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Web Viewer

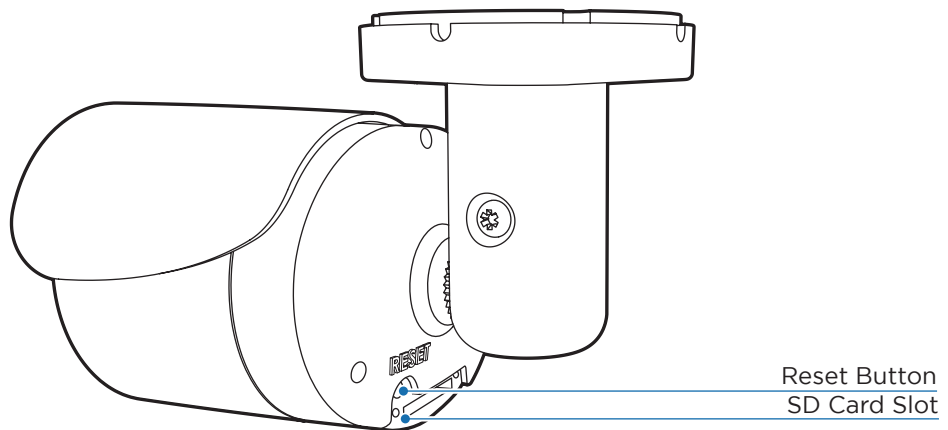
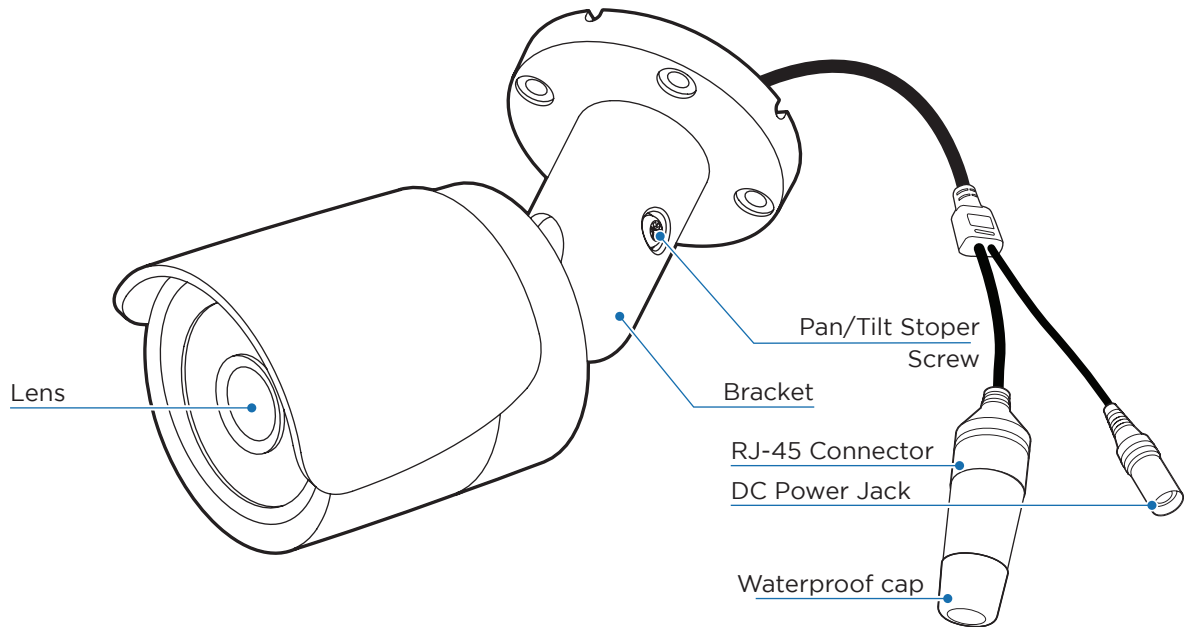
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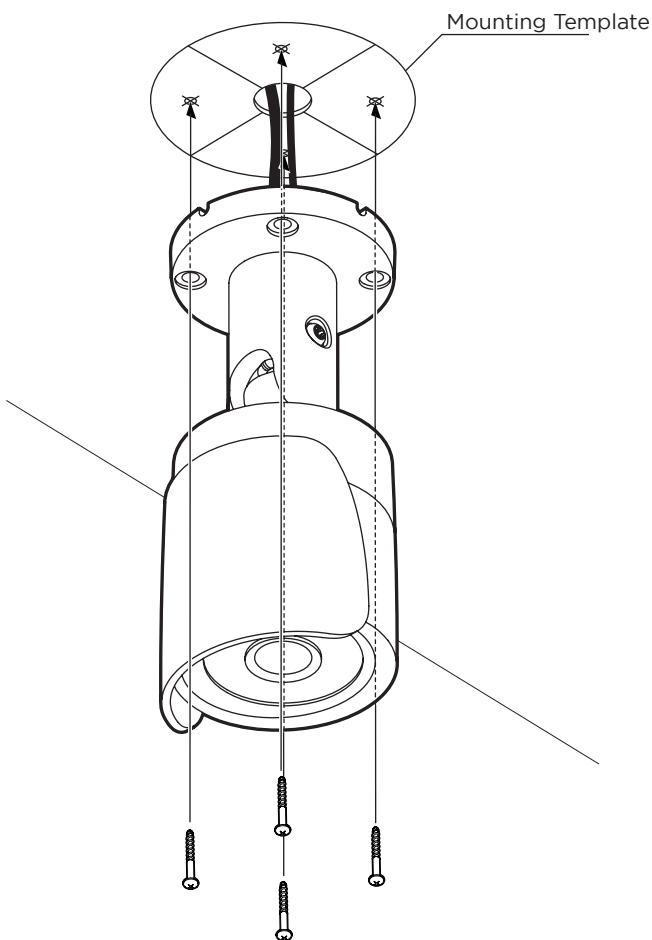
Introduction - Part Name



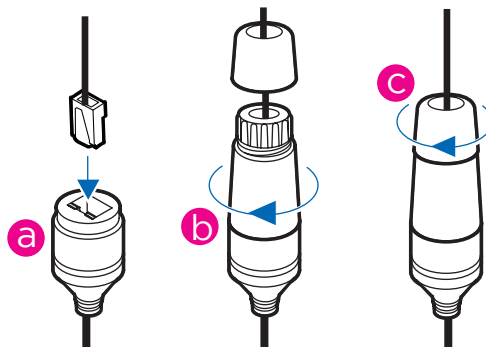
Installation - Installation

Before installing your camera, you have to read the following cautions.

1. The mounting surface must withstand five times the camera weight.
2. Do not let the cables get caught in improper places or the electric line cover can be damaged. This may cause a short or fire.



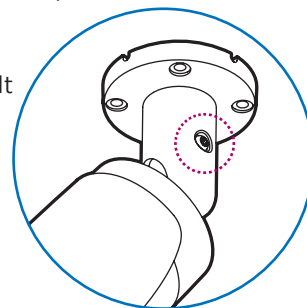
1. Using the mounting template sheet or the camera itself, mark and drill the necessary holes in the wall or ceiling.
2. Pass the wires through the mount bracket and make all necessary connections. See page 12 for more information.
3. To use the camera's waterproof wiring:
 - a. Install the LAN cable into (a).
 - b. (b) will be assembled to (a) with a 1/4 turn.
 - c. Thread (c) tightly to (b).



※ NOTE: to ensure a proper moisture seal, make sure the o-ring is in place between (a) and (b). In extreme environments, use an outdoor-rated sealer.

※ NOTE: When using the waterproof cap, crimp the RJ-45 connected after passing the camera through the waterproof cap.

4. Fix the camera's bracket to the mounting surface using the screws provided.
5. If needed, adjust the camera's tilt by loosening the pan/tilt stopper screw.
6. Once the camera's tilt and panning are adjusted, secure the stopper screw back.

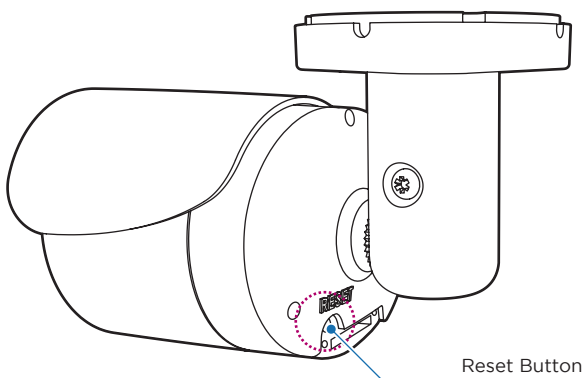


※ Reset to the Factory Default

Press the reset button for 5 seconds to return the setup to the factory default.

※ Warning:

If you press the 'Reset' button, you will lose all setting data. If needed, please, make a note for further installation.



Installation - Cabling

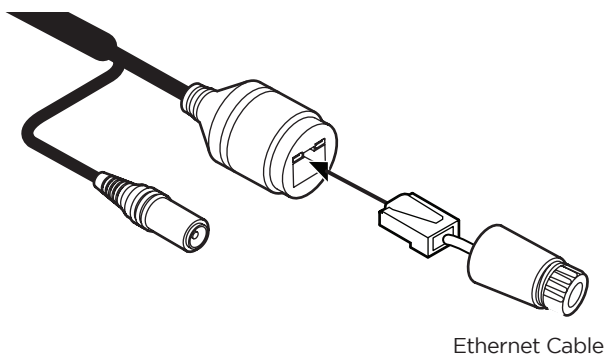
Two Options

Use a PoE-enabled switch to connect data and power through a single cable and begin viewing and recording images instantly.

A non-PoE switch will require an adaptor for power transmission.

1. Using a PoE-Enabled Switch

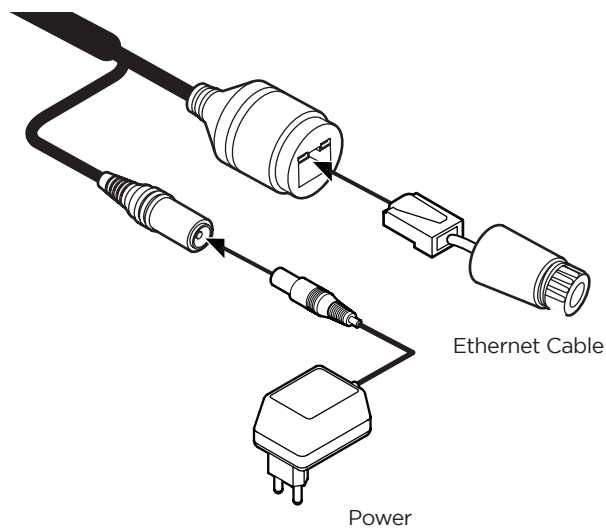
The Camera is PoE-compliant, allowing transmission of power and data via a single Ethernet cable. PoE eliminates the need for the different cables used to power, record, or control the camera. Follow the illustration below to connect the camera to a PoE-enabled switch using an Ethernet cable.



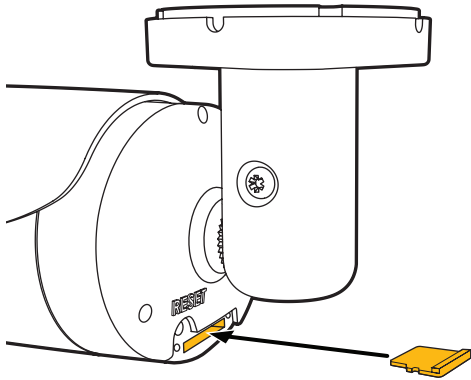
2. Using a Non-PoE Switch

If a PoE-enabled switch is not used, use a power adaptor for power transmission and non-PoE switch for data transmission.

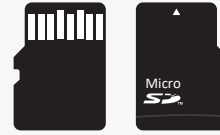
Follow the illustrations below to connect the camera without a PoE-enabled Switch.



Installation - Inserting/Removing an SD Memory Card

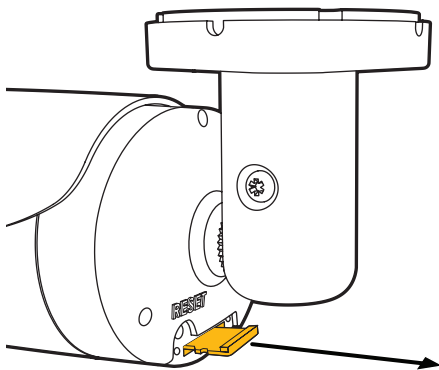


The memory card is an external data storage device that has been developed to offer an entirely new way to record and share video, audio, and text data using digital devices.



⚠ Recommended SD card specification (not included)

- Maximum SD Card size supported: Up to 1TB micro SD / exFAT.
- When inserting the SD card into the card slot, the SD card's contacts should be facing upward, as shown in the diagram.



1 Inserting an SD Memory Card

Insert the SD card in the arrow direction. The SD card slot is located on the back of the camera, under the mounting bracket.

- ⚠ Do not insert the SD memory card while it's upside down by force. Otherwise, it may damage the SD memory card.

2 Removing an SD Memory Card

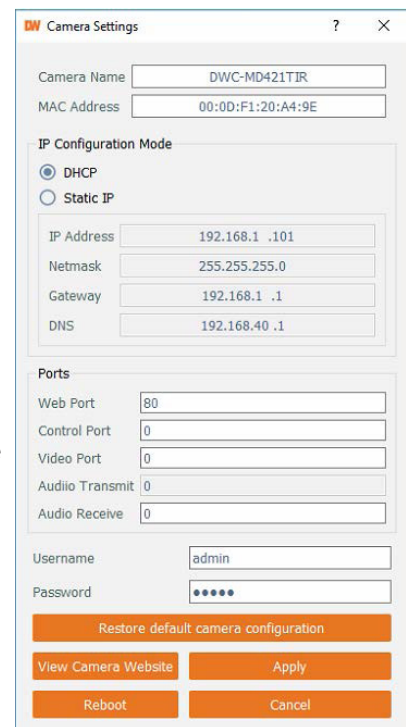
Gently press down on the exposed end of the memory card as shown in the diagram to eject the memory card from the slot.

- ⚠ Pressing too hard on the SD memory card can cause the card to shoot out uncontrollably from the slot when released.
- ⚠ If you have saved data in the SD memory card, removing the SD memory card before setting the record to OFF will cause damage to the data stored in the card.

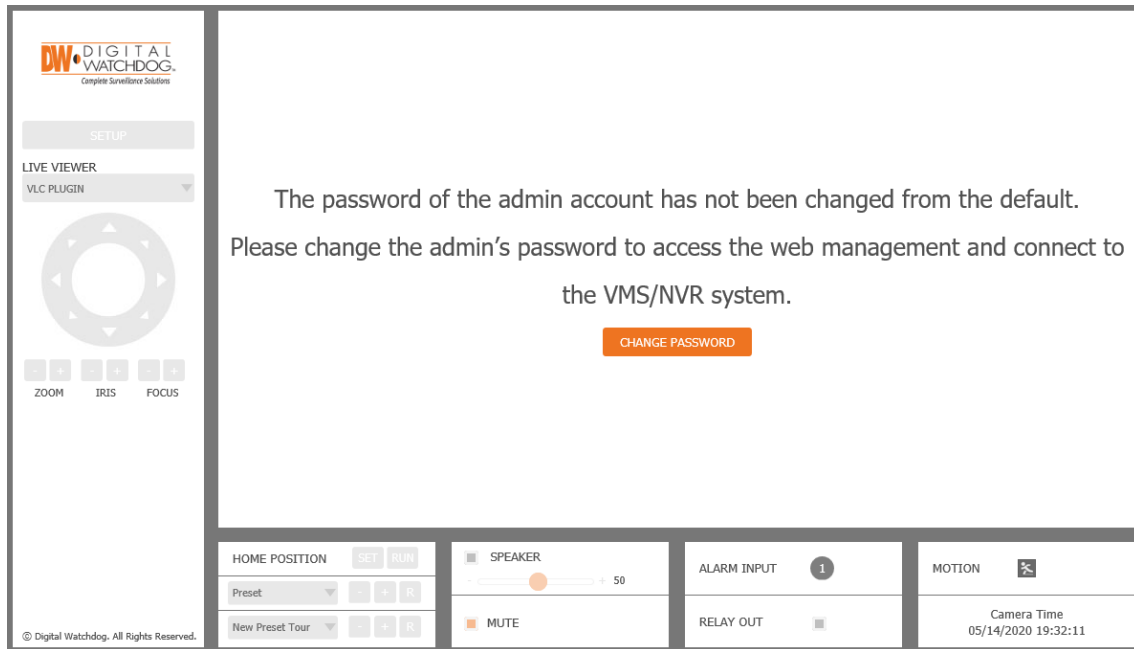
Network Setup - DW IP Finder™



- 1 Go to <http://www.digital-watchdog.com> and search for 'IP Finder' on the quick-search bar at the top of the page.
- 2 The latest IP Finder software will appear in the search results. Click on the link to download the file to your computer.
- 3 The software will scan your network for all supported cameras and display the results in the table. Allow up to 5 seconds for the IP Installer to find the camera on the network.
- 4 You can press the 'Refresh List' to search the network again, or filter the search results by entering a value in the filter box.
- 5 Check the box next to 'Display Camera Thumbnail' to view a JPEG image of the camera's view next to the camera name on supported models.
 - ✳ The default network type of camera is DHCP mode.
 - ✳ If you have a DHCP server, it will automatically set the Camera IP.
 - ✳ Contact your network administrator for more information.
- 6 To save the changes made to the camera's settings, input the username and password of the camera for authentication.
- 7 If the camera needs to be rebooted after the settings were changed, press the 'Reboot' button. The camera will power cycle and will appear back in the search results once the reboot is complete.
 - ✳ Default username and password: admin/admin.
 - ✳ For security purposes, it is highly recommended to change your password after the initial setup.
- 8 Click 'Save' to save changed values.
- 9 To update the camera's firmware from the DW IP Finder™, click on the firmware tab, upload the firmware file and select the camera to update. You can update multiple cameras at the same time.



Web Viewer Screen - Basic Screen (Default)



Password change is required at the initial connection in a factory reset state. The web client cannot be fully utilized until a new password has been assigned.

- 1 You cannot see the image, and the setup button is disabled.
- 2 Change the password with the CHANGE PASSWORD button.

Change admin's password

Password

Retype Password

Password Hint [Type the Password]

Password requirement : minimum 8 characters with at least three combinations of uppercase letters, lowercase letters, numbers and special characters.
Acceptable special characters are: ~ ! \$ * () _ - { } | . ? /

- 3 After changing the password, login again by pressing the RE-LOGIN button.
 - Internet Explorer: After three failed attempts or the cancel button is clicked, you will experience a login fail.
 - Other Browsers: After the Cancel button is clicked, you will experience a login fail.

The admin's password has been changed.

Please re-login.

Your session has expired and you have been signed out.

Please re-login.

✳ Password Hint Page

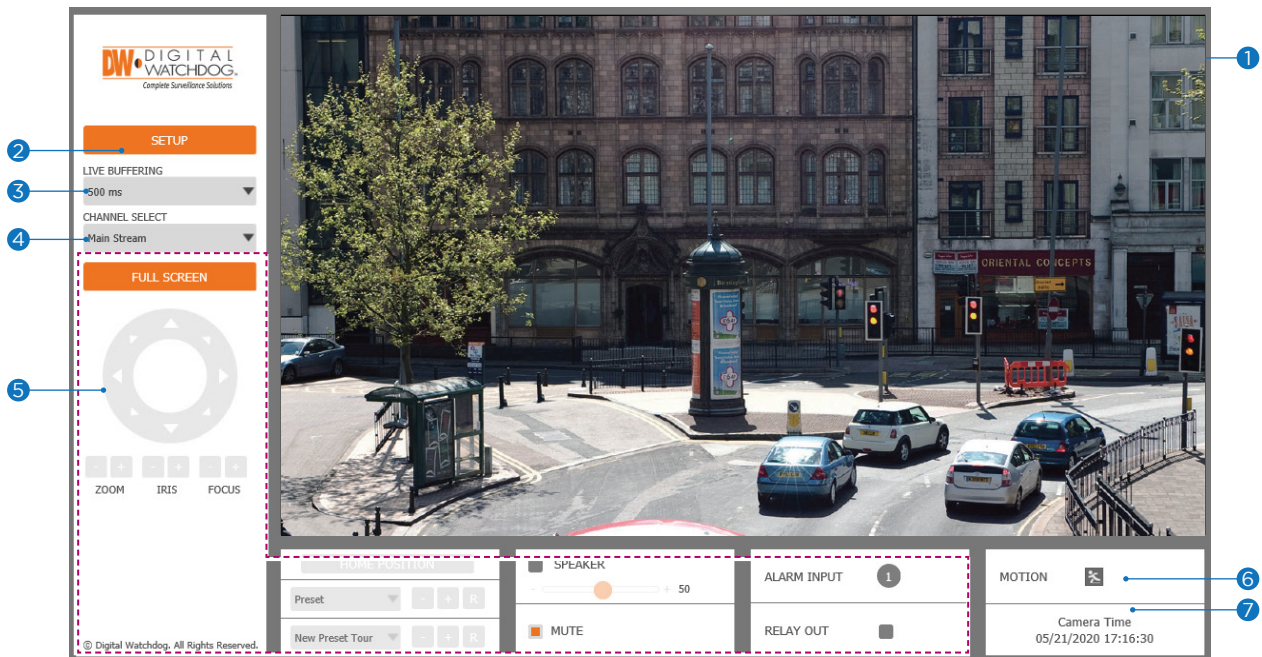
- If you need help remembering the password for your user, input the username in the username field and press the hint button. If you added a hint for your password when setting it up, it will appear then.

PASSWORD HINT

If you don't remember your password, click on the Password Hint button to see the hint.

User Name

Web Viewer Screen - Basic Screen



- ❗ The web viewer is optimized with Internet Explorer 10 (or above) and Mozilla Firefox.
- ❗ "If VLC is not installed or the VLC plugin is not supported (Chrome), 'Live Buffering' and 'Channel Select' (subjects 3 and 4 in the diagram) will display as 'Live Viewer'. If so, select HTML5 (MJPEG) from the Live Viewer menu to view the video.

- 1 Live video display. This is the region for the live video stream from the camera.
- 2 Setup a popup button. Click it to open the Setup page to setup details of IP camera like Video, Network, Events, System, etc. See the section 'Setup'.
- 3 When the image is distorted due to a bad network connection, the stored image frames will display live images, depending on the set buffer time.
 - ❗ Users will see the delayed images based on the set delay time.
- 4 Channel Select button. Select a stream produced from the camera between Stream 1 ~ 3 to display it in the live view screen.
 - ❗ Refer the 'Setup > Video & Audio > Video' to setup the Video Stream.
- 5 Below "Menu" is supported per models.


PTZ Control - This camera model does not support the zoom and focus.

Preset - Not supported.

Speaker Control - Enable/disable the audio stream from the camera and adjust the volume accordingly.

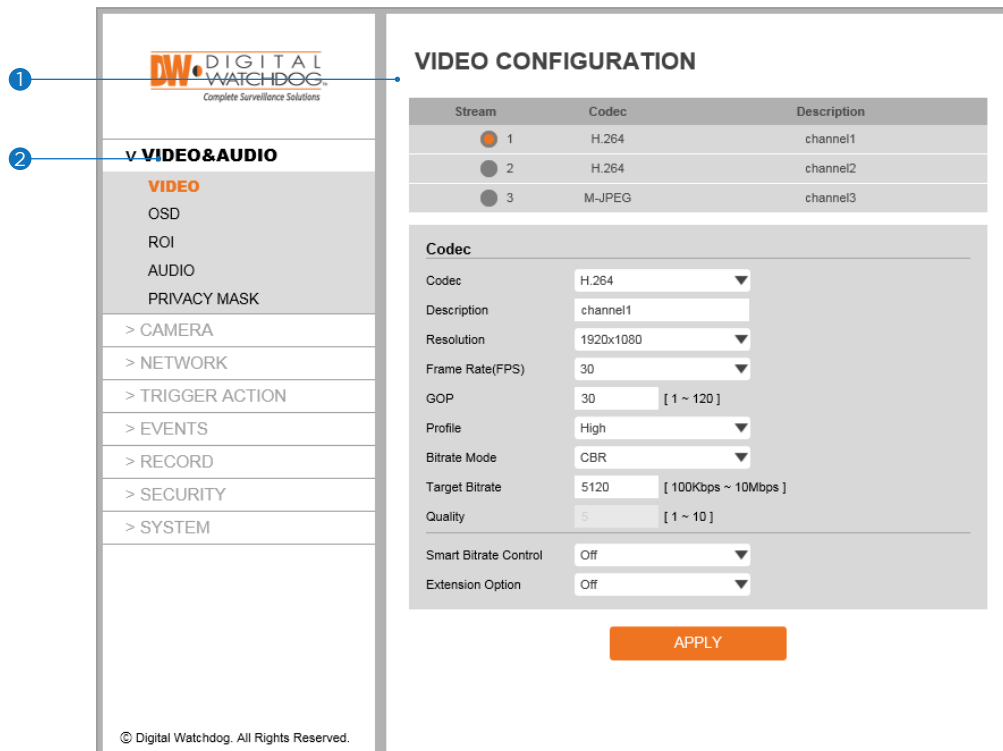
Alarm Input - If an alarm is triggered, the corresponding input number will be changed from dark gray to red.

Relay Out - Using this checkbox, read the relay output status and set or reset it manually.

- 6 **Motion** - Shows the motion event status.
 - ❗ Event Alert Icon () appears if 'Motion Detection' is activated.
- 7 **Camera Time** - Display the camera time.

Setup - Video & Audio Setup

Video Configuration



1 **Detail Page** - When you select an item from the menu, you can set the details for the selected item.

2 Setup Constitution

Video & Audio

[VIDEO, OSD, ROI, AUDIO, PRIVACY MASK]

Camera

[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, MOTION, TEMPERATURE, ALARM]

Record

[MANAGEMENT, RECORD LIST, STORAGE]

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]

NOTE: See MEGApix IVA Rules manual for more information on the IVA and IVA+ rules, setup and configuration

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 - The video can be configured to various settings with a combination of codec and resolution. The camera performance should be considered when setting multiple channels, as the performance of the camera will be affected.

⚠ H.265 (HEVC) codec with a higher bitrate may cause unstable live streaming or reload the webpage.

2 Codec - Choose the video codec. Depending on the selected codec, the subcategories may be changed accordingly.

3 Description - Input the additional description of the selected channel. Max. 30 alphanumeric characters may be used, including spaces.

4 Resolution - Select video resolution.

⚠ Available Frame Rate may differ even if the same codecs are in use.

<Resolution of Video Format>

	1080p/i	720p/i	SVGA	VGA	4CIF	CIF
NTSC	1920 x 1080	1280 x 720	800 x 600	640 x 480	704 x 576 704 x 480	352 x 288 352 x 240
PAL	1920 x 1080	1280 x 720	800 x 600	640 x 480	704 x 576 704 x 480	352 x 288 352 x 240

5 Frame Rate - Select the maximum Frame Rate.

⚠ Available Frame Rate can be different although the same codecs were set up.

Setup - Video & Audio Setup

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

- 6 **GOP(Group of Pictures) Size** - Set up the number of frames (P-frame) which contain only changed information based on the basic frame (I-frame). Regarding videos with lots of movement, if you set GOP size bigger, only the number of P-frames is bigger.

As a result, the video resolution will be low but 'File size' and 'Bit-rate can be decreased.

※ **GOP(Group of Pictures) Size** -

I-frame and P-frame creation for MPEG4, H.264, and H.265 (HEVC) video compression. 'I-frame', also known as 'key-frame', refers to the complete image data for a specific video frame. 'P-frame' refers to the changes in the image in comparison to the previous video frame. As a result, the GOP consists of one I-frame and several P-frames. For improved video quality, use a lower number of P-frames for this setting.

- 7 **Profile** - The profile defines the subset of bitstream 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. Supports I-frames, P-frames, and B-frames.

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

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

CBR - To guarantee the designated constant bit rate, the quality of the video is controlled in this mode. Therefore, the quality of the video is likely to be varying when network traffic is changing.

VBR - To guarantee the designated quality, the bit rate of the video stream is changed in this mode. Therefore, the frame rate of the video is likely to be varying when network traffic is changing.

※ This category will not appear if you select the codec.

Setup - Video & Audio Setup

Video Configuration

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
GOP: 30 [1 ~ 120]
Profile: High
Bitrate Mode: CBR

9 Target Bitrate: 5120 [100Kbps ~ 10Mbps]
10 Quality: 5 [1 ~ 10]
11 Smart Bitrate Control: Off
12 Extension Option: Off

13 **APPLY**

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

10 **Quality** - For VBR control mode, The Target Quality of video can be setup.

11 **Smart Core** - Off / Smart.RC

12 **Extension Option**

Off - You cannot use the Extension Option.

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

13 Click 'Apply' to save all settings.

Setup - Video & Audio Setup

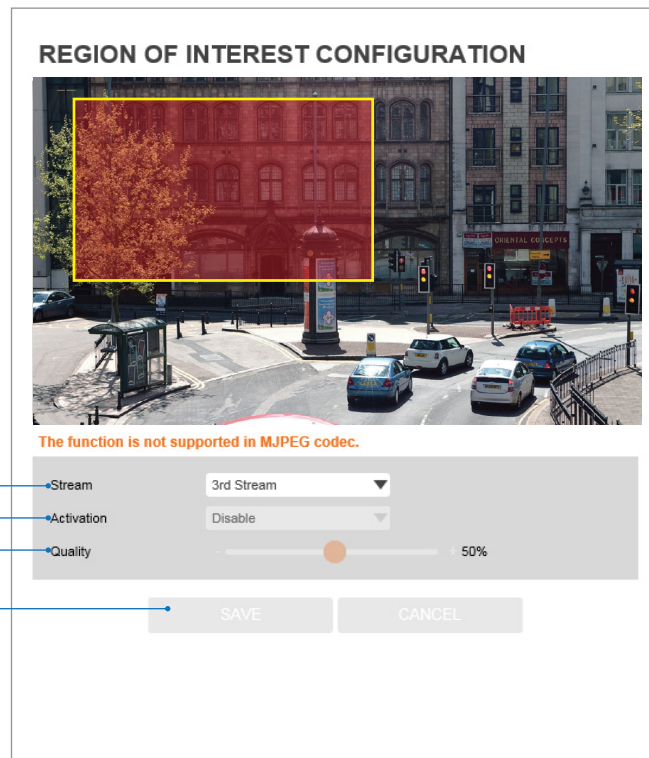
OSD Configuration

The screenshot shows the 'ON SCREEN DISPLAY(OSD) CONFIGURATION' menu. It is divided into two main sections: 'Date & Time' and 'User Text'. Each section has a radio button for 'Off' (selected) and 'On'. Below each section are input fields for 'Position X' and 'Position Y', both set to '0' with a range of '[0 ~ 100]'. The 'User Text' section also has a 'Text' input field. At the bottom of the menu is an orange 'APPLY' button. Three numbered callouts (1, 2, 3) point to the 'Date & Time' section, the 'User Text' section, and the 'APPLY' button respectively.

- 1 **Date / Time** - Display the current time.
- 2 **User Text** - Output the TEXT entered by the user. Support a maximum of 30 characters.
- 3 Click 'Apply' to save all settings.

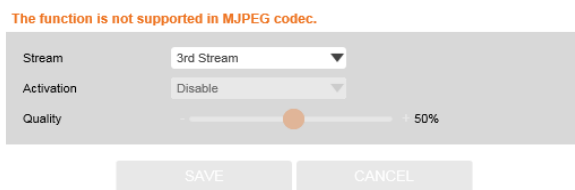
Setup - Video & Audio Setup

Region of Interest Configuration



The region of interest function gives a more efficient picture quality for the indicated area to improve the qualities of movement in the scene without compromising the bandwidth.

- 1 **Stream** - Select the Stream.
 - ⊠ Currently supports only H.264, H.265 (HEVC).
 - ⊠ The function is not supported in the MJPEG codec.



- 2 **Activation** - Enable or disable the region of interest function.
- 3 **Quality** - Set the quality of the set area.
- 4 Click 'Save' to save all settings.
 - ⊠ Click 'Cancel' to return to the previous setting.

Setup - Video & Audio Setup

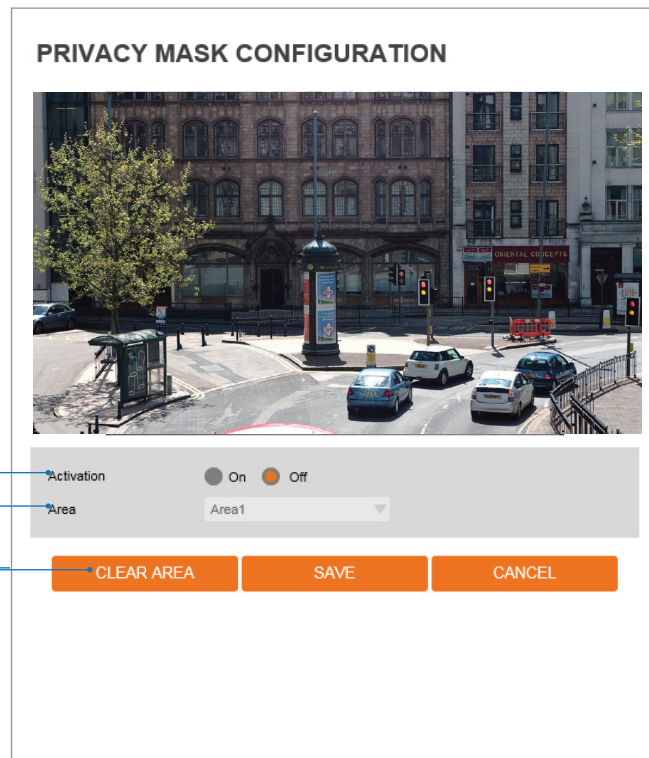
Audio Configuration

The screenshot shows the 'AUDIO CONFIGURATION' interface. It features a section titled 'Audio Encode' with three dropdown menus: 'Codec' (set to 'G.711 ulaw'), 'Volume' (set to '0'), and 'Sample Rate' (set to '8,000 Hz'). Below these is an orange 'SAVE' button. Four numbered callouts (1-4) point to the Codec, Volume, Sample Rate, and Save button respectively.

- 1 **Codec** - Select the Audio Codec.
☒ Currently, the camera supports codec G.711.
- 2 **Volume** - Select the Audio Volume from 0 to 10.
- 3 **Sample Rate** - Select the Audio Sample Rate.
☒ Currently, the camera supports 8000 Hz.
- 4 Click 'Save' to save all changes.

Setup - Video & Audio Setup

Privacy Mask Configuration

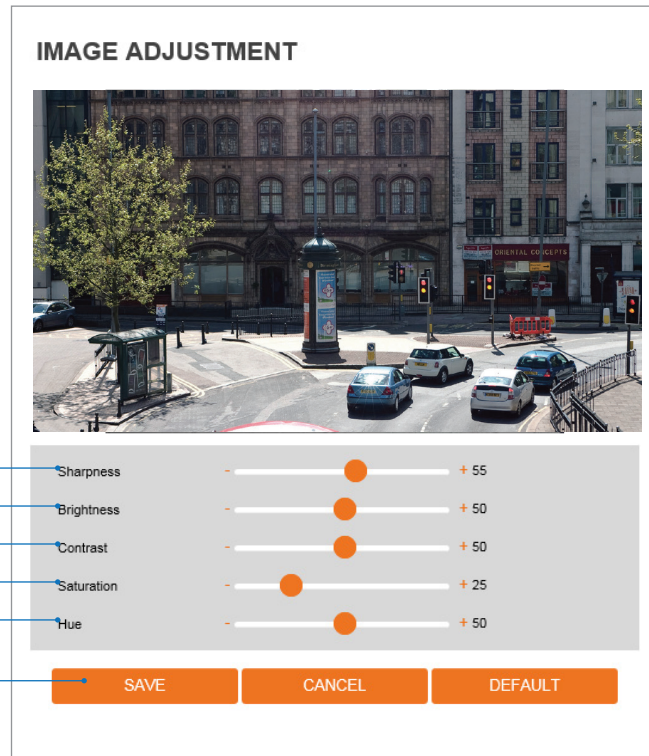


Use this function to mask areas that you want to hide on-screen to protect privacy.

- 1 **Activation** - Enable or disable the privacy mask function.
- 2 **Area** - Select Area1 ~ Area16, then draw the privacy mask in the video display.
- 3 Click 'Save' to save all settings.
 - ⊠ Click 'Cancel' to return to the previous setting.
 - ⊠ Click 'Clear Area' to delete the selected Area1~Area16.

Setup - Camera Setup

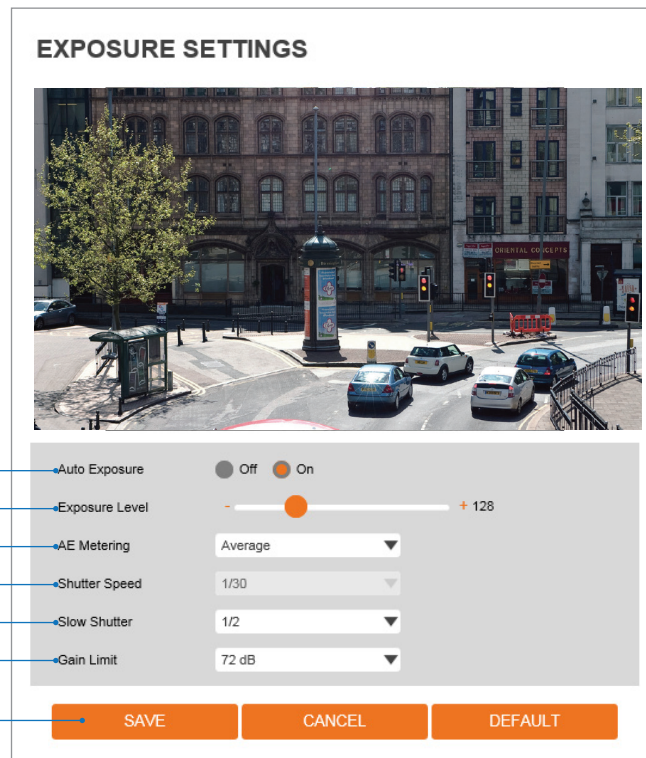
Camera Image Adjustment



- 1 **Sharpness** - The higher the number, the sharper the lines in the image will appear.
- 2 **Brightness** - The higher the number, the brighter the image will appear.
- 3 **Contrast** - The higher the number, the stronger the contrast between colors in the image will appear.
- 4 **Saturation** - The higher the number, the more saturated the colors in the image will appear.
- 5 **Hue** - The higher the number, the stronger the hue in the image will appear.
- 6 Click 'Save' to save all settings.
 - ⊠ Click 'Cancel' to return to the previous setting.
 - ⊠ Click 'Default' to settings to the factory defaults.

Setup - Camera Setup

Camera Exposure Settings



- 1 **Auto Exposure** - Automatic exposure (AE) automatically sets the aperture or shutter speed, based on the external lighting conditions for the photo.
- 2 **Exposure Level** - The higher the number, the brighter the image will appear.
- 3 **AE metering** - AE metering mode refers to how a camera determines the exposure.
- 4 **Shutter Speed** - If this speed is faster, the moving object can be photographed without the ghost effect. However, the picture can be dark if the lighting is insufficient.
- 5 **Slow Shutter Level** - Slow shutter Level lets you adjust the amount of light striking the sensor and essentially determines when the video sensor sends out its batch of data for processing.
- 6 **Gain Limit** - Adjusts image gain. The lower the value, the darker the image will appear.
- 7 Click 'Save' to save all settings.
 - ⊠ Click 'Cancel' to return to the previous setting.
 - ⊠ Click 'Default' to settings to the factory defaults.

Setup - Camera Setup

Camera Day & Night Settings



1 Day & Night

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

2 **Color Level** - It is a level to change Night mode into Day mode when Day & Night mode is Auto.

3 **B / W Level** - It is a level to change Day mode into Night mode when Day & Night mode is Auto.

4 **Transition Time** - If it is set to Auto, to determine the rate at which Day / Night is converted.

5 If it is set to schedule mode, Set the time that Day / Night is converted.

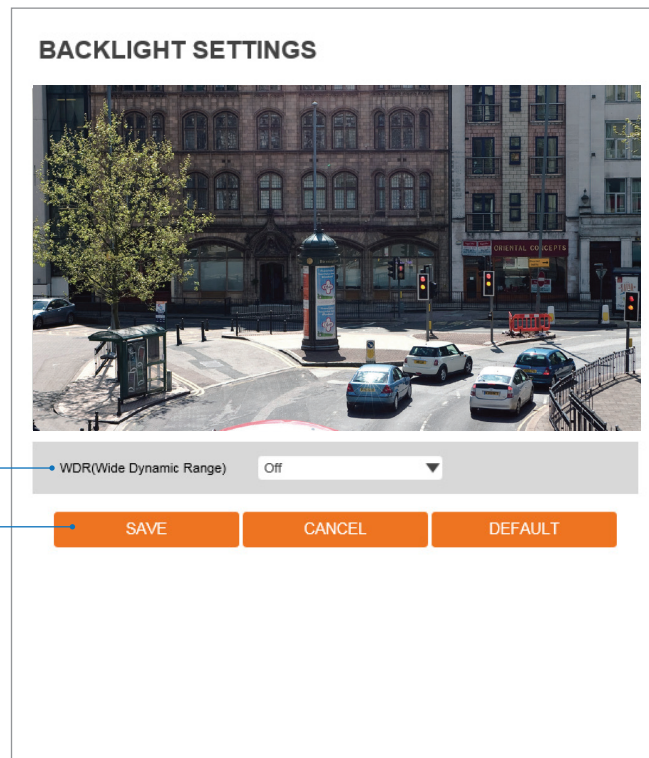
6 Click 'Save' to save all settings.

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

☒ Click 'Default' to settings to the factory defaults.

Setup - Camera Setup

Camera Backlight Settings

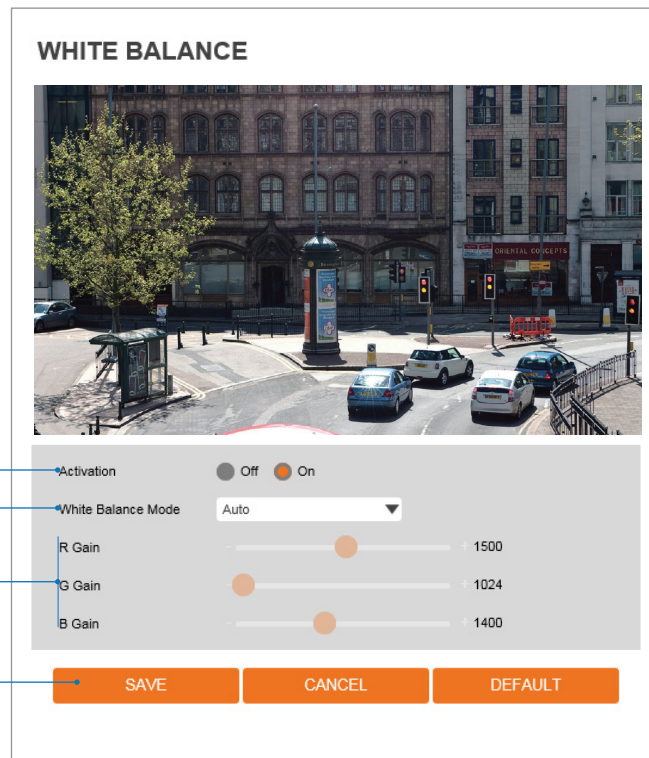


This feature is used when lighting conditions may cause detail loss in the camera's view due to high contrast.

- 1 **Digital-WDR** - Enable or disable the feature.
- 2 Click 'Save' to save all changes.
 - ⊠ Click 'Cancel' to return to the previous setting.
 - ⊠ Click 'Default' to change the settings back to their factory defaults.

Setup - Camera Setup

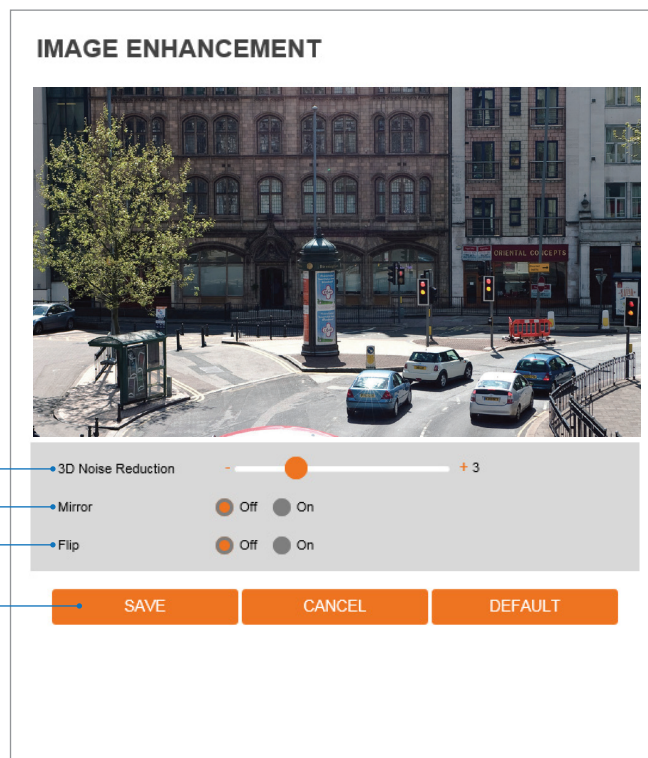
Camera White Balance



- 1 **Activation** - Enable or disable the White Balance function
- 2 **White Balance Mode** - Select White Balance depending on the lighting conditions.
- 3 **RGB Gain** - The R/G/B gain can be set only when the White Balance Mode is set to Manual.
- 4 Click 'Save' to save all settings.
 - ⊠ Click 'Cancel' to return to the previous setting.
 - ⊠ Click 'Default' to settings to the factory defaults.

Setup - Camera Setup

Camera Image Enhancement



- 1 **3D Noise Reduction** - Reduce digital noise in low-light conditions, improving video quality.
- 2 **Mirror** - Reverse the video horizontally.
- 3 **Flip** - Reverse the video vertically.
- 4 Click 'Save' to save all settings.
 - ⊠ Click 'Cancel' to return to the previous setting.
 - ⊠ Click 'Default' to settings to the factory defaults.

Setup - Network Setup

Network Status

NETWORK STATUS	
MAC Address	00:0D:F1:21:A2:11
IP Address	192.168.1.34
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 displays the camera's current network settings. To make any changes to the settings, you must go to the appropriate network settings tab.

Setup - Network Setup

Network Settings

The screenshot shows the 'NETWORK SETTINGS' configuration page. At the top, the 'Host Name' is set to 'IPNC'. Below this is the 'Network Type' section with radio buttons for 'Static' and 'Dynamic'. The 'IP setup' section contains input fields for 'IP Address' (192.168.1.34), '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 has input fields for 'HTTP Port' (80), 'HTTPS Port' (443), and 'RTSP Port' (554), each with a default range in brackets. At the bottom right is an orange 'APPLY' button. Numbered callouts 1 through 10 point to these specific elements.

- 1 **Network Type** - Define the network IP address type. Select Static Mode for a fixed IP or Dynamic Mode for a dynamic IP address.
If you select Static Mode, enter the camera's IP Address, Subnet Mask, Gateway, DNS Server, and all ports.
If you select Dynamic Mode, the IP address will be assigned automatically by the DHCP network requirements.
If you click 'Apply', the system will reboot and you will have to reconnect the camera using the new IP address.
 - 2 **IP Address** - A unique string of numbers, divided into four octets (ranging from 0-255), used to identify the device over a network.
 - 3 **Subnet Mask** - Determines the range of IP address options within the network.
 - 4 **Default Gateway** - IP address of the forwarding host within the network; the IP address of the router that is most commonly used.
 - 5 **Preferred DNS Server** - Address of the decentralized system used to translate alphabetic names into IP addresses.
 - 6 **Alternate DNS Server** - Secondary address of the decentralized system used to translate alphabetic names into IP addresses.
 - 7 **HTTP Port** - The HTTP port can be set to the default 80 port or any value in between 1025 to 60000.
 - 8 **HTTPS Port** - The HTTPS port can be set to the default 443 port or any value in between 1025 to 60000.
 - 9 **RTSP Port** - The RTSP port can be set to the default 554 port or any value in between 1025 to 60000.
 - 10 Click 'Apply' to save all settings.
- ※ If the network type is dynamic, the IP address is changed in the following cases. In these cases, the IP address needs to be searched again, and the camera needs to be reconnected:
- When the camera's power is switched off and on.
 - After firmware update, or when the camera is reset to its default settings and reboot.

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Auto IP Settings

AUTO IP SETTINGS

General Setting

Off On

UNIQUE ID 7b90d725-bc72-4571-bcc4-f048e0fd40e

AUTO IP ADDRESS 169.254.1.0

APPLY

- 1 **General Setting** - Enable or disable the Auto IP Settings.
- 2 **Auto IP Settings Information** - Display the camera's Unique ID and Auto IP address.
- 3 Click 'Apply' to save all settings.

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ONVIF Settings

The screenshot shows the 'ONVIF SETTINGS' interface. It features two main sections: 'Authentication' and 'Discovery mode'. The 'Authentication' section has three radio button options: 'None', 'WS-Usertoken', and 'WS-Usertoken + Digest'. The 'Discovery mode' section has two radio button options: 'Discoverable' and 'Nondiscoverable'. An orange 'APPLY' button is located at the bottom right of the settings area. Three numbered callouts (1, 2, and 3) point to the 'Authentication' section, the 'Discovery mode' section, and the 'APPLY' button, respectively.

1 Authentication

None: Allow access to the camera without ONVIF authentication.

WS - Usertoken: Allow access to the camera with WS-User Token of ONVIF authentication.

WS - Usertoken + Digest: Allow access to the camera with WS-User Token and Digest of ONVIF authentication.

2 Discovery Mode - Enable or disable discovery mode.

3 Click 'Apply' to save all settings.

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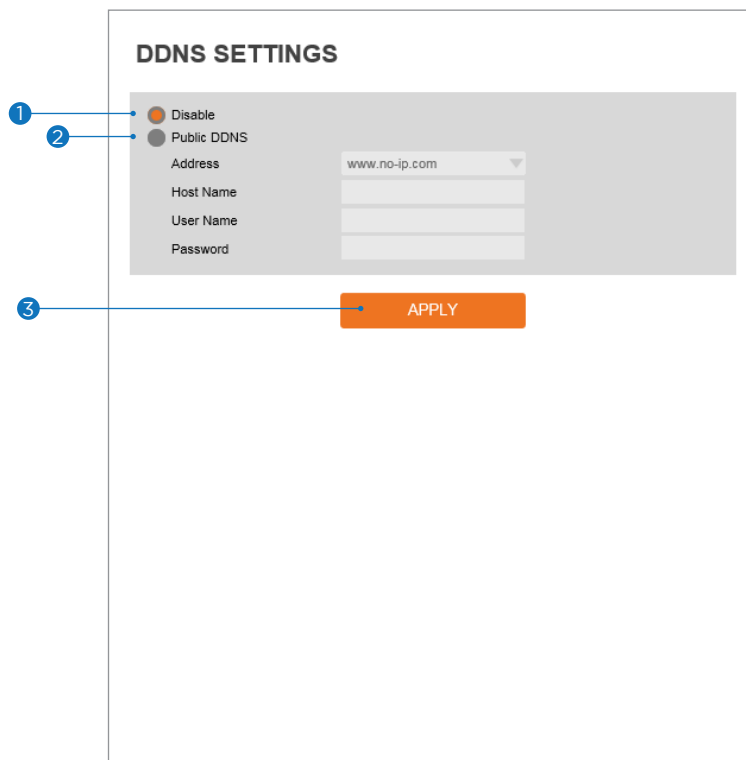
UPNP Settings

The screenshot shows the 'UPNP SETTINGS' interface. It is divided into two main sections: 'General Setting' and 'Device Information'. The 'General Setting' section contains two radio buttons, 'Off' (selected) and 'On'. The 'Device Information' section contains a text input field labeled 'FriendlyName'. An orange 'APPLY' button is located at the bottom right of the settings area. Three numbered callouts (1, 2, and 3) point to the 'General Setting' section, the 'Device Information' section, and the 'APPLY' button, respectively.

- 1 **General Setting** - Enable or disable the UPNP function.
- 2 **Friendly Name** - Define the friendly name. Support a maximum of 30 characters and special characters.
 - Do not use: / ~ ! \$ () { } [] ; ,
 - Acceptable special characters include; @ . _ -
- 3 Click 'Apply' to save all settings.

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DDNS Settings



❶ **DDNS Disable** - If it is selected, DDNS service does not work.

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

DDNS Provider

DynDNS

No-IP

⚠ 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 the DDNS site is failed, the camera will keep retrying in 1min. interval.

❸ Click 'Apply' to save all settings.

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FTP Settings

To transfer/save the image to the relevant sites through FTP, then FTP needs to be setup.

- 1 **General Setting** - Enable or disable the FTP function.
- 2 **FTP Server Address** - Define FTP Server IP Address. If the IP Address form is incorrect, a message box will be shown to try again.
- 3 **FTP Upload Path** - Define a path in FTP server to store video. For the path name, English Alphabets, numbers and special characters (/ ~ ! @ \$ ^ () _ - { } [] ; ,) can be used.
- 4 **FTP Port** - Define the FTP Server Port. If the port is not appropriate, it is impossible to access to FTP Server.
- 5 **User ID** - Define User ID to access to the FTP Server. Fill out the correct User ID registered in the FTP Server.
- 6 **Password** - Define Password to access to the FTP Server. Fill out the correct Password registered in the FTP Server.
- 7 Click 'Apply' to save all settings.
☒ Refer to the above image for example.

