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## **Chapter 1. Safety Instructions**

### **Before using the product**

This product complies with all safety rules. However, improper use of any electric device can be a cause of fire and bring to property damage. Before you start using this door station, please read this User Manual carefully.

#### **ATTENTION!**

Use accessories recommended by the manufacturer only. The use of the improper accessories may cause device breakdown.

### **Follow the operating instructions**

Do not use and store this door station in severe environment:

- avoid extremely low or high ambient temperatures (the door station operating temperature is -40°C to +50°C)
- avoid exposure to direct sunlight and do not locate the door station near any heat sources
- do not locate the door station near any electrical appliances which can be electromagnetic transmitters
- avoid exposure to high vibration

#### **ATTENTION!**

In case of malfunction of the product contact our Service Center.

#### **In case of:**

- detection of a strange smell or smoke
- penetration of any liquid or foreign objects into the door station
- the door station has been dropped or damaged

#### **Do the following:**

- unplug the power cord and disconnect all other cords from the door station
- contact our Service Center. You can find contact information on our website: <https://www.envirocams.com/tech-support/>

### **Transportation**

Transport the door station carefully, using the original box and protective packing.

**Ventilation**

To prevent overheating of the device, keep free air circulation in the area where the door station is located.

**Cleaning**

Use a soft, dry cloth for cleaning door station's external surfaces. It is acceptable to use some detergent for removing persistent dirt, but not the volatile cleaners such as the alcohol-containing solvents, benzene and so on, because of the risk to damage the door station's housing.

## Chapter 2. Description

IP Video Door Station DS05M(P) is used for building IP intercom system based on the local area network without using additional equipment, such as a separate interior monitor. All you need to start using the door station is to install on your PC the software from the package contents and do a simple setting. Low costs, easy installation and remote access to the device are the advantages of such solution.



Pic. 2.1

DS05M(P) has a vandal resistant housing. Built-in speaker, microphone and IP camera provide establishing video and audio connection between the [Guest](#) and the [Client](#), watching the nearby territory and also control other devices that can be connected to the door station, such as electronic locks, garage door openers, light switches, alarm systems, etc. To provide operation at low light level the door station has a built-in infrared LED with work distance up to 10 m and mechanical infrared filter.

The DS05M model is connected to the network using the 10/100BASE-TX Ethernet interface. In case of DS05M power is supplied from a DC 12V power source. The DS05MP model supports PoE.

The MicroSD memory cards support improves camera capabilities and makes its operation safer. In case of disconnection all important data are saved to the card.

### 2.1. Key Features

- Image sensor: 1.3 MP, CMOS 1/3" SONY Exmor Day/Night
- Simultaneous encoding: H.264/H264, H.264/MJPEG, MJPEG /MJPEG
- Frame rate: up to 25 fps for all resolutions

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- IR illumination distance up to 10 m and mechanical IR filter
- MicroSD/SDHC memory card support up to 32 GB
- Multi-streaming: up to 10 nonidentical streams (only one user can be in the two-way audio mode at one time)
- Built-in web server for viewing and setting
- A built-in player for watching records
- Built-in microphone and speaker
- Power: DC 12V, 0.5A / PoE 802.3af Class 0 (for DS05MP only)
- Operating temperature: -40°C to +50°C
- Protocols supported: TCP/IP, IPv4/IPv6, UDP, HTTP, NTP, RTP, RTSP, DHCP, DNS, DDNS, FTP, SIP, Modbus
- ONVIF support

## **2.2. Package Contents**

- DS05M(P) door station
- Bracket with mounting kit
- Hexagonal socket screw with L-key
- RJ45-S01 connector (2 pcs)
- NC101 / NC101P / NC301P2 controller
- Terminal block
- CD with product documentation and software

### **ATTENTION!**

Package contents and door station specification are subject to change without notice.

## Chapter 3. Overview

### 3.1. Door Station

A door station front view is given below:



Pic. 3.1

**1 – light sensor:** a photoelectric cell for Day/Night modes automatic changing.

**2 – built-in microphone:** allows the Client to hear what happens in the surveillance area.

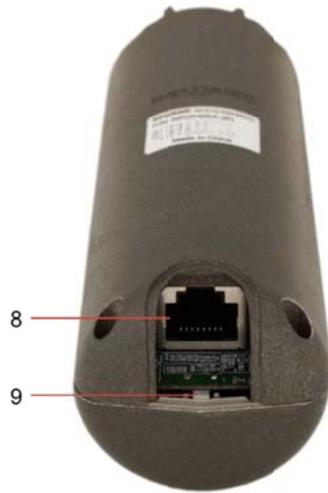
**3 – IP camera:** allows the Client to watch what happens in the surveillance.

**4 – IR LED:** the infrared light-emitting diodes used instead of standard electric lamps provide video surveillance process at a low light level as well as at night.

**5 – call button:** a call notification is sent to the Client when the Guest presses this button.

**6 – built-in speaker:** combined with the built-in microphone it provides a two-way audio channel between the Client and the Guest.

**7 – bracket frame:** combined with a bracket plate it fixes the door station on the mounting surface.



Pic. 3.2

**8 – RJ45 socket:** is used for connecting the door station to the NC101 / NC101P / NC301P2 controller by a patch cable.

**9 – reset button:** press this button 3 times with intervals not less than 1 second during 10 seconds to set door station settings by default.

**10 – memory card slot:** is situated inside the door station housing, on the upper interface board, from one side.

### 3.2. Controller

A 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.

A 1-channel or a 3-channel controller can be included in the DS05M(P) package contents.

There is an **RJ45 socket (ETHERNET)** on the front side of the door station controller, which is used for connecting the controller to a router (Pic. 3.3).



Pic. 3.3. Controller NC101 / NC101P



Pic. 3.4. Controller NC301P2

Power over Ethernet (PoE) is provided by the NC101P or NC301P2 controller and a router (or PoE injector) supported PoE 802.3af Class 0.

A rear view of the door station controller is given on the Pictures 3.5, 3.6:



Pic. 3.5. Controller NC101 / NC101P



Pic. 3.6. Controller NC301P2

**1 – RJ45 socket (ETHERNET):** is used for connecting the NC101 / NC101P / NC301P2 controller to the door station by a patch cable. The patch cable needs to be made using RJ45-S01 connectors from the package contents (see paragraph 4.5).

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**ATTENTION!**

The patch cable must have the RJ45-S01 connector at the end connected to the door station! It is impossible to connect the door station using a cable connector of some other form.

**2 – terminal connector (ALARM OUT):** is used for connecting a door lock or another device controller. In case of connection to the 1-channel door station controller, NC101 or NC101P

(shown on the *Picture 3.5*), the signal opening the door outputs to the lock controller via «1A» and «1B» pins.

**ATTENTION!**

Switching off - switching on the door station with the 1-channel controller (NC101 or NC101P) causes an uncontrolled door lock opening. It happens because of peculiarities of the auto testing procedure which is performed by the door station when it is switched on. Provide uninterrupted power supply of the door station and the lock to prevent a door opening.

In case of the 3-channel door station controller, NC301P2, the signal opening the door outputs to the lock controller via «1A» and «1B»/«1C», «2A» and «2B»/«2C», «3A» and «3B»/«3C» pins for the first, the second and the third channel accordingly (*Pic. 3.6*). The «A» and «B» pins are normally open, and the «A» and «C» pins are normally closed.

The «G» and «12V» pins of the NC101 controller (without PoE support) are used for DC 12V power supplying of the door station. It is necessary to connect a power supply recommended by Enviro Cams and the lock controller to these pins.

The «G» and «12V» pins of the NC101P / NC301P2 controller (with PoE support) are used for powering the lock controller (several lock controllers) with DC 12V. In this case it is necessary to connect only the lock controller to these pins.

**ATTENTION!**

Use only DC 12V power supplies recommended by Enviro Cams!

Power supplying using both PoE and the «G» and «12V» pins (for NC101P and NC301P2 controllers) at one time is prohibited!

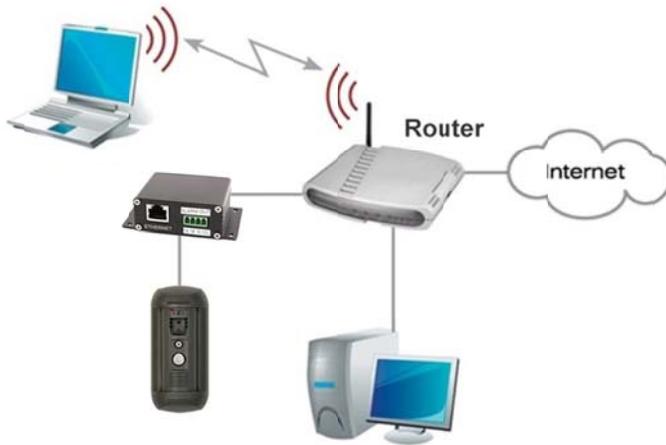
**ATTENTION!**

Maximum current rate provided by the NC101P, NC301P2 controllers for powering door locks and their controllers is 500 mA. If this value will be exceeded the device may operate incorrect and be damaged. The device breakdown caused by the exceeding of the maximum current rate is not covered by the warranty.

## Chapter 4. Door Station Installation

### 4.1. General Information

The door station can be connected directly to a computer or by means of a router (a switch).



Pic. 4.1

The steps to be done and installation recommendations are given below in the present manual.

## **4.2. Installation Recommendations**

The present paragraph contains a short list of recommendations which are important for the correct installation of DS05M(P).

IP Video Door Station DS05M is installed in the dry places on the surface of the inactive leaf of exterior double doors or on the wall of the building. It is recommended to install the device inside (vestibules, entrance halls), as far as possible, avoiding the outside installation. It is also necessary to be convinced of possibility of free laying connection cables, when installing the door station.

Install the door station in the well-lighted area avoiding exposure of the camera lens to direct sunlight. The mounting height must be convenient for the Guest to talk with the Client. It is recommended to install the door station at height of about 1.5 m above the floor.

Then it is recommended to provide the uninterrupted power supply of router, door station, electronic lock and its controller.

### **Recommendations on door station placement:**

- The operating temperature range is -40°C to +50°C.
- Avoid exposure to direct sunlight and do not locate the door station near any heat sources.
- Incorrect installation may cause undesirable “blind spots”, zones that are not visible to the Client.
- Do not locate the door station near any electrical appliances which can be electromagnetic transmitters.
- When installing the door station, be convinced of possibility of free laying connection cables.
- Avoid unstable installation, which may allow exposure to high vibration. This may reduce motion detection performance and image crispness in whole.
- The view direction should be clearly determined at the moment of the door station installation.

**Recommendations on twisted pair cable routing:**

- In corridors, it is advisable to install electric and feeble-current cables in different conduits that are disposed on different walls.
- Twisted pair and electric cables can be installed in the same conduit using different sections of the cable that have solid longitudinal partitions with at least 0.25 h of fire resistance, which are made of non-combustible material and should be positioned in work areas at distance of 15 meters maximum if the electrical power does not exceed 5 kW.
- Electric and feeble-current cables should be placed in parallel to each other at distance of at least 50 mm in different conduits or different sections of conduit. If the electric field strength from the electric cables exceeds 3 V/m, you should increase the distance between the electric and feeble-current cables or reduce the electromagnetic noise.
- Twisted pair and electric cables should cross each other at right angles.
- Unshielded twisted pair cables should be located at distance of at least 125 mm from fluorescent gas-discharge lamps or from other high-voltage discharge devices.
- Unshielded twisted pair cables should be located at distance of at least 1.5 meters from electromagnetic interference sources that produce electric field strength exceeding 3 V/m.
- Switchboards with pinned unshielded twisted pair cables should be located at distance of at least 3 meters from electromagnetic interference sources that produce electric field strength exceeding 3 V/m.
- Entire twisted pair cables should be arranged between the points of connection so the cable run is as short as possible.
- Minimum cable bending radius is four times the cable diameter (or 1 inch=2.5 cm) or it is also acceptable to install the cable so that the cable bending radius is 2 inches (5 cm).
- Maximum length of the entire segment is 100 meters.

### 4.3. Door Station Mounting

#### ATTENTION!

If you are going to use a memory card in the door station, insert it before the door station installation. Refer to the paragraph [4.4](#) for information on memory card installation. The memory card is not included in the package contents.

Follow the steps below:

**Step 1:** take the bracket plate (*Pic. 4.2*). Choose the right height of mounting above the floor. The recommended height is about 1.5 m.

**Step 2:** mark the holes on the mounting surface using the bracket plate as a template. Drill the holes.

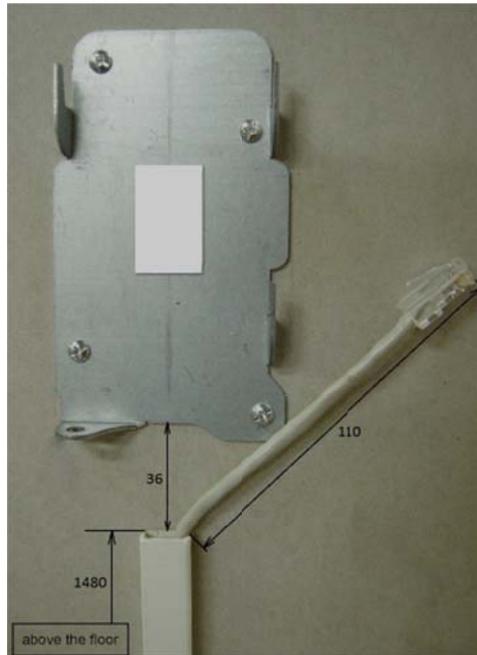


*Pic. 4.2*

**Step 3:** insert plastic wall dowels in the holes and fix the bracket plate using four screws. The heads of some other screws you use (not from the package contents) must be not higher than 2.5 mm and not bigger than 9 mm in diameter.

**Step 4:** there are hidden and open ways of cabling:

- for hidden cabling drill a hole for twisted pair cable output at the distance of 25 mm from the bottom of the bracket plate. Leave 110 mm of the cable outside.
- for open cabling fix a cable channel on the wall so that the distance between the channel and the bottom of the bracket plate would be 36 mm. Leave 110 mm of the cable outside (*Pic. 4.3*).



Pic. 4.3

**Step 5:** attach the RJ45-S01 connector from the package contents to the twisted pair cable using a crimping tool. For more information on how to crimp a twisted pair cable go to the paragraph [4.5](#).

**ATTENTION!**

The patch cable must have the RJ45-S01 connector at the end connected to the door station! It is impossible to connect the door station using a cable connector of some other form.

The twisted pair cable (5e UTP/FTP) connected the door station with its controller should be wired the same at both ends (“straight-through” form).

**ATTENTION!**

The device breakdown caused by wiring the cable in different manner is not covered by the warranty. Use the cable of the minimal possible length to connect the door station and its controller. Proper operation of the device cannot be guaranteed in case of using of the 10 m cable and more.

**Step 6:** connect the crimped cable to the door station and put it in the bracket frame. Rotate the door station in the frame to set the appropriate view direction of the built-in IP camera. Place the free cable as it is showed on the picture below:



Pic. 4.4

**Step 7:** specific notches of bracket frame and door station (Pic. 4.5) allow the door station to be fixed well and prevent its free rotation during operation.

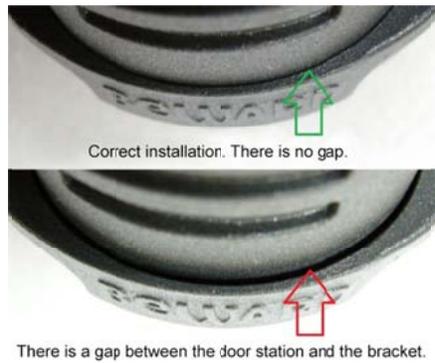


Pic. 4.5

A view direction of the built-in IP-camera must be clearly determined at the moment of the door station installation (rotating angles are  $\pm 45^\circ$  from the middle position).

**Step 8:** apply the door station inserted in the bracket frame to the bracket plate fixed on the wall. Then move them down with force up to the stop. The bracket frame should completely cover the bracket plate, and there should not be any space between the frame and the wall.

**Step 9:** ensure that the bracket is fixed well. In case of a space between bracket frame and door station, check the joint of the fixation notches. There must be no space between parts, if the notches fit each other. If they don't, change door station's position inside the frame to fit it better (Pic. 4.6).



Pic. 4.6

**Step 10:** fix the door station inside the bracket frame using the hexagonal socket screw and L-key from the package contents. To do so push the bracket frame down and simultaneously tighten the secret screw up (Pic. 4.7).



Pic. 4.7

**Step 11:** attach the RJ45 connector to the other end of twisted pair cable using a crimping tool as it described in the paragraph [4.5](#).

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**ATTENTION!**

The twisted pair cable (5e UTP/FTP) connected the door station with its controller should be wired the same at both ends ("straight-through" form). The device breakdown caused by wiring the cable in different manner is not covered by the warranty.

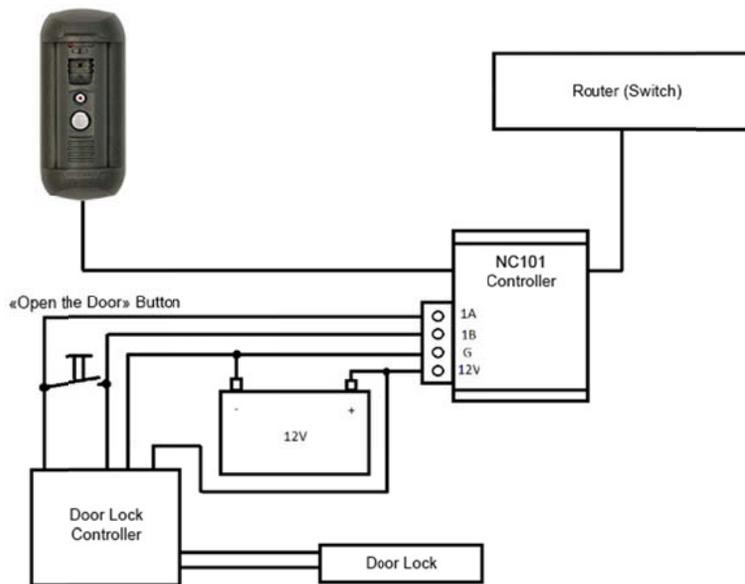
**Step 12:** connect the crimped cable to the RJ45 socket (ETHERNET) of the NC101 / NC101P / NC301P2 controller (Pic. 3.5, 3.6).

**Step 13:** connect the door lock controller to the terminal block of the door station controller. The recommended connection schemes are given below.

**NOTE!**

The NC101P controller is shown on the schemes 2, 3 (Pic. 4.9, 4.10). The same schemes can be also used in case of connection of the NC301P2 controller.

**1. Without PoE (DS05M package contents):**



Pic. 4.8

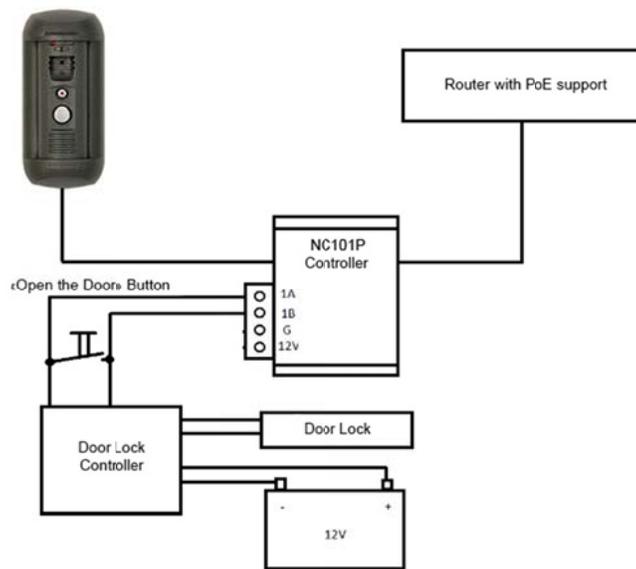
In this case the door station, the door lock and its controller are supplied with power by an external 12V power source.

**ATTENTION!**

Use only DC 12V power supplies recommended by Enviro Cams! For recommendations please visit our website (<https://www.envirocams.com/>).

It needs to highlight that the maximum current rate provided by the power source for supplying of the door station, door lock and other equipment should not be exceeded.

**2. With PoE (DS05MP package contents):**



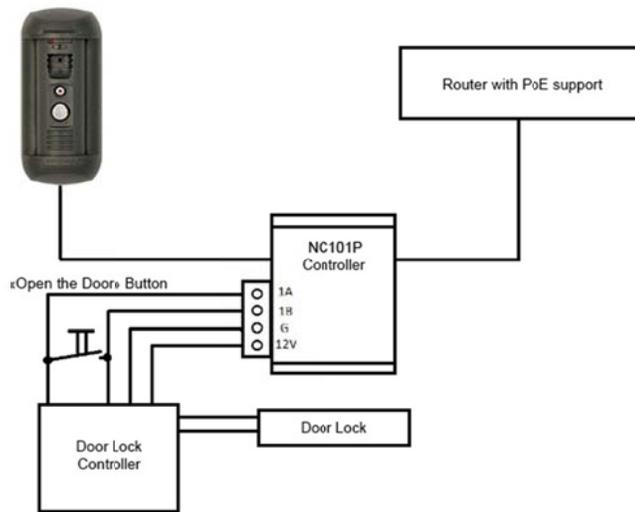
Pic. 4.9

In this case the door lock and its controller are supplied with power by an external 12V power source, but the door station use PoE supplying.

**ATTENTION!**

Power supplying using both PoE and the «G» and «12V» pins (for NC101P and NC301P2 controllers) at one time is PROHIBITED!

**3. It is available to supply all using devices with PoE (without use of an external power source) if the total energy consumption of using electronic lock and its controller is not bigger than 500 mA.** In this case the recommended connection scheme is as follows:



Pic. 4.10

The all devices use PoE supplying on the scheme above.

**NOTE!**

The current rate of electronic locks specified in their documentation can be exceeded for short time at the moment of door opening/closing. It may cause some problems with door station operation. In this case it is recommended to use an external power source for lock supplying as it shown on the Pictures 4.8, 4.9.

**ATTENTION!**

Power supplying using both PoE and the «G» and «12V» pins (for NC101P and NC301P2 controllers) at one time is PROHIBITED!

**ATTENTION!**

Maximum current rate provided by the NC101P, NC301P2 controllers for powering door locks and their controllers is 500 mA. If this value will be exceeded the device may operate incorrect and be damaged. The device breakdown caused by the exceeding of the maximum current rate is not covered by the warranty.

A Z-5R door lock controller is used as an example in the schemes above. This controller supports connection of additional equipment (such as ibutton reader, opened door sensor, etc.) which is not shown on the schemes. See the documentation on the door lock controller you use to connect additional equipment correctly.

**Step 14:** using the crimped cable connect the RJ45 socket (ETHERNET) of the door station controller (*Pic 3.3, 3.4*) straight to a PoE supported router or by means of a PoE injector if the router does not support PoE (see schemes 2, 3).

If PoE is not used, then connect the RJ45 socket (ETHERNET) of the NC101 controller to a router using the crimped cable and connect the «G» and «12V» pins of the controller with an external DC 12V power source.

To prevent the door station malfunction use only equipment recommended by Enviro Cams.

#### 4.4. Memory Card Installation

Do as follows to install a memory card.

**Step 1:** remove the 4 screws and open the split-type door station housing. The memory card slot is situated on the upper interface board, on its back side.

**Step 2:** take the memory card in a way that its contacts are directed to the interface board and to the slot and insert it in the slot; you should feel/hear a little click.

To eject the memory card from the slot press it to feel/hear a click and then it will be pushed out by a spring.

#### NOTE!

Switch off the door station before installation/ejection of the memory card. The hot swap of a memory card is not supported by the door station and may damage the equipment or cause a data loss.

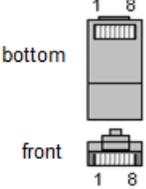
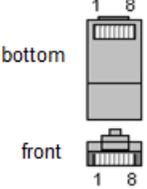
**Step 3:** close the split-type door station housing and fix the 4 screws.

### 4.5. Wired Connection to a Network

Connect the door station controller to the local network (to the router's LAN interface) using a twisted pair cable with RJ45 connectors.

You can purchase the network cable separately or if you have materials, tools and skills, you can make it by yourself.

#### A straight RJ-45 cable (UTP category 5e)

One end		Other end	
	1: White and orange		1: White and orange
	2: Orange		2: Orange
	3: White and green		3: White and green
	4: Blue		4: Blue
	5: White and blue		5: White and blue
	6: Green		6: Green
	7: White and brown		7: White and brown
	8: Brown		8: Brown

To make a network cable, you need the following materials: a UTP category 5e cable, two RJ-45 connectors and an RJ-45 crimping tool.

Assembling the pairs of wires in the correct order (see the table above) ensures data transfer speed of 100 Mbps.

## Chapter 5. Wired Connection Setting

To make the door station work together with computers, laptops and other devices in your local network, you need to connect it to the network according to the network parameters. This chapter explains how to define the network parameters.

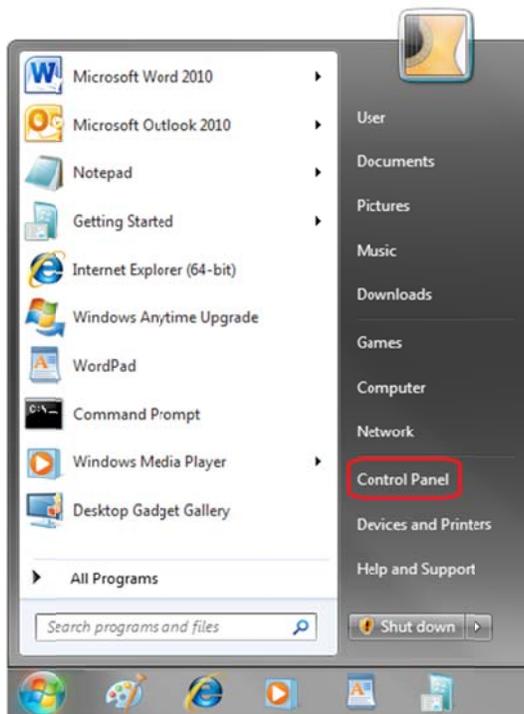
**NOTE:**

The connection establishment process is shown for OS Windows 7 Ultimate. Despite titles of system menus and options may differ from the titles of system menus and options that appear in other Windows versions, the procedure of the connection establishment process is universal.

### 5.1. Defining the Local Network Parameters for Wired Connection

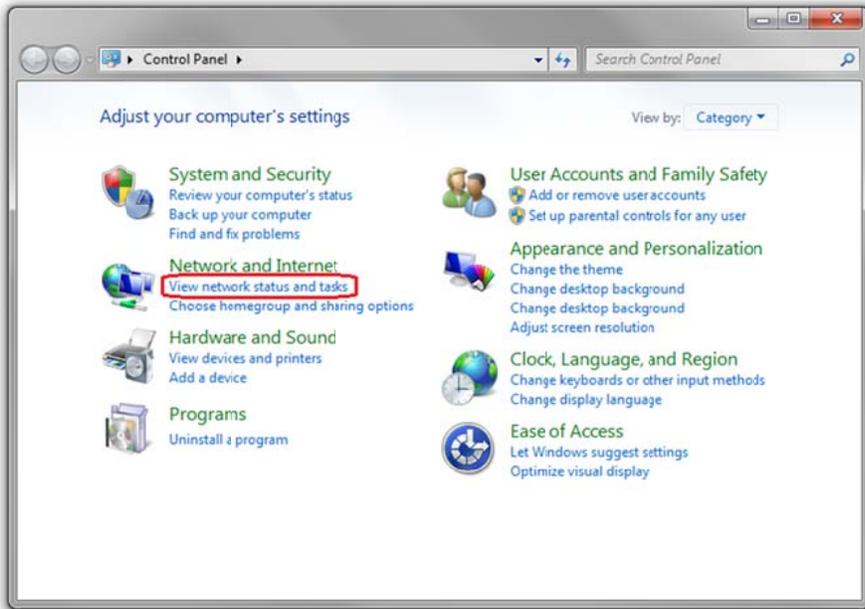
When connecting the door station using an Ethernet cable, you need to define local network parameters.

To do so, go to **Start – Control Panel** (Pic. 5.1).



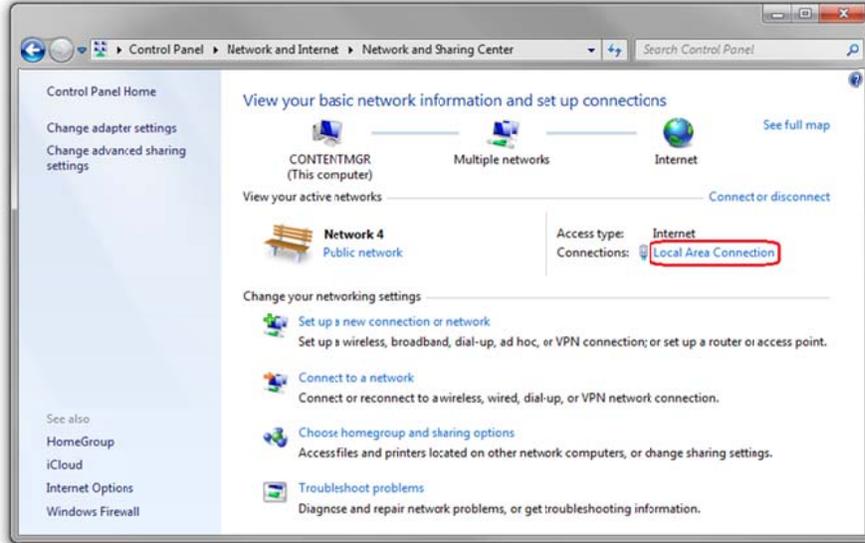
Pic. 5.1

In the opened window click on the **[View network status and tasks]** in the **[Network and Internet]** section (Pic. 5.2).



Pic. 5.2

In the opened window click on the **[Local Area Connection]** (Pic. 5.3).

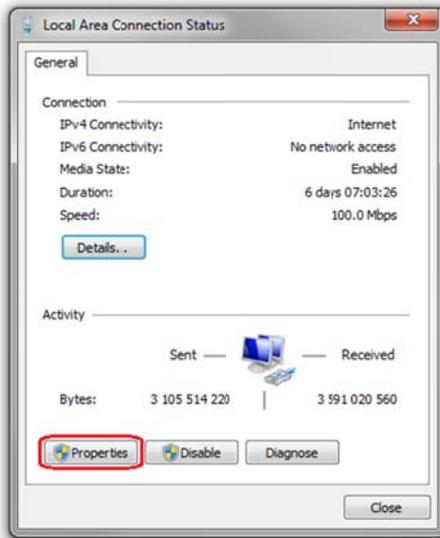


Pic. 5.3

**NOTE:**

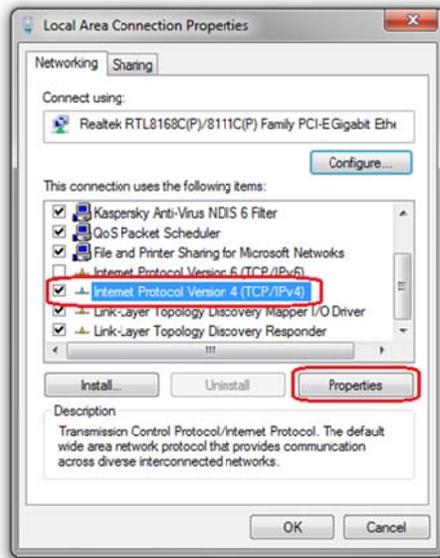
If there are several active networks, choose the one that you are going to connect your door station to.

In the opened window click the **[Properties]** button (Pic. 5.4).



Pic. 5.4

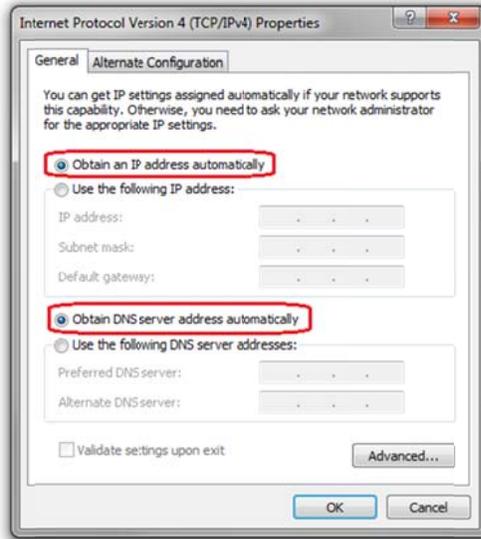
In the opened window select the **[Internet Protocol Version 4 (TCP/IPv4)]** menu item and click the **[Properties]** button (Pic. 5.5).



Pic. 5.5

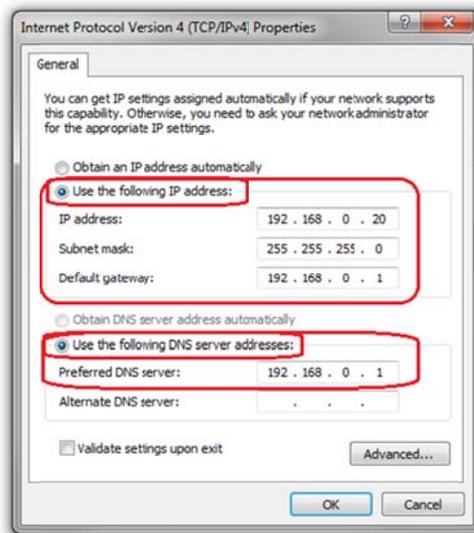
The window opens displaying information about the network connection settings. There are two ways to configure the IP address:

1. **Obtain an IP address automatically:** select this option to obtain an IP address automatically from a DHCP-server on your network (Pic. 5.6). If an IP address is assigned to your computer automatically, go to paragraph [5.1.1](#) to define the network parameters.



Pic. 5.6

2. **Use the following IP address:** an IP address is specified manually (Pic. 5.7).



Pic. 5.7

Make a note of the following parameters: IP address, Subnet mask, Default gateway, DNS server.

**ATTENTION!**

If you do not make a note of the network parameters, then it will be impossible to return the computer's network settings to their initial state and to connect it to a local network or the Internet after configuring the door station.

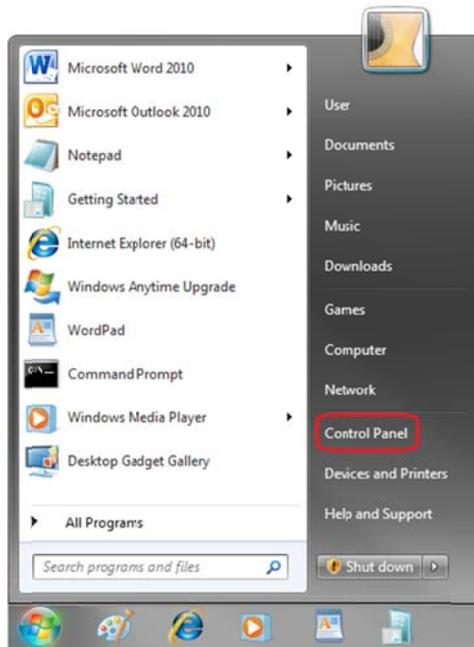
**5.1.1. Defining the Local Network Parameters When Using a Dynamic IP Address**

**NOTE:**

This paragraph explains how to define the local network parameters if an IP address is assigned to your computer automatically (by DHCP-server).

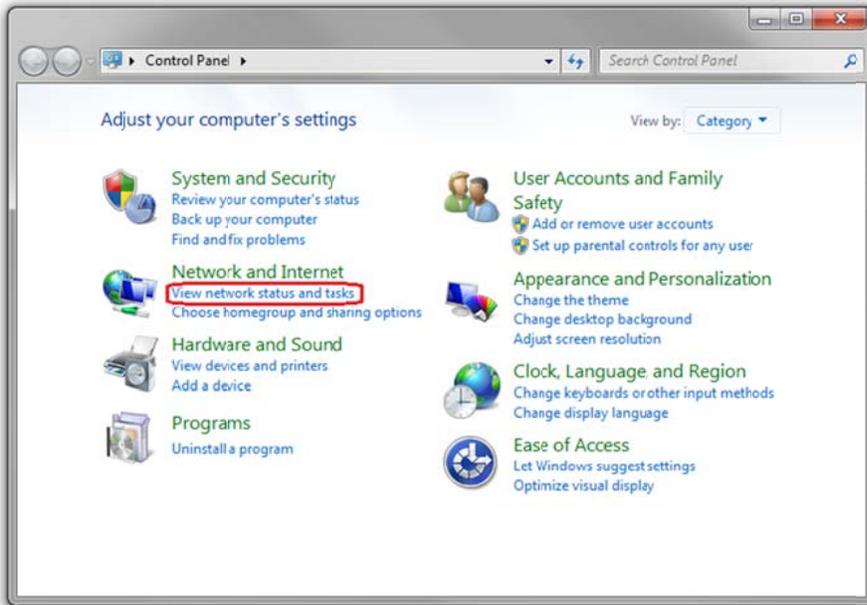
Connect a computer (laptop) to your local network using a network cable and wait till the connection process completing.

To define the local network settings, go to **Start – Control Panel** (Pic. 5.8).



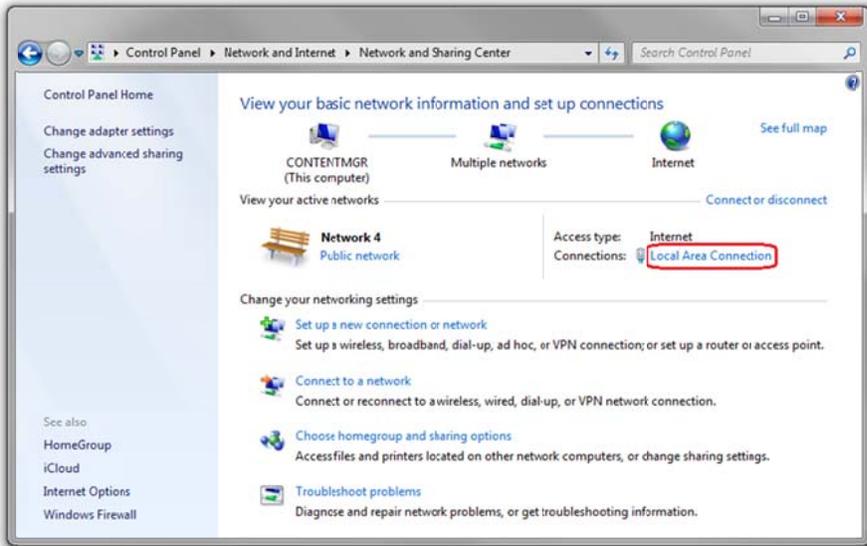
Pic. 5.8

In the opened window click on the **[View network status and tasks]** in the **[Network and Internet]** section (Pic. 5.9).



Pic. 5.9

In the opened window click on the [Local Area Connection] (Pic. 5.10).

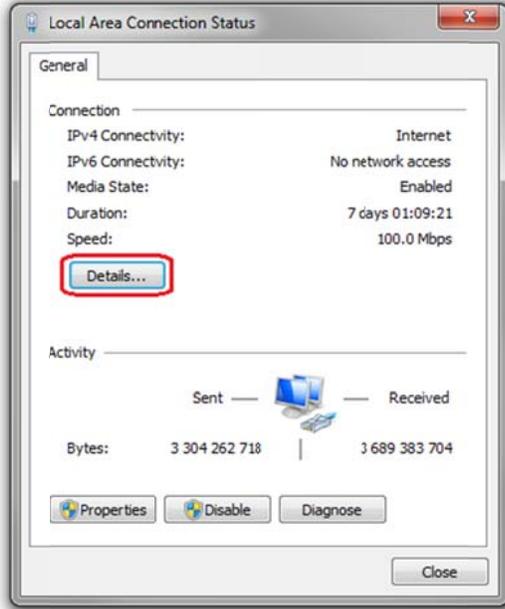


Pic. 5.10

**NOTE:**

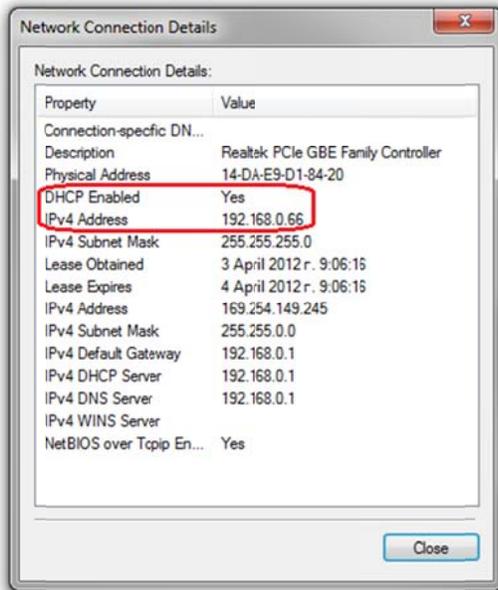
If there are several active networks, choose the one that you are going to connect your door station to.

In the opened window click the **[Details]** button (Pic. 5.11).



Pic. 5.11

In the opened window you can see the current network connection details (Pic. 5.12).



Pic. 5.12

If you will see the following information in the opened window: **[DHCP Enabled – Yes]**, **[IPv4 Address – xxx.xxx.xxx.xxx]** (where xxx.xxx.xxx.xxx is an IP address value), it means that your computer is assigned the IP address displayed in the **[IPv4 Address]** line, the subnet mask displayed in the **[IPv4 Subnet Mask]** line, the gateway address displayed in the **[IPv4 Default Gateway]** line, the DNS server address displayed in the **[IPv4 DNS Server]** line. Make a note of these parameters.

**ATTENTION!**

If you do not make a note of the network parameters, then it will be impossible to return the computer's network settings to their initial state and to connect it to a local network or Internet after configuring the door station.

**ATTENTION!**

If there is the following information in the **[Network Connection Details]** window: **[DHCP Enabled – Yes]**, **[IPv4 Address Autoconfiguration – xxx.xxx.xxx.xxx]** (where xxx.xxx.xxx.xxx is an IP address value), it means that wired connection was not established and a DHCP-server did not assign your computer an IP address. Please check the connection settings or contact your system administrator.

## 5.2. Changing the Local Network Parameters

On default IP address of the door station is 192.168.0.99. To connect to the door station, you need to get it and your computer on the same subnet. Take notice that each device must have a unique IP address.

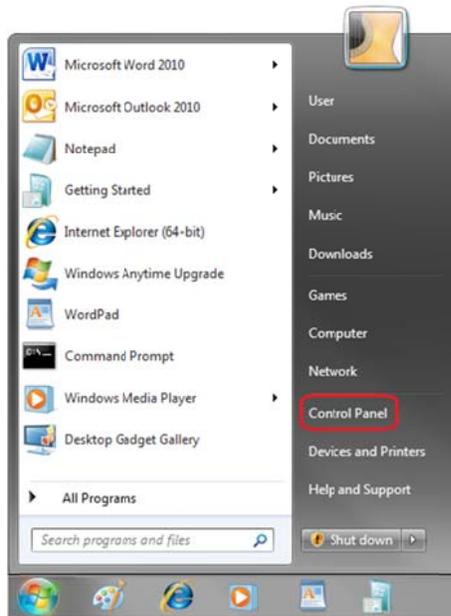
**ATTENTION!**

The door station's default IP address is **192.168.0.99**. If you use several stations, you need to change their default IP addresses to prevent an IP addresses conflict.

**ATTENTION!**

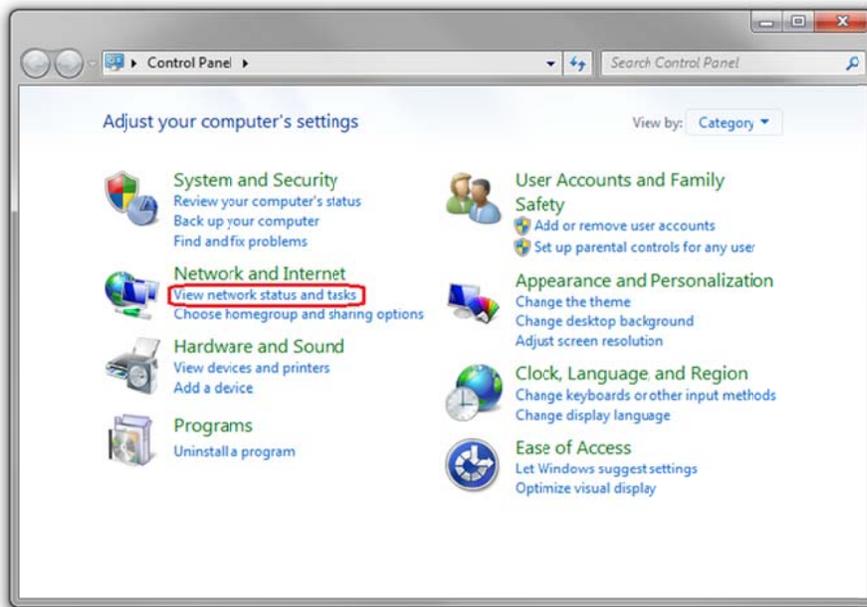
If you are sure that your computer and your door station are on the same subnet, you can skip this paragraph and go to paragraph [5.3](#).

To change your computer current network settings, go to **Start – Control Panel** (Pic. 5.13).



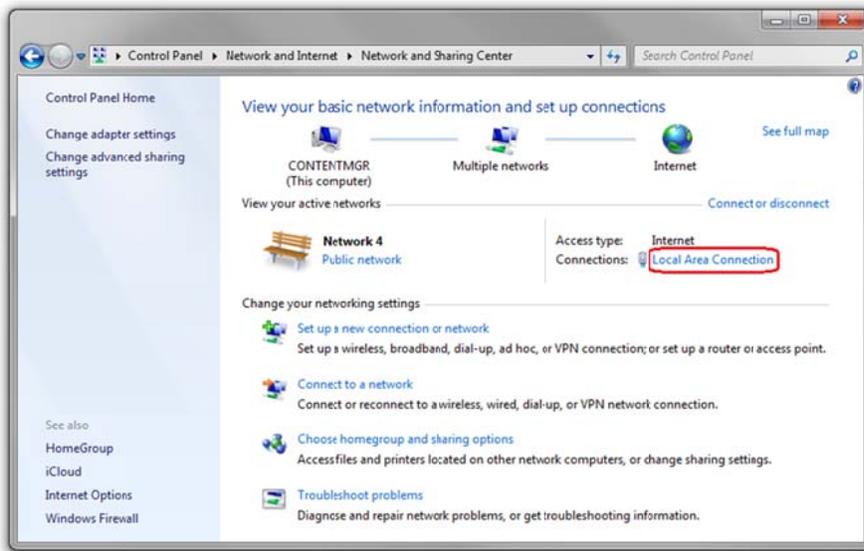
Pic. 5.13

In the opened window click on the **[View network status and tasks]** in the **[Network and Internet]** section (Pic. 5.14).



Pic. 5.14

In the opened window, click on the **[Local Area Connection]** (Pic. 5.15).

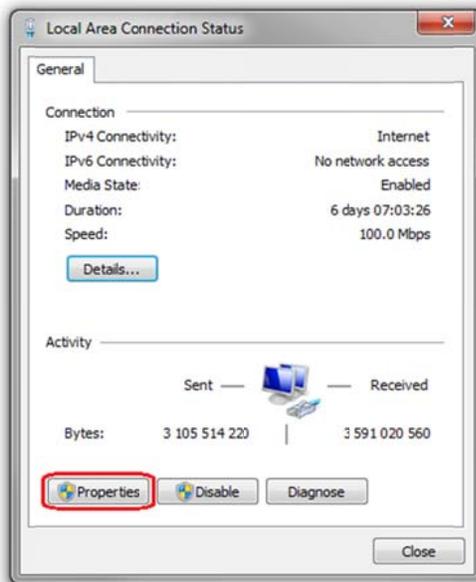


Pic. 5.15

**NOTE:**

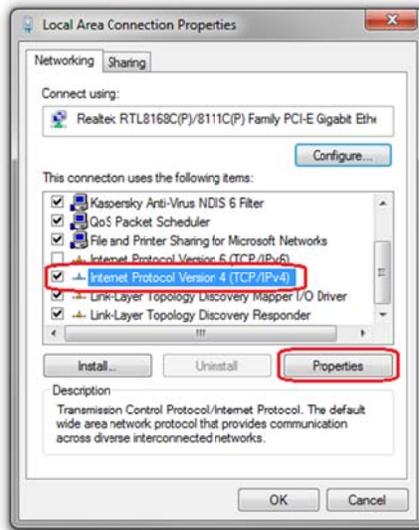
If there are several active networks, choose the one that you are going to connect your door station to.

In the opened window, click the **[Properties]** button (Pic. 5.16).



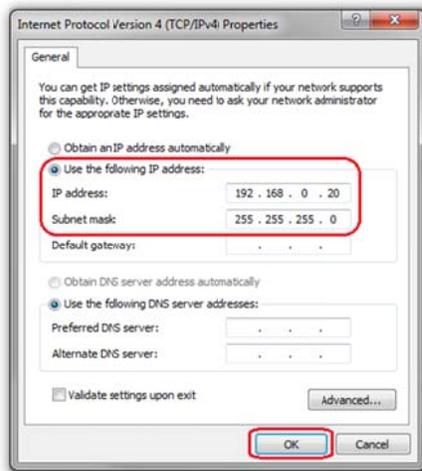
Pic. 5.16

In the connection properties opened window select the **[Internet Protocol Version 4 (TCP/IPv4)]** menu item and click the **[Properties]** button (Pic. 5.17).



Pic. 5.17

In the opened window you need to specify an IP address and a subnet mask. Click the **[Use the following IP address]** and type an unused IP address from the same subnet as the door station, for example, 192.168.0.20, and 255.255.255.0 in the **[Subnet mask]** field. You can skip the other parameters (Pic. 5.18).



Pic. 5.18

Click the **[OK]** button in the all opened windows to save the changes.

### 5.3. Accessing the Door Station Using Internet Explorer

Launch Internet Explorer to access the door station web user interface (WUI).

**NOTE:**

Use of the door station web interface requires Internet Explorer 11.0 or later to be run and displayed correctly.

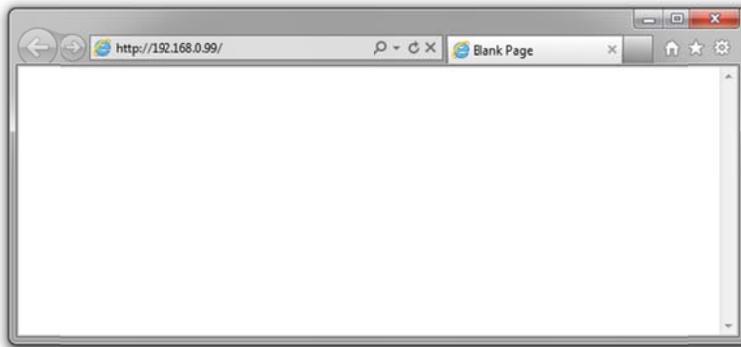
Enter the following path in the address field: **http://<IP>:<port>/**, where **<IP>** is the IP address of the door station, **<port>** is the number of the port that is used for HTTP connection to the door station (*Pic. 5.19*).

**ATTENTION!**

On default, the IP address of the door station is 192.168.0.99 and the http-port is 80.

**NOTE:**

You do not need enter a port number if you connect via the default HTTP port 80.

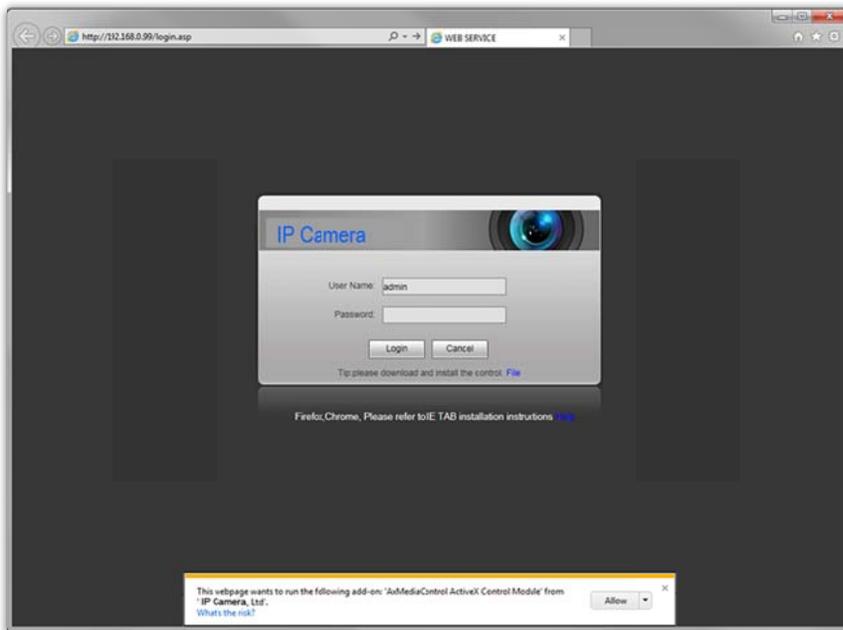


*Pic. 5.19*

### 5.4. Accessing the Door Station Web Interface

If the path is correct you will see the authorization window (*Pic. 5.20*).

To work with the door station web interface you need to install the ActiveX add-on. You will see the system notification at the bottom of the window: **“This webpage wants to run the following add-on: “AxMediaControl ActiveX Control Module” from “IP Camera Co., Ltd”** (*Pic. 5.20*).



Pic. 5.20

Click **[Allow]** to start installation.

**ATTENTION!**

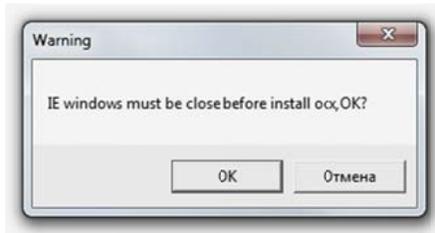
Installation of ActiveX components is only possible for 32-bit Internet Explorer.

On default, the Internet Explorer security system blocks ActiveX installation. Click **[Install]** to continue (Pic. 5.21).



Pic. 5.21

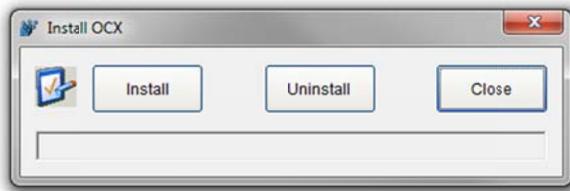
Then you will see the following window (Pic. 5.22):



Pic. 5.22

Close Internet Explorer and click **[OK]**. You need close the browser before installation anyway, whether the window on the *Picture 5.22* will appear or not.

After that the installation window will appear. Click **[Install]** (*Pic. 5.23*).



Pic. 5.23

After installation completing you will see the following notification: «Register OCX success(C:\)» (*Pic. 5.24*). Click **[Close]** to finish ActiveX installation.



Pic. 5.24

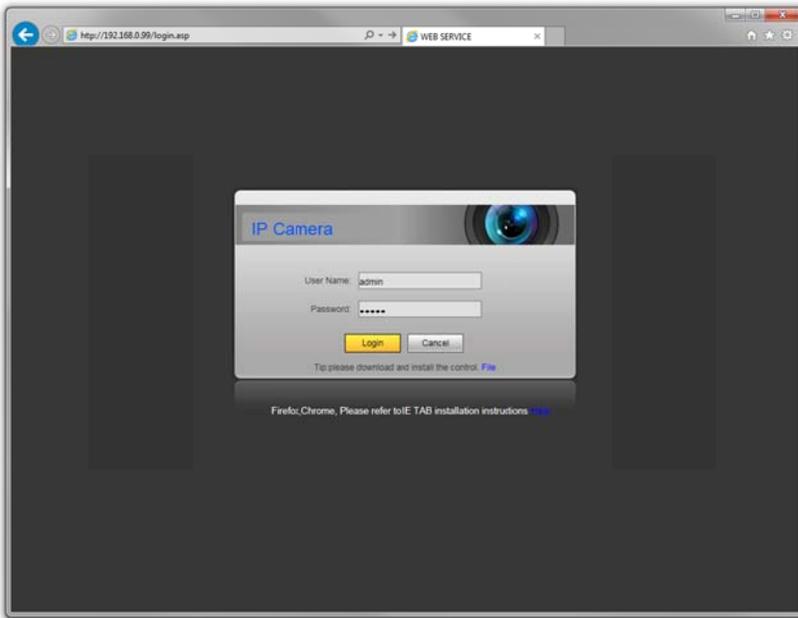
**NOTE:**

Titles of system menus and options in Windows 7 and Internet Explorer 11.0 may differ from other operating systems and web browsers.

**NOTE:**

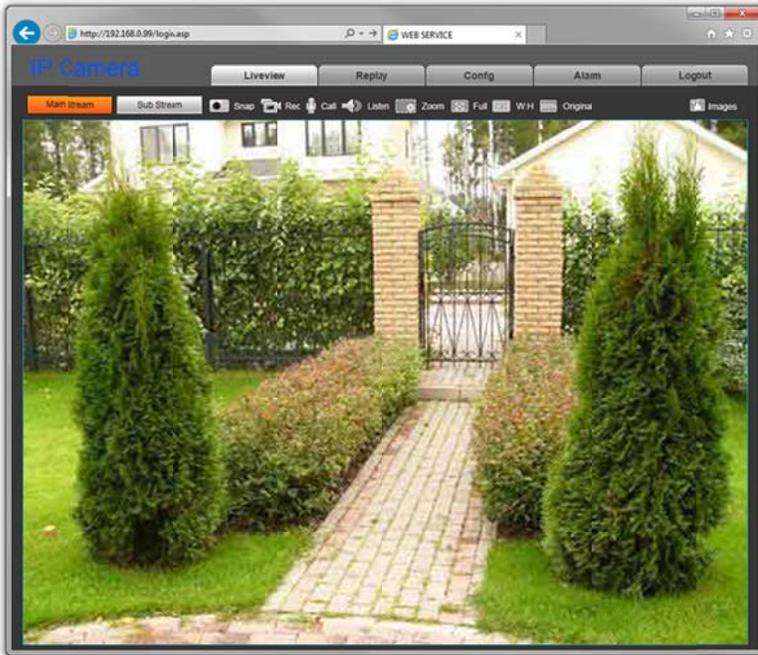
There is one more ActiveX installation blocking in Windows 7 with enabled user account control. In this case you will see an additional system notification. Give a positive answer in the notification window to permit installation.

Open Internet Explorer, enter door station's IP address and press **[Enter]**. Enter username and password and then click **[Login]** (*Pic. 5.25*).



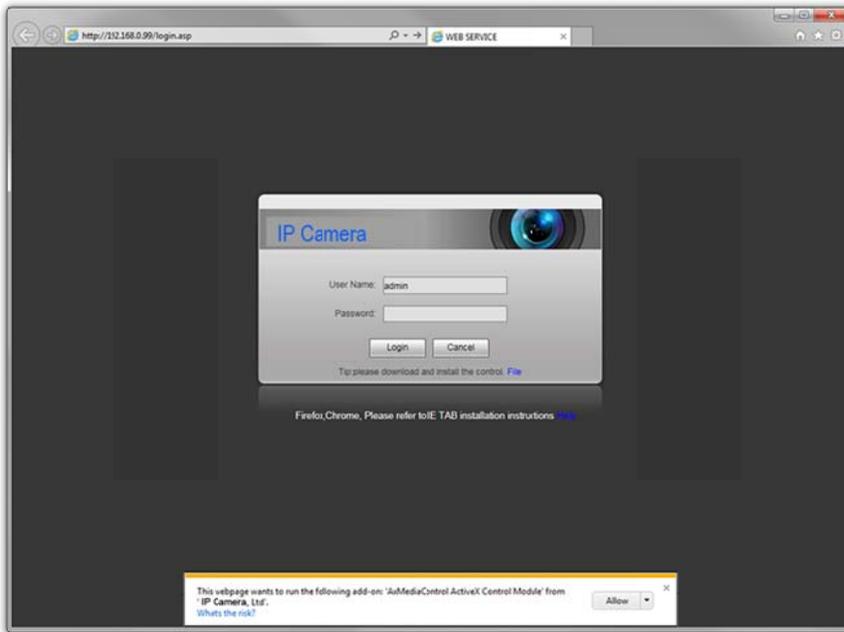
Pic. 5.25

If everything was done correctly, you will start receiving a video stream from door station's camera (Pic. 5.26).



Pic. 5.26

If you failed to install ActiveX correctly you can do it again by clicking the link in the authorization window (Pic. 5.27) and following the instructions above.



Pic. 5.27

### 5.5. Configuring Door Station Network Settings through the Web Interface

After connecting the door station to the local network you need to change its network parameters to get it and your other devices (e.g. computer, laptop etc.) to the same subnet.

#### ATTENTION!

To make your door station and your computer work together, the first three parts of their IP addresses must be identical but the fourth must differ.

For example, the IP address of your computer is 192.168.0.40. An IP address consists of four octets separated by dots. In the provided example, the 1st octet is 192, the 2nd octet is 168, the 3rd octet is 0, and the 4th octet is 40. You need to change the IP address of your door station so that the first three octets of its IP address were the same as your computer's IP address. Therefore, the IP address of your door station must be of the form 192.168.0.XX. You only need to change the fourth octet to a number different from the IP address of your computer and other network devices.

To configure the network settings through the web interface, click the **[Config]** button and go to the **Network Settings – LAN** (Pic. 5.27).



Pic. 5.27

In the fields **[IP Address]**, **[Subnet Mask]**, **[Gateway]**, **[Main DNS]**, **[Sub DNS]** you need to enter such values which provide joint work of the door station and other devices in the same subnet. To do so apply to the settings you had to write out or save in the paragraphs [5.1](#) or [5.1.1](#).

**NOTE:**

Contact your system administrator if you need help.

Click **[Save]** to save the changes.

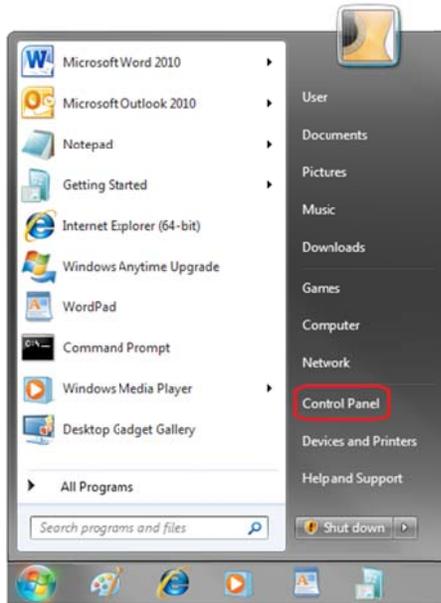
After rebooting the door station will be available on the IP address you specified.

Configuring the door station network settings is completed.

### 5.6. Restoring Network Settings of PC to the Previous Values

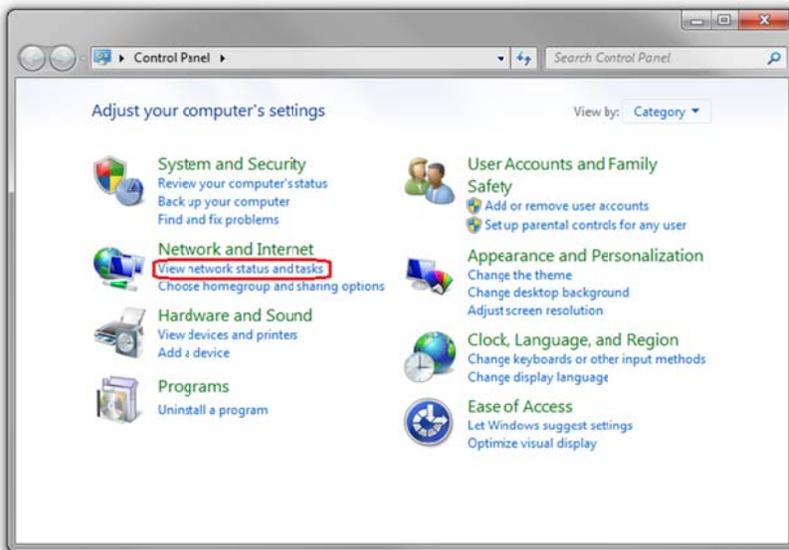
To restore the wired connection settings to their previous values, follow the steps below.

Go to **Start – Control Panel** (Pic. 5.28).



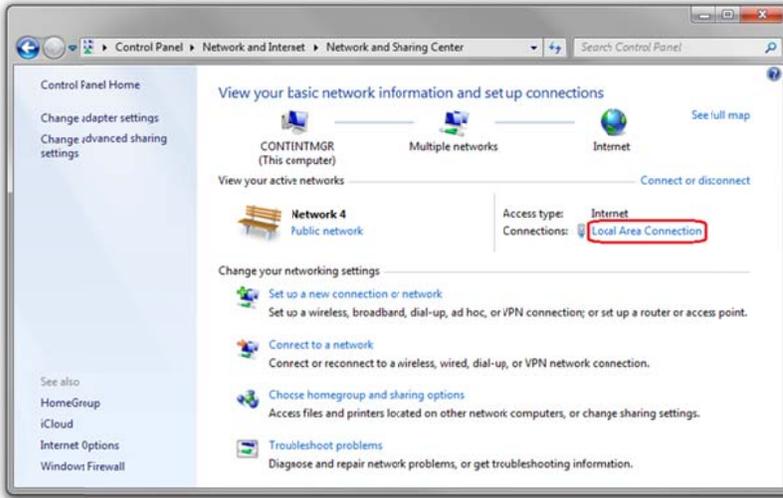
Pic. 5.28

In the opened window, click on the **[View network status and tasks]** in the **[Network and Internet]** section (Pic. 5.29).



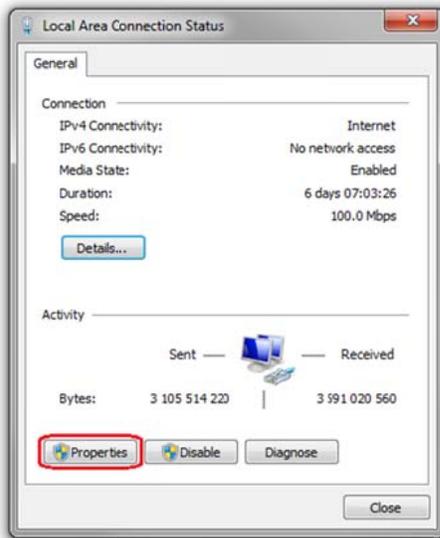
Pic. 5.29

In the opened window, click on the **[Local Area Connection]** (Pic. 5.30).



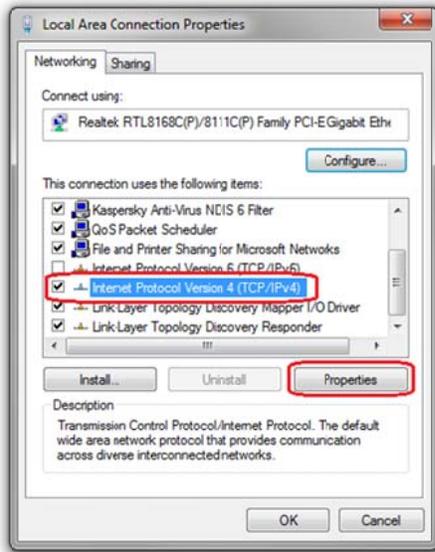
Pic. 5.30

In the opened window, click the **[Properties]** button (Pic. 5.31).



Pic. 5.31

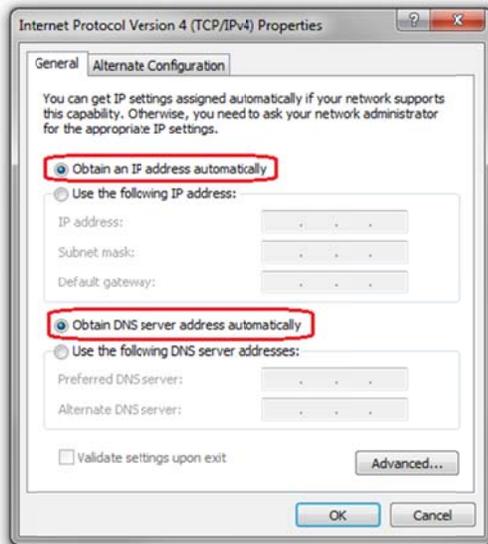
Select the **[Internet Protocol Version 4 (TCP/IPv4)]** menu and click the **[Properties]** button (Pic. 5.32).



Pic. 5.32

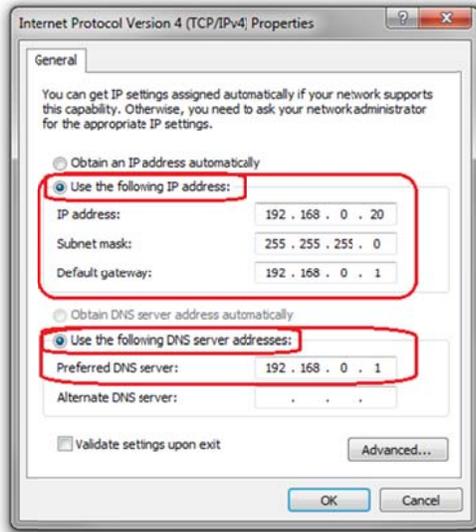
In the opened window of the connection properties you need to specify your initial network settings (see paragraphs [5.1](#), [5.1.1](#)).

If the IP settings were assigned automatically, use the **[Obtain an IP address automatically]** and the **[Obtain DNS server address automatically]** options (Pic. 5.33), then click **[OK]**.



Pic. 5.33

If the IP settings were specified manually, use the **[Use the following IP address]** and the **[Use the following DNS server addresses]** options and complete the required fields (see paragraph 5.1), then click **[OK]** (Pic. 5.34).



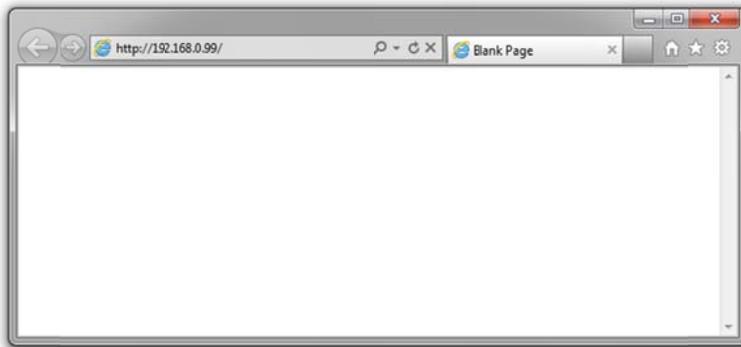
Pic. 5.34

### 5.7. Verifying the Connection Settings

To verify the network settings of your door station and your computer, you must access the station through Internet Explorer.

To launch Internet Explorer go to **Start – All Programs** and click **[Internet Explorer]**.

Enter the IP address of your door station in the address field (e.g. <http://192.168.0.99>) (Pic. 5.35).

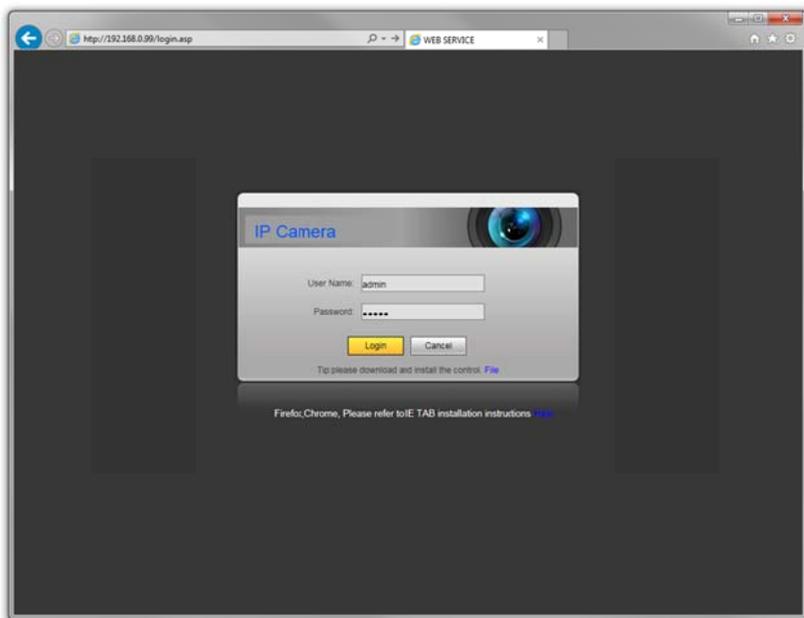


Pic. 5.35

If the settings are correct, an authorization window will appear. Enter the username and password, then click **[OK]** (Pic. 5.36).

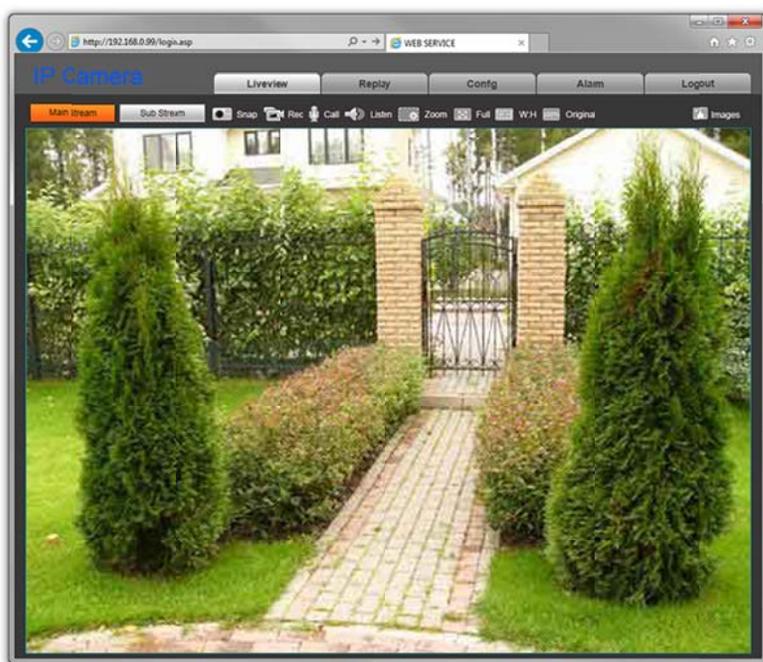
**ATTENTION!**

The default username is **admin**, the default password is **admin**.



Pic. 5.36

If everything was done correctly, you will see the video image on your display (Pic. 5.37).



Pic. 5.37

**NOTE:**

If the video image is not appeared on your display, return to the chapter's [beginning](#) and check the setting step by step. Contact your system administrator if you need help.

## **Chapter 6. Recommendations on Setting and Operation of DS05M(P)**

IP intercom systems unite different types and configurations of equipment (PCs, laptops, microphones, speakers, etc.). Consequently, correct operation of the whole system depends on proper setting of each used device taking into account the peculiarities of their joint operation.

### **6.1. Acoustic Echo Cancellation**

Using the door station the Client or the Guest may hear an echo feedback from their PC speakers or the door station speaker accordingly.

The echo feedback on the Guest side (door station speaker) depends on settings of audio output equipment of Client's PC as well as on audio settings in the operating system on Client's PC.

The echo feedback on the Client side (PC speakers) depends on the door station settings.

The echo feedback may occur when one or more of the following conditions are taken place:

- 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.

The most efficient method to remove the echo feedback effect on the Client side is use of headphones or a hands-free unit by the Client for a conversation with the Guest. If this is impossible according to some reasons, follow the recommendations below.

There are two main ways of reducing the echo feedback effect: **change of audio settings in the operating system** and **change of audio settings of the door station**.

1. To reduce the echo feedback effect on the Guest side (door station speaker) by changing settings of the operating system do as follows:

- go to **Control Panel – Sound – Recording**, double-click the recording device set by default (microphone) and 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 echo feedback effect by selecting the **Enhancements** tab on 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.

2. Some features of functionality of the door station can be effectively used to reduce the echo feedback effect on the Client side (PC speakers). In the Web User Interface menu go to **Config – Audio Settings – Audio Parameter** and change the **compression type** to «**G.726**» (see the Operation User Manual). This echo cancellation method has one disadvantage that consists in some decrease of sound quality and its volume level because of limitations of the G.726 codec.

## **6.2. Sound Gain and Volume Adjusting**

1. If the Client can't hear the Guest well or his voice is interrupted, or if the Guest hears his echo, then change your operating system settings as follows:

- go to **Control Panel – Sound – Recording**, double-click the recording device set by default (microphone) and reduce microphone boost level and volume level (if necessary) on the **Levels** tab. It is recommended to set microphone boost level to 0 dB, volume level to 100. It is also necessary to ensure that the “**Listen to this device**” option is disabled on the **Listen** tab.
- reduce volume level of the PC speakers to the minimal appropriate level. If it is too high, then the microphone may receive the audio waves from the speakers and, therefore, the Guest may hear his echo as well as the Client may hear the Guest with interrupts.
- place the PC microphone farther from the speakers and closer to Client's face.

Moreover, you can adjust the gain of sound transmitted from the door station microphone to the PC speakers in the Web User Interface. Go to **Config – Audio Settings – Audio Parameter** and change the “**Input Volume**” parameter to the appropriate value. The lower “Input Volume” value, the quieter Guest's voice and his echo, and vice versa.

2. If the Guest can't hear the Client well or his voice is interrupted, then change your operating system settings as follows:

- go to **Control Panel – Sound – Recording**, double-click the recording device set by default (microphone) and increase microphone boost level on the **Levels** tab. Then, set appropriate volume level. It is recommended to set microphone boost level to 0 dB, volume level to 100. Values of the parameters may vary depending on the PC microphone type.

- ensure that the “**Listen to this device**” option is disabled on the **Listen** tab.
- reduce volume level of the PC speakers to the minimal appropriate level.

Moreover, you can adjust the gain of sound transmitted from the PC microphone to the door station speaker in the Web User Interface. Go to **Config – Audio Settings – Audio Parameter** and change the “**Output Volume**” parameter to the appropriate value. The lower “Output Volume” value, the quieter Client’s voice and his echo, and vice versa.

## Appendices

### Appendix A. Factory Defaults

Parameter	Value
IP address	192.168.0.99
Subnet mask	255.255.255.0
Gateway	192.168.0.1
Username (administrator)	admin
Password (administrator)	admin
HTTP port	80
Data port	5000
RTSP port	554
ONVIF port	2000
NTP server	time.nist.gov time.windows.com time-nw.nist.gov time-a.nist.gov time-b.nist.gov

### Appendix B. 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.