HIKVISION EUROPE B.V.

How to Remotely Access

Hikvision Devices User Manual

(Use to remotely access Hikvision DVR's, NVR's and IP Cameras)

Name:	Remote Access
Publisher:	HIKVISION EUROPE B.V.
Type:	Information Only
Version:	1.2
File:	N/A

Hikvision Europe B.V.

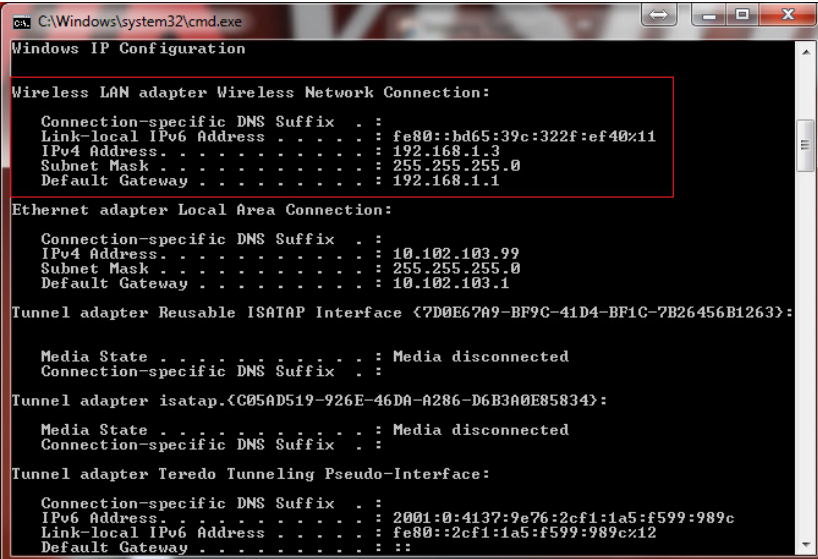www.hikvisioneurope.com

Introduction

The following guide will guide you through the necessary steps to remotely access your Hikvision device with another PC, Laptop, Tablet, Smartphone or iPhone. Before proceed please connect your device to your router and obtain a computer that is already connected to the same router or LAN. Also make sure that your computer can access the internet. After properly port-forwarding (also called port-mapping) your router you will be able to access your device by using an internet browser, such us IE, Chrome, Firefox or Safari and/or our client software iVMS4200.

Step n1: Obtaining your Local Network Settings from your computer.

1.1 Open the *command prompt* window on your computer.

- a) For Windows Vista and 7 users:
  - Locate the Windows icon in the bottom left corner of the task bar.
  - In the Search box, type *cmd* or *command* to locate the *command prompt* and press *Enter.*
  - Following the available prompt, type *ipconfig* and press *Enter*.

- b) Windows NT, 2000, and XP users:
  - Locate the Windows icon in the bottom left corner of the task bar.
  - Click *Run*.
  - Type *cmd* or *command* and press enter.
  - Following the available prompt, type *ipconfig* and press *Enter*.

1.2 This will bring up the *command prompt* window which will display your network settings (Fig. 1). Make sure to write down the **Local IP Address**, **Subnet Mask** and **Default Gateway**. This will display the address of your router.

Fig. 1

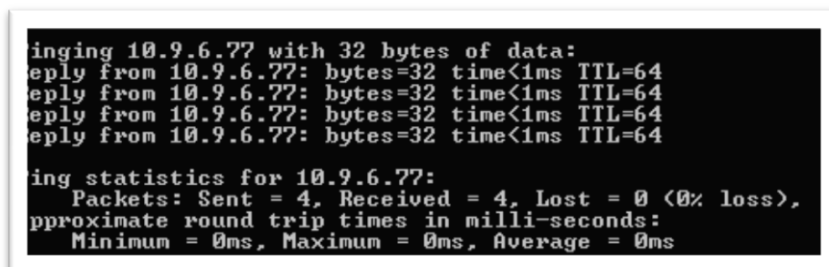*** Write down the Local IP Address, Subnet Mask and Default Gateway.

Step n2: Static or Dynamic IP address.

Now check for an open or free IP address on the network. Make sure to use an IP address that is in the same subnet range. (*Example*: if your gateway is 192.168.1.1 you want to check for an IP address available like 192.168.1.4 or 192.168.1.5 and so forth)

2.1 Option 1 (*static local IP address*)

a) You can check the IP address availability by performing the "*Ping*" command (Fig. 2). In order to do that you need to type **ping 192.168.1.4** at the *command prompt* window.

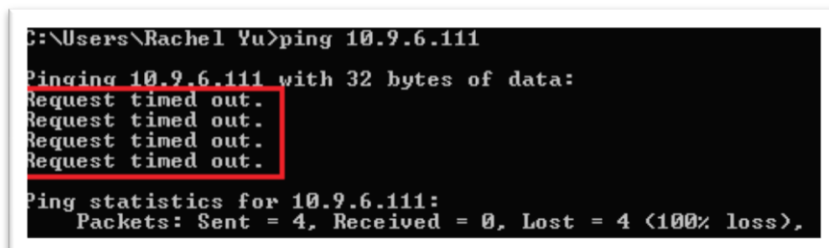- If there is a reply it means that the IP address is already in use:

Fig. 2

*** Type **ping 192.168.1.4** at the *command prompt* window.

- If there is no reply (*request timed out*) it means that the IP address is available for use (Fig.3)

Fig. 3

*** The IP address is available for use.

b) If you have found an available IP address in the same subnet then you can assign this IP address (Static IP Address) to the device by using the GUI, or using iVMS4200 client software or by login into the device via an internet browser IE, Chrome, Firefox or Safari.

Using the GUI

- In **Live View** mode right click with a mouse to access the **Main Menu**.

- Click on **Configuration** and then **Network** (Fig. 4)

- Enter the available static **IP address** (192.168.1.10)

- **Subnet Mask** (255.255.255.0)

- Enter **Default Gateway IP address** you made a note of earlier (192.168.1.1)

Fig. 4

*** Enter the available static IP address.

Using iVMS4200

- In **Control Panel** click on **Device Management** and then select the device from the list.
- Now click on **Remote Configuration** and then **Network** (Fig. 5)
- Enter the available static local **IP address** (192.168.1.10)
- **Subnet Mask** (255.255.255.0)
- Enter **Default Gateway IP address** you made a note of earlier (192.168.1.1)

Fig. 5

*** Click on Remote Configuration and then Network.

Using Internet browser (LAN)

- Login to the device by entering its **Local IP address:port number** (192.168.1.10:80) in the address bar of the Internet browser.
- Click in **Configuration** and then on **Network Settings** (Fig. 6)
- Enter the available static **IP address** (192.168.1.10)
- **Subnet Mask** (255.255.255.0)
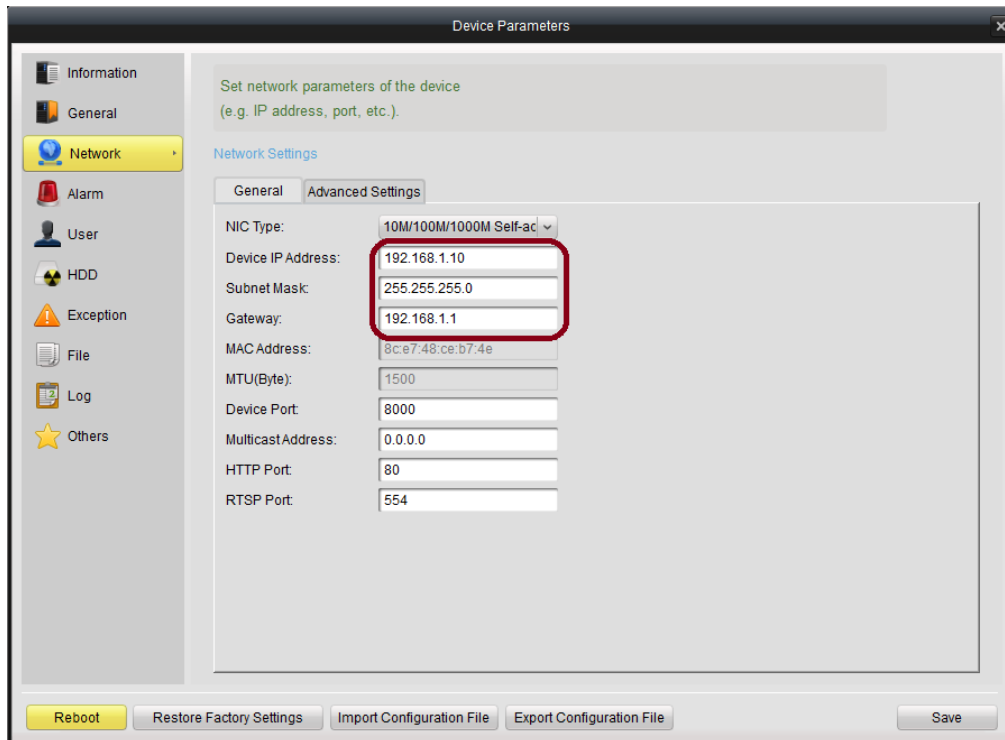- Enter **Default Gateway IP address** you made a note of earlier (192.168.1.1)
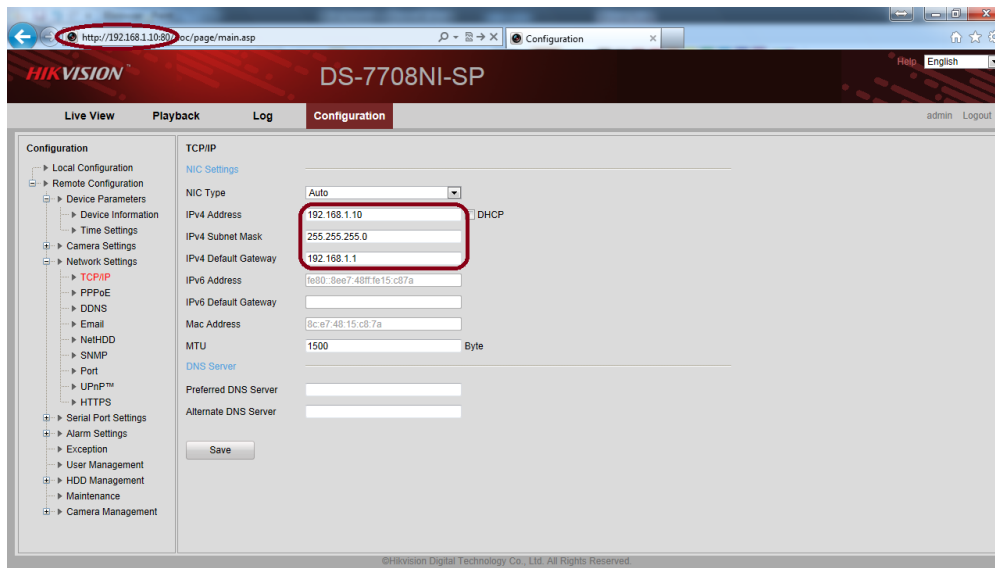

Fig. 6

*** Click on Configuration and then Network settings.

2.2 Option 2 (Dynamic IP address)

a) You can enable the DHCP checkbox in the DVR Network Configuration interface:

<u>Using the GUI</u>

- In **Live View** mode right click with a mouse to access the **Main Menu**.
- Click on **Configuration** and then **Network** (Fig. 7)
- Check the **DHCP** radio box, and click **Apply**.
- **Reboot** the system.
- Return to the **Network Configuration** to check what the current IP address is.

<div align="right">Fig. 7</div>

*** Check the **DHCP** radio box, and click **Apply**.

Using iVMS4200

- In **Live View** mode right click with a mouse to access the **Main Menu**.
- Click on **Configuration** and then **Network** (Fig. 8)
- Check the **DHCP** radio box, and click **Save**.
- **Reboot** the system.
- Return to the **Network Configuration** to check what the current IP address is. It will be listed under **Current Configuration** >> **IP Address**.
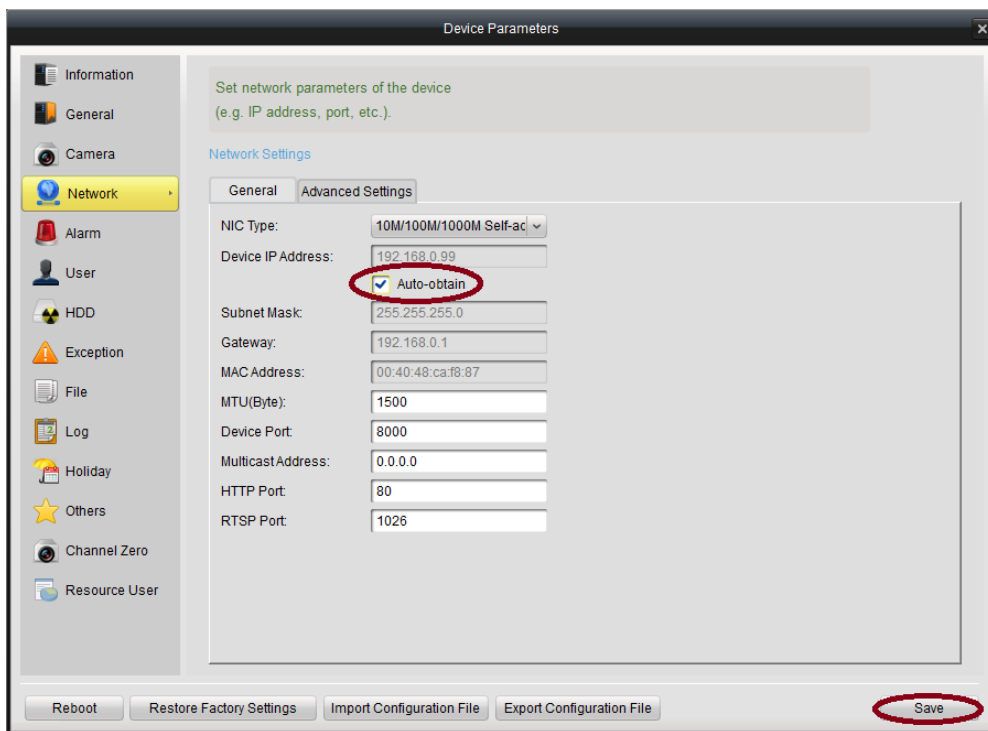

Fig. 8

*** Check the **DHCP** radio box, and click **Apply**.

Using Internet browser (LAN)

- Login to the device by entering its **Local IP address:port number** (http://192.168.1.10:80) in the address bar of the Internet browser.
- Check the **DHCP** radio box, and click **Save** (Fig. 9)
- **Reboot** the system.
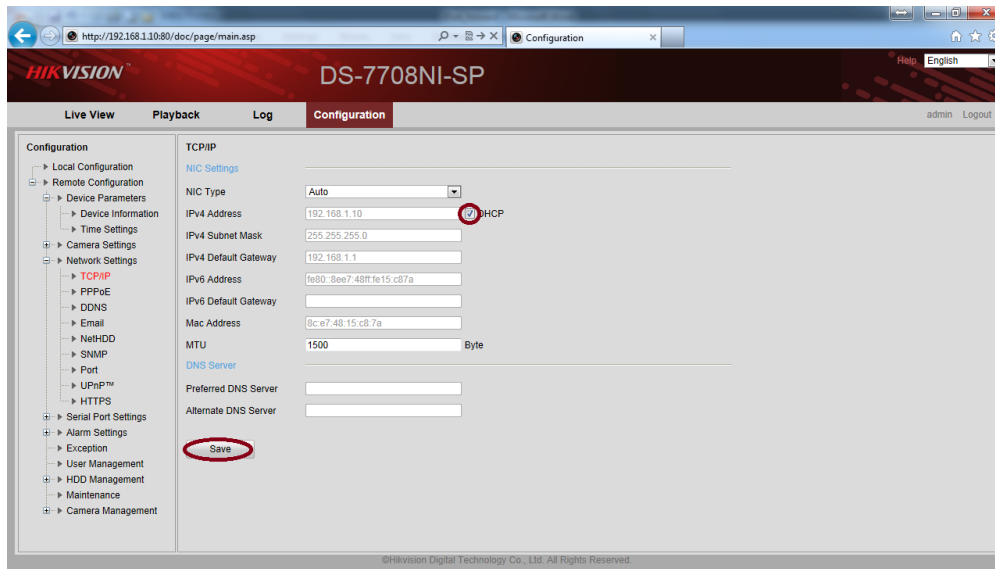- Return to the **Network Configuration** to check what the current IP address is.

Fig. 9

*** Check the **DHCP** radio box, and click **Apply**.

Step n3: Confirm your DVR Connection

Now you can check if the settings you did before are done correctly. Open the Internet Explorer browser.

- Type the **IP address** of the DVR in the Internet Explorer address bar (http://192.168.1.10:80)
- Internet Explorer will **prompt** you to install the Active-X control.
- Click **Allow** and **install** the Active-X control (Fig. 10)
- **NOTE:** When using Internet Explorer (64-bit) you'll need to download Active-X from our server: www.hikvisioneurope.com/portal
- Under <**Technical Materials**> look for <**Software & Development Tools**> and then check the following path: **/Web Componets/Multi-brower web video componet for win64 v3.0.3.3 build120419_en**.
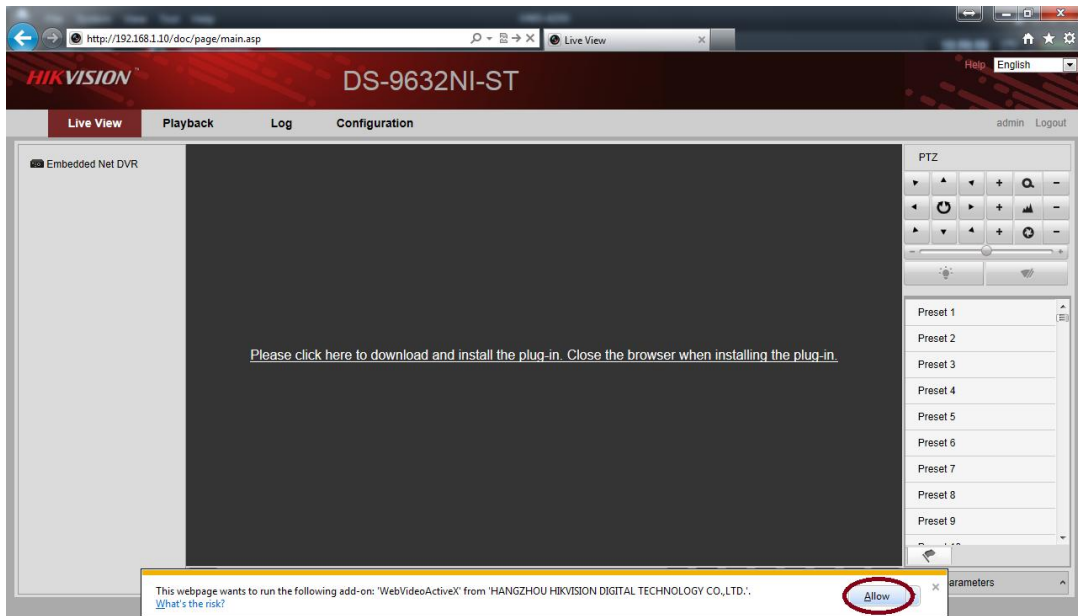

Fig. 10

*** Click **Allow** and **install** the Active-X control.

- The user login interface will be displayed (Fig. 11). Now you can **enter** the correct **user name**, **password** and **port**. The default login information is:

  user name: **admin**
  password: **12345**
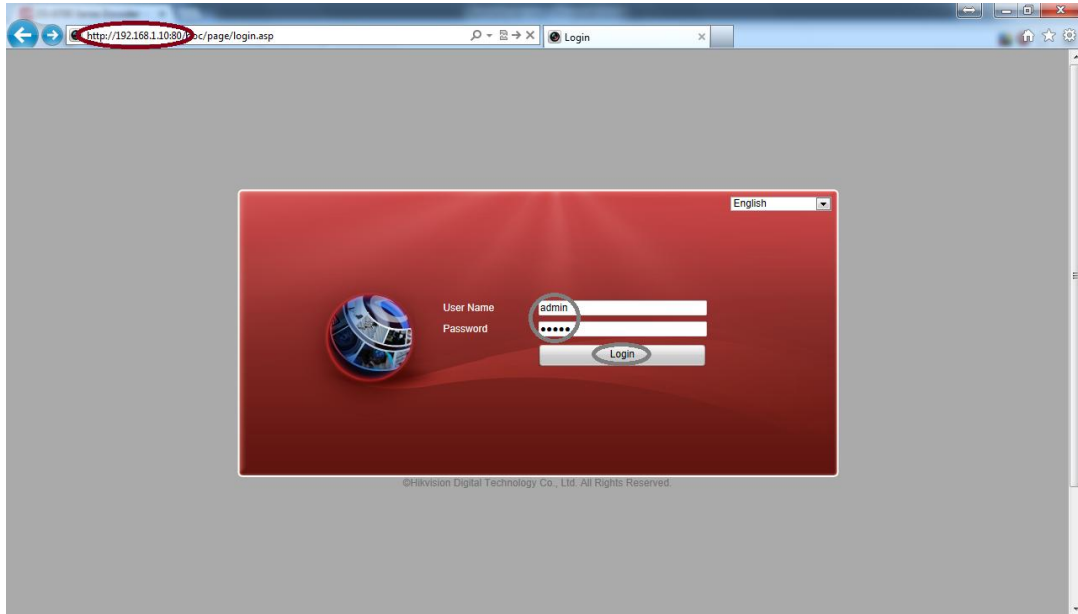 port: **8000**

Fig. 11

*** Enter the correct **user name**, **password** and **port**.

- After successfully log in the next interface will appears and you can choose your display layout configuration (Fig. 12)
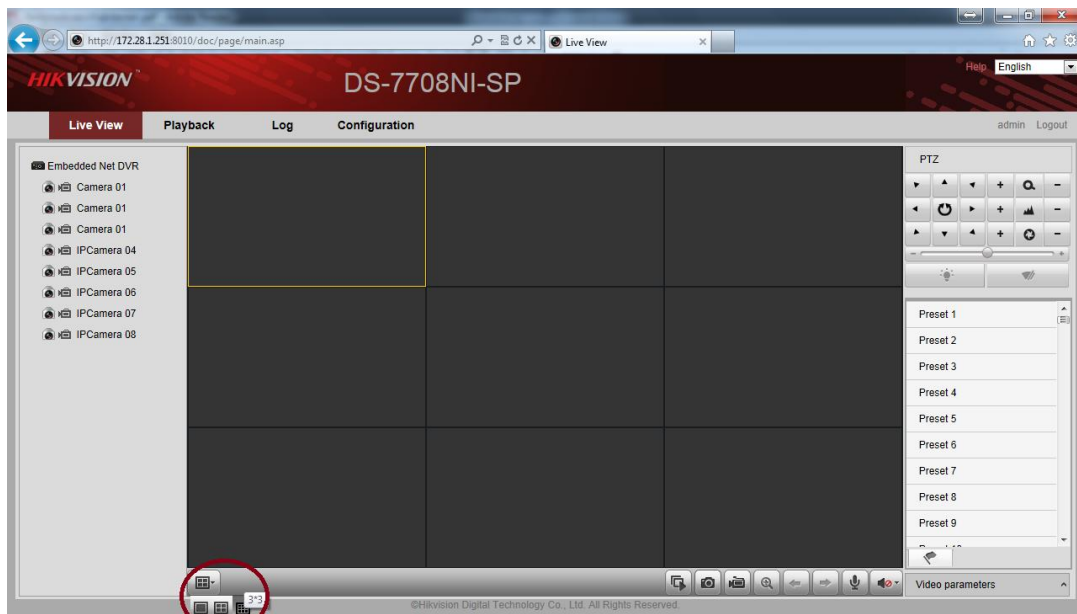

Fig. 12

*** Enter the correct **user name, password** and **port**.

- **Select** a square where you want to preview 1st camera. Then **click** on the camera you want to preview in Live View (Fig. 13). In order to populate the Live View do the same thing for the rest of the cameras.
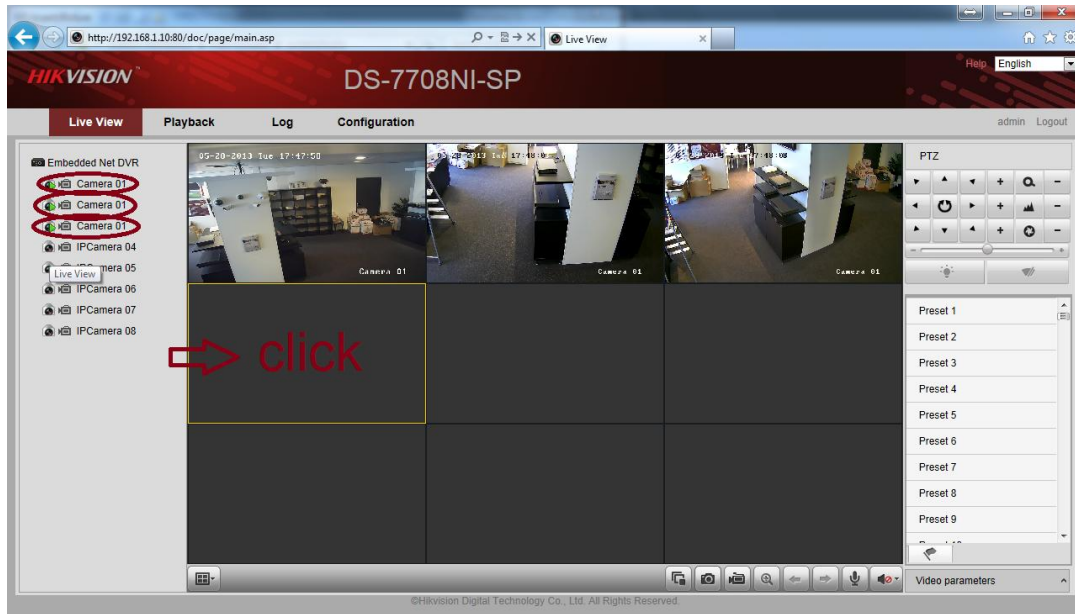

<div align="right">Fig. 13</div>

*** **Select** a square then **click** on the camera.

Step n4: Port forwarding your router:

By enabling bellow ports to be forwarded to a device's IP address on your local network router it will provide users with remote access to the device from the internet. For more information about Port Forwarding please refer to http://portforward.com/

By default Hikvision devices uses the following 4 ports:

- Device: **8000**
- HTTP: **80**
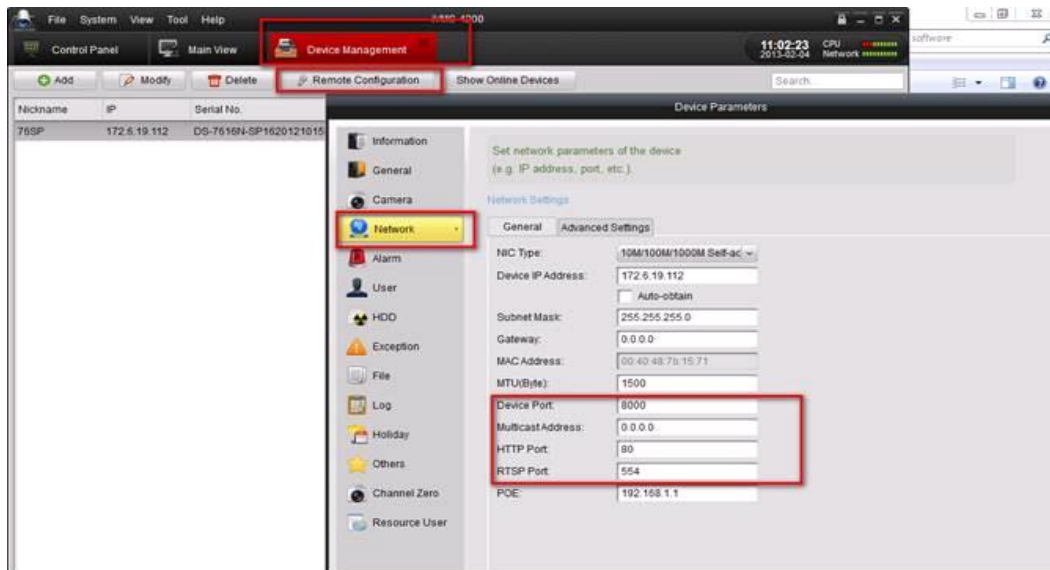- SDK: **8200**
- RTSP: **554**

Fig. 13

*** Hikvision devices use the following 4 ports: **8000, 80, 554, 8200**.

Once you have accessed the router's web-interface successfully follow the next steps to guide yourself to the port forwarding option (normally NAT). Once in this option forward the ports mentioned above. Note that every router is different and the configuration can vary from model to model. A very helpful site is: http://www.pcwintech.com/port-forwarding-guides but also you can refer to your ISP provider and router manual.

Helpful Tip:

- If you are unable to access the default router IP address use the "*Default Gateway*" IP address (normally 192.168.1.1)

- A reboot and reset of the default router settings may be necessary.

Step n5: Confirm your device Remote Connection:

Open an Internet browser and visit the website (Fig. 14): http://www.yougetsignal.com/tools/open-ports/

The open port checker is a tool you can use to check your external IP address and detect open ports on your connection. This tool is useful for finding out if your port forwarding is setup correctly or if your server applications are being blocked by a firewall.
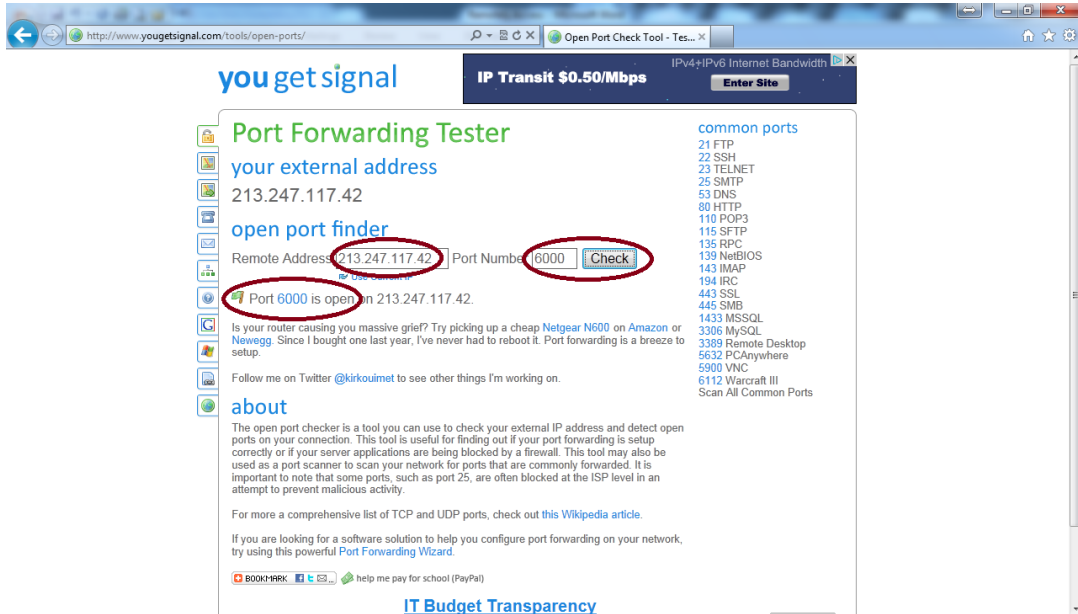

Fig. 14

*** Visit the website http://www.yougetsignal.com/tools/open-ports/.

1. Enter port number '**80'** (or your http port) in the **Port Number** field.

2. Click the **Check** button. If the port is forwarded correctly then status will be show as open.

3. Repeat step 1 and 2 for the other ports 8000, 554, 8200 (or your own ports).

4. If all ports are forwarded properly you can use the external IP address to connect remotely to your device from outside the local network (LAN).

5. In order to test it you can ask someone remotely to connect to the external IP address via Internet browser, the login information will be the same as the DVR.

For further information or if you need help with the above steps please feel free to contact Hikvision Technical Support.