

# **Accessing the IP Camera**

This chapter explains how to access the IP camera through web browsers and RTSP players.

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## **Using Web Browsers**

To access the camera, follow these steps:

- **Step 1** Launch your web browser (Microsoft Internet Explorer or Mozilla Firefox).
- **Step 2** Enter the IP address of the camera in the address field and then press **Enter**.

Live video is displayed in your web browser.

If it is the first time installing the camera, a dialog box prompts for information. Follow the instructions to install the required plug-in on your computer.

- **Step 3** If you see a dialog box indicating that your security settings prohibit running ActiveX Controls, enable the ActiveX Controls for your browser:
  - a. Choose Tools > Internet Options > Security > Custom Level.
  - b. Look for Download signed ActiveX controls, select Enable or Prompt, and then click OK.
  - **c.** Refresh your web browser, then install the ActiveX control. Follow the instructions to complete installation



- The camera utilizes 32-bit ActiveX plugin. You cannot open a management/view session with the camera using a 64-bit IE browser.
- If you encounter this problem, try execute the Iexplore.exe program from C:\Windows\SysWOW64. A 32-bit version of IE browser will be installed.

• On Windows 7, the 32-bit explorer browser can be accessed from here: C:\Program Files (x86)\Internet Explorer\iexplore.exe.



The onscreen Java control can malfunction under the following situations: A PC connects to different cameras that are using the same IP address (or the same camera running different firmware versions). Removing your browser cookies will solve this problem.

If you encounter problems with displaying the configuration menus or UI items, try disabling the Compatibility View on Internet Explorer 8 or 9.

You may also press the F12 key to open the developer tools utility, and then change the Browser Mode to the genuine Internet Explorer 8 or 9 mode.

In the event of plug-in compatibility issues, you may try to uninstall the plug-in that was previously installed

#### **Performing the Initial Setup of the IP Camera**

After you install IP camera or after you perform a factory reset procedure, you must access the IP camera and make initial configuration settings. These settings include root passwords, and whether the IP camera can be accessed through an HTTPS connection in addition to the default HTTP connection.

By default, when the IP camera powers on, it attempts to obtain an IP address from a DHCP server in your network. If the camera cannot obtain an IP address through DCHP, an IP address is assigned using the Link-Local address scheme. The camera acquires an IP address by inserting part of its MAC address into the 169.254.x.x IP address. To do this, the camera converts the hex digits of the MAC address to decimal values and then applies them to create an IP address in the following format:

169.254.MAC:9-10.MAC:11-12

where MAC:9-10 are the 9th and 10th digits in the MAC address, and MAC:11-12 are the 11th and 12th digits.

For example, using this method, camera with a MAC address of 00-11-22-33-44-55 acquires an IP address of 169.254.68.85, given that hex 44 = 68 decimal and hex 55 = 85 decimal.

To connect to the IP camera for the first time and make initial configuration settings, perform the following steps:

**Step 1** Start Internet Explorer, enter HTTP://ip\_address in the address field, and press **Enter**.

Replace *ip\_address* with the IP address that the IP camera obtained through DHCP or, if the camera was unable to obtain this IP address, enter 169.254.x.x as obtained by camera.

The Configure password window appears

- **Step 2** In the Password and Confirm Password fields, enter a password for the IP camera root user.
- **Step 3** Enable / disable HTTPs check box as required.
- Step 4 Click Save.

## **Using RTSP Players**

To view the streaming media using RTSP players, you can use one of the following players that support RTSP streaming.

- Quick Time Player
- VLC media player
- **Step 1** Launch the RTSP player.
- **Step 2** Choose **File > Open URL**. A URL dialog box will pop up.
- **Step 3** The address format is rtsp://ip\_address:rtsp\_port/RTSP\_streaming\_access\_name\_for\_stream1\_or\_stream2.

As most ISPs and players only allow RTSP streaming through port number 554, set the RTSP port to 554. For more information, see the "RTSP Streaming" section on page 5-22.

**Step 4** The live video will be displayed in your player.

For more information about how to configure the RTSP access name, see the "RTSP Streaming" section on page 5-22

## **Using 3GPP-Compatible Mobile Devices**

To view the streaming media through 3GPP-compatible mobile devices, make sure the camera can be accessed over the Internet. For more information on how to set up the camera over the Internet, see the "Network Deployment" section on page 1-9.

To utilize this feature, do the following on the camera:

- **Step 1** Because most players on 3GPP mobile phones do not support RTSP authentication, make sure the authentication mode of RTSP streaming is set to disable. For more information, see the "RTSP Streaming" section on page 5-22.
- Step 2 As the bandwidth on 3G networks is limited, you will not be able to use a large video size. Set the video streaming parameters as follows. For more information, see the "RTSP Streaming" section on page 5-22.
  - Video Mode—H.264
  - Frame Size—176 X 144
  - Maximum frame rate—5 fps
  - Intra frame period—1S
  - Video quality (Constant bit rate)—40kbps
- Step 3 As most ISPs and players only allow RTSP streaming through port number 554, set the RTSP port to 554. For more information, see the "RTSP Streaming" section on page 5-22.
- **Step 4** Launch the player, such as QuickTime, on the 3GPP-compatible mobile devices.

Step 5 Type the following URL commands into the player. The address format is rtsp://public\_ip\_address\_of\_your camera:rtsp\_port/ RTSP\_streaming\_access\_name\_for\_stream\_#\_with\_small\_frame\_size\_and\_frame\_rate.

For example:

#### rtsp://192.168.10.15:554/live2.sdp

You can configure Stream #2 into the suggested stream settings as shown above for live viewing on a mobile device.