



Client Settings

This chapter explains how to select the stream transmission mode and saving options on a local computer. When completed with the settings on the Client Settings page, click **Save** on the page bottom to enable the settings.

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H.265/H.264 Media Options

Select to stream video or audio data or both. This option is enabled only when the video mode is set to H.264 or H.265.

H.265/H.264 Protocol Options

Depending on your network environment, there are four transmission modes of H.264 or H.265 streaming:


- **UDP unicast**—This protocol allows for more real-time audio and video streams. However, network packets may be lost due to network burst traffic and images may be broken. Activate UDP connection when occasions require time-sensitive responses and the video quality is less important. Note that each unicast client connecting to the server takes up additional bandwidth and the camera allows up to ten simultaneous accesses.
- **UDP multicast**—This protocol allows multicast-enabled routers to forward network packets to all clients requesting streaming media. This helps to reduce the network transmission load of the camera while serving multiple clients at the same time. Note that to utilize this feature, the camera must be configured to enable multicast streaming at the same time. For more information, see the [“RTSP Streaming” section on page 5-27](#).

- TCP—This protocol guarantees the complete delivery of streaming data and thus provides better video quality. The downside of this protocol is that its real-time effect is not as good as that of the UDP protocol.
- HTTP—This protocol allows the same quality as TCP protocol without needing to open specific ports for streaming under some network environments. Users inside a firewall can utilize this protocol to allow streaming data through.

Two Way Audio

- Half duplex—Audio is transmitted from one direction at a time, for example, from a PC holding a web console with the camera.
- Full duplex—Audio is transmitted in both directions simultaneously.

MP4 Saving Options

You can record live video as you are watching it by clicking . Start MP4 Recording on the main page. Here, you can specify the storage destination and file name.

- Folder—Specify a storage destination on your PC for the recorded video files. The location can be changed.
- File name prefix—Enter the text that will be appended to the front of the video file name. A specified folder will be automatically created on your local hard disk.
- Add date and time suffix to the file name—Select this option to append the date and time to the end of the file name. The date and time appear in the format YYYYMMDD_HHMMSS. An example files name is CLIP_20170713_180853.

Local Streaming Buffer Time

Due to the unsteady bandwidth flow, the live streaming may lag and not be very smooth. If you enable this option, the live streaming will be stored temporarily on your PC's cache memory for a few seconds before being played on the live viewing window. This will help you see the streaming more smoothly. If you enter 3,000 Millisecond, the streaming will delay for 3 seconds.

Joystick settings

Enable Joystick

Connect a joystick to a USB port on your management computer. Supported by the plug-in (Microsoft DirectX), once the plug-in for the web console is loaded, it will automatically detect if there is any joystick on the computer. The joystick should work properly without installing any other driver or software.

Then you can begin to configure the joystick settings of connected devices.

To enable joystick settings, follow these steps:

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- Step 1** Select a detected joystick, if there are multiple, from the Selected joystick menu. If your joystick is not detected, it may be defective.
- Step 2** Click **Calibrate** or **Configure buttons** to configure the joystick-related settings.
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**Note**

- If you want to assign Preset actions to your joystick, the preset locations should be configured in advance in the Configuration > PTZ page.
 - If your joystick is not working properly, it may need to be calibrated. Click the **Calibrate** button to open the Game Controllers window located in Microsoft Windows control panel and follow the instructions for trouble shooting.
 - The joystick will appear in the Game Controllers list in the Windows Control panel. If you want to check for your devices, choose **Start > Control Panel > Game Controllers**.
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Buttons Configuration in Microsoft Windows

In the Button Configuration window, the left column shows the actions you can assign, and the right column shows the functional buttons and assigned actions. The number of buttons may differ from different joysticks.

To configure your joystick buttons, follow these steps:

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- Step 1** Choosing one of the actions and clicking **Assign** will pop up a dialog. Then you can assign this action to a button by pressing the joystick button or selecting it from the drop-down list.
- Step 2** Click **OK** to confirm the configuration.
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Buttons Configuration on the Camera

Click the **Configure Buttons** button and the Joystick Settings window appears.

To configure your joystick buttons, follow these steps:

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- Step 1** Select a button number from the Button # pull-down menu.

**Tip**

If you are not sure of the locations of each button, use the Properties window in the Game Controllers utility.

- Step 2** Select a corresponding action, such as Patrol or Preset#.
- Step 3** Click the Assign button to assign an action to the button. You can delete an association by selecting a button number, and then click the **Delete** button.

Repeat the process until you are done with the configuration of all preferred actions.

The buttons you define should appear on the button list accordingly.

Step 4 Click the **Save** button on the Client settings page to preserve your settings.
