



3xLOGIC VISIX Gen III Cameras

User Interface Guide Ver. 1.0 / 2020.07



Simple. Scalable. Secure.

Table of Contents

Adding a Camera to VIGIL Server	4	VCA - Enable	55
Adding a VISIX Gen III Camera to VIGIL Server -	5	IP Address Filter Configuration	56
Viewing a Camera in VIGIL Client	6	RTSP Authentication Configuration	57
3xLOGIC Camera Setup Utility-B	7	IEEE 802.1X Configuration	58
Main Screen - Change Password	8	HTTPS Configuration	59
Main Screen	9	Certificates Configuration	61
Browser Interface -	10	Service Configuration	62
Video Configuration	11	System Information	63
Video Configuration	12	System Diagnostics	64
Video Configuration	13	Firmware Update	65
Video Configuration	14	Date & Time Settings	66
OSD Configuration	15	DST Settings	67
Region of Interest Configuration	16	Users Management	68
Audio Configuration	17	System Log	69
Smart Stream RC Configuration	18	Language	70
Setup - Video & Audio Setup -	19	Factory Reset	71
Privacy Mask Configuration	20	Restart	72
Profile Configuration	21	System Open Source License	73
Camera Image Adjustment	22	PTZ Settings	74
Camera Exposure Settings	23		
Camera Day & Night Settings	24		
Camera Backlight Settings	25		
Camera White Balance	26		
Camera Image Enhancement	27		
Video Enhancement	28		
Network Status	29		
Network Settings	30		
Setup - Network Setup	31		
ONVIF Settings	32		
UPNP Settings	33		
DDNS Settings	34		
FTP Settings	35		
SMTP Settings	36		
SNMP Settings	37		
RTSP Information	38		
Action Rules Configuration	39		
Action Rules Add / Modify	40		
Image Transfer Configuration	41		
Relay Out Configuration	42		
Event Rules Configuration	43		
Event Rules Configuration	44		
Schedule Configuration	45		
Motion Detection Configuration	46		
Temperature	47		
Alarm Configuration	48		
Record Management	49		
Record Configuration	50		
Recording List	51		
Setup - Record Setup	52		
Recording Video	52		
Storage Configuration	53		
Storage Configuration	54		

Legal and Safety



a. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are

designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment

generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful

interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will

be required to correct the interference at his own expense.

b. This device complies with CAN ICES-3 (A)/NMB-3(A)

c. This device is UL and ULC E467574 (Safety) certified.

d. This device complies with CE 2014/30/EU – EMC Directive, 2015/863/EU RoHS3 as part of 2011/65/EU RoHS

e. This device complies with WEEE

For safety instructions, please refer to your camera's quick start guide, which features all safety information as well as steps for physical installation. Documentation for individual cameras is available at www.3xlogic.com.

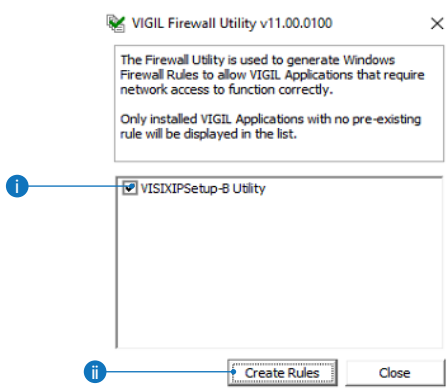
Quick Start- Adding a Camera to VIGIL Server

Please follow the steps below to identify a camera on your network and add the camera to VIGIL Server. Please be certain to install the latest available firmware for your camera from <https://www.3xlogic.com/resource/software-download-center>. Instructions on firmware installation are available in section "Setup - System Setup - Firmware Update".

1 Connect the IP Camera and PC to the configured network.

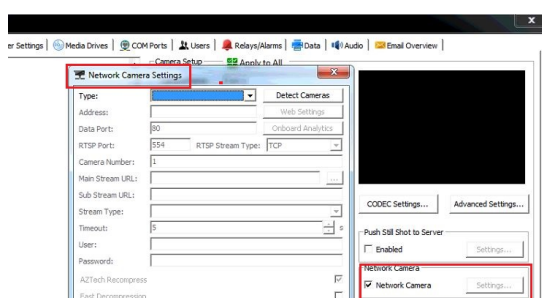
2 Before adding a camera to VIGIL Server, a firewall rule must be created for new camera detection utility. This can be easily performed using the VIGIL Firewall Utility:

- Open the Windows Start menu and navigate to Programs>VIGIL>Utilities >Firewall Utility.
- After the firewall utility launches, check the box for VSXIPSetup-B Utility.
- Click Create Rule(s).
- A firewall rule for the utility will be created.

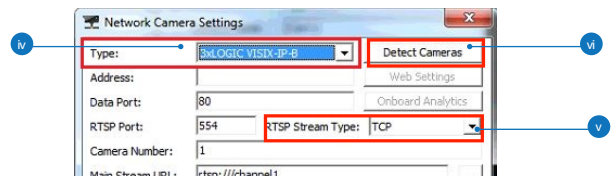


3 Adding the Camera to VIGIL Server -After creating the appropriate firewall rule, the camera can now be added to VIGIL Server. To begin:

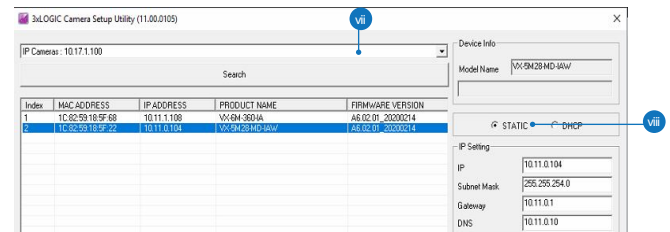
- Update the system to VIGIL Server v11.00.0100 or newer. If updating to v11 series is not possible, alternative details are provided in the applicable steps below.
- Download the latest version of the 3xLOGIC Camera Detection Utility-B (VISIXIPUtility-b.exe) [here](#) and install in on the VIGIL Server system. Confirm a firewall rule for the utility has been created, as instructed in the previous section.
- Launch VIGIL Server, open settings (right-click Server tray icon, click Advanced Settings, login and the Camera Setup tab opens by default), select an available camera channel from the available list and open the Network Camera Settings form.



- For v11 series systems, select 3xLOGIC VISIX-IP-B in the Type drop-down. For pre-v11 series systems, select RTSP in the Type drop-down.
- Set the RTSP Stream Type as TCP



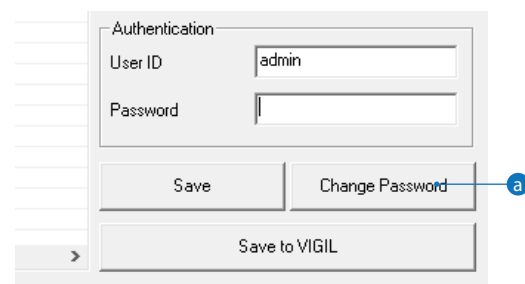
- For VIGIL 11 series systems, click the Detect Cameras button to start the 3xLOGIC Camera Setup Utility-B. For Pre 11 systems, launch the utility from Start>Program Files> VIGIL > VISIXIPUtility-B.exe.



- When the utility deploys, select the desired network adapter (i.e IP Cameras in the above example) from the available drop-down menu and click Search. A list of detected cameras will be displayed. The utility will list IP and product info for each device. Select a camera from the list to edit camera settings.
- The default IP mode for GEN III VISIX models is DHCP. If necessary, choose STATIC to edit the camera's IP, gateway, and DNS. Click Save (located bottom right of utility) after making any IP settings changes.
- Before proceeding further, the camera's administrative password must be changed from its default to ensure your camera's data is secure. VIGIL Server cannot stream video from the camera if the password is not changed. This is to ensure best security practices. Password setup can be performed from the utility or in the camera's browser UI. Choose one of the following options:

WARNING: *IMPORTANT* VIGIL Server cannot stream video from the camera if the admin password is not changed. This is to ensure best security practices. Always change default device credentials.

- To change the password in the utility, select the camera, enter in the default login credentials of admin/admin in the Authentication section, click the Change Password button and follow the on-screen prompts. When finished, skip to Step 10 of this section.



- To change the password from the browser, see instructions in "Browser Interface - Main Screen (Change Password)" section of this guide.

- The process for finalizing the addition of a camera to Server varies between v11 systems and pre-v11 systems. See 'a' below for instructions on v11 series and newer systems. See 'b' below for instructions on saving the camera to pre-v11 series VIGIL Servers.

Quick Start - Adding a VISIX Gen III Camera to VIGIL

- a. On VIGIL 11 series systems, select the camera from the utility list, click Save to apply any new settings to the camera then click Save to VIGIL. Camera information (highlighted in the below screenshot) will be automatically added to the camera's Network Settings form in VIGIL Server.

- b. On pre-v11 series systems, the information in the utility must be used to manually fill out the Network Camera settings form in VIGIL Server. Use the IP address and other available info for the camera in the detection utility to fill out the following fields in the Network Camera Settings form:

- **Type:** RTSP. (this setting was configured earlier in this section, but be sure to confirm).
- **Address:** Enter the IP address of the camera as displayed in the detection utility.
- **Main Stream URL:** rtsp://IP.ADDRESS/channel1
- **Sub-Stream URL:** rtsp://IP.ADDRESS/channel2 (this field may be greyed out if the Substream box has not been toggled on).
- **Stream Type:** H264/H265
- **User:** admin
- **Password :** Use the new password you configured earlier in this section.
- **Sub Stream** - Toggle this box to enable substream.

- xi. After the utility has auto filled the fields, or you have manually entered the information, click the OK button. Set the Recording Speed fields to Set by Camera and click OK or Apply. The camera will now be saved to VIGIL Server.

Your Camera should now be added to VIGIL Server and should begin recording via motion detection automatically. View live , playback and more via VIGIL Client. See "Quick Setup - Viewing the Camera in VIGIL Client" for more information.

Troubleshooting Tips

■ Failure to Save Camera to VIGIL Server

Login to the camera and confirm the default username and password have been changed. In keeping with modern security practices, the camera cannot be added to VIGIL Server with the default credentials in place.

Be certain to install the latest available firmware available for the camera at the 3xlogic.com [Software Download Center](#).

■ - Delay, Frame Skipping When Live Viewing in VIGIL Client / VIGIL Server System High CPU Usage

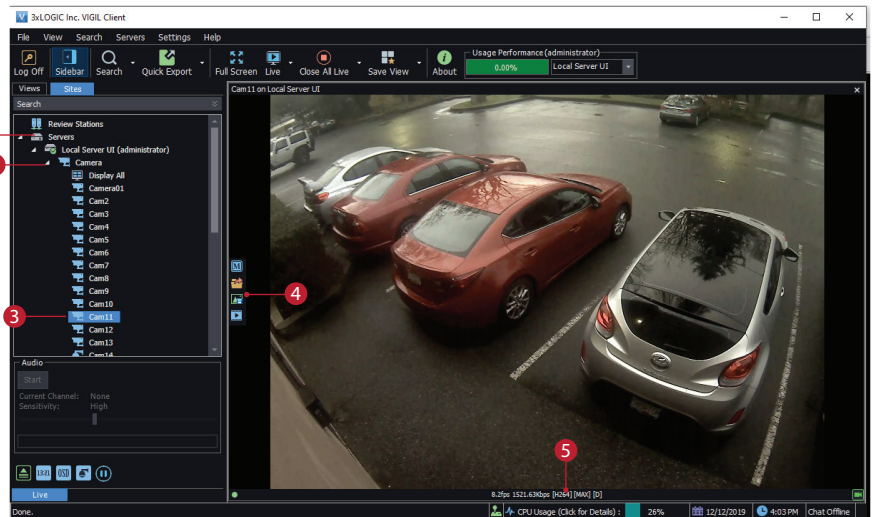
Adjust the camera's codec and resolution in the camera's browser UI. This can be especially helpful when cameras are interfaced with older VIGIL Server systems.

See [SB 200008](#) for more information.

Quick Setup - Viewing a Camera in VIGIL Client

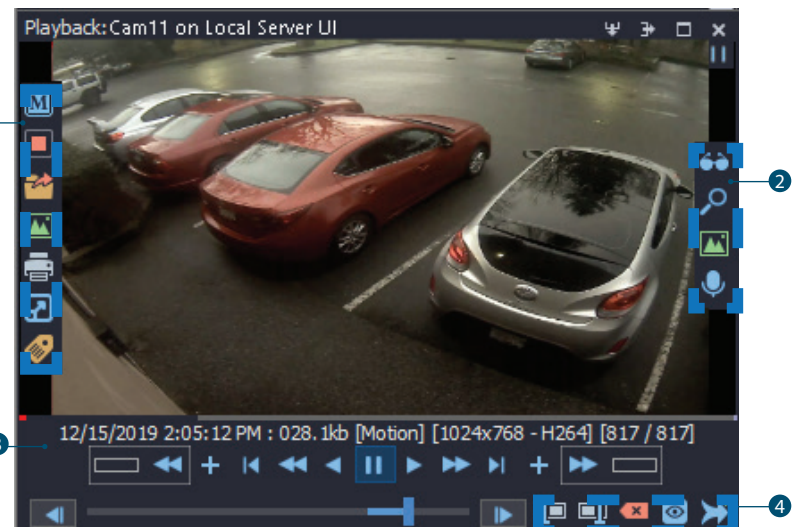
After adding a camera to VIGIL Server, 3xLOGIC recommends VIGIL Client for viewing live and playback. Client's powerful tool set can be leveraged by users to thoroughly and quickly review camera footage and other data collected by a VIGIL Server. After adding a VIGIL Server to VIGIL Client, refer to the steps in this section for details on viewing the camera's footage in VIGIL Server.

- 1 After launching VIGIL Client, extend the Servers node located in the Sites tab treeview then double-click the desired VIGIL Server to reveal available devices and tools
- 2 Expand the Camera node to reveal the VIGIL Server's cameras.
- 3 Double-click the desired camera. The camera's live stream will be automatically displayed in the viewing area.
- 4 Live Edge Controls instantly grant the user access to common tools such as Capture Still Image, Instant Replay and Stream Type Selection.
- 5 Stream information such as FPS rate, bitrate and CODEC type are listed when the cursor hovers over the bottom edge of the frame.



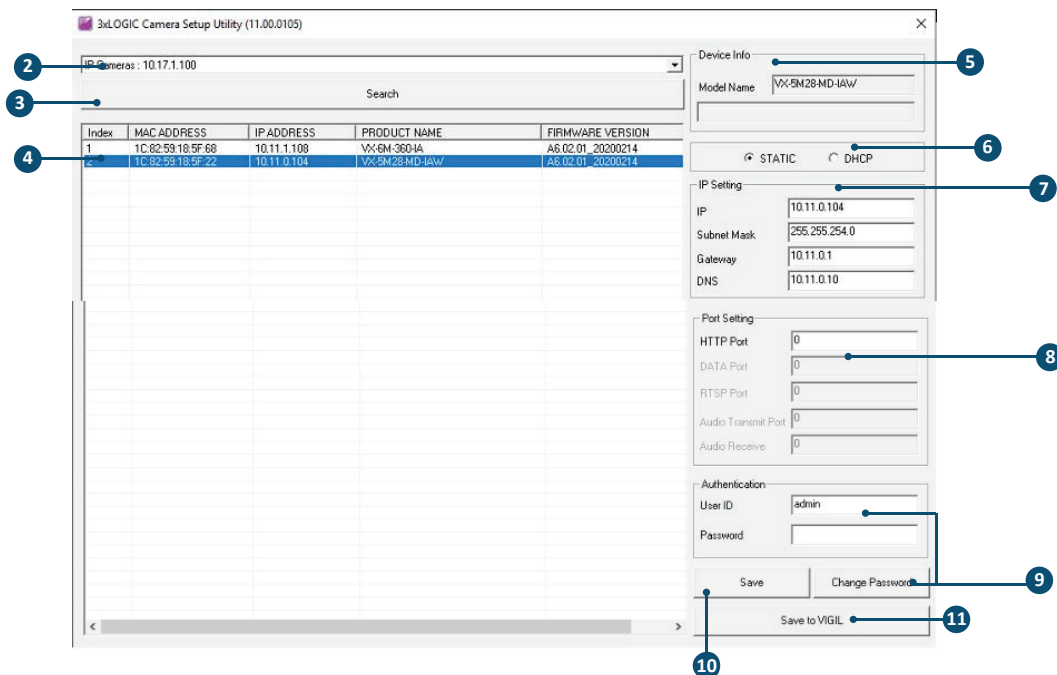
Select **Instant Replay** from the Live Edge Controls to open the last 5 minutes of footage from the camera or perform a playback search to review a custom timerange of playback. A Playback viewer featuring the requested footage will deploy.

- 1 Playback Left-Edge controls include Export Video or Stills, Stream Mode Selection and Screen Record, etc...
- 2 Right-Edge Controls include more tools such as Smart Search, Audio and Zoom Controls and Image Control.
- 3 Stream information and standard playback controls are accessible at the bottom of the frame.
- 4 Located next to the scrub bar, footage markers and export tools can be used to quickly narrow down and export portions of interest within larger video clips



For further details on reviewing and exporting playback and other advanced features such as audio recording and two-way audio talk, POS Data OSD and more, please visit www.3xlogic.com and consult the product documentation library for VIGIL Client-related support documentation. Visit 3xLOGIC University at <https://www.3xlogic.com/training> for training and education.

Setup Tools - 3xLOGIC Camera Setup Utility-B



Standard usage of the 3xLOGIC Camera Setup Utility-B is detailed on this page.

1 Run the 3xLOGIC Camera Setup Utility-B

- Download and install the latest version of the utility at www.3xlogic.com.
- Navigate to Start > Programs > VIGIL>Utilities and launch the VIGIL Firewall Utility. Create a firewall rule for **VISIXIPSetup-B Utility** if one has not already been created.
- Launch VIGIL Server, navigate to Settings > Cameras.
- Select the desired camera channel from the treeview.
- Open Network Camera Settings and set the Type to **VISIX-IP-B**.
- Click the **Detect Camera** button. The utility will now launch.

2 Click on Network Adaptor selection Menu (NIC) after the utility deploys.

3 Select the NIC associated with your cameras then click on the Search button. Allow the utility time to identify cameras.

4 Select the desired camera.

5 The information of the selected camera will be shown in Device Info.

6 Select the network type.

7 Input IP settings information when the network type is set to STATIC. Always click Save after changing IP Settings.

- i** Default TCP/IP information
- IP: 192.168.1.80
 - Subnet Mask: 255.255.255.0
 - Gateway: 192.168.1.1
 - DNS : 168.126.63.1

8 Change the port as necessary when the network type is set to STATIC.

- i** A 'Port Forwarding' has to be set for external access to the camera.
- i** Refer to the manual of the network hub for 'Port Forwarding' settings.
- i** An additional change of HTTPS, RTSP port can be done at Web Viewer >Admin page.

9 Change Password.

- i** Default ID / PW : admin / admin

- ⚠** The default user ID and password must be changed for security reasons. Video will not stream from the camera until the default admin password is changed. Enter the default credentials (admin / admin) and click Change Password. A pop-up will deploy. Enter and confirm a unique password, then click OK to complete the change.
- ⚠** The ID and PW will be set to defaults when a 'factory reset' is performed on the camera.

10 Make sure to click on 'Save' button to save changed values.

- ⚠** An Apply message will deploy when the settings are applied normally, or an error message will deploy if the settings fail to apply. This step saves settings to the camera itself

11 After applying the new camera settings, click Save to VIGIL

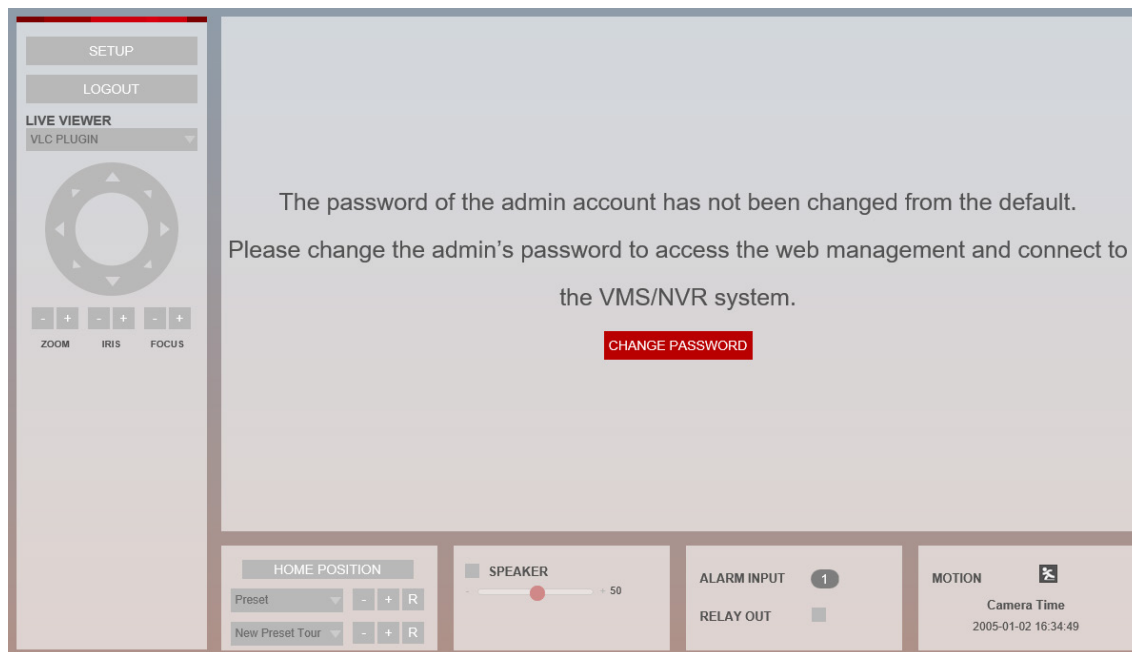
- ⚠** This step saves the camera to the VIGIL Server software. The camera will occupy the camera channel you selected in Step 1 (iv) of this section.

* Rebooting or Resetting the Camera to Factory Settings

- ⚠** If a factory reset is required, login to the camera's browser interface (enter IP into a browser URL bar and login to the camera) then navigate to Setup > System > Factory Reset. To perform a basic camera restart, Navigate to Setup > System > Restart.

Browser Interface -

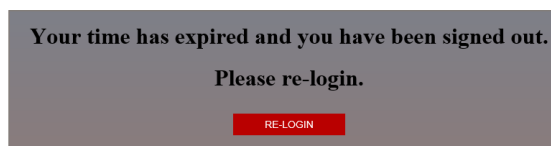
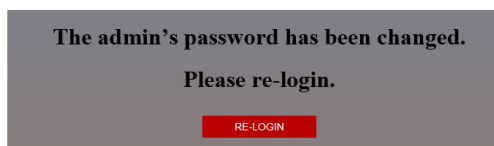
Main Screen - Change Password



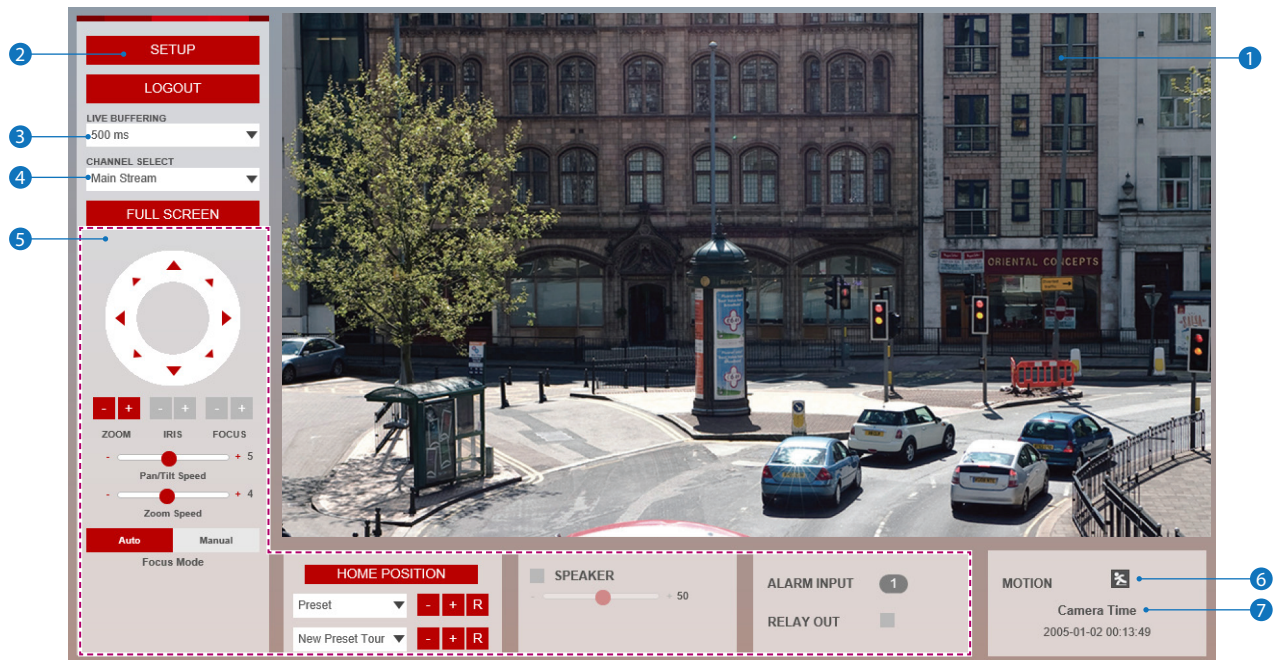
Password change is required at initial connection when the camera is new from factory or when a factory reset has been performed. The password can be reset from the 3xLOGIC Camera Setup Utility-B, however, if the camera's browser UI is opened first, the user will be prompted on login to change the password. See below for instructions:

- 1 If the default password for the camera has not previously changed, no camera image will be visible and the Setup button will be disabled.
- 2 Change the password by filling in a new password (password guidelines provided. See screenshot below) and clicking the CHANGE PASSWORD button.

- 3 After changing the password, you must re-login. If no input is received, a time expiry pop-up will deploy also asking for a re-login. In either case, click RE-LOGIN and enter the credentials to log back into the camera's interface.



Browser Interface - Main Screen



Web viewer is optimized with Internet Explorer 10 or newer versions and Firefox.

If VLC is not installed or VLC plugin is not supported (Chrome), Live buffering and Channel select menus will be changed to a Live Viewer menu. If HTML5(MJPEG) is selected on Live Viewer menu, then video can be checked.

1 Live video display.

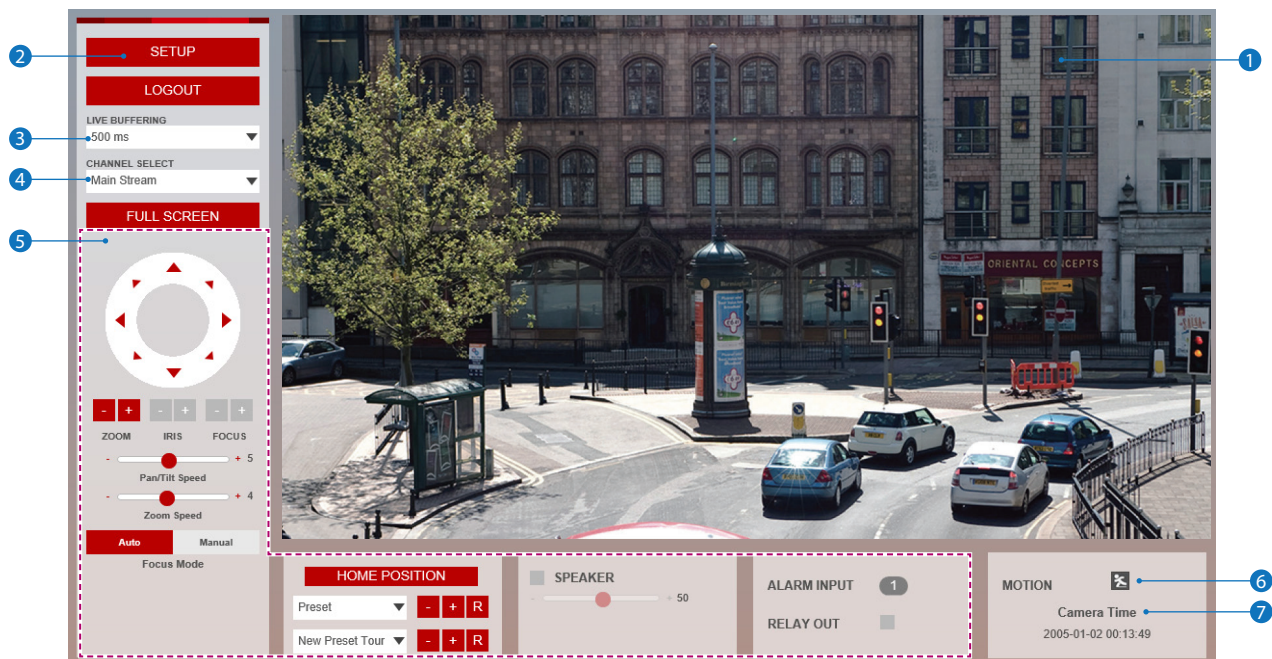
2 Setup button. Click it to open the Setup page to setup and configure settings for the camera like Video, Network, Events, System Settings, etc... See 'Setup' section for more details.

3 Configure the Live buffering value to increase or decrease the buffering delay. The longer the delay, the smoother the image will remain during periods of high network activity or CPU usage.

4 Channel Select button. Select one of the camera's available streams to display it in the live viewer

Refer to 'Setup > Video & Audio > Video' to customize the Video Stream settings.

Browser Interface - Main Screen - Cont'd



- 5 PTZ, Presets, Tours, Speaker / Audio Controls and Alarm controls are model-dependent and will only be accessible on applicable models.

PTZ Control - If using a PTZ-enabled model camera, PTZ motion can be controlled from this interface.

Home Position - Click this button to reset the PTZ to default home position.

Preset - You can add PTZ presets by clicking the + button when the camera is at the desired PTZ location. Up to 255 presets can be saved.

Please enter preset name.

pres002

Preset Tour - You can add a Preset Tour by clicking the + button and adding the desired PTZ presets you would like the camera to tour. Up to 10 Tours can be saved.

Delay and Speed can be set from 1 to 10.

PRESET TOUR

Preset Tour01 +

Index	Function	Delay:1-10(s)	Speed:1-10
1	[1]pres001	1	1

Add Modify Delete

Speaker Control - Enable/Disable the Audio stream received from the camera. The system volume can also be set. Audio controls are only available for applicable models.

Alarm Input - Alarm input indicator. If an alarm is triggered, the corresponding input's color will be changed to red from gray.

Relay Out - Using these controls, you can read the status of the Relay Out switch and also set or reset it manually.

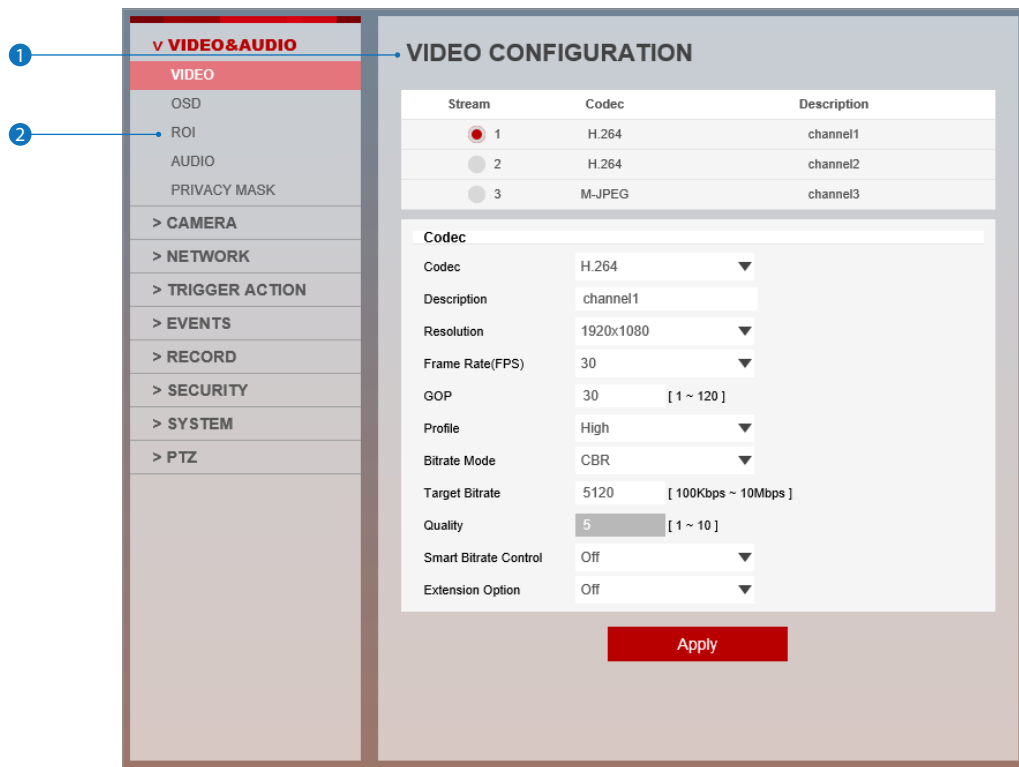
- 6 **Motion** - This indicator shows the Motion event status.

Event Alert Icon () appears if 'Motion Detection' is activated. Motion record is enabled by default.

- 7 **Camera Time** - Display the camera system's time.

Setup - Video & Audio Setup

Video Configuration



- ① **Details Pane-** When an item is selected from the menu, related items and settings will be visible in the Details pane.
- ② **Setup Menu -** A list of configurable settings and information. Click a menu link to view related content. Some settings are model-dependent and will only be accessible for applicable models.
 - **Video&Audio**
[VIDEO, OSD, ROI, AUDIO, PRIVACY MASK]
 - **Camera**
[PROFILE, IMAGE ADJUSTMENT, EXPOSURE, DAY&NIGHT, BACKLIGHT, WHITE BALANCE, IMAGE, VIDEO]
 - **Network**
[STATUS, NETWORK SETTING, AUTO IP, ONVIF, UPNP, DDNS, FTP, SMTP, SNMP, RTSP INFORMATION]
 - **Trigger Action**
[ACTION RULES, IMAGE TRANSFER, RELAY OUT]
 - **Events**
[EVENT RULES, SCHEDULE, MOTION, TEMPERATURE, ALARM]
 - **Record**
[MANAGEMENT, RECORD LIST, STORAGE]
 - **VCA**
[Enable]
 - **Security**
[IP ADDRESS FILTER, RTSP AUTHENTICATION, IEEE 802.1x, HTTPS, CERTIFICATES, SERVICE]
 - **System**
[INFORMATION, DIAGNOSTICS, FIRMWARE UPDATE, DATE&TIME, DST, USER MANAGEMENT, LOG, LANGUAGE, FACTORY RESET, RESTART, OPEN SOURCE]
 - **PTZ**
[PTZ SETTINGS]

Setup - Video & Audio Setup

Video Configuration

VIDEO CONFIGURATION

Stream	Codec	Description
1	H.264	channel1
2	H.264	channel2
3	M-JPEG	channel3

Codec

Codec: H.264

Description: channel1

Resolution: 1920x1080

Frame Rate(FPS): 30

GOP: 30 [1 ~ 120]

Profile: High

Bitrate Mode: CBR

Target Bitrate: 5120 [100Kbps ~ 10Mbps]

Quality: 5 [1 ~ 10]

Smart Bitrate Control: Off

Extension Option: Off

Apply

1 Live Video Channel Setup - Each available video stream can be configured to a variety of settings using any combination of the available codecs and resolutions. The amount of available streams will differ depending on the camera model. Toggle the button for the stream you would like to edit.

⚠ Camera performance should always be considered when configuring multiple channels / streams. Each active channel will cause additional strain on the camera's CPU. H.265 (HEVC) codec with higher bitrates may cause the unstable live streaming in the browser interface as well as within VIGIL Server / Client on older systems. See SB20008 for best practices on mitigating performance issues on older systems.

2 Codec - Choose the video codec. Subcategories will be changed automatically depending on the selected codec.

3 Description - Input a description for the selected channel / stream. Max. 30 alpha-numeric characters as well as special characters (including space) can be used.

4 Resolution - Select the video resolution.

⚠ Available resolutions will depend on the selected codec as well as the camera model's lens.

Example of common resolutions are listed below.

Format	QXGA	3.7m	3m	1080p/i	720p/i	SVGA	VGA	4CIF	CIF
NTSC	2592 x 1944	2560 x 1440	2304 x 1296	1920x1080	1280x720	800x600	640x480	704x576 704x480	352x288 252x240
PAL	2592 x 1944	2560 x 1440	2304 x 1296	1920x1080	1280x720	800x600	640x480	704x576 704x480	352x288 252x240

5 Frame Rate - Select the maximum Frame Rate (FPS).

Setup - Video & Audio Setup

Video Configuration

Stream	Codec	Description
<input checked="" type="radio"/> 1	H.264	channel1
<input type="radio"/> 2	H.264	channel2
<input type="radio"/> 3	M-JPEG	channel3

Codec

Codec

H.264

Description

channel1

Resolution

1920x1080

Frame Rate(FPS)

30

6

GOP

30 [1 ~ 120]

7

Profile

High

8

Bitrate Mode

CBR

Target Bitrate

5120 [100Kbps ~ 10Mbps]

Quality

5 [1 ~ 10]

Smart Bitrate Control

Off

Extension Option

Off

Apply

- 6 **GOP(Group of Pictures) Size** - Set up the number of p-frames (frames which contain only changed information based on the basic key frame or I-frame) in a GOP.

⚙ **GOP(Group of Pictures) Size is..**

I-frame and P-frame can be created for MPEG4, H.264 and H.265 (HEVC) video compression. I-frame(key-frame) is essentially the whole image with all captured data for one specific scene of video. A P-frame is a frame based on the I-frame, but contains only data that is changed from the original I-frame. A GOP is made up of one I-frame and its corresponding several P-frames. To improve video quality, set the number of P-frames lower and to decrease image size, set the number of P-frames to a larger value.

- 7 **Profile** - The profile defines the subset of bit stream features in H.264, H.265 (HEVC) stream, including color reproduction and additional video compression.

⚙ H.264 : Main, High / H.265 (HEVC) : Main

Main - An intermediate profile with a medium compression ratio. The main profile supports I-frames, P-frames, and B-frames.

High - A complex profile with a high compression ratio. The high profile supports I-frames, P-frames, and B-frames.

- 8 **Bitrate Mode** - Select the bit rate control scheme of video compression to CBR (Constant Bit Rate) or VBR (Variable Bit Rate).

CBR - To guarantee the designated constant bit rate, the quality of video is controlled in this mode.

Therefore, the quality of video is likely to varying when network traffic is changing.

VBR - To guarantee the designated quality, the bit rate of video stream is changed in this mode.

Therefore, the frame rate of video is likely to varying when network traffic is changing.

⚙ This category will only appear for some codecs.

Setup - Video & Audio Setup

Video Configuration

The screenshot shows the 'VIDEO CONFIGURATION' window. At the top is a table with three columns: Stream, Codec, and Description. Stream 1 is selected with a red dot. Below the table is a 'Codec' section with various settings. Numbered callouts point to the following elements:

- 9: Target Bitrate (5120)
- 10: Quality (5)
- 11: Smart Bitrate Control (Off)
- 12: Extension Option (Off)
- 13: Apply button

Stream	Codec	Description
<input checked="" type="radio"/> 1	H.264	channel1
<input type="radio"/> 2	H.264	channel2
<input type="radio"/> 3	M-JPEG	channel3

Codec
Codec: H.264
Description: channel1
Resolution: 1920x1080
Frame Rate(FPS): 30
GOP: 30 [1 ~ 120]
Profile: High
Bitrate Mode: CBR
Target Bitrate: 5120 [100Kbps ~ 10Mbps]
Quality: 5 [1 ~ 10]
Smart Bitrate Control: Off
Extension Option: Off

Apply

9 **Target Bitrate** - If Bitrate Control is set to CBR, you can set the Target Bitrate.

10 **Quality** - For VBR control mode, The target Quality of video can be setup (1 is low quality, 10 is higher quality)

11 **Smart Stream** - Off / Smart Stream RC / Smart Stream ETC (ATF). Available options will depend on the camera model. See the corresponding setup section for Smart.RC and Smart.ACF for more information.

12 **Extension Option**

Off - Turn off the Extension Option.

SVC-T On - The H.264, H.265 (HEVC) SVC (Scalable Video Coding) Extension is a video compression algorithm that enables effective and efficient transmission of video files over low bandwidth networks.

13 Click **Apply** to save new settings.

Setup - Video & Audio Setup

OSD Configuration

The screenshot shows the 'ON SCREEN DISPLAY(OSD) CONFIGURATION' window. It contains three main sections: 'Date & Time', 'User Text', and 'PTZ'. Each section has an 'Off' (red) and 'On' (grey) radio button, and two numeric input fields for 'position X' and 'position Y', both with a range of '[0 ~ 100]'. The 'User Text' section also includes a 'Text' input field. A red 'Apply' button is located at the bottom right. Four blue numbered callouts point to specific elements: 1 points to the 'Date & Time' section header, 2 points to the 'User Text' section header, 3 points to the 'PTZ' section header, and 4 points to the 'Apply' button.

ON SCREEN DISPLAY(OSD) CONFIGURATION

1 **Date & Time**
☒ Off ☐ On
position X: 0 [0 ~ 100]
position Y: 0 [0 ~ 100]

2 **User Text**
☒ Off ☐ On
position X: 0 [0 ~ 100]
position Y: 0 [0 ~ 100]
Text:

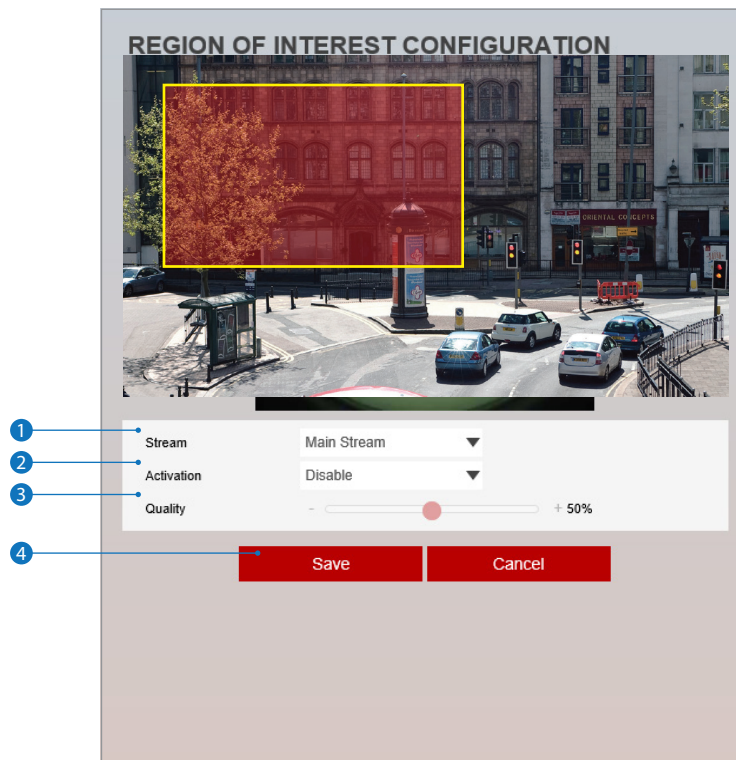
3 **PTZ**
☒ Off ☐ On
position X: 0 [0 ~ 100]
position Y: 0 [0 ~ 100]

4 **Apply**

- ① **Date / Time** - Display the current time.
- ② **User Text** - Output the TEXT entered by the user. Supports a maximum of 30 characters.
- ③ **PTZ** - Display PTZ information. This field is only visible on models with hardwired PTZ functionality.
- ④ Click **Apply** to save the above settings.

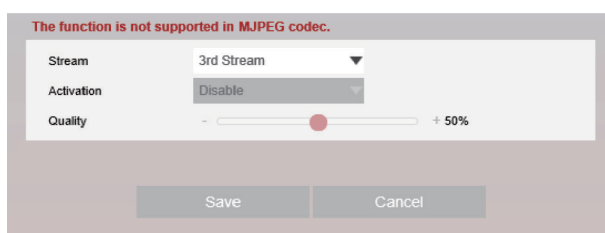
Setup - Video & Audio Setup

Region of Interest Configuration



The Region of interest (ROI) function increases picture quality for an indicated area while maintaining lower quality for the rest of the image to help maintain bandwidth usage.

- 1 **Stream** - Select the Stream to apply the ROI to.
 - ❗ ROI currently supports only H.264, H.265 (HEVC).
 - ❗ The function is not supported with the MJPEG codec.



- 2 **Activation** - The Region of interest can be enabled or disabled here.
- 3 **Quality** - Set the quality of the set ROI area.
- 4 Click **Save** to save the current settings.
 - ❗ Click 'Cancel' to return to the previous setting.

Setup - Video & Audio Setup

Audio Configuration

The screenshot shows a web interface titled "AUDIO CONFIGURATION". It contains a section labeled "Audio Encode" with three dropdown menus: "Codec" (set to "G.711 ulaw"), "Volume" (set to "5"), and "Sample Rate" (set to "8,000 Hz"). Below these is a red "Save" button. Four numbered callouts point to these elements: 1 points to the Codec dropdown, 2 points to the Volume dropdown, 3 points to the Sample Rate dropdown, and 4 points to the Save button.

- 1 **Codec** - Select the Audio Codec.
 - ⚙ Currently only G.71 is supported.
- 2 **Volume** - Set the Audio Volume from 0 to 10.
- 3 **Sample Rate** - Select the Audio Sample Rate.
 - ⚙ Currently only 8000 Hz is supported.
- 4 Click **Save** to save settings changes.

Setup - Video & Audio Setup - Smart Stream RC Configuration

The screenshot shows the 'SMART STREAM RATE CONTROL' configuration interface. It features a 'General Setting' section with the following elements:

- 1** Stream: A dropdown menu currently showing 'Main Stream'.
- 2** Stream Quality: A dropdown menu currently showing 'Low'.
- 3** Dynamic GOP: Two radio buttons, 'Off' (selected) and 'On'.
- 4** FPS Drop: Two radio buttons, 'Off' (selected) and 'On'.
- 5** Apply: A red button to save the settings.

All menus for this configuration page can be activated by enabling *Smart RC* in the *Smart Stream* menu on the *Video Configuration* page.

- 1 Stream** - Select the stream to apply Smart RC to. Main-stream and sub-stream are available.
- 2 Stream Quality** - Select the desired stream quality. Low, Medium, High and Extreme are available.
- 3 Dynamic GOP** - Select dynamic GOP to enable dynamic p-frame limits for GOP.
- 4 FPS Drop** - Select to enable FPS drops when necessary meet image quality selection.
- 5** Click **Apply** to save new settings.

Setup - Video & Audio Setup - Smart Stream ETC (ACF) Configuration

SMART STREAM EVENT TRIGGERED CONTROL

General Setting

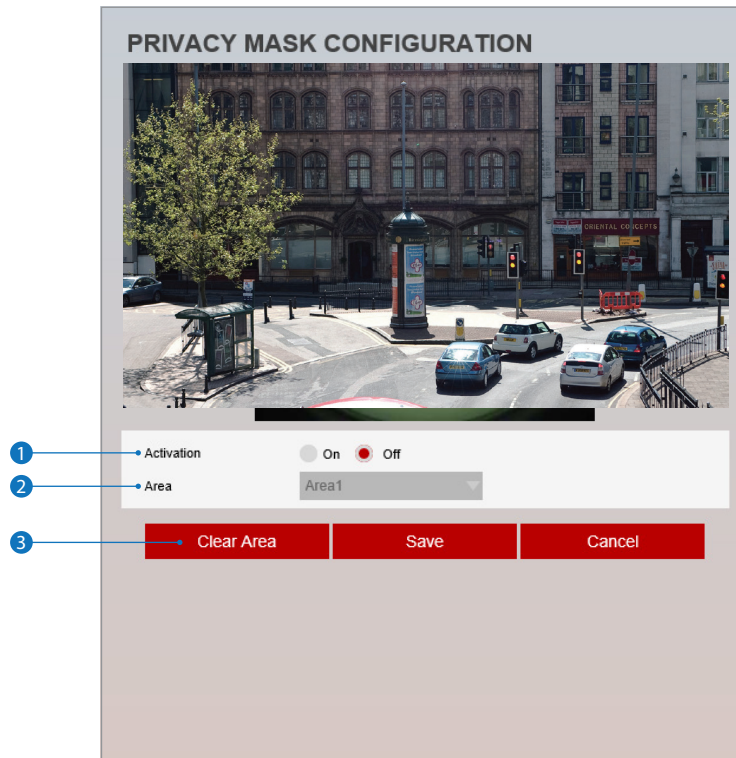
1 Stream	Main Stream
2 Frame Rate(FPS)	30
3 GOP	60
4 Bitrate Mode	CBR
5 Target Bitrate	4096
6 Hold On Time	10
7 Trigger Event	Motion
8	Apply

Smart ETC allows specific stream settings to be used when a specific event occurs. ETC settings can be configured on this page. All menus are activated by enabling *Smart Stream ETC* in the *Smart Stream* menu located on the *Video Configuration* page.

- 1 **Frame Rate** - Set the frame rate value to change to when the trigger event occurs.
- 2 **GOP** - Set the GOP value (P-frame limit) to change to when the event trigger occurs.
- 3 **Bitrate Mode** - Set to the bitrate mode to change to when the event trigger occurs.
- 4 **Target Bitrate** - Set the Target Bitrate to be set when the event trigger occurs.
- 5 **Hold on time** - Set the amount of time to keep the Smart Stream ETC settings active when a event trigger occurs (5-60 seconds).
- 6 **Trigger Event** - Select the event that will trigger Smart ETC settings to activate. Motion / Alarm Input / Motion and Alarm Input event triggers are available.
- 7 Click **Apply** to save new settings.

Setup - Video & Audio Setup

Privacy Mask Configuration

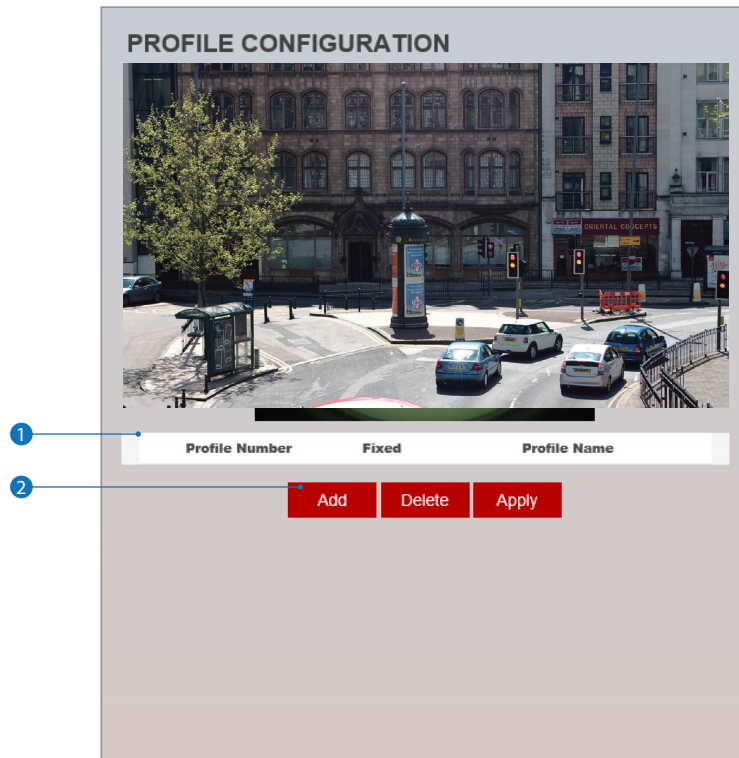


Use this function to mask areas that you want to hide on screen to protect privacy.

- 1 **Activation** - The Privacy mask function can be enabled or disabled here.
- 2 **Area** - Select an area designation (Area1 ~ Area16) and draw the privacy area.
- 3 Click **Save** to save the current settings.
 - ⌘ Click 'Cancel' to return to the previous setting.
 - ⌘ Click 'Clear Area' to delete the selected Area.

Setup - Camera Setup

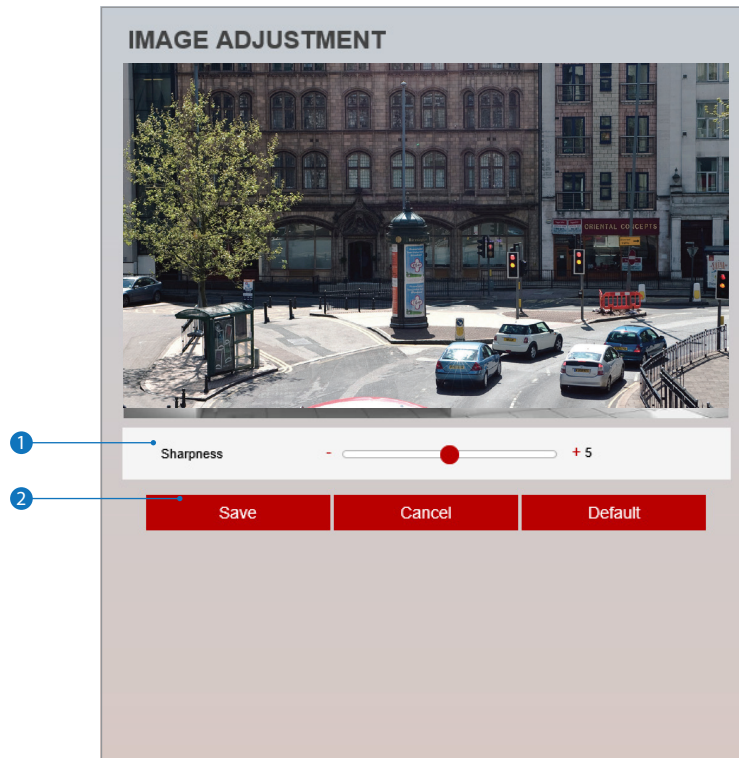
Profile Configuration



- 1 **Profile List** - Displays information about available camera settings profiles.
- 2 Click 'Add' to add a new profile using the current camera settings.
 - ⌘ Click 'Delete' to delete selected item from the profile list.
 - ⌘ Click 'Apply' to apply settings from the selected profile.

Setup - Camera Setup

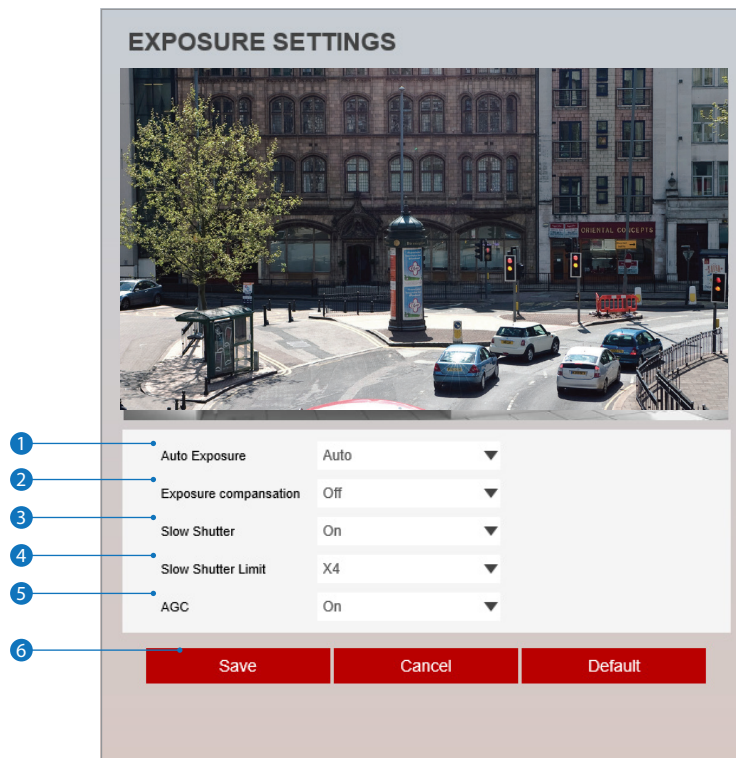
Camera Image Adjustment



- 1 **Sharpness** - Using this control, sharpness of image can be adjusted to meet your preference.
- 2 Click **Save** to save the current settings.
 - ⌘ Click 'Cancel' to return to the previous settings.
 - ⌘ Click 'Default' to return settings to the factory defaults.

Setup - Camera Setup

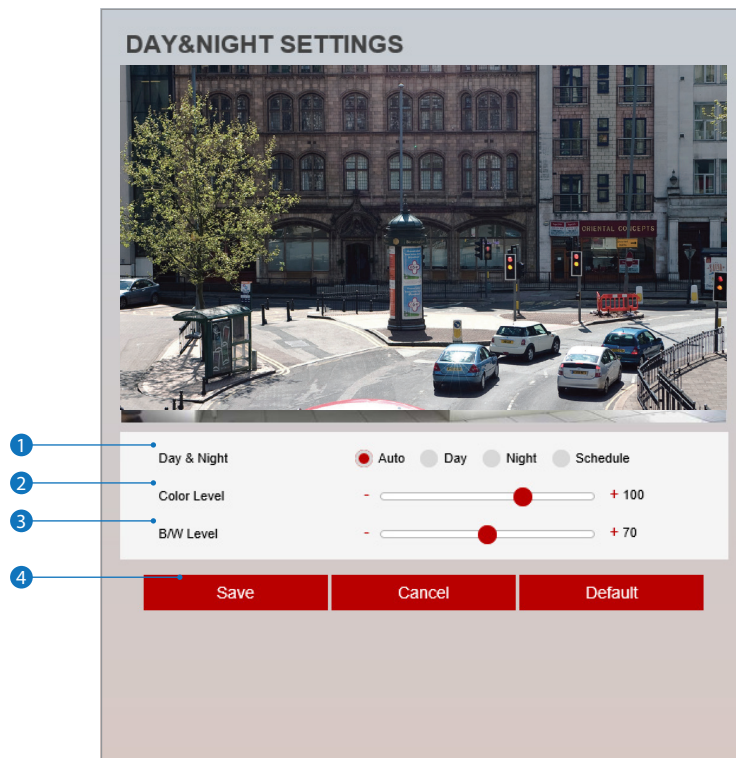
Camera Exposure Settings



- 1 **Auto Exposure (Auto)** - Automatic exposure(AE) automatically sets the aperture or shutter speed, based on the external lighting conditions for the photo. Auto / Manual / Shutter Priority / Iris Priority / Bright Mode. Available shutter speeds may vary depending on the camera model.
 - **[Manual]**
 - Shutter Speed : 1/8, 1/15, 1/30, 1/60, 1/120, 1/125, 1/700, 1/1000, 1/1600, 1/2500, 1/5000, 1/7000, 1/10000, 1/30000
 - Iris : 0 (Close) ~ 20 (Open)
 - Gain : 0 step ~ 10 step
 - **[Shutter]**
 - Shutter Speed : 1/8, 1/15, 1/30, 1/60, 1/120, 1/125, 1/700, 1/1000, 1/1600, 1/2500, 1/5000, 1/7000, 1/10000, 1/30000
 - **[Iris]**
 - Iris : 0 (Close) ~ 20 (Open)
 - **[Bright]**
 - Bright : Adjust the brightness. 0 (dark) ~ 20 (bright)
- 2 **Exposure Compensation** - Using this function helps to improve image quality by compensating for exposure. Select On / Off.
- 3 **Slow Shutter** - Slow shutter can be set to On / Off.
- 4 **Slow Shutter Limit** - Set the slow shutter limit. x2 / x4 are available.
- 5 **AGC** - Enable this function to enable Automatic Gain Control.
- 6 Click **Save** to save the current settings.
 - ⚙ Click 'Cancel' to return to the previous settings.
 - ⚙ Click 'Default' to return settings to the factory defaults.

Setup - Camera Setup

Camera Day & Night Settings



1 Day & Night

- **Auto:** In this mode, the IR cut filter is applied automatically depending on the light conditions of the environment.
- **Day:** In this mode, the IR cut filter is applied to the image sensor at all times.
Thus, the sensitivity will be reduced in dark light conditions but better color reproduction performance is obtained.
- **Night:** In this mode, the IR cut filter on the image sensor is always disabled.
The sensitivity will be enhanced in dark light conditions but the image is black and white.
- **Schedule:** In this mode, Day / Night mode is converted in accordance with the scheduled time.

⚙ Schedule

- Day > Night Time / Night > Day Time : If it is set to schedule mode, Set the time that Day / Night mode switches.

Day & Night	<input type="radio"/> Auto	<input type="radio"/> Day	<input type="radio"/> Night	<input checked="" type="radio"/> Schedule
Day -> Night Time	19	:	00	
Night -> Day Time	5	:	00	

- 2 **Color Level** - Set the color level threshold for switching Night mode into Day mode when Day & Night mode is set to Auto.

- 3 **B / W Level** - Set the Black and White Level threshold for switching change Day mode into Night mode when Day & Night mode is set to Auto.

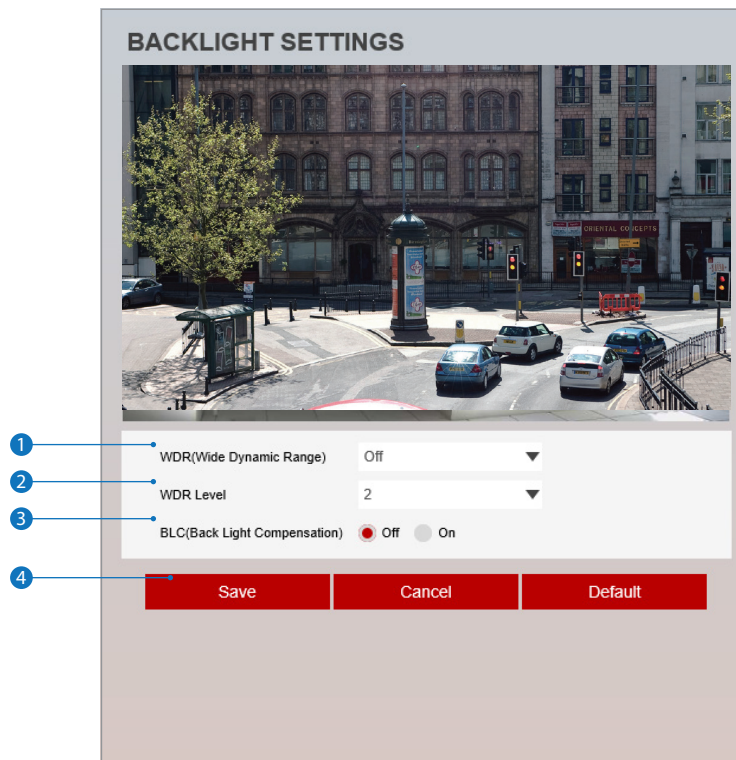
- 4 Click **Save** to save the current settings.

⚙ Click 'Cancel' to return to the previous settings.

⚙ Click 'Default' to return settings to the factory defaults.

Setup - Camera Setup

Camera Backlight Settings

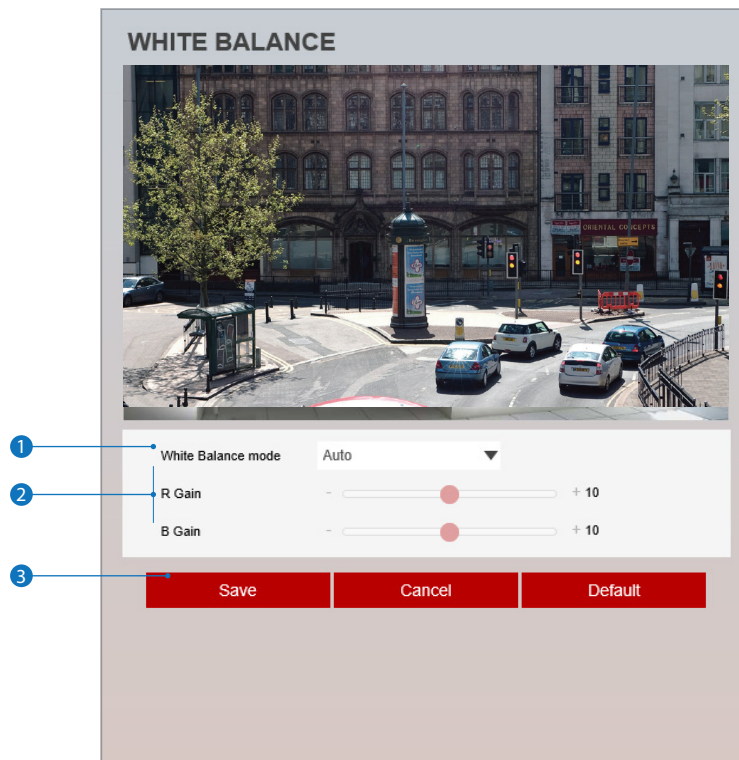


This is a feature used for problematic light conditions where the contrast from light to dark areas is very high.

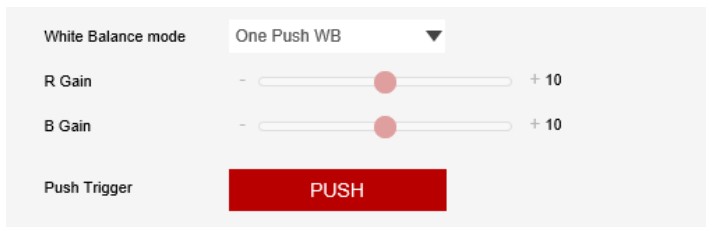
- 1 **WDR (Wide Dynamic Range)** - The WDR function can be enabled or disabled.
- 2 **WDR Level** - Set the WDR level.
- 3 **BLC (Back Light Compensation)** - The BLC function can only be set when WDR is off.
- 4 Click Save to save the current settings.
 - ⌘ Click 'Cancel' to return to the previous settings.
 - ⌘ Click 'Default' to return settings to the factory defaults.

Setup - Camera Setup

Camera White Balance



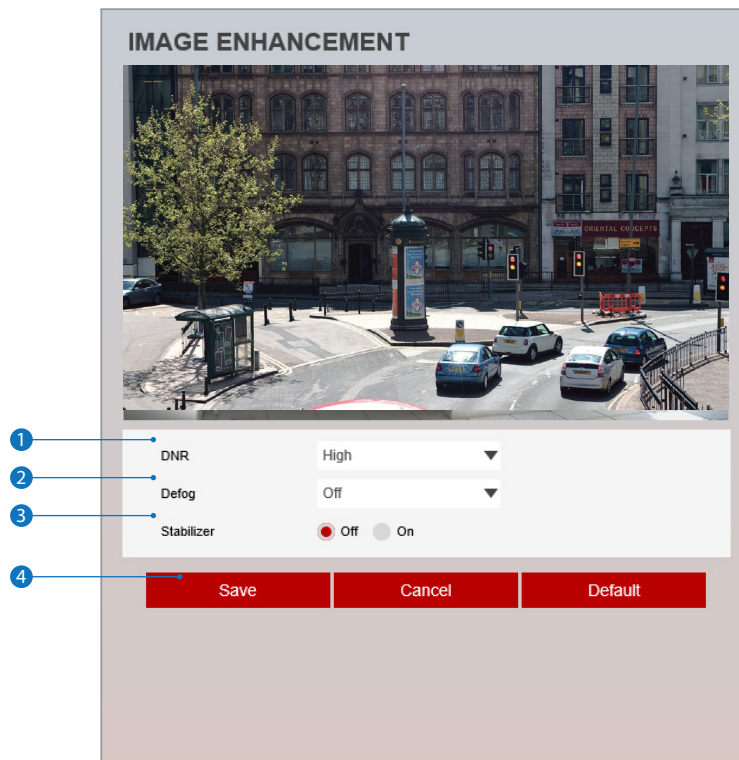
- 1 **Activation** - White Balance can be enabled or disabled here. Auto / Indoor / Outdoor / One Push WB / Manual modes available.
- ⊠ **One Push WB** : Clicking the PUSH button saves the white balance value at the current state.



- 2 **White Balance Mode** - Select White Balance depending on the lighting conditions.
- 3 **RB Gain** - The R/B gain can be set only when the White Balance Mode is set to Manual.
- 4 Click **Save** to save the current settings.
- ⊠ Click 'Cancel' to return to the previous settings.
- ⊠ Click 'Default' to return settings to the factory defaults.

Setup - Camera Setup

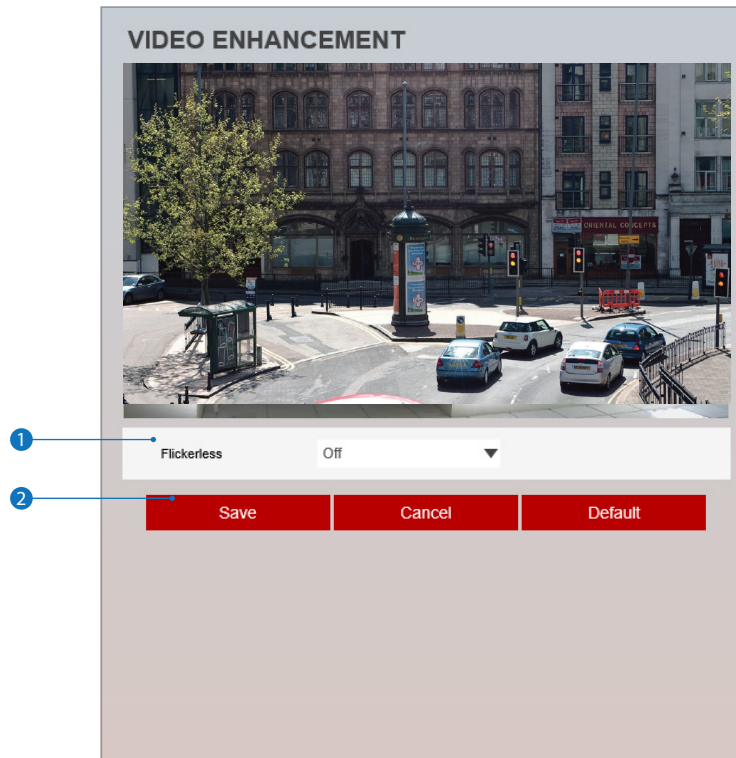
Camera Image Enhancement



- 1 **DNR** - DNR function can be enabled to suppress noise and retain good video quality in low light conditions. Off / Middle / Low / High / Auto modes are available.
- 2 **Defog** - Fog compensation can be set. Off / Middle / Low / High
- 3 **Stabilizer** - The Stabilizer function can be enabled or disabled.
- 4 Click **Save** to save the current settings.
 - ⌘ Click 'Cancel' to return to the previous settings.
 - ⌘ Click 'Default' to return settings to the factory defaults.

Setup - Camera Setup

Video Enhancement



- 1 **Flickerless** - Enable to enhance images experiencing flickering.
- 2 Click **Save** to save the current settings.
 - ⌘ Click 'Cancel' to return to the previous settings.
 - ⌘ Click 'Default' to return settings to the factory defaults.

Setup - Network Setup

Network Status

NETWORK STATUS	
MAC Address	00:0D:F1:21:18:CC
IP Address	192.168.1.48
Subnet Mask	255.255.0.0
Default Gateway	192.168.1.1
Preferred DNS Server	192.168.1.1
Alternate DNS Server	
HTTP Port	80
HTTPS Port	443
RTSP Port	554

This menu will show Network information for the camera. Settings are for reference only and cannot be configured from this screen. 3xLOGIC recommends editing camera IP and network info from the 3xLOGIC Camera Setup Utility-B or from Network Settings (detailed in the next page of this guide).

Setup - Network Setup

Network Settings

The screenshot shows the 'NETWORK SETTINGS' web interface. It includes a 'Host name' field with the value 'IPNC'. Below this is the 'Network Type' section with radio buttons for 'Static' and 'Dynamic' (which is selected). The 'IP setup' section contains fields for 'IP Address' (192.168.1.48), 'Subnet Mask' (255.255.0.0), 'Default Gateway' (192.168.1.1), 'Preferred DNS Server' (192.168.1.1), and 'Alternate DNS Server'. The 'Port Setup' section contains fields for 'HTTP Port' (80), 'HTTPS Port' (443), and 'RTSP Port' (554), each with a default range in brackets. At the bottom is a red 'Apply' button. Numbered callouts 1 through 10 point to these specific elements: 1 points to the Network Type section, 2 to the IP Address field, 3 to the Subnet Mask field, 4 to the Default Gateway field, 5 to the Preferred DNS Server field, 6 to the Alternate DNS Server field, 7 to the HTTP Port field, 8 to the HTTPS Port field, 9 to the RTSP Port field, and 10 to the Apply button.

- 1 **Network Type** - Define network IP address type from the Static Mode for the fixed IP or the Dynamic Mode by the dynamic IP address. Dynamic is the default mode used on 3xLOGIC VISIX Cameras.
If you select Static Mode, you must fill out IP Address, Subnet Mask, Gateway, DNS Server and all ports.
If you select the Dynamic Mode, the IP address will be allocated automatically by DHCP equipment.
If you click the Apply button to update changes, the system will be re-booted.
In this case, you have to reconnect to the camera using the new IP address.
- 2 **IP Address** - Define the IP address. The address consists of four numbers separated by dots and the range of each number is from 0 to 255.
- 3 **Subnet Mask** - Define the Subnet Mask. Format is same as the IP address.
- 4 **Default Gateway** - Default the Gateway IP Address. Format is same as the IP address.
- 5 **Preferred DNS Server** - Define the DNS server IP address. Format is same as the IP address.
- 6 **Alternate DNS Server** - Define the Secondary DNS server IP address. Format is same as the IP address.
- 7 **HTTP Port** - The HTTP port can be set to 80 which is default or in the 1025 to 60000 range.
- 8 **HTTPS Port** - The HTTPS port can be set to 443 which is default or in the 1025 to 60000 range.
- 9 **RTSP Port** - The RTSP port can be set to 554 which is default or in the 1025 to 60000 range.
- 10 Click **Apply** to save new settings. If you click the Apply button to update changes, the system will be re-booted.
If you have changed the IP address, you will have to reconnect to the camera using the new IP and re-login. If the camera is added to VIGIL Server, VIGIL Server will have to be updated with the new camera network and IP settings.

Setup - Network Setup

Auto IP Settings

The screenshot shows the 'AUTO IP SETTINGS' configuration page. It features a 'General Setting' section with 'Off' and 'On' radio buttons, where the 'On' button is selected. Below this is a table displaying 'UNIQUE ID' and 'AUTO IP ADDRESS'. At the bottom right is a red 'Apply' button. Three numbered callouts point to these elements: 1 points to the 'General Setting' section, 2 points to the 'UNIQUE ID' row, and 3 points to the 'Apply' button.

AUTO IP SETTINGS	
General Setting	
<input type="radio"/> Off <input checked="" type="radio"/> On	
UNIQUE ID	2634b5a7-58a4-4978-b707-3d1eb77b954b
AUTO IP ADDRESS	169.254.248.9
<div>Apply</div>	

- ① **General Setting** - The Auto IP Setting function can be enabled or disabled here.
- ② **Auto IP Settings Information** - Displays the unique id or Auto IP address.
- ③ Click **Apply** to save new settings.

Setup - Network Setup

ONVIF Settings

The image shows a web-based configuration interface for ONVIF settings. It has a light gray background. At the top, there is a header bar with the text "ONVIF SETTINGS" in bold. Below the header, there are two main sections. The first section is titled "Authentication" and contains three radio button options: "None", "WS-Usertoken", and "WS-Usertoken + Digest". The "WS-Usertoken + Digest" option is selected, indicated by a red dot. The second section is titled "Discovery mode" and contains two radio button options: "Discoverable" and "Nondiscoverable". The "Discoverable" option is selected, indicated by a red dot. At the bottom of the form, there is a red button labeled "Apply". Three blue numbered callouts are present: callout 1 points to the "Authentication" section, callout 2 points to the "Discovery mode" section, and callout 3 points to the "Apply" button.

1 Authentication

None: Allows access without ONVIF authentication.

WS - Usertoken: Allows access with WS-User Token of ONVIF authentication.

WS - Usertoken + Digest: Allows access with WS-User Token and Digest of ONVIF authentication.

2 Discovery Mode - The ONVIF discovery function can be enabled or disabled.

3 Click **Apply** to save new settings.

Setup - Network Setup

UPNP Settings

The image shows a web interface for 'UPNP SETTINGS'. It has two main sections: 'General Setting' and 'Device Information'. In the 'General Setting' section, there are two radio buttons: 'Off' (selected) and 'On'. In the 'Device Information' section, there is a text field labeled 'FriendlyName' containing the value 'NDE0-SLAH9'. At the bottom right of the form is a red 'Apply' button. Three blue numbered callouts point to specific elements: 1 points to the 'General Setting' section, 2 points to the 'Device Information' section, and 3 points to the 'Apply' button.

- 1 **General Setting** - UPNP function can be enabled or disabled here.
- 2 **Friendly Name** - Define the an easily identifiable name for the device. Supports a maximum of 30 characters and special characters.
 - (/ ~ ! \$ ^ () { } [] ; ,) cannot be used.
 - (' @ , ' . ' _ ' - ' ') can be used.
- 3 Click **Apply** to save new settings.

Setup - Network Setup

DDNS Settings

The screenshot shows the 'DDNS SETTINGS' interface. It features two radio buttons at the top: 'Disable' (selected, indicated by a red dot) and 'Public DDNS' (unselected, indicated by a grey dot). Below these are five input fields: 'Address' (a dropdown menu showing 'www.no-ip.com'), 'Host Name', 'User Name', and 'Password'. At the bottom right is a red 'Apply' button. Three blue numbered callouts are present: '1' points to the 'Disable' radio button, '2' points to the 'Public DDNS' radio button, and '3' points to the 'Apply' button.

❶ **DDNS Disable** - When selected, the DDNS service is disabled

❷ **Public DDNS** - To use a public DDNS service, select an approved site address listed in the list. After filling out the *Host Name* of the site, setup is completed by entering *User Name* and *Password* registered in that DDNS site.

DDNS Provider	Site Address
DynDNS	www.dyndns.com
No-IP	www.no-ip.com

⚠ If you setup DDNS properly, the IP address of your camera will be updated automatically whenever the IP address is changed or the system is rebooted.

⚠ If IP updating to DDNS site is failed, the camera will keep retrying in 1min. intervals.

❸ Click **Apply** to save new settings.

Setup - Network Setup

FTP Settings

The screenshot shows the 'FTP SETTINGS' configuration page. It has a title bar 'FTP SETTINGS' and two main sections. The first section, 'General Setting', contains a toggle switch for 'Off' (selected) and 'On'. The second section, 'Server information', contains five input fields: 'FTP Server Address', 'FTP Upload Path' (with a '/' character), 'FTP Port' (with '21'), 'User ID', and 'Password'. A red 'Apply' button is located at the bottom right of the form. Seven numbered blue circles with arrows point to specific elements: 1 points to the 'General Setting' header, 2 points to the 'FTP Server Address' field, 3 points to the 'FTP Upload Path' field, 4 points to the 'FTP Port' field, 5 points to the 'User ID' field, 6 points to the 'Password' field, and 7 points to the 'Apply' button.

To transfer / save images to a relevant site via FTP, then FTP must be enabled and configured here.

- ① **General Setting** - FTP function can be enabled or disabled here.
- ② **FTP Server Address** - Define FTP Server IP Address. If IP Address form is incorrect, a Message box will deploy warning the user.
- ③ **FTP Upload Path** - Define a path on the FTP server to store images. For the path name, English Alphabets, numbers and special characters (/ ~ ! @ \$ ^ () _ - { } [] ; ,) can be used.
- ④ **FTP Port** - Define the FTP Server Port. If no port is available, it is impossible to access the FTP Server from the camera.
- ⑤ **User ID** - Enter a User ID to access the FTP Server. Fill out using the correct User ID registered in the FTP Server.
- ⑥ **Password** - Enter a Password to access to the FTP Server. Fill out using the correct Password registered in the FTP Server.
- ⑦ Click **Apply** to save new settings.
 - ☒ Refer the above screen image for the example.

Setup - Network Setup

SMTP Settings

The screenshot shows the 'SMTP SETTINGS' configuration page. It is divided into three main sections: 'General Setting', 'Account information', and 'Mail Contents'. The 'General Setting' section has a toggle for 'Off' (selected) and 'On'. The 'Account information' section includes fields for 'Mode' (PLAIN selected, SSL/TLS available), 'SMTP Server Address', 'PORT' (25), 'User ID', 'Password', 'E-Mail Sender', and 'E-mail Receiver'. The 'Mail Contents' section includes fields for 'Title' and 'Message'. At the bottom right is a red 'Apply' button. Numbered callouts 1 through 11 point to specific elements: 1 points to the General Setting toggle; 2 points to the Mode radio buttons; 3 points to the SMTP Server Address field; 4 points to the PORT field; 5 points to the User ID field; 6 points to the Password field; 7 points to the E-Mail Sender field; 8 points to the E-mail Receiver field; 9 points to the Title field; 10 points to the Message field; and 11 points to the Apply button.

To send / save the image via Email, SMTP needs to be setup.

- 1 **General Setting** - SMTP function can be enabled or disabled here.
- 2 **Mode** - Select Security mode of SMTP from Plain or SSL / TLS. After checking account setup of your SMTP Server, select the correct option.
- 3 **SMTP Server Address** - Define the SMTP Server Address. If the IP Address form is incorrect, the user will be prompted with a warning.
- 4 **Port** - Define the Port used in the Plain or SSL / TLS security mode.
- 5 **User ID** - Enter the User ID to access the SMTP Server. Fill out using the correct User ID registered with your email provider.
- 6 **Password** - Enter the Password to access the SMTP Server. Fill out using the correct Password registered with your email provider.
- 7 **E-Mail Sender** - Define the e-mail address of the E-Mail Sender. It will be displayed as the sender when the camera sends an E-mail.
- 8 **E-Mail Receiver** - Define the e-mail address of E-Mail Receiver. It will be displayed as the Receiver when the camera sends an E-mail.
- 9 **Title** - Define the title of the E-Mail when the camera sends an E-mail.
⚠ The title of the Email is limited to 40 characters including the spaces.
- 10 **Message** - Define the contents of E-Mail when camera sends an E-mail. The message of the Email is limited to 40 characters including the spaces.
- 11 Click **Apply** to save new settings.

Setup - Network Setup

SNMP Settings

The image shows a web-based configuration interface for SNMP settings. It is divided into two main sections: 'SNMP v1/v2c' and 'SNMP v3'. The 'SNMP v1/v2c' section includes fields for 'SNMPv1' and 'SNMPv2c' (each with 'Off' and 'On' radio buttons), 'Read community' (text field with 'public'), 'Write community' (text field with 'private'), 'SnmTrap' (radio buttons), 'TrapAddress' (text field with '0.0.0.0'), and 'TrapCommunity' (text field with 'public'). The 'SNMP v3' section includes a 'Mode' dropdown (set to 'Read'), an 'Activation' section with 'Off' and 'On' radio buttons, a 'Read name' text field (set to 'root'), a 'Security Level' dropdown (set to 'no auth, no priv'), an 'Authentication Algorithm' dropdown (set to 'MD5'), an 'Authentication Password' text field, a 'Private-Key Algorithm' dropdown (set to 'DES'), and a 'Private-Key Password' text field. At the bottom right is a red 'Apply' button. Numbered callouts 1 through 11 point to specific elements: 1 points to the 'SNMPv2c' radio button; 2 points to the 'SnmTrap' radio buttons; 3 points to the 'Mode' dropdown; 4 points to the 'Activation' radio buttons; 5 points to the 'Read name' text field; 6 points to the 'Security Level' dropdown; 7 points to the 'Authentication Algorithm' dropdown; 8 points to the 'Authentication Password' text field; 9 points to the 'Private-Key Algorithm' dropdown; 10 points to the 'Private-Key Password' text field; and 11 points to the 'Apply' button.

SNMP is for advanced users only.

① **SNMPv1/SNMPv2** - Select the SNMPv1/SNMPv2 option and type the names of Read community and Write community.

SNMP trap can be used to check periodically for operational thresholds or failures that are defined in the MIB.

② **SNMP Trap** - SNMP trap can be enabled or disabled.

SNMPv3 contains cryptographic security, a higher security level, which allows you to set the Authentication password and the Encryption password.

③ **Mode** - Select either Read or Read/Write mode.

④ **Activation** - Disable or activate the selected mode.

⑤ **Read/Write name** - Define Read name and Write name.

⑥ **Security Level** - Select one of no auth, no priv/auth , no priv/auth, priv

⑦ **Authentication Algorithm** - Select MD5 or SHA as the authentication method.

⑧ **Authentication Password** - The Authentication Password is an encrypted password used for authentication. A minimum of 8 digits required and a maximum of up to 30 digits allowed.

⑨ **Private-Key Algorithm** - Select DES or AES as the encryption algorithm.

⑩ **Private-Key Password** - Information protection password is a private encrypted password. A minimum of 8 digits required and a maximum of up to 30 digits allowed.

⑪ Click **Apply** to save new settings.

Setup - Network Setup

RTSP Information

The screenshot shows the 'RTSP INFORMATION' configuration page. It includes sections for 'RTSP Global Setting', 'Session Timeout', 'QoS Setting', and 'Rtp Multicast'. A red 'Apply' button is located below the 'Rtp Multicast' section. At the bottom, there is a table showing RTSP connection information.

RTSP INFORMATION

RTSP Global Setting

Target Stream: Main Stream

Session Timeout

Time Out: 0 [Default: Off, 30~120]

QoS Setting

DSCP: 0 [0~255]

Rtp Multicast

MULTICAST: ☒ Stop ☐ Start

IP: 0.0.0.0

PORT: 0 [1024~60000]

TTL: 0 [1~255]

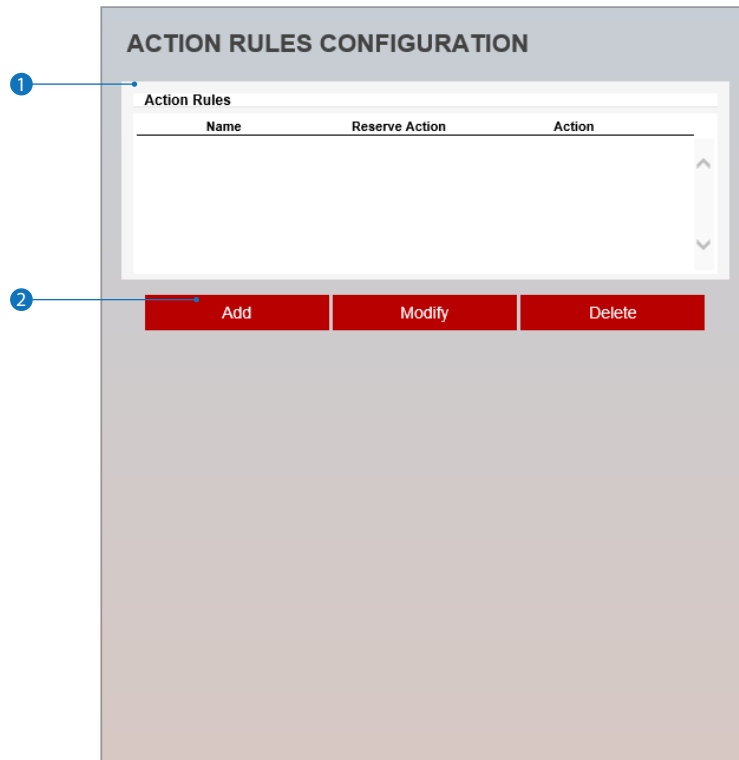
Apply

No	Remote IP	Port	Type
1	192.168.4.100	60183	TCP

- 1 **Target Stream** - Select the stream you want to configure
- 2 **Time out** - Set the RTSP time out.
 - ⚙ The session is disconnected after the specified time out.
- 3 **QoS Setting** - Set the quality of service to ensure data transfer performance.
- 4 **RTP Multicast** - Check RTP Multicast Start/Stop. To activate RTP Multicast.
 1. Click "On" button.
 2. Enter accessible RTP Multicast IP, port for video stream control, RTP packet TTL.
 3. Click "Apply" button.
 - ⚙ It is possible to set each RTP Multicast for Stream 1-3 (main, sub, third).
- 5 Click **Apply** to save new settings.
 - ⚙ Click this button between configuring the different channels or data will not be saved for the preceding channel settings.
- 6 RTSP Connection information.

Setup - Trigger Action Setup

Action Rules Configuration



- ① **Action rules List** - This indicates the custom action rule information added to the Action rules list.
- ② Click **Add** to add custom action rules.
 - ⊠ Click 'Modify' to modify a selected item from the action rules list.
 - ⊠ Click 'Delete' to delete a selected item from the action rules list.

Setup - Trigger Action Setup

Action Rules Add / Modify

The screenshot shows the 'ACTION RULES CONFIGURATION' dialog box. It has a 'General Setting' section with a 'Name' field (containing 'NewAction') and an 'Operation Interval' field (containing '0' and a unit of 'Second(s) [0 ~ 60]'). Below this is a table with five rows, each labeled 'Action1' through 'Action5' on the left and a dropdown menu on the right, all currently set to 'NONE'. At the bottom are two red buttons: 'Save' and 'Cancel'. Four numbered blue circles with arrows point to these elements: 1 points to the Name field, 2 points to the Operation Interval field, 3 points to the Action3 dropdown, and 4 points to the Save button.

ACTION RULES CONFIGURATION	
General Setting	
Name	NewAction
Operation Interval	0 Second(s) [0 ~ 60]
Action1	NONE ▼
Action2	NONE ▼
Action3	NONE ▼
Action4	NONE ▼
Action5	NONE ▼
<div>Save Cancel</div>	

- ① **Name** - Name the action rule.
 - ⊠ Input text must be between 315 characters.
- ② **Operation Interval** - Select the interval to maintain event mode.
- ③ **Action1 ~ Action5** - Select the action to take if the event occurs. Recording, FTP Recipient, SMTP Recipient and Relay Out are available.
- ④ Click **Save** to save the current settings.
 - ⊠ Click 'Cancel' to return to the previous menu.

Setup - Trigger Action Setup

Image Transfer Configuration

IMAGE TRANSFER CONFIGURATION

1. Add the FTP/SMTP action in the event rules menu.
2. When an event occurs, the images will be sent to ftp/smtp address .
3. Determine the image transfer speed and the duration of image transfer after/before an event.

1

Pre/Post Alarm Image

Number Of Image	2	Image Per Seconds(s) [1 ~ 5]
Pre-Alarm Duration	3	Second(s) [1 ~ 5]
Post-Alarm Duration	3	Second(s) [1 ~ 30]

2

Apply

Image Transfer on Event can only be configured when FTP or SMTP is selected as an event rule action.

1 Pre / Post Alarm Image - Image Transfer due to event is configured by setting the Image transfer rate and Pre / Post alarm duration.

	Descriptions
Number of Image	Define Number of image transferred per second.
Pre-alarm Duration	Define duration of image transfer before an event.
Post-alarm Duration	Define duration of image transfer after an event.

2 Click **Apply** to save new settings.

Setup - Trigger Action Setup

Relay Out Configuration

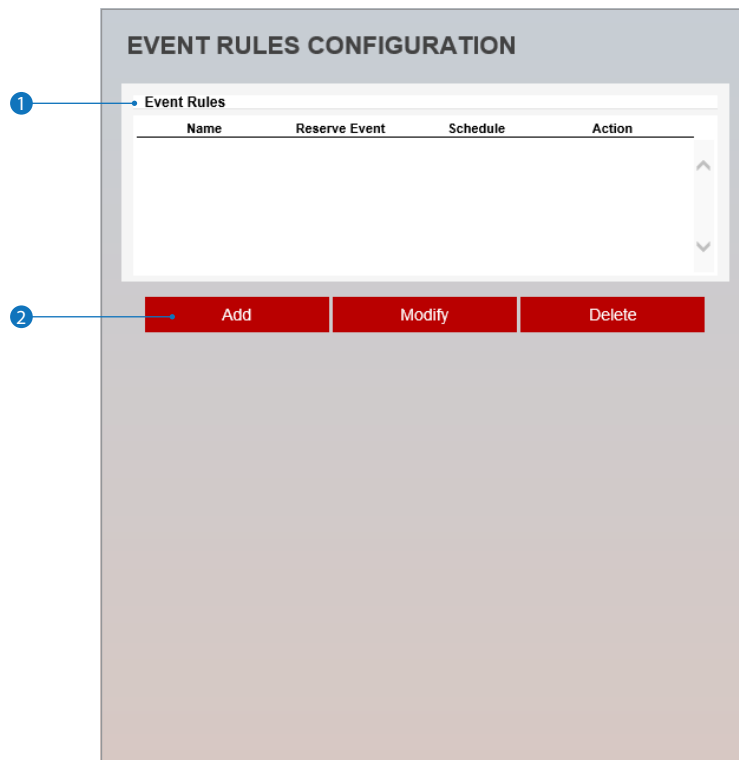
The screenshot shows a 'RELAYOUT CONFIGURATION' dialog box. It contains the following fields and controls:

- Relay output:** A dropdown menu showing '01'. A blue circle with the number '1' points to this field.
- Mode:** Two radio buttons: 'Monostable' (unselected) and 'Bistable' (selected). A blue circle with the number '2' points to the 'Bistable' radio button.
- Idle state:** Two radio buttons: 'Closed' (unselected) and 'Open' (selected). A blue circle with the number '3' points to the 'Open' radio button.
- Duration:** A text input field showing '0' and a label 'Second(s) [0 ~ 30]'. A blue circle with the number '4' points to the input field.
- Apply:** A red button with the text 'Apply'. A blue circle with the number '5' points to this button.

- 1 **Relay Output** - Select the Relay output to trigger.
 - ⚙ The number of relay outputs depends on the camera model.
- 2 **Mode** - Select monostable / bistable for relay mode.
- 3 **Idle State** - Select whether the contact is normally opened or is closed.
- 4 **Duration** - The relay will remain trigger during the set time.
 - ⚙ If bistable mode is selected, this function is activated
- 5 Click **Apply** to save the new settings.

Setup - Event Setup

Event Rules Configuration



- ❶ **Event Rules List** - Event Rule information for added event rules is displayed here.
- ❷ Click 'Add' to add custom event rules.
 - ⌘ Click 'Modify' to modify a selected item from the event rules list.
 - ⌘ Click 'Delete' to delete a selected item from the event rules list.

Setup - Event Setup

Event Rules Configuration

The screenshot shows the 'EVENT RULES CONFIGURATION' form. It is divided into three main sections: 'General', 'Event Condition', and 'Action'. Callout 1 points to the 'Activation' toggle (On/Off). Callout 2 points to the 'Name' text input field, which contains 'NewRule'. Callout 3 points to the 'Event' dropdown menu, which is set to 'NONE'. Callout 4 points to the 'Schedule' section, which includes radio buttons for 'Always' (selected) and 'Manual'. Callout 5 points to the 'Week' section, which includes checkboxes for days of the week (Sun, Mon, Tue, Wed, Thu, Fri, Sat). Callout 6 points to the 'Rules' dropdown menu, which is set to 'NONE'. Callout 7 points to the 'Save' and 'Cancel' buttons at the bottom of the form.

1 **Activation** - The Event Rules function can be enabled or disabled here.

2 **Name** - Define the Event rule name.

3 **Event** - Select the event type. Types include motion detection, network disconnection, illegal login detected, temperature critical, schedule, sensor detection.

⚙️ Click 'Cancel' to return to the previous setting.

4 **Schedule** - Set an activation time. The event can only occur during the stated time period. Always / Manual Time available. Manual mode will require the custom creation of a schedule.

5 **Week / Time** - When manual is selected, you need to define a *Start time* and *End time* followed by selecting *Days*. The setup schedule is repeated every week.

6 **Rules** - Select the action rule defined in the Trigger Action-Action rule menu.

7 Click Save to save the current settings.

⚙️ Click 'Cancel' to return to the previous setting.

Setup - Event Setup

Schedule Configuration

The screenshot shows a 'SCHEDULE CONFIGURATION' window. It contains a 'Recurrences Function' section with two options: 'Mode' and 'Repeat rule'. The 'Mode' section has two radio buttons: 'Enable' (selected) and 'Disable'. The 'Repeat rule' section has a dropdown menu showing 'Every 5 minutes'. Below these options is a red 'Apply' button. Three numbered callouts are present: 1 points to the 'Mode' section, 2 points to the 'Repeat rule' dropdown, and 3 points to the 'Apply' button.

SCHEDULE CONFIGURATION

Recurrences Function

Mode ☒ Enable ☐ Disable

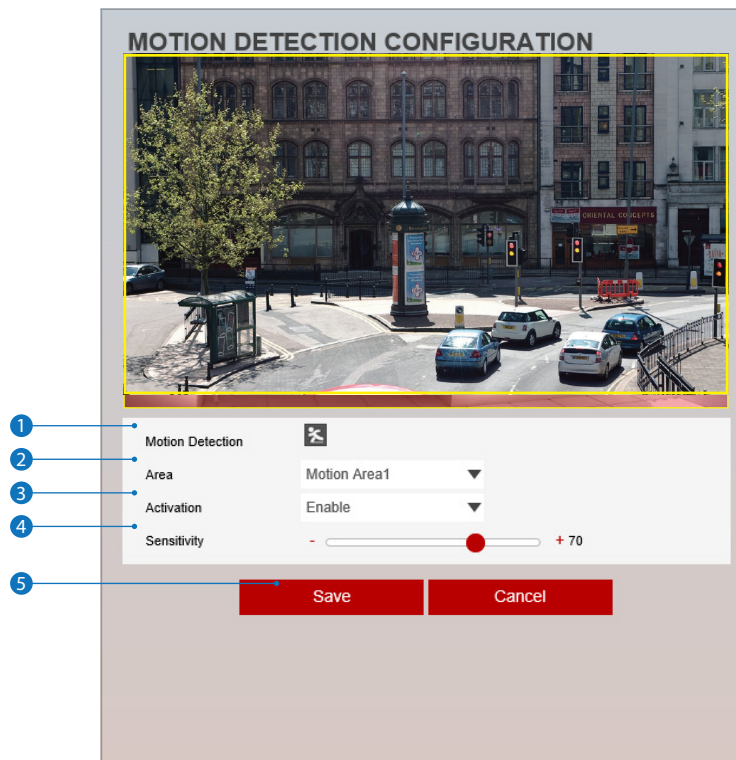
Repeat rule Every 5 minutes

Apply


- 1 **Mode** - The Schedule function can be enabled or disabled here.
- 2 **Repeat Rule** - If desired, set a recurring time the event occurs.
- 3 Click **Apply** to save new settings.

Setup - Event Setup

Motion Detection Configuration



1 **Motion Detection** - Shows the Motion event status.

⚙️ Event Alert Icon() appears if 'Motion Detection' is activated.

2 **Area** - Set the motion detected area.

⚙️ You can set up to four areas.

3 **Activation** - Enable or Disable motion detection.

4 **Sensitivity** - Define the sensitivity of motion detection.

If a High value is selected, it will detect very small motions while conversely, it becomes insensitive to motion when a Low value is selected.

5 Click **Save** to save the current settings.

⚙️ Click 'Cancel' to return to the previous settings.

Setup - Event Setup

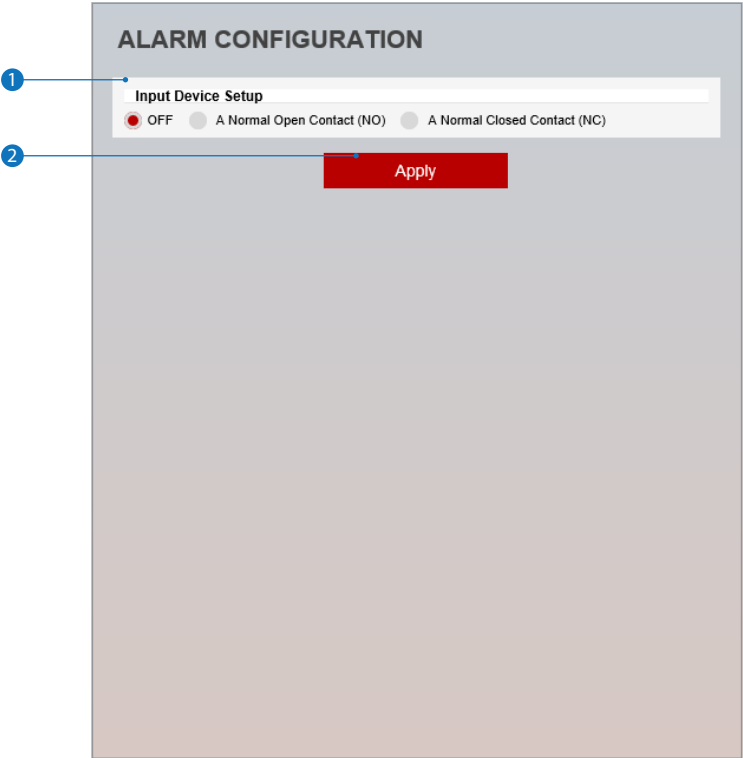
Temperature

The screenshot shows a web interface titled "TEMPERATURE". Below the title is a "General Setting" section with three rows: "Mode" with a dropdown menu showing "Fahrenheit", "Threshold" with a text input "150" and a range "[122 ~ 212]", and "Temperature" with a text input "122 °F". A red "Apply" button is located below these settings. Four numbered blue circles with lines pointing to the interface are on the left: 1 points to the Mode dropdown, 2 points to the Threshold input, 3 points to the Temperature input, and 4 points to the Apply button.

- ① **Mode** - Select either Fahrenheit and Celsius.
- ② **Threshold** - Define the temperature at which the event trigger occurs
- ③ **Temperature** - Indicates the current temperature of the IP camera.
- ④ Click **Apply** to save new settings.

Setup - Event Setup

Alarm Configuration



1 **Input Device Setup** - Select input device type from OFF / N.O. / N.C.

	Operation
OFF	Ignore this input sensor.
NO	The contact is normally open and closed when activated.
NC	The contact is normally closed and open when activated.

2 Click **Apply** to save new settings.

Setup - Record Setup

Record Management

The screenshot shows a web interface titled "RECORD MANAGEMENT". It contains a "Record Global Setting" section with a "Target Stream" dropdown menu currently set to "NONE". Below this is a red "Save" button. Underneath is a "RECORDING LIST" table with columns: Name, Enabled, File Type, Storage, and Continuous. The table lists two records: RECORD0 and RECORD1, both enabled, using MP4 file type and STORAGE1 storage, with continuous recording set to Off. Below the table is a red "Modify" button. Four numbered callouts point to the following elements: 1. Target Stream dropdown, 2. Save button, 3. Recording List table, and 4. Modify button.

RECORD MANAGEMENT

Record Global Setting

Target Stream: NONE

Save

RECORDING LIST

Name	Enabled	File Type	Storage	Continuous
RECORD0	X	MP4	STORAGE1	Off
RECORD1	X	MP4	STORAGE1	Off

Modify

- 1 **Target Stream** - Select the channel you want to record video from.
- 2 Click **Save** to save the current settings.
- 3 **Recording List** - Display the information about the recording settings.
- 4 Click 'Modify' to modify the selected item in the recording list.

Setup - Record Setup

Record Configuration

The screenshot shows a 'RECORD MANAGEMENT' window with a 'Record Settings' sub-window. The settings are as follows:

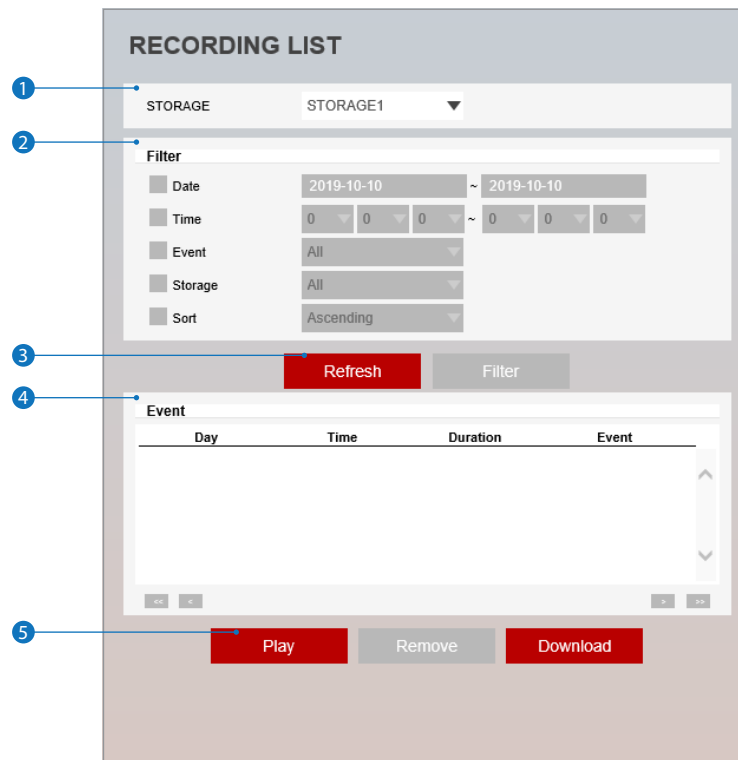
Setting	Value
Enabled	Off (radio button selected)
Storage Device	SDCard 1
File Type	MP4
Storage	SDCard
Continuous	Off (radio button selected)
Pre Duration	5 [0 ~ 5]
Post Duration	5 [1 ~ 240]

At the bottom of the 'Record Settings' window are two buttons: 'Save' and 'Cancel'. Numbered callouts 1 through 8 point to these elements: 1 points to 'Enabled', 2 to 'Storage Device', 3 to 'File Type', 4 to 'Storage', 5 to 'Continuous', 6 to 'Pre Duration', 7 to 'Post Duration', and 8 to the 'Save' button.

- ① **Enabled** - The Recording function can be enabled or disabled.
- ② **Storage Device** - This item cannot be selected. Shows the saved SD Card.
- ③ **File Type** - Select the recording file type.
 - ⚙ Currently only supports MP4 Type.
- ④ **Storage** - Select the storage type. SD Card(Disabled) selection is not allowed.
- ⑤ **Continuous** - If continuous mode is turned on, start continuous recording without any other setting. This settings is independent of recording to a VIGIL Server.
- ⑥ **Pre Duration** - Define duration of pre-recording before an event.
- ⑦ **Post Duration** - Define duration of post-recording image transfer after an event.
- ⑧ Click **Save** to save the current settings.
 - ⚙ Click 'Cancel' to return to the previous setting.

Setup - Record Setup

Recording List



- 1 **Storage** - Select the Storage type from the list.
- 2 **Filter** - Select the date / time, event, sort or storage format to filter the recorded video.
 - ☒ Click 'Filter' to view the filtered recorded video.
- 3 Click the 'Refresh' button to refresh the records list.
- 4 **Recording List** - Display the information for recording video.
- 5 Click 'Play' to view the selected item in list of recorded video.
 - ☒ Click 'Remove' to delete the selected item in list of recorded video.
 - ☒ Click 'Download' to download the selected item in list of recorded video.
 - When you click Download, the following window appears.
 - When downloading, please fill up the purpose within 30 characters. (The purpose you created is shown on the Log page with the download time)

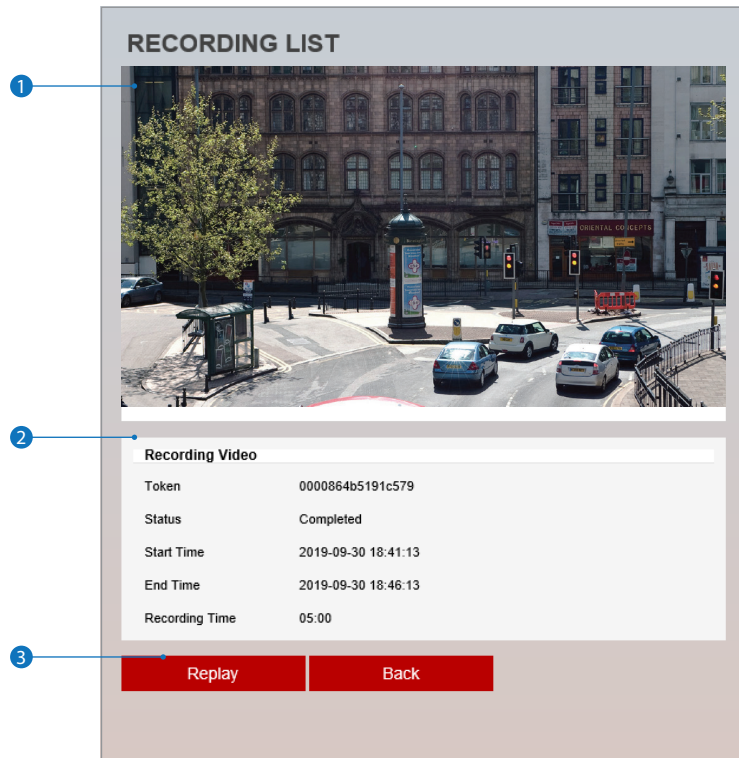
Input the purpose of the file download (max : 32 characters)

확인
취소

☒ When playing back recorded MP4 file format with H.265 (HEVC) codec, video may not play due to the performance issues with the VLC plug-in. 3xLOGIC recommends always recording and reviewing video via the VIGIL VMS.

Setup - Record Setup

Recording Video



- ① **Recording Video Viewer** - Play the recorded video.
- ② **Recording Video Information** - Display the information about the recorded video.
- ③ Click 'Replay' to view the recorded video again.
 - ⌘ Click 'Back' to return to the previous menu.

Setup - Record Setup

Storage Configuration

STORAGE CONFIGURATION

Notice

1. If SD Card does not automatically mount, you must format for mounting SD card.

Storage List

Name	Mounted	Size	Used(%)	Available
SDCard1	X	0	0%	0

Display the SD card information mounted from device.

When you select the item in the storage list, you can set the functions related to the SD card here.

Setup - Record Setup

Storage Configuration

STORAGE CONFIGURATION

Notice
1. If SD Card does not automatically mount, you must format for mounting SD card.

1 Storage Size 0 / 0

2 Auto Delete NONE ▼

3 Overwrite ☒ Off ☐ On

4 Unmount **Unmount**

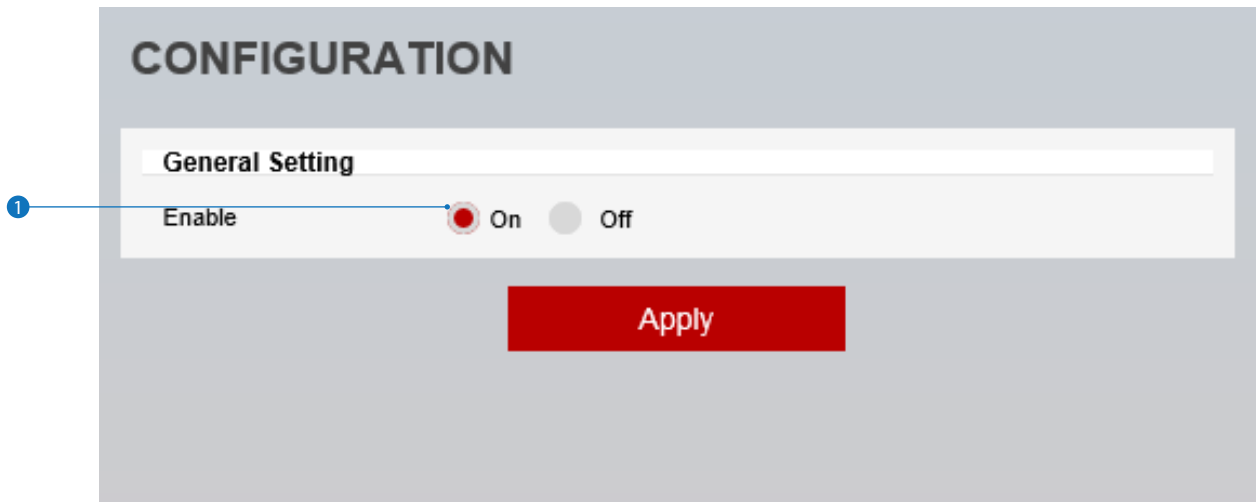
5 Format **Format**

6 **Apply** **Cancel**

- 1 **Storage Size** - Total capacity of SD card and remaining space are displayed here.
- 2 **Auto Delete** - Select the period for Auto delete. The image data stored before period will be deleted automatically.
 - ⌘ Deletes all stored image older than selected time.
- 3 **Overwrite** - When set to ON and remaining space of SD card reaches less than 8MB, new data will start to be overwritten overtop the oldest data. However, if it is set OFF and remaining space of SD card reach to less than 8MB, recording will cease. This does not affect recording to a VIGIL Server.
- 4 **Unmount** - Select this option to unmount the SD card from the device before physically removing it. This can help to avoid damage to stored data.
- 5 **Format** - Delete the all contents that are stored in SD card and format.
- 6 Click **Apply** to save new settings.
 - ⌘ Click 'Cancel' to return to the previous settings.

Setup - VCA Setup

VCA Enable



VCA rules can be used for detecting events of interest and triggering actions on-camera or within VIGIL Server to react to those events.

1 Enabled - Switch this option to *On* to enable VCA rules on the camera.

Once enabled, please visit www.3xlogic.com and see the *VISIX Gen III Cameras - VCA Analytics Guide* for more information on VCA licensing , configuring VCA rules, adding VCA rules from a camera to a VIGIL Server and more.

Setup - Security Setup

IP Address Filter Configuration

The image shows a web-based configuration interface titled "IP ADDRESS FILTER CONFIGURATION". It contains two main sections: "General Setting" and "Filtered IP Address".

- General Setting:** Includes a toggle for "IP Address Filter" (currently set to "Off") and a dropdown for "IP Filter Type" (currently set to "Allow").
- Filtered IP Address:** A section containing a list of IP addresses and an "IP Address" input field with a "[Invalid]" placeholder.
- Buttons:** An "Apply" button is located below the "General Setting" section. "Add" and "Remove" buttons are located below the "Filtered IP Address" section.

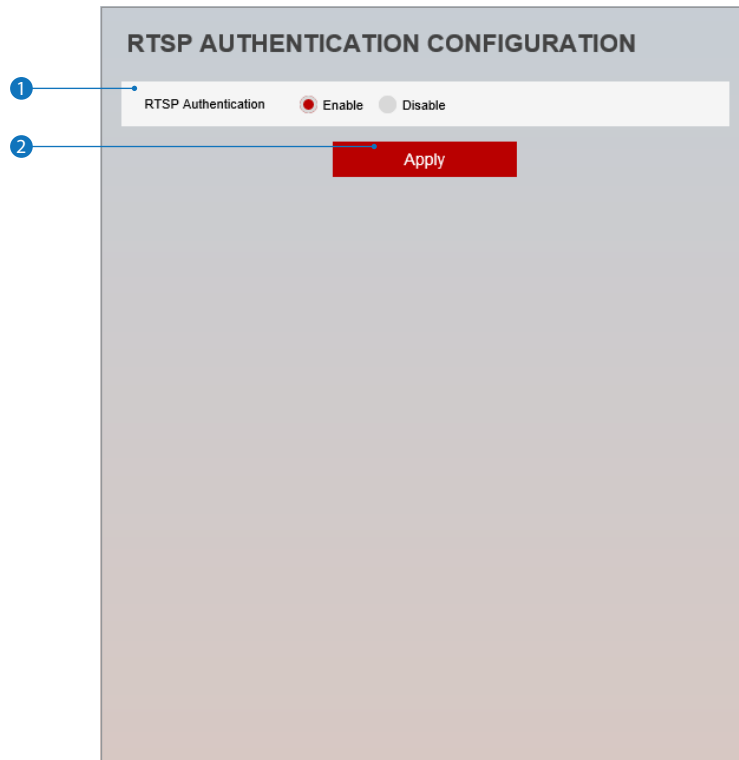
Numbered callouts (1-6) point to the following elements:

1. IP Address Filter toggle
2. IP Filter Type dropdown
3. Apply button
4. Filtered IP Address list
5. IP Address input field
6. Add button

- 1 **IP Address Filter** - IP filter function can be enabled or disabled here.
- 2 **IP Filter Type** - Select the recording IP filter type.
- 3 Click **Apply** to save new settings.
- 4 **Filter IP Address** - Display the filtered IP addresses.
- 5 **IP Address** - Define the IP address you want to apply the IP filter to.
- 6 Click 'Add' to add the IP address to the filter list.
 - Click 'Remove' to remove the IP address selected in the list.

Setup - Security Setup

RTSP Authentication Configuration



① **RTSP Authentication** - RTSP Authentication can be enabled or disabled. When running older versions of VIGIL Server with Gen III VISIX Cameras, RTSP Streams may be required. Always disable RTSP Authentication in this case before entering the RTSP URL for the cameras in the VIGIL Server Network Camera settings.

② Click **Apply** to save new settings.

Setup - Security Setup

IEEE 802.1X Configuration

The screenshot shows the 'IEEE 802.1X CONFIGURATION' web page. It has a 'General Setting' tab. The configuration options are as follows:

- 1. IEEE 802.1x: A toggle switch currently set to 'Off'.
- 2. Protocol: A dropdown menu showing 'MD5'.
- 3. EAPOL version: A dropdown menu showing '1'.
- 4. ID: An empty text input field.
- 5. Password: An empty text input field.
- 6. Retype Password: An empty text input field.
- 7. CA Certificate: A dropdown menu showing 'NONE'.
- 8. Certificate: A dropdown menu showing 'NONE'.
- 9. A red 'Apply' button at the bottom right of the configuration area.

The feature is needed when connecting the camera to the network protected by the IEEE 802.1X.

- 1 IEEE 802.1x - The IEEE 802.1x feature can be enabled or disabled here.
- 2 **Protocol**
 - MD5: Provides one-way password-based network authentication of the client.
 - PEAP : Similair TTLS in that it does not require a certificate on the client side.
 - TTLS / MD5 : It does not require a certificate on the client side.
 - TLS : It relies on client-side and server-side certificates to perform authentication.
- 3 **EAPOL Version** - Select the EAPOL Version.
- 4 **ID** - Type the ID to identify the client in the IEEE 802.1X authentication server.
- 5 **Password** - Type the Password to identify the client in the IEEE 802.1X authentication server.
- 6 **Verify** - Verify Password.
- 7 **CA Certificate** - Select the CA certificate required for TLS, TTLS, and PEAP authentication.
- 8 **Certificate** - Select the client certificate required for TLS authentication
- 9 Click **Apply** to save new settings.

Setup - Security Setup

HTTPS Configuration

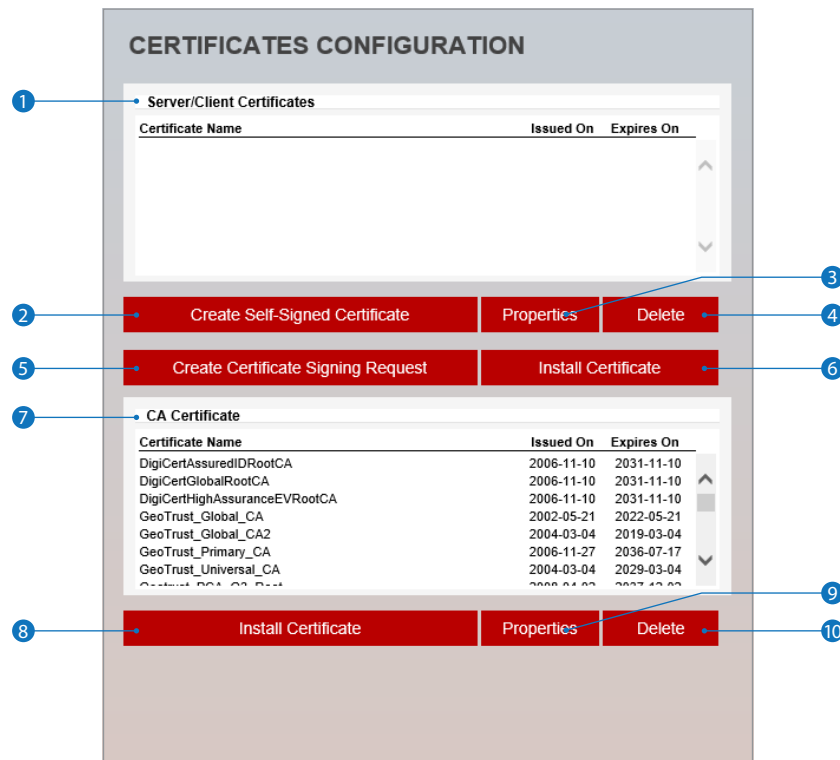
The screenshot shows the 'HTTPS CONFIGURATION' window. At the top, a red message states: '1. If no certificates are available go to certificates to manage.' Below this, there are two main sections. The first section, labeled 'Certificates' with a callout '1', contains a 'Certificate' dropdown menu currently set to 'NONE'. The second section, labeled 'HTTPS connection Policy' with a callout '2', contains three rows: 'WEB' with a dropdown set to 'HTTP and HTTPS', 'ONVIF' with a dropdown set to 'HTTP', and 'RTSP OVER HTTP' with a dropdown set to 'HTTP'. A red 'Apply' button, indicated by callout '3', is located at the bottom right of the configuration area.

HTTPS encrypts session data over SSL or TLS protocols instead of using plain text in socket communications.

- 1 **Certificate** - Select an installed certificate.
 - ⚙ If you can not select a certificate, please install the certificate from the Security->Certificates menu.
- 2 **HTTPS connection Policy** - Select one of "HTTP", "HTTPS", "HTTP and HTTPS" depending on the connected web, ONVIF, RTSP over HTTP.
 - WEB : "HTTP" "HTTPS" "HTTP and HTTPS"
 - ONVIF, RTSP OVER HTTP : "HTTP" "HTTPS" "HTTP and HTTPS"
- 3 Click **Apply** to save new settings.
 - ⚙ When HTTPS mode is chosen, input https://<IP Address> to connect to the camera.

Setup - Security Setup

Certificates Configuration



- 1 **Server/Client Certificates** - Shows the installed certificates.
- 2 **Create Self-Signed Certificate** - A self-signed SSL certificate is an identity certificate signed by its own creator. These are considered to be less trustworthy.
- 3 **Properties** - Shows information about the selected certificate.
- 4 **Delete** - Delete the selected certificate.
- 5 **Create Certificate signing request** - This is the encoded data that contains the necessary information for issuing the certificate.
⚠ They must be filled in when creating the CSR (Certificate Signing Request).
- 6 **Install Certificate** - Install Certification
- 7 **CA Certificate** - Shows the installed CA certificates.
- 8 **Install CA Certificate** - Install Certification. See the Details page.
- 9 **Properties** - Shows information about the selected certificate.
- 10 **Delete** - Delete the selected CA certificate.

Setup - Security Setup

Certificates Configuration

The screenshot shows the 'CERTIFICATES CONFIGURATION' window. It contains three main sections:

- Create Self-Signed Certificate:** Fields for Certificate Name, Expires On (set to ~2038-01-18), Country (US), State Or Province, Locality, Organization, Organization Unit, Common Name (192.168.1.48), RSA (4096), SHA (256), Alternative Hostname1, Alternative Hostname2, and Alternative IP. Buttons for OK and Cancel are at the bottom.
- Install Certificate:** Radio buttons for 'Certificate From Signing Request' (selected) and 'Certificate And Private Key'. A text field for Certificate Name and a 'Select File' button for Certificate File. Buttons for OK and Cancel are at the bottom.
- Install CA Certificate:** A text field for Certificate Name and a 'Select File' button for Certificate File. Buttons for OK and Cancel are at the bottom.

Numbered callouts (1-10) point to the following elements:

- 1: 'Certificate From Signing Request' radio button
- 2: 'Certificate And Private Key' radio button
- 3: Certificate Name text field
- 4: Select File button for Certificate File
- 5: OK button for Install Certificate
- 6: Cancel button for Install Certificate
- 7: Certificate Name text field for Install CA Certificate
- 8: Select File button for Certificate File
- 9: OK button for Install CA Certificate
- 10: Cancel button for Install CA Certificate

Detail for Install Certification.

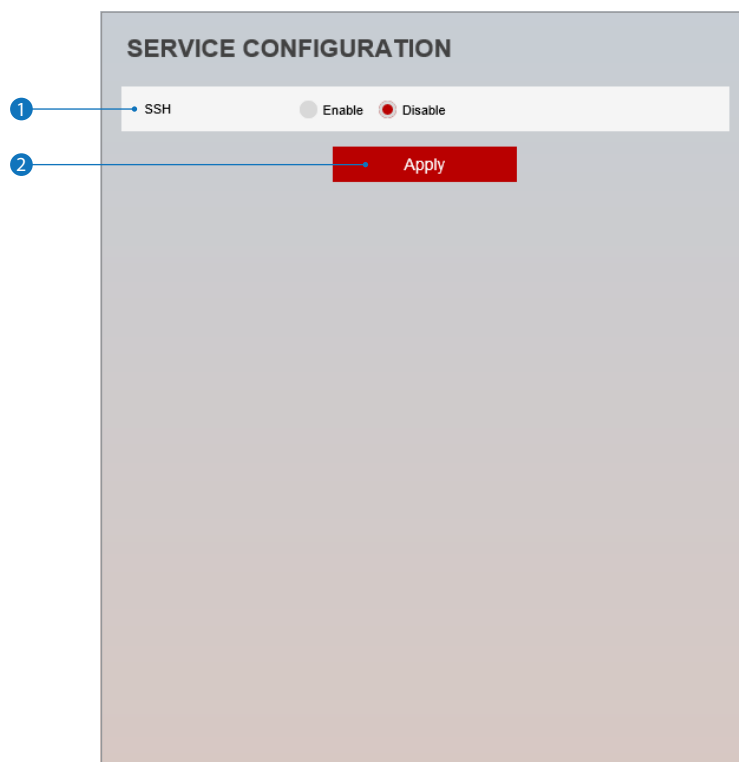
- 1 **Certificate From Signing Request** - Select to install signed certificate returned from the CA.
- 2 **Certificate And Private Key** - Select to install Certificate And Private Key to install a certificate and private key.
- 3 **Certificate Name** - Enter a unique name to identify certificate.
- 4 **Select File** - Choose certification file.
- 5 **OK** - Request installing certificate.
- 6 **Cancel** - Cancel install certificate and return back to certificates configuration.

Detail for Install CA Certification.

- 7 **Certificate Name** - Enter a unique name to identify CA certificate.
- 8 **Select File** - Choose CA certification file
- 9 **OK** - Request installing CA certificate.
- 10 **Cancel** - Cancel install CA certificate and return back to certificates configuration.

Setup - Security Setup

Service Configuration



- 1 SSH - The SSH function can be enabled or disabled here.
- 2 Click **Apply** to save new settings.

Setup - System Setup

System Information

The screenshot shows a web interface titled "SYSTEM INFORMATION". It contains two input fields: "Device Name" with the value "IP-Camera" and "Location" with the value "unknown". Below these fields is a red "Apply" button. A table below the button lists various system specifications. Three numbered callouts are present: 1 points to the "Device Name" field, 2 points to the "Location" field, and 3 points to the "Apply" button.

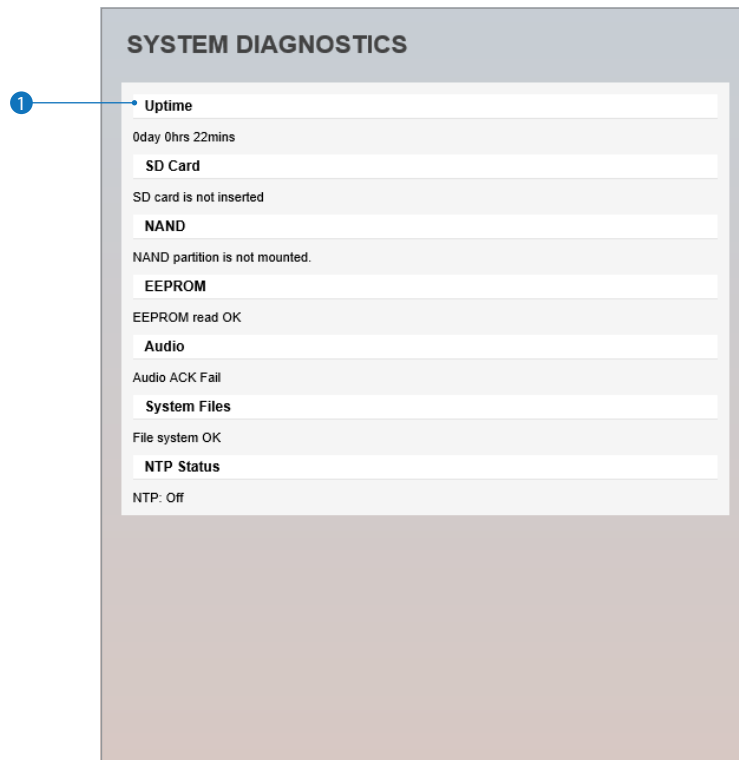
SYSTEM INFORMATION	
Device Name	IP-Camera
Location	unknown
Apply	
Model Name	NDE0-SLAH9
Manufacturer	IPNC
Max Resolution	3008 x 3000
Max Framerate	30 fps
Photo Resistor(CDS)	SUPPORT
Alarm In	SUPPORT
Relay out	SUPPORT
Audio	SUPPORT
Optical Zoom	NOT SUPPORT
Digital Zoom	NOT SUPPORT
PTZ	NOT SUPPORT

System Information is displayed here.

- 1 **Device Name** - Enter the device name.
- 2 **Location** - Shows camera's location.
- 3 Click **Apply** to save new settings.

Setup - System Setup

System Diagnostics

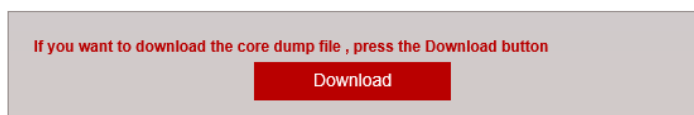


Shows basic hardware functions after inspection.

1 Shows Uptime, SD card, NAND, EEPROM, Audio chip, Important file system and NTP Status.

Warning:

If the camera is abnormally terminated, a download button will appear on the diagnostics page to download a file that allows you to check the error information log. .



Setup - System Setup

Firmware Update

The screenshot shows a web interface titled "FIRMWARE UPDATE". At the top, there are three red warning instructions: "1. Do not power off during update. It may cause fatal system damage.", "2. If Explorer was closed abnormally or a user closed accidentally while uploading firmware file, please try again after 30 seconds.", and "3. Please do not select other menus while updating firmware file." Below the warnings, there are three numbered callouts: 1 points to the "Version Information" section, 2 points to the "Web update" section, and 3 points to the "Start F/W Update" button.

FIRMWARE UPDATE

1. Do not power off during update. It may cause fatal system damage.
2. If Explorer was closed abnormally or a user closed accidentally while uploading firmware file, please try again after 30 seconds.
3. Please do not select other menus while updating firmware file.

1. **Version Information**

System	2019.10.10_A10.2.1
Camera	-

2. **Web update**

Firmware File

3.

1 **Version Information** - Shows the current Firmware Version in the system.

2 **Web Update** - Select the Firmware file to update to on your computer by clicking **Select File**.

3 **Start F / W Update** - Click this button to start update. Progress of uploading will be displayed using a progress bar.
If you assign the wrong file name, an error message will be shown.

⚠ Warning:

1. Do not turn off the power of camera during the Firmware update. Otherwise, the system can hang and the device may become unusable. If updating is finished, the system will be rebooted automatically.
2. Please make sure to check the 'Notice' shown on screen.
If firmware update is completed, the camera will reboot automatically and 'Setup window' will be closed.

Setup - System Setup

Date & Time Settings

The screenshot shows the 'DATE&TIME SETTINGS' window. It contains three main sections: 'TimeZone Setup', 'Time Format', and 'Current Date & Time'. The 'TimeZone Setup' section has a dropdown menu for 'TimeZone' set to '(GMT 00) Greenwich Mean Time, Lisbon, London' and an 'Apply' button. The 'Time Format' section has a dropdown menu for 'Time Format' set to 'yy-mm-dd' and an 'Apply' button. The 'Current Date & Time' section shows the current date and time as '2005-01-02 04:44:59'. Below this is the 'New Camera Date & Time' section, which has two radio buttons: 'Synchronize with my computer' (selected) and 'Setup manually'. The 'Setup manually' option is further divided into 'Date' (2005-01-01) and 'Time' (00:00:00). There is also an option to 'Synchronize with time server (NTP)' with a dropdown for 'NTP Server' set to 'time-a.nist.gov'. An 'Apply' button is at the bottom of the window. Numbered callouts 1 through 7 point to the following elements: 1. TimeZone Setup section, 2. Time Format section, 3. Current Date & Time section, 4. Synchronize with my computer radio button, 5. Setup manually radio button, 6. Synchronize with time server (NTP) radio button, and 7. Apply button at the bottom.

- ❶ **TimeZone Setup** - Choose the TimeZone for camera. It will be activated after clicking 'Apply' button.
⚠ Prior to setting below 'New Camera Date & Time', always set the correct Timezone first.
- ❷ **Time Format** - Select the time format: yy-mm-dd or mm/dd/yy.
- ❸ **Current Date & Time** - Shows the current date and time setting in the camera.
- ❹ **Synchronize with my computer** - Set the date / time using those of the currently connected PC.
- ❺ **Setup manually** - Set the date / time by typing manually.
- ❻ **Synchronize with time server (NTP)** - Choose time server available to connect to the camera.
Date & Time will be updated automatically every hour when connected.
- ❼ Click **Apply** to save new settings.

Setup - System Setup

DST Settings

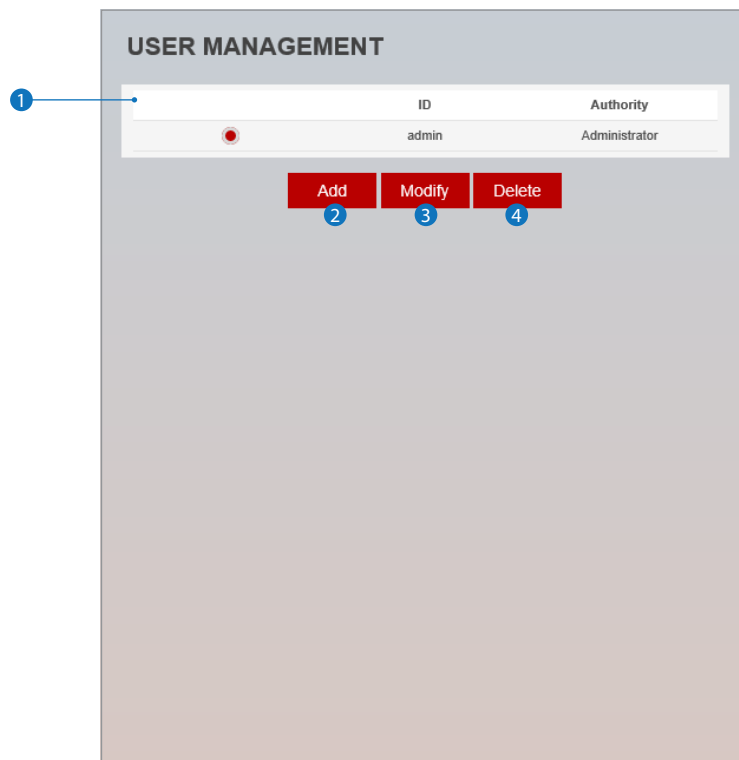
The screenshot shows the 'DST SETTINGS' interface. It has a title bar 'DST SETTINGS' at the top. Below it is a 'General Setting' section with a radio button for 'Off' (selected) and a radio button for 'On'. Below that is a 'Date&Time Settings' section with two rows: 'Start Time' and 'End Time'. Each row has four dropdown menus: the first for the month (both set to 'Jan'), the second for the occurrence (both set to 'First'), the third for the day of the week (both set to 'Sun'), and the fourth for the time (both set to '0'). Each dropdown menu is followed by the text 'o'clock'. At the bottom of the settings area is a red 'Apply' button. Three numbered blue circles with arrows point to the 'General Setting' section (1), the 'Date&Time Settings' section (2), and the 'Apply' button (3).

Daylight Saving Time (DST) is the practice of setting the clocks forward one hour from standard time during the spring and summer months, and back again in the fall and winter in order to make better use of natural daylight.

- 1 **General Setting** - DST function can be enabled or disabled here.
- 2 **Date&Time Settings** - Set the Start time and end time for DST.
- 3 Click **Apply** to save new settings.

Setup - System Setup

Users Management



1 **Users** - List all the user accounts for the camera.

2 **Add** - Register a new user.

ID	Enter a new user ID (admin exists by default).
Password	Enter the user password.
Verify	Enter the user password again for verification.
User Authority	Select Operator or Viewer. Viewer : Only monitoring is allowed. Operator : Most of the functions are allowed except 'Setup'.

⚙ The ID is limited to 4~30 characters.

⚙ [Password Rules]

Weak : 8 characters or less, less than 2 combinations

Good : more than 8 characters, more than 3 combinations

strong : more than 12 characters, 4 combinations

⚙ If deemed 'Good' or better, you can change your password.

Combinations : uppercase letters, lowercase letters, numbers, special symbols.

Acceptable special characters are ~ ' ! & ^ () _ - | { } ; . ? /.

Click **Apply** to save new settings.

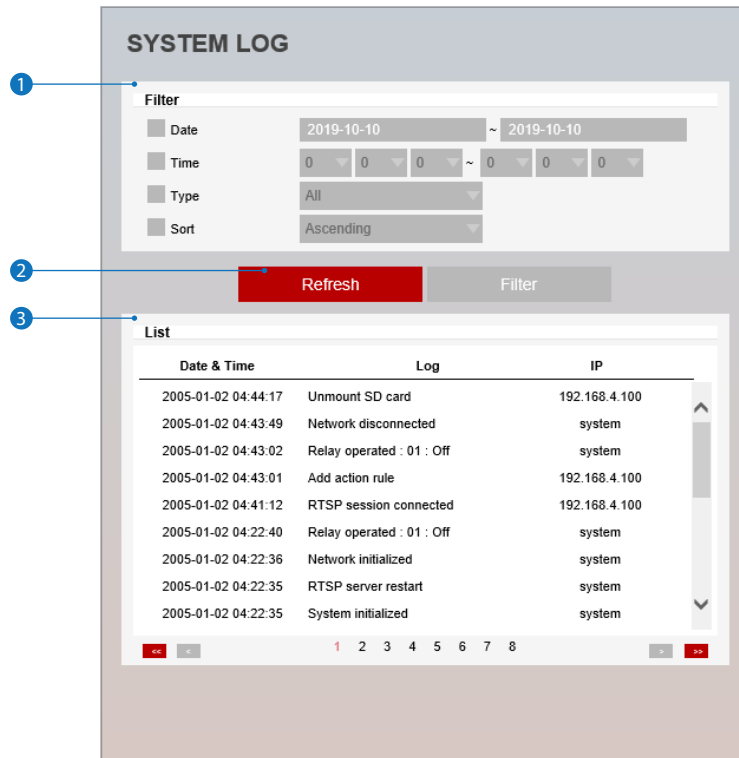
⚙ Click 'Cancel' to return to the previous menu.

3 **Modify** - Modify user account info. For the *admin* account, only password function can be modified.

4 **Delete** - Delete the selected user account. Admin account cannot be deleted.

Setup - System Setup

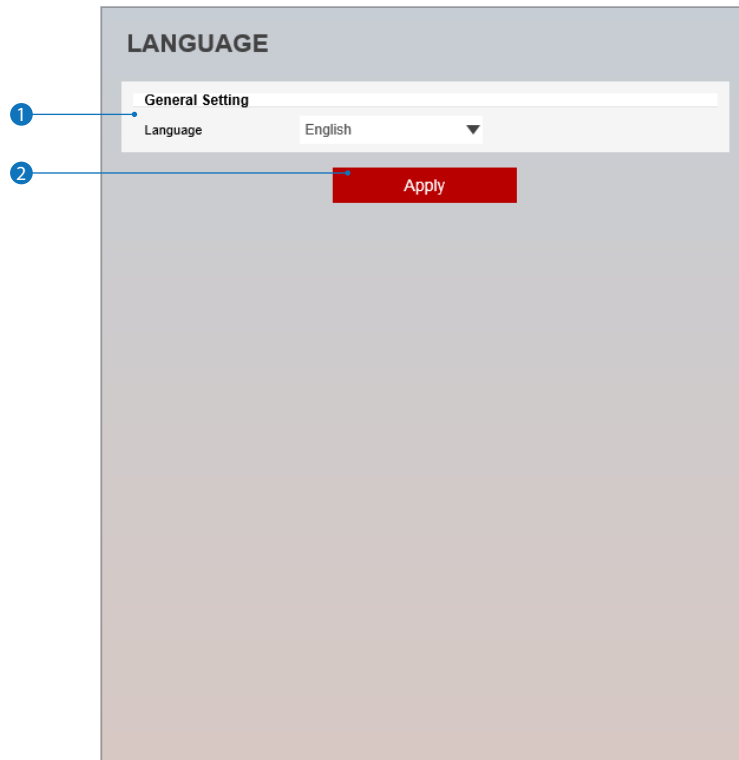
System Log



- 1 **Filter** - Select a date, time, sort or type of log to filter the log.
- 2 Click the 'Refresh' button to refresh the log list.
⚙️ Click 'Filter' to view the filtered log.
- 3 **System Log List** - The filtered log is displayed.

Setup - System Setup

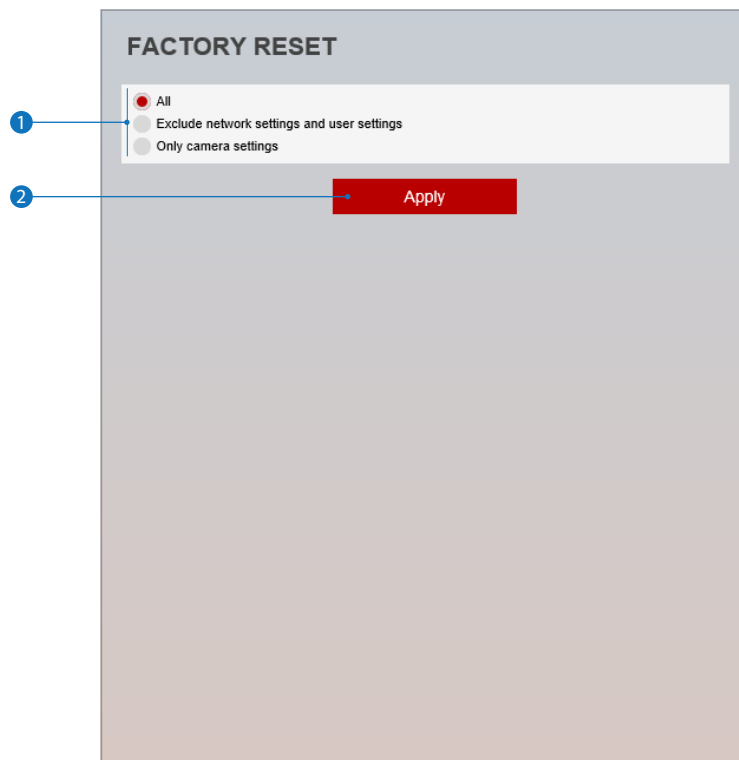
Language



- 1 **Language** - Select the language for the camera interface from the menu.
- 2 Click **Apply** to save new settings.

Setup - System Setup

Factory Reset



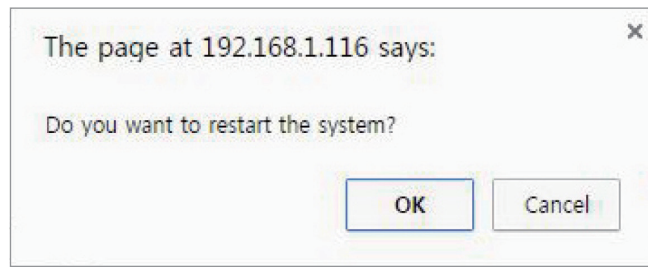
1 **Reset to the factory defaults** - Return the camera settings to their factory default state.

-
- **All** - Reset all Settings to the factory defaults.
 - **Except Network Settings and User Settings** - Reset all setting to defaults except network and user settings.
 - **Only Camera Settings** - Reset only camera related settings to their factory defaults.
-

2 Click **Apply** to save new settings.

Setup - System Setup

Restart



If you click the 'RESTART' menu, a message box will be shown to confirm a camera system restart. Click the 'OK' button to restart. You will be logged out and will require a relogin to continue setup and settings configuration.

Setup - System Setup

System Open Source License

SYSTEM OPEN SOURCE LICENSE		
Open Source Name	Version	License
busybox	1.24.1	GPLv2
alsa-lib	1.1.2	GPLv2.1
libglib2	2.47.1	LGPLv2
libgnutls	3.4.11	LGPLv2.1
libjson-c	0.11-20140402	JSON License
libcurl	7.50.1	MIT/X derivate License
libffi	3.1	MIT License
libgcrypt	1.6.1	LGPLv2.1
libnl	3.2.24	LGPLv2.1
libogg	1.3.1	BSD-style License
libsamplerate	0.1.8	GPLv2
libselinux	2.3	Public domain
libsndfile	1.0.25	LGPLv2.1
libssh2	1.6.0	BSD
libtasn1	4.8	GPLv3

This menu will show you all the list of System Open Source Licensees used in the camera. Open Source Name / Version / License is displayed.

Setup - PTZ Setup

PTZ Settings

The screenshot shows the 'PTZ SETTINGS' interface. It contains three main sections: 'Parking Action', 'Power Up Action', and 'AutoFlip & Digital Zoom'. Each section has a 'Mode' (Enable/Disable), an 'Action' dropdown, a 'Preset' dropdown, and a 'Preset Tour' dropdown. The 'Parking Action' section has a 'Wait Time' input field set to 3600. There are three red 'Apply' buttons, one for each section. Numbered callouts point to: 1. 'Parking Action' section header, 2. 'Apply' button for Parking Action, 3. 'Power Up Action' section header, 4. 'Apply' button for Power Up Action, 5. 'AutoFlip & Digital Zoom' section header, and 6. 'Apply' button for AutoFlip & Digital Zoom.

PTZ Settings are only available for applicable models.

- 1 **Parking Action** - Set the action for the camera to take when the PTZ control of the camera is not in use.
 - Wait Time : Set the wait time (5sec ~ 14400sec). The camewra will be considered idle after the set amount of time transpires with no PTZ inputs detected.
 - Action : Set the action to perform if there is no PTZ operation during the wait time. (HomePosition / Preset / Preset Tour)
 - Preset : If the Action is set to a preset, select the preset number here. Presets must be constructed and added from the main viewer.
 - Preset Tour : If the Action is set to a preset tour, it can be selected here. Preset Tours can be constructed and added from the main page.
- 2 Click **Apply** to save new settings.
- 3 **Power Up Action** - Set the acti for PTZ to take when the camera comes online.
 - Action : Set the action (HomePosition / Preset / Preset Tour)
 - Preset : If the Action is set to a preset, select the preset number here. Presets must be constructed and added from the main viewer.
 - Preset Tour : If the Action is set to a preset tour, it can be selected here. Preset Tours can be constructed and added from the main page.
- 4 Click the 'Apply' to make above setting effective.
- 5 **AutoFlip & Digital Zoom**
 - **AutoFlip** : This is a function that enables continuous pan by converting PTZ to 180 degree panoraamic instantly.
 - **Digital Zoom** : Enable this to allow Digital zoom.
- 6 Click **Apply** to save new settings.

3xLOGIC

Simple. Scalable. Secure.