

Table of Contents

CHAPTER 1. INTERCOM OVERVIEW	2
1.1. DESCRIPTION	2
1.2. FUNCTIONS	2
1.3. MINIMAL SYSTEM REQUIREMENTS	2
CHAPTER 2. INTERCOM INSTALLATION	3
CHAPTER 3. APPLICATION FIRST RUN WIZARD	7
CHAPTER 4. INTERCOM VIDEO STREAM DISPLAYING WINDOW	9
4.1. IMAGE SETTINGS	10
4.2. THREE-CHANNEL DOOR STATION SUPPORT	10
CHAPTER 5. INTERCOM SETTING	
5.1. "Application settings" tab	12
5.2. "DOOR STATION SETTINGS" TAB	13
5.3. "About" tab	20
CHAPTER 6. OPERATION WITH SEVERAL DOOR STATIONS	21
6.1. [ADD A DOOR STATION] BUTTON	
6.2. [CHANGE CONNECTION PARAMETERS] AND [REMOVE A DOOR STATION] BUTTONS	
CHAPTER 7. MULTIACCESSIBLE USER OPERATION	
CHAPTER 8. CALL NOTIFICATIONS	
CHAPTER 9. CALL LOG	
9.1. "Settings" tab	
9.2. "Playback" tab	
CHAPTER 10. ACOUSTIC ECHO CANCELLATION	
APPENDIX	
APPENDIX A. INTERCOM HOT KEYS	
APPENDIX B. TROUBLESHOOTING	
APPENDIX C. GLOSSARY	40

Chapter 1. Intercom Overview

1.1. Description

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

An *IP Video Door Station* is a device which combines modern network and multimedia technologies. It allows not only controlling the access to some territory or building but also provides video surveillance functions. The call from a <u>*Guest*</u> is sent from the door station to the <u>*Client*</u>'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;
- Video image parameters setting;
- Multiaccessible user operation;
- Application parameters setting.

1.3. Minimal System Requirements

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

Component	Requirements
OS	Windows XP SP3 / 7 SP1 / 8.1 / 10
CPU	2.0 GHz Intel [®] Pentium [®] 4 or AMD Athlon [®] 64
Video card	NVIDIA GeForce FX 5200 or ATI Radeon 7000 (9000)
Sound card, microphone or headset	Yes
RAM	Not less than 1 GB
Monitor	Resolution – 1024x768 or higher

Chapter 2. 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 (<u>https://www.envirocams.com/tech-support/</u>).

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

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

Choose	Setup Langua	ge	
	Choose the language of installation setup and application interface:		
	English		~
		ОК	Cancel

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 a 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 technical support service <u>https://www.envirocams.com/tech-support/</u>).



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) Intercom\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 "**Intercom**". Press [**Browse...**] to select another folder. Press [**Next >**] to continue.

F Setup - Intercom
Select Start Menu Folder Where should Setup place the program's shortcuts?
Setup will create the program's shortcuts in the following Start Menu folder. To continue, click Next. If you would like to select a different folder, click Browse.
Beward Browse
< Back Next > Cancel

Pic. 2.5. Shortcuts folder selecting

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

Setup - Intercom
Select Additional Tasks Which additional tasks should be performed?
Select the additional tasks you would like Setup to perform while installing Intercom, then click Next.
Additional icons:
✓ Create a desktop icon
< Back Next > Cancel
Concer

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.

Intercom		
o Install is now ready to begin ir	nstalling Intercom on your co	mputer.
nstall to continue with the any settings.	he installation, or click Back if	you want to review or
ination location: :: Verogram Files (x86)\IF : Menu folder: ntercom tional tasks: .dditional icons: Create a desktop icon	P Camera\Intercom	*
	< Back	Install Cancel
	o Install is now ready to begin in nstall to continue with the any settings. ination location: ::\Program Files (x86)\UF ::Menu folder: intercom tional tasks: idditional icons:	o Install is now ready to begin installing Intercom on your co install to continue with the installation, or click Back if e any settings. ination location: ::Yorogram Files (x86)\IP Camera\Intercom ::Menu folder: intercom tional tasks: idditional icons: Create a desktop icon

Pic. 2.7. Setup settings review before starting the installation

Step 11: mark the **"Launch 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 Intercom. The First Run Wizard will help you to connect the installed door station to the application (*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 found device or press the \blacktriangleright button. If door station authorization parameters are set by default, you will be asked to change them (*Pic. 3.3*).

First Run Wizard	×
Default pas	sword changing
Enter new password: Confirm password:	
It is strongly recommended to change the default passwo A new password should be in accordance with the follow I. It should not contain the name of the user account. 2. Password length should vary from 8 to 15 symbols. 3. A password ishould contain symbols of at least three gre - Latin uppercase letters (A-Z); - Latin lowercase letters (a-z); - figures from 0 to 9; - symbols "_" (underscore) and "." (dot).	ng requirements:
*	

Pic. 3.3. Default password changing

The video stream displaying window will be displayed after the default password will be 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 also choose the type of a video stream in the following window:

🔅 Door Stati	on Connection Wizard			×
	Connection a	nd authorization parar	neters	
Name	192.168.0.99	IP/DDNS	192.168.0.99	
Password	*****	Data port	5000	
Login	admin	HTTP port	80	
		Video stream	Main	۲
•		Set by default		•

Pic. 3.4. Connection parameters entering

NOTE!

If the found door station (after pressing the **[Search]** button) has login or password differed from the defaults, then you should also enter authorization parameters manually.

Chapter 4. Intercom Video Stream Displaying Window

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



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

As the window is opened 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 displaying window.

There are buttons [Browse log] I, [Start recording] and [Make snapshot] in the upper right part of the video stream displaying 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 an 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 <u>9</u>.

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

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

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

(U [Close]: close the application.

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

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

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

Pressing the [Open] button you may 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 255. To set any parameter by default, click its name or icon.

4.2. Three-channel Door Station Support

A door stations 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 Intercom application operates with the first pair of pins (the **[Open]** button in the video stream displaying window), and if necessary it allows using additional buttons for the second and

third pairs (see paragraph 5.2). In case of a door stations with the firmware 3.1.0.0.1.18 and higher the application video stream displaying window can look like as follows:



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

Chapter 5. Intercom Setting

Press the **[Settings]** button in the left lower corner of the application video stream displaying 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

🔅 Settings			×
Application settings	Door station setting		About
Start the application	on with Windows		
Display the applica	tion on top of all windows		
Turn on the call so	und notification		
DoorBell.mp3	11.4	s 🕨	Browse
Turn on the sound	notification for unlocking		
OpenSound.mp3	01.8	s 🕨	Browse
Set to defa		Casta	
Set to defai		Save	

Pic. 5.1. "Application settings" tab

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

Display the application on top of all windows: turn on this option to display the application video stream displaying 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 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.

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 displaying 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

🔅 Settings	_		×
Application settings	Door station settings		About
Door station 192.16	8.31.222 •	+	×
Keep video streamin	g when the application wir	ndow is	hidden
Decode video stream	when the application is h	idden	
Display the application	on window by the call		
Automatically hide the second seco	ne application window in	00:06	5
Turn on the call notif	ication		
Turn on the missed of	all notification		
Door station password		Ch	ange
Door station network settin	ngs	Ch	lange
Door station output pins		Se	et up
"Waiting for response" aud	lio file		
		\triangleright	Browse
"Auto response" audio file			
		\triangleright	Browse
Set to default	Save	Save	for all

Pic. 5.2. "Door station settings" tab

Door station: the application can operate with several door stations at one time. The 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], [X] [Remove a door station]. Functions of these buttons are described in the Chapter <u>6</u>.

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 Intercom to be connected to the door station when hiding the application video stream displaying window to the notification area of the Windows taskbar. In this case a video image displays faster when opening again the application video stream displaying 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 displaying window to the notification area of the Windows taskbar. It allows video to display faster when opening the application video stream displaying 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 displaying 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 displaying 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 $\underline{8}$).

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:

Ф	Door station password chan	ging	×
	A new password should be in accordan 1. It should not contain the name of the 2. Password length should vary from 8 3. A password should contain symbols - Latin uppercase letters (A-Z); - Latin lowercase letters (a-z); - figures from 0 to 9; - symbol ~ (dot).	user account.	
	Current password	*****	
	New password	•••••	
	Confirm the new password	*****	
	Set to def	fault Save	

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), becomes available as you will enter the correct current password. There is no any other way to set the default door station password in the Intercom application.

Please, pay attention to the instructions in the top 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*).

Door station network settings	×
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 displaying 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 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:

Message	×
Audic conversion has been finished. to continue.	Press "OK"
ОК	

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:\Users\<User_name>\AppData\Loca\\Intercom\Intercom\audio* 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:

onversion information: F					
N S B	File format MP3 -> Number of channels Sample rate 44100 Bit rate Variable -> File size 8217 k8 ->	: 2 (stereo) -> 1 (n -> 8000 128 kBit/sec	nono)		
love the slidable frame to sel					
love frame's borders to chan	ge the duration	of the fragme	ent.		
01:25	01:30	01:35	01:40	01:45	01:50

Pic. 5.9. Audio Conversion Wizard

At the top of the window you can see notes about conversion changes were made. Below the notes you can choose the fragment of the soundtrack 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:\Users\<User_name>\AppData\Local\Intercom\Intercom\audio* 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 new settings require device rebooting to be applied, then you will see the following message after you pressed 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:





The **[Set to default]** button on the "Door station settings" tab (*Pic. 5.2*) is used to set by default the parameters, which are situated right on this tab. "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*).

Chapter 6. Operation with Several Door Stations

Intercom provides operation with several door stations at one time. The list of connected devices is displayed in the right lower corner of the screen, if two or more door stations are added to the application (*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 five or more door stations are added. 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.



Pic. 6.1. The list of connected devices

Use the buttons **[1]**, **[2]**, which are situated on the "Door station settings" tab (*Pic. 6.2*), to add, remove door stations and change their network parameters or names.



Pic. 6.2. 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. 6.3. 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. 6.4. Available devices

NOTE!

You can add several devices at once. For this purpose, press the **[Search]** button, select several door stations 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.

🔅 Door Stati	on Connection Wizard			×
Connection and authorization parameters				
Name	Entrance	IP/DDNS	192.168.2.131	
Password		Data port	5000	
Login	admin	HTTP port	80	
		Video stream	Main	
*		Set by default		

Pic. 6.5. Connection and authorization parameters

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 displaying window for each connected door station (*Pic. 6.6*).

NOTE!

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



Pic. 6.6. 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 «intercom» logos, clock, buttons **[Turn on/off audio from the door station]**, **[Settings]**, **[Hide]**, **[Maximize]** and **[Close]**. Moreover, the door station, whose video stream displaying window is currently active, is highlighted in the list of connected devices (*Pic. 6.1*).

The video stream displaying 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 at one time. Suppose that the "Speak" mode is in progress on the device 1. If you start talking using the device 2, you automatically finish the "Speak" mode on the door station 1.

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 and choose "Open in new window", if you want to operate the door station in a new separate window (*Pic. 6.7*).



Pic. 6.7. New video stream displaing window opening

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.

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. 6.8*).

Connectio	n parameters		×
	Connection a	nd authorization parar	neters
Name	Entrance	IP/DDNS	192.168.2.131
Password	******	Data port	5000
Login	admin	HTTP port	80
		Video stream	Alternative
		Set by default	₩

Pic. 6.8. 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

Intercom provides simultaneous door station access of 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

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

You can enable and disable the notifications for every 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 door station, and displays on the screen during 15 seconds. 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. 8.1*). Click the notification (and it will disappear) to open the video stream displaying window of the corresponding door station.



Pic. 8.1. Incoming call notification

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. 8.2*). Click the notification to open a Call Log window (see Chapter <u>9</u>).



Pic. 8.2. 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. 8.3*). The missed calls notification is modified by every further missed call.



Pic. 8.3. 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. 8.4*). Use the **[Clear]** button to delete all notifications.



Pic. 8.4. Missed Calls List

You can also open the "Missed calls" window, choosing "Missed calls" in the application context menu, in the notification area (*Pic. 8.5*). This way allows you to review the missed calls even when the missed call notification option is disabled.



Pic. 8.5. 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. 8.6*).



Pic. 8.6. Incoming and missed calls indication in the list of connected devices

The missed call icon ($\stackrel{\scriptstyle{\leftarrow}}{\leftarrow}$) can be used as a button to open the Call Log (see Chapter <u>9</u>).

Chapter 9. Call Log

The Call Log of the 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 displaying window ([Make snapshot] and [Start recording]

buttons) are also saved in the Call Log.

Use the **[Browse log]** button in the active video stream displaying 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).

Call log ΘOX Playback Settings Logging settings Log missed calls answered calls Actions by call:
take snapshots: record video: enable prebuffer Path to the log archive: E:\IntercomArchiveTest Browse Archive clearing options Delete when the maximum archive size is reached GB Current archive size: 0.79 GB Space available on disk: 854.66 GB week(s) Delete when the storage time limit is exceeded Door stations for which the call log is kept For all ▼ 192.168.31.110 V 192.168.31.222 Set to default Save

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



Log missed calls: put a tick to save records about missed calls in the Call Log archive. Log answered calls: put a tick to save records about answered calls in the Call Log archive. Actions by call:

- **Take snapshots**: 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**: 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: put a tick 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: put a tick 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 Intercom starts.

ATTENTION!

Do not change a structure of the 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 Intercom as well as to the ones that are stored on SD cards of door stations. Enable filtering on "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 latest 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 the record is loaded from 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.

The records that are stored on SD cards of door stations are not displayed in the calendar.

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

Date						
	June 2016					
Mon	1	Wed	Thu	Fri	Sat	Sun
30		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			
- 41						
	02 June 2016					

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!

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 <u>8</u>, *Pic. 8.4*); 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:

- Intercom start;

- click on the [Clear] button in the Missed Calls window (see Chapter 8, Pic. 8.4);

- 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 (see below): the devices, which the new missed calls came from, are only displayed in that list.

If you enable the option "New" you cannot enable options "**Answered**" and "**My records**" at the same time.

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

My records: put a tick 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 displaying window (see Chapter <u>4</u>, *Pic. 4.1*); remove the tick to exclude such records from the list.

Memory card: put a tick to add in the list records from SD cards of the door stations which are currently connected to the Intercom application. Note that searching records on door station SD cards may need much time if the number of records is big and a high resolution is set for recording. That is why it is recommended to choose a source device and dates you really need before start searching.

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.

3. Filter the records according to their source device putting / removing ticks in the check boxes of the door station list (*Pic. 9.4*).



Pic. 9.4. 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 displaying window, but it is also possible to do from the list of connected devices in the lower right corner of the screen when there is at least one missed call (*Pic. 9.5*; see also Chapter <u>8</u>).



Pic. 9.5. Incoming and missed calls indication in the list of connected devices

The Call Log window is opened on clicking the icon \bowtie 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 with 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. 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. Intercom Hot Keys

F1	Opening an Operation User Manual.
F5	"Speak" mode: on / off.
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 displaying window: "There is no signal from the door station".	 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 Intercom is added to the list of trusted applications of your firewall.
2	The application is open but no sound can be heard.	 Check the speakers you use, OS volume settings (the icon in the notification area of the Windows taskbar), including volume settings of Intercom exactly (volume mixer settings in Windows 7, 8). Restart the application.
3	A video image from the door station is dark.	 Check brightness and contrast of the video image (see paragraph <u>4.1</u>). Check the settings of the Day/Night modes switching in the door station web interface (<i>Config – Video Settings – Video Parameters</i> <i>– Day/Night Mode</i>).

4	A video image from the door station is of low quality.	 Check video settings through the door station web interface (<i>Config – Video Settings – Video Coding</i>). 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 displaying window.	 Restart the application. Make sure that the door station is available through the application or the web interface. Check if the lock controller and its connection cables are not damaged.
6	The application is not opened by clicking the icon in the notification area of the Windows taskbar.	 Wait up to 3 minutes. Close the application using the Task Manager and start it again. If the problem repeats itself, contact our support service, sending the all files from the "Logs" subfolder (<i>C</i>:\Users\User_name\AppData\Local\Intercom\ Intercom\logs).

7	The application fails to start. The following message is displayed: "Application is already running".	 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 main
		 start it again. If the application fails to start, contact our support service, sending the all files from the "Logs" subfolder (C:\Users\User_name\AppData\Local\Intercom\Int
8	There is an echo in the application "Speak" mode.	• Follow the recommendations in the <u>chapter 10</u> .
9	A high-frequency noise hinders talking in the "Speak" mode.	 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.
10	The door station speaker has a low volume level.	 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.
11	There is a delay between audio and video signals in the video stream displaying window of the application. The problem can occur because of network connection malfunction or disconnection of the device from a power supply.	 Turn off and on the sound from the door station using the corresponding button in the active video stream displaying window. Restart the application.
12	There are some sound defects in the video stream displaying window of the application.	 Turn off and on the sound from the door station using the corresponding button in the active video stream displaying window. Restart the application.

NOTE!

If some troubles fail to be removed, contact our support service on <u>https://www.envirocams.com/tech-support/</u>.

Appendix C. Glossary

Client is person who controls a door station using 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 some 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.