## **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.
  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. 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 5-24.

- 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.
- File name prefix—Enter the text that will be appended to the front of the video file name.
- 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 of the recorded videos. The date and time appear in the format
  YYYYMMDD\_HHMMSS. An example files name is CLIP\_20180713\_180853.

#### **Local Streaming Buffer Time**

In a busy network, fluctuations in available bandwidth can occur. Video streaming may lag and may not proceed very smoothly. If you enable this option, video streams from the camera will be temporarily stored on the computer cache memory for a configurable period of time (seconds or milliseconds) before being played on a web session. 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 the USB plug of the joystick to a USB port on your management computer. Once a USB joystick is connected, the related joystick configuration will be available on the Client settings window. 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, click on the Configure buttons button. If your joystick is working properly, it will be displayed on the drop-down list.

#### **Buttons Configuration**

In the Joystick Settings window, you can use the combinations of pull-down menus, Actions and Button number, to assign joystick buttons with different functions. The number of buttons may differ from the joystick you attached.

To configure your joystick buttons, follow these steps:

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

For example: Assign Preset 1 (move to preset 1 position) to Button 1.

**Step 2** Select an action from the Actions menu. Click **Assign** to associate the button with an action.

Your configuration will be automatically saved.

- **Step 3** To disable an assignment, select the number of a button, and then click the **Delete** button. The associated action will then be cleared.
- **Step 4** Repeat the above process to assign actions to other buttons. When done, close the configuration window.



- If you want to assign Preset actions to your joystick, the PTZ preset locations should be configured in advance.
- 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 out for your devices, go to the following page: Start > Control Panel > Game Controllers. Follow the onscreen instructions to calibrate your joystick.

Joystick settings