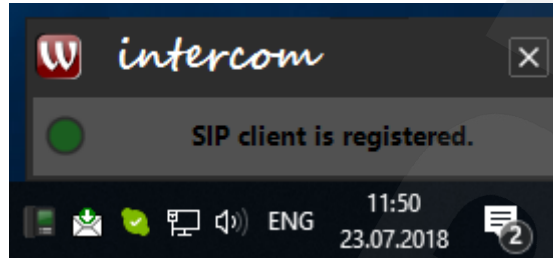
Pic. 9.7. Incoming and missed calls indication in the list of connected devices

The Call Log window is opened by clicking the icon  1) in the title of the list of connected devices or 2) near the image of the door station. In the first case, the filter option “New” is automatically applied to the Call Record List; in the second case, two filter options, “New” and filtration according to the call source device are automatically enabled. In the both cases, when you will open the Call Log window, a special “**Overview**” mode will be enabled to let you look through all the corresponding records and snapshots fast and with convenience. You can turn on / off that mode at any time using the button  on the view control tool bar (Pic. 9.2).

You can use the “Overview” mode with filtration options or without. In the “Overview” mode records are listed in a reverse chronological order, beginning from the selected one. The latest record among those which comply with filtration parameters is selected when the Call Log window is opened. During the overview of records you can see only the snapshot made at the moment when the Guest pressed the call button. If you need to watch the whole record or look through all snapshots of the record, just move a mouse cursor into the record viewing area and the record will be played (or the images will be changed) repeatedly until you move the cursor out of this area, and after that the overview will be continued.

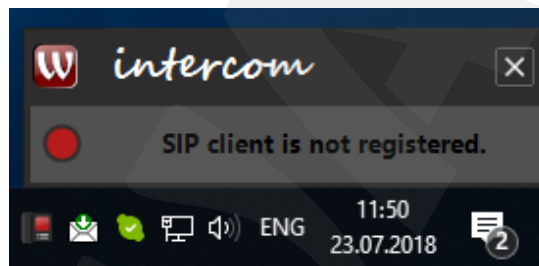
Chapter 10. SIP Registration Server Notifications

You need to correctly set up an SIP account (see [5.4.](#)) in order to start receiving notifications. If the SIP account is set up correctly, the successful registration notification will appear at the bottom right corner of the screen. (Pic.10.1). Press the notification text or the [X] button to hide the notification.







Pic. 10.1. Successful registration notification

If the SIP account is set up incorrectly, the following notification will appear (Pic. 10.2). This notification will also appear if the registration is unsuccessful for other reasons e.g. network failure.



Pic. 10.2. Unsuccessful registration notification

Press the [X] button to close the notification.. Pressing the notification text will open the **SIP account settings** tab (Pic. 5.13), unless it's already open.


The registration status is also indicated by the BEWARD Intercom icon in the taskbar notification area, **Red icon**  indicates registration failure when SIP is active. **Green icon**  means that the registration is active and SIP mode is ON, **Yellow icon**  means that the registration is in progress., **White icon**  is shown when SIP is disabled.

Chapter 11. Acoustic Echo Cancellation

Using the application, the Client may hear feedback from their PC speakers when one or more of the following conditions are true:

- Microphone Boost level is too high;
- The speakers are too close to the microphone;
- The speaker volume is turned up so as the microphone hears the speakers;
- The microphone is very sensitive.

It is possible to reduce or eliminate the feedback by trying the following steps:

- go to **Control Panel – Sound – Recording**, double-click the recording device set by default and reduce the Microphone Boost level on the **Levels** tab. It is also necessary to ensure that the “Listen to this device” option is disabled on the **Listen** tab.
- go to **Control Panel – Sound – Playback**, double-click the playback device set by default and ensure that the Microphone option is disabled on the **Levels** tab (button .

It is also possible to reduce the feedback loop by selecting the **Enhancements** tab in the microphone's properties page and enabling one of the following options:

- Enable Noise Suppression
- Enable Acoustic Echo Cancellation

NOTE!

These settings are audio hardware and software specific and may not be available for all microphones.

NOTE!

The names of options in the OS menus may differ from the ones mentioned above.

Appendix

Appendix A. BEWARD Intercom Hot Keys

- F1** Opening an Operation User Manual.
- F5** “Speak” mode: on / off. (This option only applies for the directly connected door stations).
- F6** Output contact 1 activation (unlocking the door).
- F7** Output contact 2 activation (if the function is supported and enabled).
- F8** Output contact 3 activation (if the function is supported and enabled).

NOTE!

In the multi-window mode (when several door stations are added to the application) hot keys works with the active window.

Appendix B. Troubleshooting

No.	Malfunction Description	Ways of Correction
1	The following inscription is displayed in the video stream display window: “There is no signal from the door station”.	<ul style="list-style-type: none"> • Restart the application. • Check power supply of the door station (a power supply unite or a PoE injector). • Check if the network cables of the door station and your PC are normally connected. • Check if BEWARD Intercom is added to the list of trusted applications of your firewall.
2	The application is open but no sound can be heard.	<ul style="list-style-type: none"> • Check the speakers you use, OS volume settings (the icon in the notification area of the Windows taskbar), including volume settings of BEWARD Intercom exactly (volume mixer settings in Windows 7, 8). • Restart the application.
3	A video image from the door station is dark.	<ul style="list-style-type: none"> • Check brightness and contrast of the video image (see paragraph 4.1.). • Check the settings of the Day/Night modes switching in the door station web interface (Config – Video Settings – Video Parameters – Day/Night Mode).

4	A video image from the door station is of low quality.	<ul style="list-style-type: none"> • Check video settings through the door station web interface (Config – Video Settings – Video Coding). Set the following parameters in the “Main Stream” column as given below: “Resolution” to “960×576” for DS03M(P) and to “1280×720” for DS05M(P); “Encode Mode” to “H.264”; “Bitrate” not less than 2048 kbit/s; “Quality” not less than “Better”; “Frame Rate” not less than 25. • Check if door station camera lens is clean.
5	The lock cannot be opened by pressing the [Open] button in the video stream display window.	<ul style="list-style-type: none"> • Make sure that the door station is available through the application or the web interface. • Check if BEWARD Intercom is added to the lists of trusted applications of the Windows firewall and antivirus software (in case such SW is used). • Restart the application. • Check the lock controller and its connection cables for any damages.
6	Failed to initiate conversation to the Guest by pressing the [Speak] button in the video stream display window (the Guest can't hear the Client or the Client can't hear the Guest).	<ul style="list-style-type: none"> • Make sure that the door station is available through the application or the web interface. • Check if BEWARD Intercom is added to the lists of trusted applications of the Windows firewall and antivirus software (in case such SW is used). • Restart the application.
7	The application is not opened by clicking the icon in the notification area of the Windows taskbar.	<ul style="list-style-type: none"> • Wait up to 3 minutes. • Close the application using the Task Manager and start it again. • If the problem still persists, contact our support service, sending the all files from the “Logs” subfolder (<i>C:\ProgramData\Beward\BEWARD Intercom\logs</i>).
8	The application fails to start. The following message is displayed: “Application is already running”.	<ul style="list-style-type: none"> • Make sure that the application is not being run (check if the icon is displayed in the notification area). And if yes, then use it or close. • If the icon is not displayed in the notification area or the running application does not respond, close it using the Task Manager and start it again. • If the application still fails to start, contact our support service, sending the all files from the “Logs” subfolder (<i>C:\ProgramData\Beward\BEWARD Intercom\logs</i>).
9	There is an echo in the application “Speak” mode.	<ul style="list-style-type: none"> • Follow the recommendations in the Chapter 11

10	A high-frequency noise hinders talking in the “Speak” mode.	<ul style="list-style-type: none"> • Check if the microphone of your PC is not too close to the speakers (an appropriate distance is 20-30 cm). • Check microphone sensitivity and boost level in the settings of your OS. • Check if there is some equipment near the door station, which can be a strong electromagnetic radiation emitter.
11	The door station speaker has a low volume level.	<ul style="list-style-type: none"> • Check if the PC microphone is placed enough close to Client’s face. • Adjust microphone sensitivity and boost level in the settings of your OS.
12	There is a delay between audio and video signals in the video stream display window of the application. The problem can occur because of network connection malfunction or disconnection of the device from a power supply.	<ul style="list-style-type: none"> • Turn off and on the sound from the door station using the corresponding button in the active video stream display window. • Restart the application.
13	There are some sound defects in the video stream display window of the application.	<ul style="list-style-type: none"> • Turn off and on the sound from the door station using the corresponding button in the active video stream display window. • Restart the application.

NOTE!

If the problem still is not fixed, please contact our support service at <http://www.beward.net/>.

Furthermore, you can create *an error report* and send it to the support service by e-mail. To create the report click the **[Report]** button in the error notification window. You can also choose the “BEWARD Intercom Error Report” in the “Start” menu at any time you need.

Appendix C. Glossary

Client is person who controls a door station using a computer.

Door Station Controller is used for powering the door station, network connection, processing the signal of door opening and signals of other devices that can be connected to the door station.

Guest is a person who presses the call button on a door station installed outside.

IP Video Door Station is a device which is used for controlling the access to a territory or building and provides video surveillance functions due to a built-in IP video camera. The call from the Guest (as he presses the call button) is sent from the door station to the Client’s PC or laptop with the installed application. The Client can see the Guest on the monitor of his PC and talk with him using a microphone

and speakers / headphones. The Client can control the electronic door lock and some other devices connected to the door station controller.

PoE Injector is a device that stands between a regular Ethernet switch and the powered device (for example, door station PoE supported controller), injecting power and transferring the data via the same cable.

SIP server is a server that manages all SIP calls within a network. Stores SIP account data. It is an intermediary between the door station and BEWARD Intercom software. Also can be used to register SIP client without SIP protocol. Keep address information of SIP clients updated via SIP protocol.

SIP account is an account stored in an SIP server. It contains network address information of an SIP client, as well as request methods to communicate with it.

Incoming call (SIP) is an attempt by a door station to establish media connection with BEWARD Intercom software via SIP protocol.