User's Guide

TRENDNET®

Indoor/Outdoor 4MP H.265 Motorized Varifocal PoE IR Bullet Network Camera

TV-IP344PI

Contents

Product Overview

Features

TRENDnet's Indoor/Outdoor 4MP H.265 Motorized Varifocal PoE IR Bullet Network Camera, model TV-IP344PI, provides day and night surveillance with a night vision range of up to 30m (98 ft.). A built-in 2.8 – 12mm motorized varifocal lens allows you to adjust the field of view to meet your installation needs. This varifocal surveillance camera delivers year-round surveillance with an IP67 weather rated housing to withstand outdoor environments. Record up to 4MP HD video at 20 fps in a space saving H.265 compression format. Stream live video from this varifocal surveillance camera with included complimentary software and mobile apps.

Specifications

4 Megapixel

Record up to 4MP HD video (2560 x 1440) at 20 fps in the space saving H.265 compression format

Varifocal Lens

Varifocal surveillance camera has built-in 2.8 – 12mm motorized varifocal lens, allowing you to adjust the field of view to meet your installation needs

Covert Night Vision

Masked IR LEDs provide covert night-time viewing up to 30m (98 ft.) away

Smart IR

Smart IR dynamically adjusts the Infrared (IR) LEDs by lowering the IR intensity when objects are near, and increasing IR intensity when objects are farther away

Enhanced IR Technology

Enhanced IR technology provides up to a 30% increase in illuminant efficiency over traditional IR LED array technology

PoE

Save installation costs with Power over Ethernet (PoE) technology

Outdoor Ready

Varifocal surveillance camera with an outdoor IP67 weather rated housing

3-Axis Mounting Base

Integrated 3-axis mounting base provides installation flexibility

Advanced Playback

Advanced in-camera archived video playback functionality

Motion Detection

Create custom motion detection zones for the varifocal surveillance camera to record video and send email notifications when a zone is triggered

Tamper Detection

Create custom tamper detection zones to send an email notification when the camera view has been obstructed

Wide Dynamic Range (WDR)

Adjustable 120dB WDR setting improves image quality and focus when a camera is exposed to high contrast lighting environments by enhancing the dark areas of the image to make them more visible

Recording Flexibility

Define custom schedules using continuous (24/7) and event-based recording modes

ONVIF Compliant

ONVIF Profile S

Complimentary Software

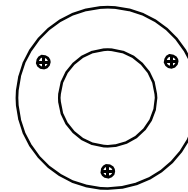Complimentary pro-grade software to manage TRENDnet cameras

Complimentary Apps

Live video to a mobile device with free iOS® and Android™ apps

Package Contents

TV-IP344PI package includes:

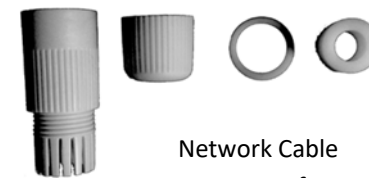- TV-IP344PI
- Weather seal
- Quick installation guide
- Camera mounting hardware

Drilling Template   Mounting Screws

Network Cable
Waterproof Accessories

If any package content is missing or damaged, please contact the retail store, online retailer, or reseller/distributor from which the product was purchased.

Front View

IR Sensor

Reset Button /MicroSD slot

Reset Button	Push and hold the reset button then power on the camera. Keep holding the reset button for more than 10 seconds to reset configuration to factory default.
MicroSD slot	Open the case and insert the MicroSD slot for storage.
IR Sensor	Detects the brightness in the environment and enable day/night modes automatically.

Warnings

Serious injury or death may be caused if any of these warnings are neglected. Follow these safety guards to prevent serious injury or death.

- If using the power adapter, please choose the power adapter that meets the safety extra low voltage (SELV) standard or IEC60950-1 and Limited Power Source standard.

- If the product does not work properly, please contact your dealer or the nearest service center. Never attempt to disassemble the camera yourself. Disassembling the product will void the warranty and may cause harm or injury.

- To reduce the risk of fire or electrical shock, do not expose this product to rain or water.

- The installation should be done by a qualified service person and should conform to all construction and electric regulations and other local codes.

Cautions

Injury or equipment damage may be caused if any of these cautions are neglected. Follow these precautions to prevent potential injury or material damage.

- Make sure the power supply voltage is correct before using the Camera.

- Do not drop the camera or subject to physical shock.

- Do not touch sensor modules with fingers. If cleaning is necessary, use a clean cloth with a bit of ethanol and wipe it gently. If the camera will not be used for an extended period of time, put on the lens cap to protect the sensor from dirt.

- Do not aim the camera lens at the strong light such as the Sun or an incandescent lamp. Strong light can damage the camera sensor.

- The sensor may be burned out by a laser beam, so when any laser equipment is being used, make sure that the surface of the sensor will not be exposed to the laser beam.

- Do not place the camera in extremely hot, cold temperatures (the operating temperature should be between -10°C to 60°C), dusty or damp environment, and do not expose it to high electromagnetic radiation.

- To avoid heat accumulation, good ventilation is required for a proper operating environment.

- Keep out of water and any liquid.

- While shipping, the camera should be packed in its original packing.

Plan for installation location

Viewing angle

The TV-IP344PI is a bullet camera with a focused viewing angle (70° horizontal) that provides non-distorted and detailed images. Choose the location where has good angle to shoot the image you expect to see. The motion detection area should also be considered when installing the camera.

Weather Conditions

The TV-IP344PI is a small bullet camera, which fits most installations indoor and outdoor. The camera can work under a wide range of weather conditions. For severe weather conditions, a camera housing with temperature and moisture control is recommended. Using the camera in milder weather conditions will help extend the camera's product life and preserve the quality of the video image.

- **Moisture:** Avoid damp or moist environments whenever you can. The TV-IP344PI is an IP66 grade water proof camera, and it will work in moist environments. However, rain may affect the picture quality, especially at night, water may reflect the light from the infra-red illumination and degrade picture quality.

- **Temperature:** TV-IP344PI works within a specified temperature range. Areas with severe temperatures should be avoided when installing the camera. It's recommended that you use an enclosure with a heater and blower if you plan on using this camera outside of the specified temperature range.

- **Sunlight:** Avoid direct sun light exposure. Direct sun light will damage the image sensor. If sunlight is necessary for your viewing purposes, provide protection for the image sensor.

- **Lighting:** Consider installing your camera faces the same direction of the light sources. Shooting images with top-down position outdoor or next to the existing light source are good choices. Avoid the light source if it creates a shade that darkens the viewing area.

Hardware Installation

Cabling

It's recommended that the wiring the cable in your home or office by a professional. If you already have the cable deployed, make sure the cable and the connectors meet the category 5 Ethernet cable standards. At least 2 pairs of twisted lines are required for power and data. Poor cable quality may cause unexpected problems. Testing your cable or running a new cable is suggested for new camera installation.

Waterproof cap

The camera itself is IP66 grade water and dust proof. There is a set of network cable water proof caps that comes with the package as well. Run your cable going through the accessories, and then crimp the cable with an RJ45 module. Plug in the network cable and then tighten the waterproof cap to prevent water running into camera through the cable.
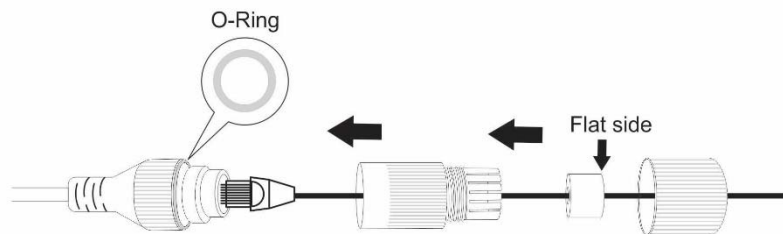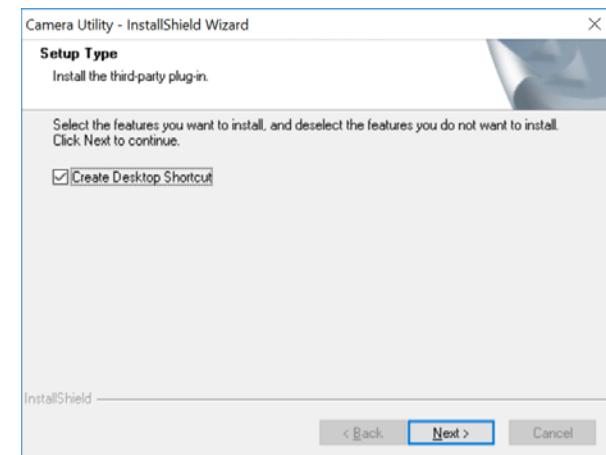
Setup Your Camera with Camera Utility

1. Please download the utility at
    http://www.trendnet.com/camerautility

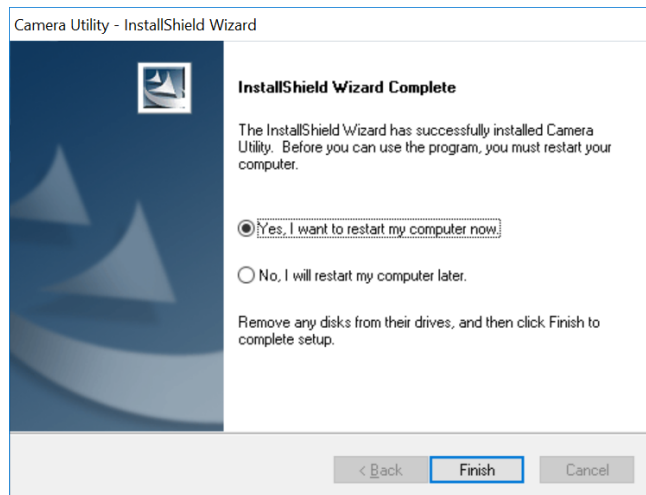2. Extract the downloaded file and double click on the camera utility file to install
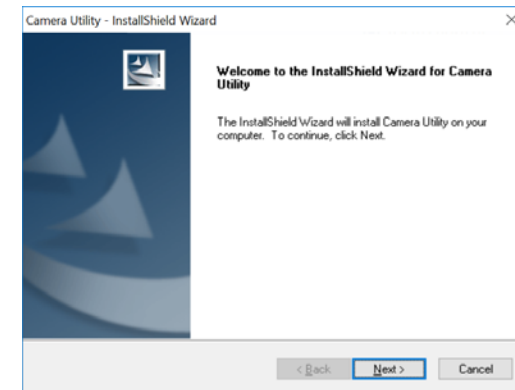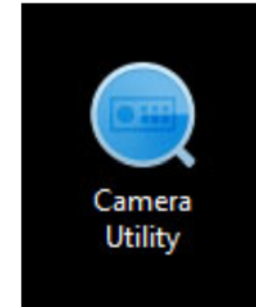
3. Last, click Next to finish the installation.

4. This will also require you to Install WinPcap program if you don't have this installed before, please follow the on screen Instructions to Install It.
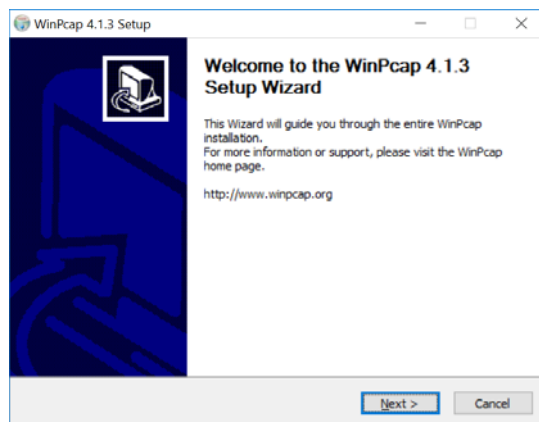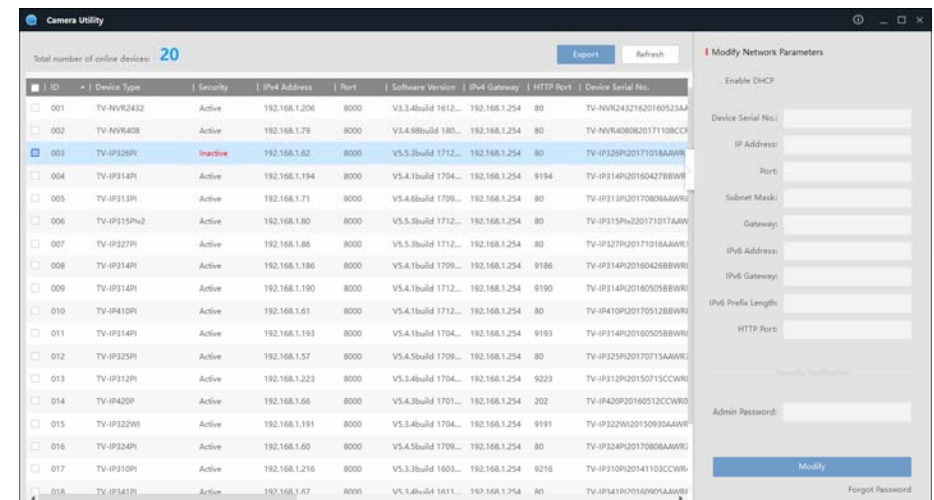
5. Restart the computer after the Installation.

6. After the computer has restarted, double click on the Camera Utility icon to launch the program.

7. Find the camera you would like to access and configure then double click on the IP address.

8. Continue to the next section **Access your Camera with the Web Browser** for detail configurations of the camera.

Access your Camera with the Web Browser

Logging-in to the Camera for the First Time (Windows)

1. Find the camera from the Utility and double click on the IP address to open the browser.
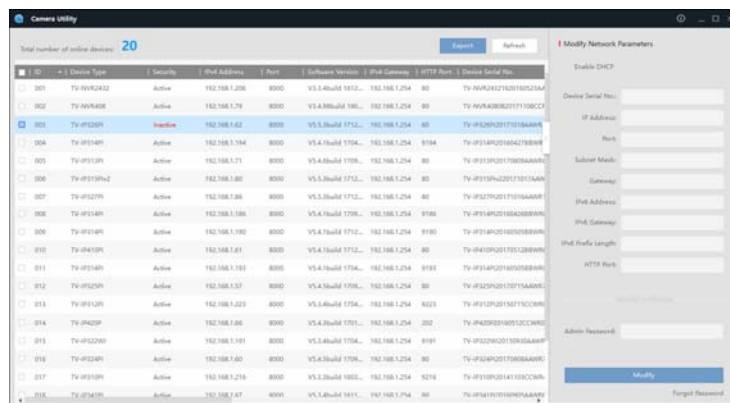
2. Activate the **admin** User Account by entering your desired password, and then click **OK.**

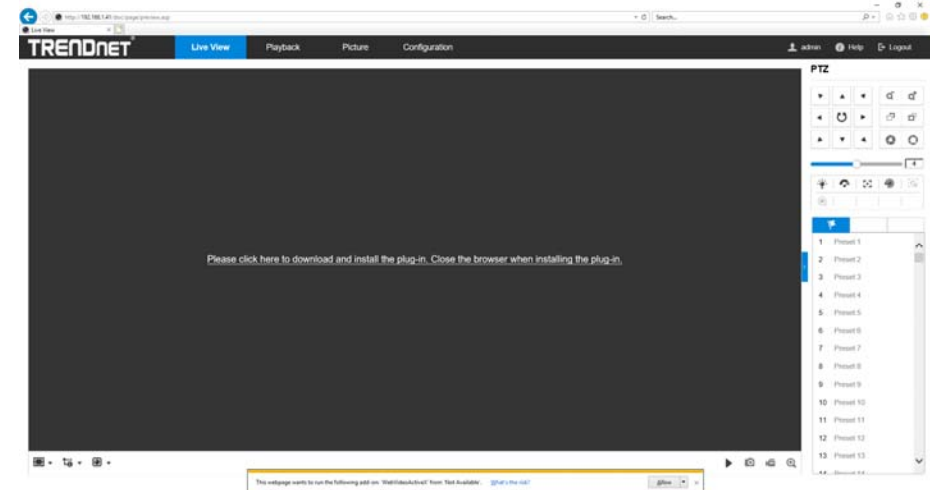3. The camera management page will detect if you installed the camera video streaming plug-in or not. Click the link to download the plug-in from the camera. (For Internet Explorer and Safari only) Google and Firefox users, skip to step 9.
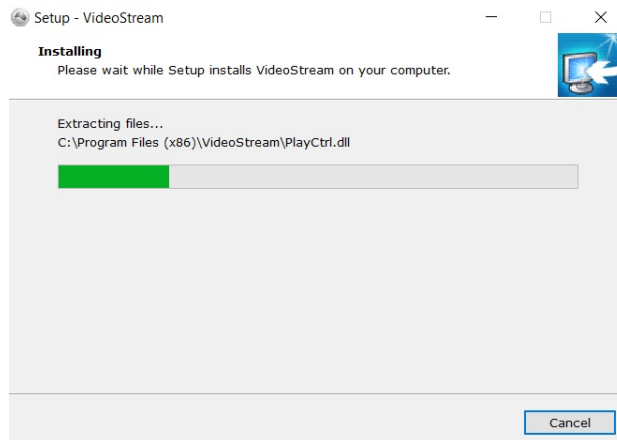

4. Download the plug-in to your computer and then and close your browser. Launch the plug-in installation to install the plug-in.
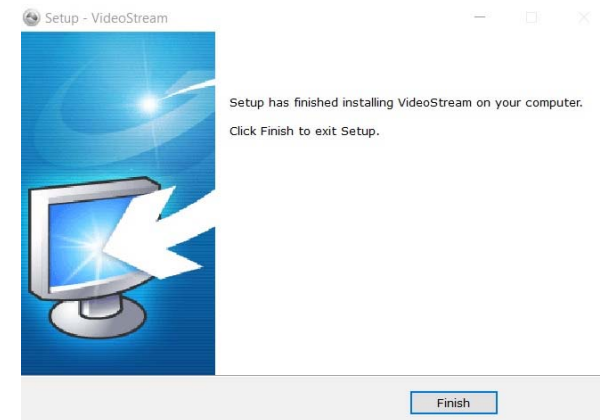
5. Permission request may show up depends on the Internet security settings on your computer. Click **Yes** or **Run anyway** to install the plug-in**.**
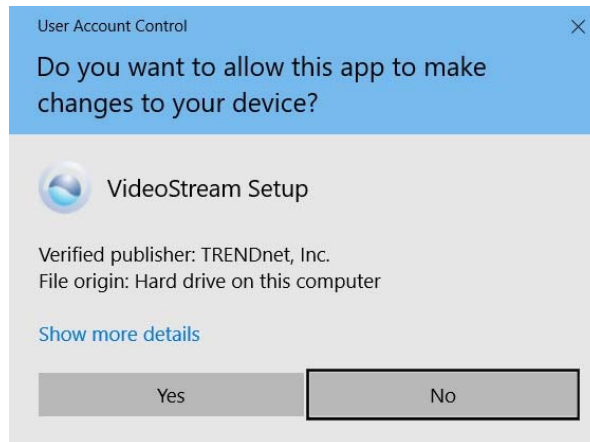
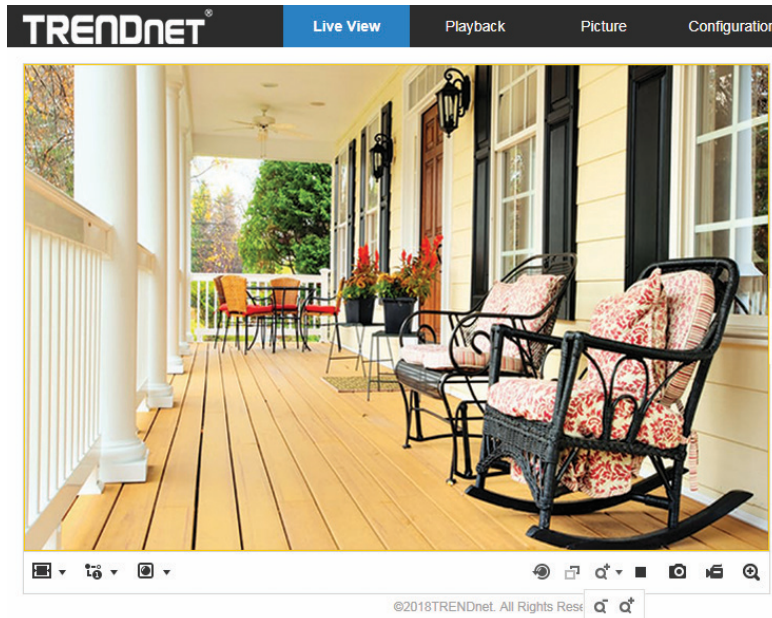6. Click **Next** to install the plug-in.

7. Click **Finish** to finish the installation.

8. Open the browser and login again, enter the user name **admin** and new password again to start secured session**.**

9. Refresh the browser and the Live View page will show up and begin streaming video.

Logging-in to the Camera for the First Time (OS X)

1. Open the web browser on your computer. In the address bar, enter the default IP address of the camera 192.168.10.30.   If the camera is connected to a router/network, please use the Windows Camera Utility to find the exact IP address.

2. Activate the **admin** User Account by entering your desired password, and then click **OK.**

3. The camera management page will detect if you installed the camera webcomponent plug-in or not. Click the link to download the plug-in from the camera.

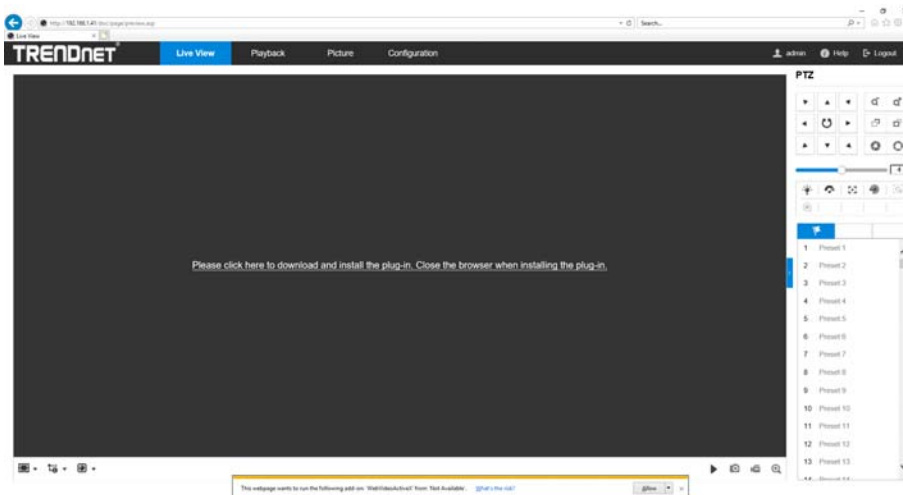   *Note: Internet connection is required to download the plug-in. If you do not have Internet access, you can find the plug-in on the CD comes with the package under /Mac folder.*

4. Quit your browser completely by **command-Click** on the browser icon and then click **Quit** before installing the plug-in.

5. Go to the **Finder** and navigate to the **Download** folder. **Command-Click** the **WebComponents.pkg** and then click **Open**. (If you are install the plug-in from the CD when you don't have internet connection, just browse to /Mac folder and double click the **WebComponents.pkg** file.)
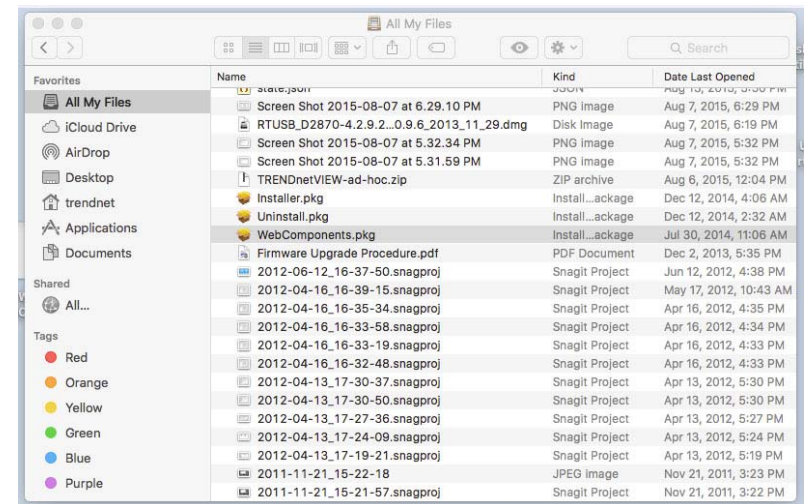
6. Click **Open with → Installer** to start installation.
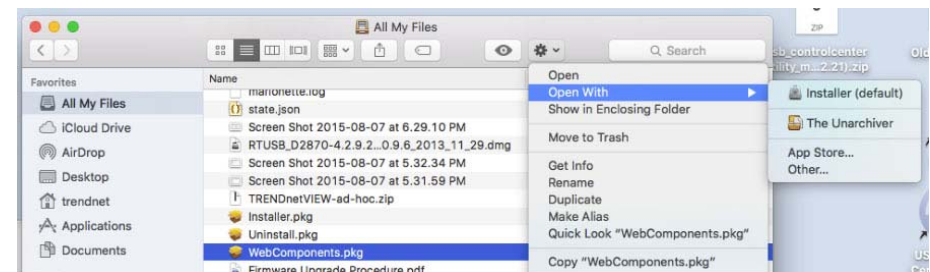
7. Click **Continue** to install the plug-in.
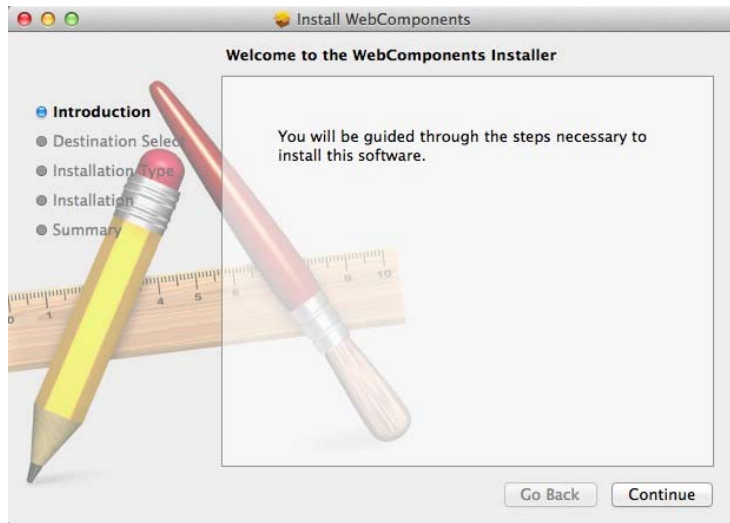
8. Select a destination to install the plug-in. Then click **Continue.**

9. Use the default location and click **Install.**
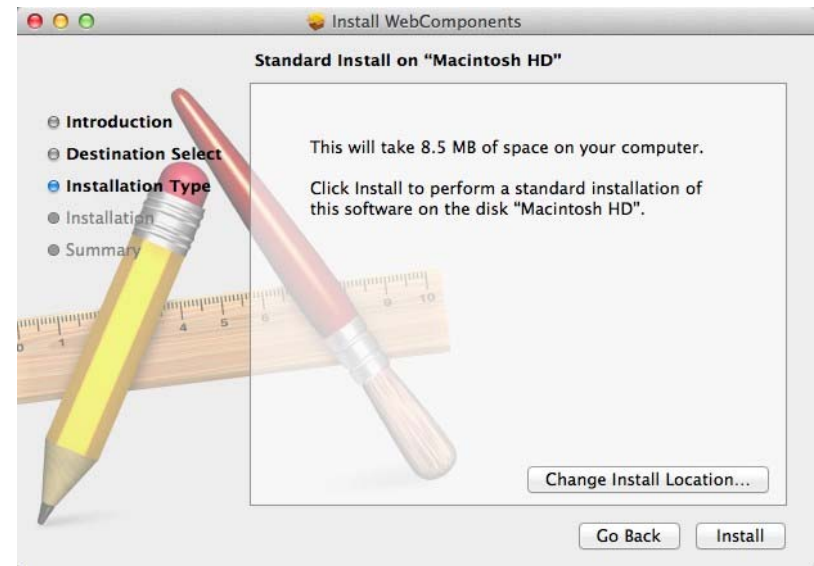
10. Enter your password and click **Install Software**

11. Installation will process automatically.
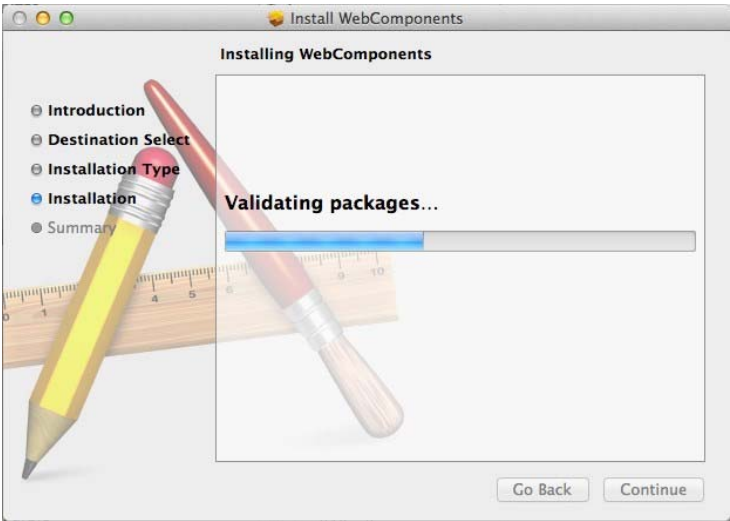
12. Click **Close** to exit the installation.
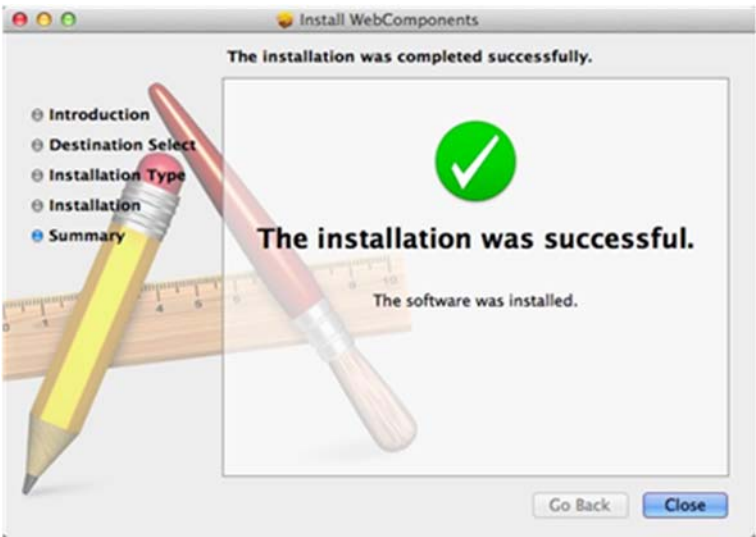
Live View

After you log-in into the camera management page, you'll see the Live View page.
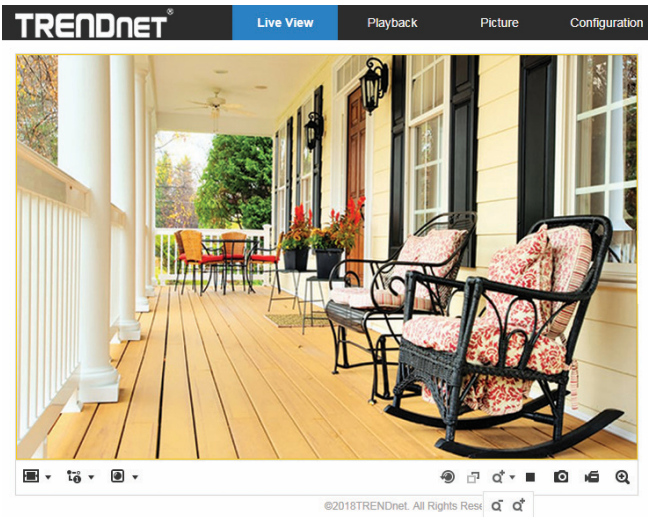
Video Stream ▾	The camera has two video streams: H.264 and MJPEG. Switch to view the different video streams by clicking this icon
Start/Stop All	Click to start/stop all live views
Snapshot	Click this icon to take a video snapshot
Recording	Click once to start recording. Click it again to stop recording. The status bar

	will indicate if it is in recording state or not
Zoom ⊕	Click once to enable zoom. Then, click and drag the area on the picture to zoom in. Click once on picture for 100% zoom. Click the icon again to disable zoom. The zoom function works in full screen mode as well
Regional Exposure	Click this button to enable/disable regional exposure
Regional Focus	Click this button to enable/disable regional focus
Full Screen Mode	Double click the picture or click this button to view in full screen mode. Double click again or press escape key on your keyboard to exit full screen mode
Expand Control Panel ❯	The icon expands the control panel
Zoom in / out	Zoom in and out of the image
Focus near / far	Focus the image

Playback

You can playback the video recording on the network storage and download the video clip and snapshots to your local computer.
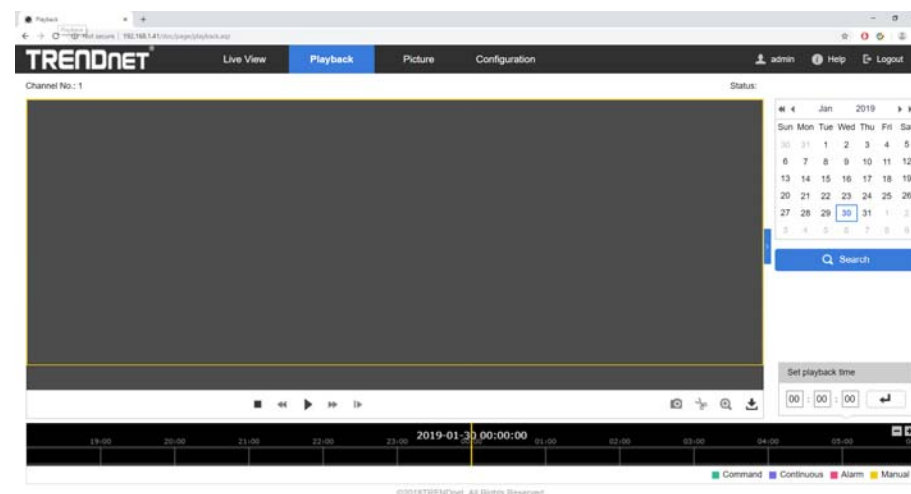
Search for video recordings
Click the date selection, and then choose a date as the date range of searching. Click **Search** to start searching.
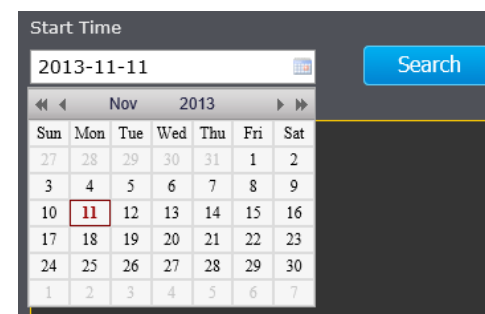
Time Line

There is a play back head in the center of the time line represented in a yellow vertical line. To look for a specific video recording, move the time line by clicking and dragging it. If the recording is short, zoom in by clicking ⊕ button. Click ⊖ to zoom out the time scale. If you know the exact time of the day you are looking for, click ➡ then enter the time you want to playback.

Different types of recordings are identified differently. The scheduled recordings are marked in blue, and the recordings triggered by motion detection are marked in red.
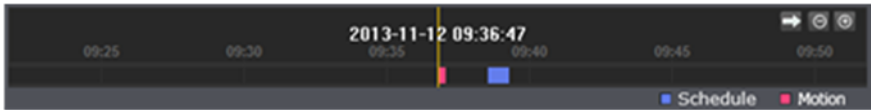
Click and drag the time line to move your time manually.

Click this button to zoom in the scale

Click this button to zoom out of the scale

Click this button to specify a specific time of the day.
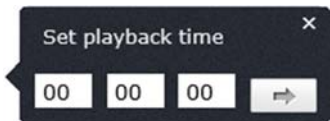
then click ➡ to confirm selection and then click **X** to close this dialog box.

Playback

Use playback controls to play back the video recording.

▶	Click this button to play/pause the video.
■	Click this button to stop playback.
▶▶	Click this button increase playback speed*.
◀◀	Click this button decrease playback speed*.
I▶	Click to playback video frame by frame. Click again for the next frame.

Note: There are 5 steps of playback speed you can choose from: 1/4, 1/2, 1, 2, and 4 times of original speed.

Slice images from video playback

You can take snapshots from playback video or make new video clips from the video you are playing back.

		Click this button to start/stop all recordings.
		Click this button to take a snapshot of current playback.
		Click this button to clip a video from playback.
		Click this button to enable zoom. Then click and drag on the video to define the area you want to zoom in. Click again to get back to 100% zoom. Double click to show video in full screen and press **ESC** on keyboard to exit full screen mode.
		Use this to adjust the volume of the live view feed
		Click this to download the footage
		Click this button to full-screen the playback

Where can I find saved files?

Videos and snapshots captured from Playback will be saved to your computer.

Picture

Click button to list snapshots to download
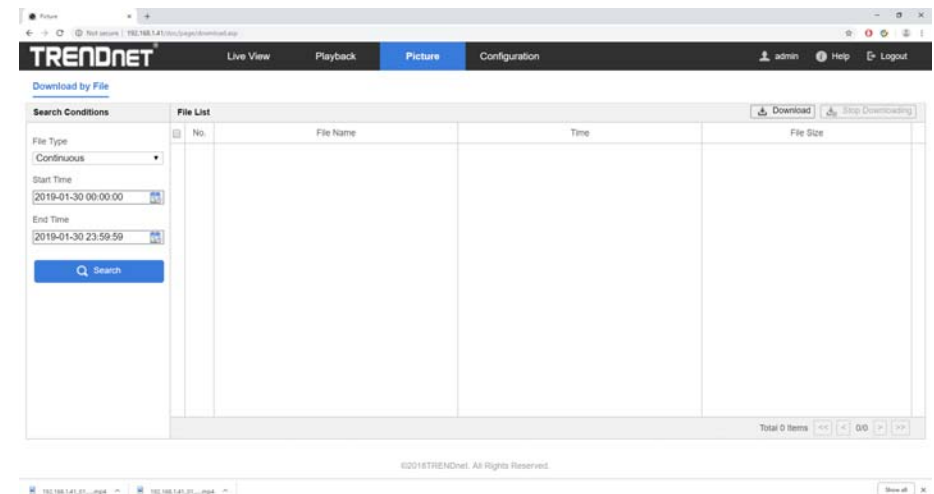
Select the type of event that triggered the snapshots. Choose the Start Time and End Time. Then, click **Search** to find the snapshot list. Check the time of the snapshot, and then select the snapshots you want to download, then click **Download**.

Where can I find saved files?

Videos and snapshots captured from Playback will be saved to your computer.

Configuration

System

System Settings

Basic Information

Setup your camera name and location for easy identification. This camera name will also be recognized by other network camera software as the name of this camera. OSD, On Screen Display, camera name is referring to this setting as well.

Names	
Device Name:	Name of the camera. The camera name setup here can be discovered by other network camera

	software and OSD, On Screen Display. The default camera name is the model number: TV-IP460PI
Location:	Label where you installed this camera for reference
Device Number	The number you assigned to the device
Model	Model of the device
Serial No.	Serial Number of this device
Firmware Version	The version of the FW currently applied to the camera
Encoding Version	The encoding version used by the camera
Web Version	The web version of the camera
Plugin Version	The version of the plugin used
Number of Channels	Number of camera channels on this camera
Number of HDDs	Number of HDDs added to this camera
Number of Alarm Input	Number of Alarm Inputs
Number of Alarm Output	Number of Alarm output

Time Settings

The accuracy of the system clock is important for scheduling and accurate logging. You can synchronize the system time with your computer, or automatically check the time accuracy with a network time server (NTP server).
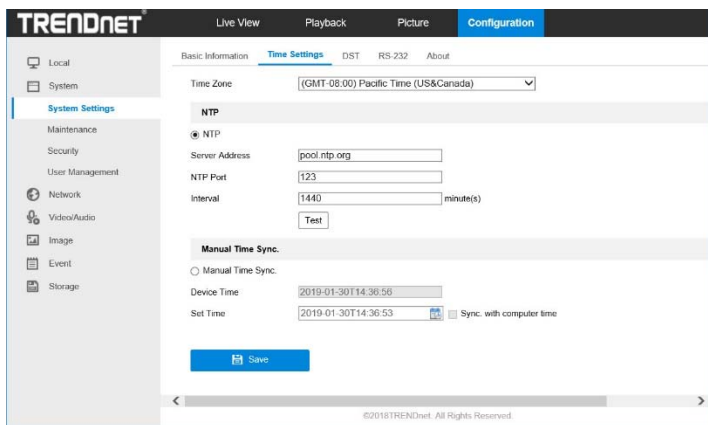
Automatic Update	
NTP Server:	Specify a time server (NTP server) to synchronize with. (e.g. pool.ntp.org)
Interval:	The time interval that the TV-IP344PI will synchronize the time with NTP server. Default: 1440 minutes (24 hours)
Manual Time Sync	
Device Time:	The system time of this camera.
Set Time:	Click the calendar icon and manually select the date. Check the **Sync. with computer time** to copy the time from your computer.

DST

Setup daylight savings.
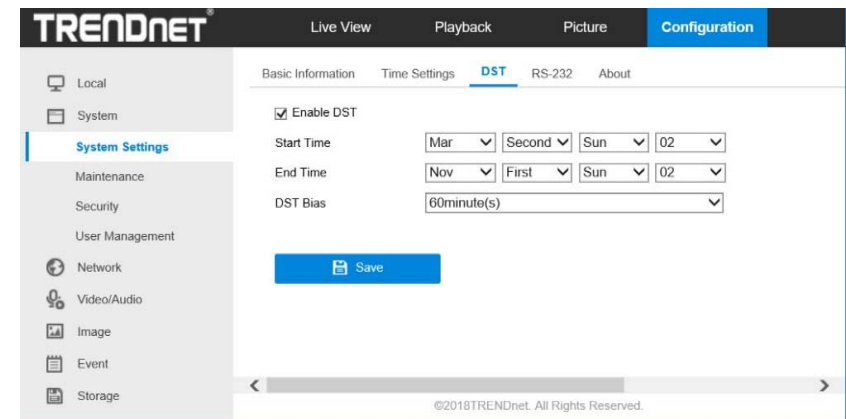
Automatic Update	
Enable DST:	Check this box if your time zone has daylight savings.
Start Time:	Enter the date that daylight savings starts
End Time:	Enter the date that daylight savings ends
DST Bias	Enter how much time the daylight saving adjusted by daylight savings.

*Click **Save** to save the changes*

Maintenance

Upgrade and Maintenance

You can restart, load camera settings and upgrade the camera firmware on this page.
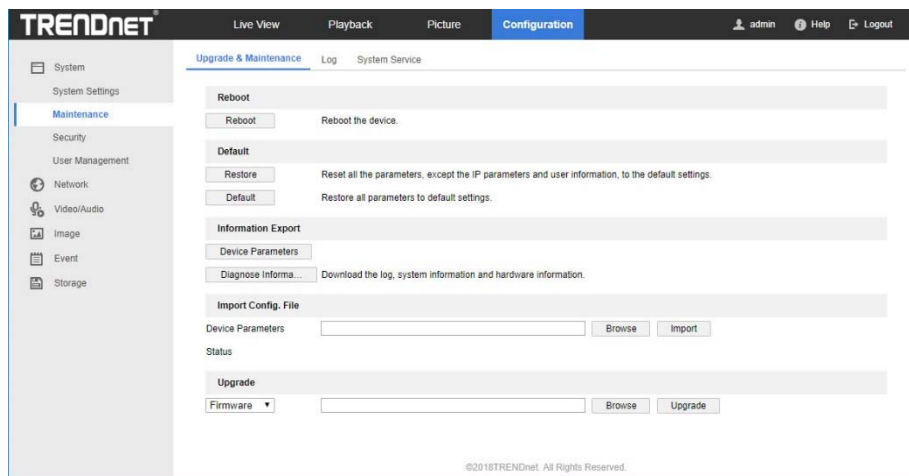
Reboot		
Reboot:	Click this button to reboot this camera.	
Reset		
Reset:	Reset all camera parameters, except the IP parameters and user information.	
Default:	Load complete factory default to the camera.	
Inport Config. File		
Config File:	To load previously saved settings, click **Browse** to find the configuration file and then click **Import**.	

Status:	Shows the status in loading configuration file.	
Export Config. File		
Export:	Click Export to download configuration file. The file will be downloaded to the Download folder by default.	
Remote Upgrade		
Firmware:	Click Browse to find the latest firmware and then click Upgrade.	
Status:	Shows the status in firmware upgrade.	

TRENDnet may periodically release firmware upgrades that might add features or fix problems associated with your camera. To find out if there is a firmware upgrade available for your device, please check your TRENDnet model and version using the link.

http://www.trendnet.com/downloads/

1. If a firmware upgrade is available, download the firmware to your computer.
2. Unzip the file to a folder on your computer.
3. Read the firmware upgrade instruction for specific version update information.
4. Log into the camera or NVR.
5. Getting to this Maintenance page to upgrade firmware.

Log

The log of the camera will be saved on the network storage. You can search the relevant records and save to your local computer.
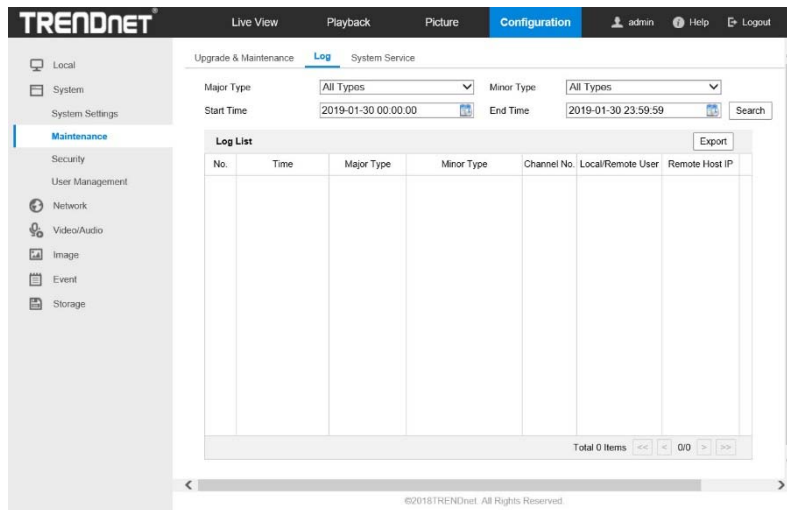
Search for logs

Click the type of log and then the Start Time and End Time. Click **Search** to start searching**.**

Click **First Page** ⏮ , **Prev Page** ◀ , **Next Page** ▶ , and **Last Page** ⏭ to show the logs. Click **Save Log** to save the logs to your computer.

System Service

This section allows you to enable/disable IR light control.
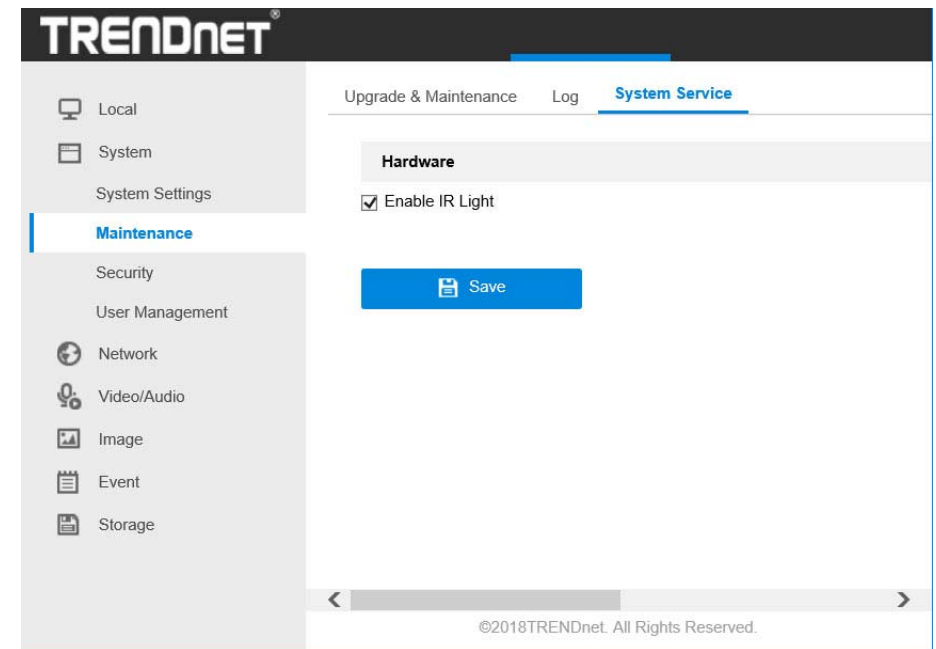
Security

Authentication

Configure the parameters, including Authentication, Anonymous Visit, IP Address Filter, and Security Service from security interface.

1. Enter the Authentication interface: **Configuration** > **System** > **Security** > **Authentication.**

2. Set up authentication method for RTSP authentication and WEB authentication.

   Caution:

   Digest is the recommended authentication method for better data security. You must be aware of the risk if you adopt basic as the authentication method.

3. Click **Save** to save the settings.

IP Address Filter

1. Enter the IP Address Filter interface: **Configuration** > **System** > **Security** > **IP Address Filter**

2. Check the checkbox of **Enable IP Address Filter**.

3. Select the type of IP Address Filter in the drop-down list, **Forbidden** and **Allowed** are selectable.

4. Set the IP Address Filter list.

   ● Add an IP Address

     Steps:

   (1) Click the **Add** to add an IP.

   (2) Input the IP Adreess.

   (3) Click the **OK** to finish adding.

● Modify an IP Address

Steps:

(1) Left-click an IP address from filter list and click **Modify**.

(2) Modify the IP address in the text filed.

(3) Click the **OK** to finish modifying.

● Delete an IP Address or IP Addresses.

Select the IP address(es) and click **Delete**.
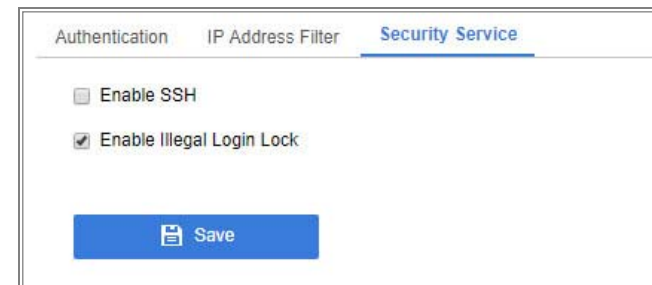
5. Click **Save** to save the settings.

To enable the remote login, and improve the data communication security, the camera provides the security service for better user experience.

Steps:

1. Enter the security service configuration interface: **Configuration > System** > **Security** > **Security Service**.

2. Check the checkbox of **Enable Illegal Login Lock**.

Illegal Login Lock: it is used to limit the user login attempts. Login attempt from the IP address is rejected if admin user performs 7 failed user name/password attempts (5 times for the operator/user).

Note: If the IP address is rejected, you can try to login the device after 30 minutes.

User Management

User Management

You can setup up to 16 user accounts to access the camera's video stream with a web browser or real time video stream (RTSP). Only one administrator account can be setup to configure the TV-IP344PI and cannot be deleted.

Online Users

You can see the current users who are visiting the device through this interface. User information, such as user name, level, IP address, and operation time, is displayed in the User List.

Click **Refresh** to refresh the list.

User Management	Online Users			
User List				Refresh
No.	User Name	Level	IP Address	User Operation Time
1	admin	Administrator	192.168.1.70	2019-02-25 13:08:21

User Management	Online Users			
User List		Security Question	Add	Modify	Delete
No.	User Name		Level	
1	admin		Administrator	

User Accounts

Add:	Click **Add** button to add one user account
Modify:	To change a user's name and password, highlight the user by clicking on it. Then, click **Modify** button. You can change the user's name and password. You can also change the administrator's password here. But, the administrator's name is fixed, you cannot change that.

Add user

User Name	
Level	Operator
Admin Password	
Password	

Valid password range [9-16]. You can use a combination of numbers, lowercase, uppercase and special character for your password with at least two kinds of them contained.

Confirm	

Click **OK** to save the changes.

Network

Basic Settings

You can configure the parameters, including TCP/IP, DDNS, PPPoE, Port, and NAT, etc., by following the instructions in this section.

TCP/IP

Setup your basic IPv4 and IPv6 network settings on this page.

1. Configure the basic network settings, including the NIC Type, IPv4 or IPv6 Address, IPv4 or IPv6 Subnet Mask, IPv4 or IPv6 Default Gateway, MTU settings and Multicast Address.

2. (Optional) Check the checkbox of **Enable Multicast Discovery**, and then the online network camera can be automatically detected by client software via private multicast protocol in the LAN.

3. Configure the DNS server. Input the preferred DNS server, and alternate DNS server.

4. Click **Save** to save the above settings.

***Notes*:**

● The valid value range of MTU is 1280 to 1500.

● The Multicast sends a stream to the multicast group address and allows multiple clients to acquire the stream at the same time by requesting a copy from the multicast group address. Before utilizing this function, you have to enable the Multicast function of your router.

● A reboot is required for the settings to take effect.

DDNS

If your camera is set to use PPPoE as its default network connection, you can use the Dynamic DNS (DDNS) for network access.

***Before you start*:**

Registration on the DDNS server is required before configuring the DDNS settings of the camera.

Steps:

1. Check the **Enable DDNS** checkbox to enable this feature.
2. Select **DDNS Type**. Two DDNS types are selectable: DynDNS and NO-IP.

    ● DynDNS or NO-IP:

    Steps:

    (1) Enter **Server Address** of DynDNS or NO-IP (e.g. members.dyndns.org).

    (2) In the **Domain** text field, enter the domain name obtained from the DynDNS website.

    (3) Enter the **User Name** and **Password** registered on the DynDNS website.

    (4) Click **Save** to save the settings.

PPPoE

1. Check the **Enable PPPoE** checkbox to enable this feature.

2. Enter **User Name**, **Password**, and **Confirm** password for PPPoE access.

Note: The User Name and Password should be assigned by your ISP.

- *For your privacy and to better protect your system against security risks, we strongly recommend the use of strong passwords for all functions and network devices. The password should be something of your own choosing (using a minimum of 8 characters, including at least three of the following categories: upper case letters, lower case letters, numbers and special characters) in order to increase the security of your product.*

- *Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.*

3. Click **Save** to save and exit the interface.

Note: A reboot is required for the settings to take effect.

Port
You can change the service port numbers of TV-IP344PI and enable/disable RTSP or HTTPS services.

1. Set the ports of the camera.

    HTTP Port: The default port number is 80, and it can be changed to any port No. which is not occupied.

    RTSP Port: The default port number is 554 and it can be changed to any port No. ranges from 1 to 65535.

    HTTPS Port: The default port number is 443, and it can be changed to any port No. which is not occupied.

Server Port: The default server port number is 8000, and it can be changed to any port No. ranges from 2000 to 65535.

Note:

When you use client software to visit the camera and you have changed the server port number, you have to input the correct server port number in login interface to access to the camera.

WebSocket Port: The default port number is 7681. It can be changed to any port No. ranges from 1 to 65535.

WebSockets Port: The default server port number is 7682. It can be changed to any port No. ranges from 1 to 65535.

2. Click **Save** to save the settings.

Note: A reboot is required for the settings to take effect.

NAT
NAT interface allows you to configure the UPnP™ parameters.

Universal Plug and Play (UPnP™) is a networking architecture that provides compatibility among networking equipment, software and other hardware devices. The UPnP protocol allows devices to connect seamlessly and to simplify the implementation of networks in the home and corporate environments.

With the function enabled, you don't need to configure the port mapping for each port, and the camera is connected to the Wide Area Network via the router.

Steps:

1. Enter the NAT settings interface. **Configuration > Network > Basic Settings > NAT.**

2. Check the checkbox to enable the UPnP™ function.
    Note:

    Only when the UPnP™ function is enabled, ports of the camera are active.

3. Choose a friendly name for the camera, or you can use the default name.

4. Select the port mapping mode. Manual and Auto are selectable.

    Note:

    If you select Auto, you should enable UPnP™ function on the router.

    If you select Manual, you can customize the value of the external port and complete port mapping settings on router manually.

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

Advanced Settings

SNMP

You can set the SNMP function to get camera status, parameters and alarm related information, and manage the camera remotely when it is connected to the network.

Before you start:

Before setting the SNMP, please download the SNMP software and manage to receive the camera information via SNMP port. By setting the Trap Address, the camera can send the alarm event and exception messages to the surveillance center.

Note: The SNMP version you select should be the same as that of the SNMP software. And you also need to use the different version according to the security level you required. SNMP v1 provides no

security and SNMP v2 requires password for access. And SNMP v3 provides encryption and if you use the third version, HTTPS protocol must be enabled.

1. Check the checkbox of Enable SNMPv1, Enable SNMP v2c, Enable SNMPv3 to enable the feature correspondingly.

2. Configure the SNMP settings.

    Note: The settings of the SNMP software should be the same as the settings you configure here.

3. Click **Save** to save and finish the settings.

    *Notes***:**

•   A reboot is required for the settings to take effect.

•   To lower the risk of information leakage, you are suggested to enable SNMP v3 instead of SNMP v1 or v2.

FTP

You can configure the FTP server related information to enable the uploading of the captured pictures to the FTP server. The captured pictures can be triggered by events or a timing snapshot task.

1. Input the FTP address and port.

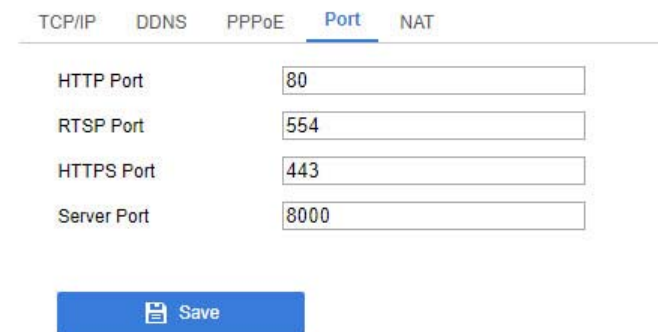2. Configure the FTP settings; and the user name and password are required for the FTP server login.

⚠️

● *For your privacy and to better protect your system against security*

risks, we strongly recommend the use of strong passwords for all functions and network devices. The password should be something of your own choosing (using a minimum of 8 characters, including at least three of the following categories: upper case letters, lower case letters, numbers and special characters) in order to increase the security of your product.

- *Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.*

3. Set the directory structure and picture filing interval.

   Directory: In the **Directory Structure** field, you can select the root directory, parent directory and child directory. When the parent directory is selected, you have the option to use the Device Name, Device Number or Device IP for the name of the directory; and when the Child Directory is selected, you can use the Camera Name or Camera No. as the name of the directory.

   Picture Filing Interval: For better picture management, you can set the picture filing interval from 1 day to 30 days. Pictures captured in the same time interval will be saved in one folder named after the beginning date and ending date of the time interval.

   Picture Name: Set the naming rule for captured picture files. You can choose **Default** in the drop-down list to use the default rule, that is,

   IP address_channel number_capture time_event type.jpg

   (e.g., *10.11.37.189_01_20150917094425492_FACE_DETECTION.jpg*).

   Or you can customize it by adding a **Custom Prefix** to the default naming rule.

4. Check the Upload Picture checkbox to enable the function.

   Upload Picture: To enable uploading the captured picture to the FTP server.

   Anonymous Access to the FTP Server (in which case the user name and password won't be required.): Check the **Anonymous** checkbox to enable the anonymous access to the FTP server.

   Note: The anonymous access function must be supported by the FTP server.

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

Email

1. Configure the following settings:

   Sender: The name of the email sender.

   Sender's Address: The email address of the sender.

   SMTP Server: IP address or host name (e.g., smtp.263xmail.com) of the SMTP Server.

   SMTP Port: The SMTP port. The default TCP/IP port for SMTP is 25 (not secured). And the SSL SMTP port is 465.

   Email Encryption: None, SSL, and TLS are selectable. When you select SSL or TLS and disable STARTTLS, e-mails will be sent after encrypted by SSL or TLS. The SMTP port should be set as 465 for this encryption method. When you select SSL or TLS and enable STARTTLS, emails will be sent after encrypted by STARTTLS, and the SMTP port should be set as 25.

   Note: If you want to use STARTTLS, make sure that the protocol is supported by your e-mail server. If you check the Enable STARTTLS checkbox when the protocol is not supported by your e-mail sever, your e-mail will not be encrypted.

   Attached Image: Check the checkbox of Attached Image if you want to send emails with attached alarm images.

   Interval: The interval refers to the time between two actions of sending attached pictures.

Authentication (optional): If your email server requires authentication, check this checkbox to use authentication to log in to this server and input the login user name and password.

⚠️

- *For your privacy and to better protect your system against security risks, we strongly recommend the use of strong passwords for all functions and network devices. The password should be something of your own choosing (using a minimum of 8 characters, including at least three of the following categories: upper case letters, lower case letters, numbers and special characters) in order to increase the security of your product.*

- *Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.*

The **Receiver** table**:** Select the receiver to which the email is sent. Up to 3 receivers can be configured.

　　Receiver: The name of the user to be notified.

Receiver's Address: The email address of user to be notified.

HTTPS

HTTPS provides authentication of the web site and its associated web server, which protects against Man-in-the-middle attacks. Perform the following steps to set the port number of https.

1. Check the checkbox of Enable to enable the function.

2. Create the self-signed certificate or authorized certificate.

   - Create the self-signed certificate

   (1) Select **Create Self-signed Certificate** as the Installation Method.

   (2) Click **Create** button to enter the creation interface.

   (3) Enter the country, host name/IP, validity and other information.

   (4) Click **OK** to save the settings.

      Note: If you already had a certificate installed, the Create Self-signed Certificate is grayed out.

- Create the authorized certificate

(1) Select **Create the certificate request first and continue the installation** as the Installation Method.

(2) Click **Create** button to create the certificate request. Fill in the required information in the popup window.

(3) Download the certificate request and submit it to the trusted certificate authority for signature.

(4) After receiving the signed valid certificate, import the certificate to the device.

3. There will be the certificate information after your successfully creating and installing the certificate.

4. Click the **Save** button to save the settings.

QoS

QoS (Quality of Service) can help solve the network delay and network congestion by configuring the priority of data sending.

1. Configure the QoS settings, including Video/Audio DSCP, Event/Alarm DSCP and Management DSCP.

   The valid value range of the DSCP is 0 to 63. The bigger the DSCP value is, the higher the priority is.

   Note: DSCP refers to the Differentiated Service Code Point; and the DSCP value is used in the IP header to indicate the priority of the data.

2. Click **Save** to save the settings.

Note: A reboot is required for the settings to take effect.

802.1X

Setup 802.1X for remote authentication service.

*Click **Save** to save the changes*

Before you start:

The authentication server must be configured. Please apply and register a user name and password for 802.1X in the server.

⚠️

- *For your privacy and to better protect your system against security risks, we strongly recommend the use of strong passwords for all functions and network devices. The password should be something of your own choosing (using a minimum of 8 characters, including at least three of the following categories: upper case letters, lower case letters, numbers and special characters) in order to increase the security of your product.*

- *Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.*

- Check the **Enable IEEE 802.1X** checkbox to enable the feature.

- Configure the 802.1X settings, including Protocol, EAPOL version, User Name, Password and Confirm.

  Note: The **EAPOL version** must be identical with that of the router or the switch.

- Enter the user name and password to access the server.

- Click **Save** to finish the settings.

Note: A reboot is required for the settings to take effect.

Integration Protocol

If you need to access to the device through ONVIF protocol, you can configure ONVIF user in this interface. Refer to ONVIF standard for detailed configuration rules.

1. Check the Enable ONVIF checkbox to enable the function.
2. Add ONVIF users. Up to 32 users are allowed.

    Set the user name and password, and confirm the password. You can set the user as media user, operator, and administrator.

    Note: ONVIF user account is different from the camera user account. You have set ONVIF user account independently.

3. Save the settings.

Note: User settings of ONVIF are cleared when you restore the camera.

Video/Audio

Follow the instructions below to configure the video setting, audio settings, ROI, Display info. on Stream, etc.

Video

1. Select the Stream Type.

    Supported stream types are listed in the drop-down list.

    Notes:

    •   For some models, the **Third Stream** is not enabled by default. Go to **System > Maintenance > System Service> Software** to enable the function is required.

    •   The main stream is usually for recording and live view with good bandwidth, and the sub-stream can be used for live view when the bandwidth is limited.

2. You can customize the following parameters for the selected stream type.

    Video Type:

    Select the stream type to video stream, or video & audio composite stream. The audio signal will be recorded only when the **Video Type** is **Video & Audio**.

    Resolution:

    Select the resolution of the video output.

    Bitrate Type:

    Select the bitrate type to constant or variable.

    Video Quality:

    When bitrate type is selected as Variable, 6 levels of video quality are selectable.

    Frame Rate:

    Set the frame rate. The frame rate is to describe the frequency at which the video stream is updated and it is measured by frames per second (fps). A higher frame rate is advantageous when there is movement in the video stream, as it maintains image quality throughout.

    Max. Bitrate:

    Set the max. bitrate from 32 to 16384 Kbps. The higher value corresponds to the higher video quality, but the better bandwidth is required.

Note: The maximum limit of the max. bitrate value varies according to different camera platforms. For certain cameras, the maximum limit is 8192 Kbps or 12288 Kbps.

Video Encoding:

The camera supports multiple video encodings types, such as H.264, H.265, MJPEG, and MPEG4. Supported encoding type for different stream types may differ. H.265 is a new encoding technology. Compared with H.264, it reduces the transmission bitrate under the same resolution, frame rate and image quality.

Note: Selectable video encoding types may vary according to different camera modes.

H.264+ and H.265+:

- **H.264+:** If you set the main stream as the stream type, and H.264 as the video encoding, you can see H.264+ available. H.264+ is an improved compression coding technology based on H.264. By enabling H.264+, users can estimate the HDD consumption by its maximum average bitrate. Compared to H.264, H.264+ reduces storage by up to 50% with the same maximum bitrate in most scenes.

- **H.265+:** If you set the main stream as the stream type, and H.265 as the video encoding, you can see H.265+ available. H.265+ is an improved compression coding technology based on H.265. By enabling H.265+, users can estimate the HDD consumption by its maximum average bitrate. Compared to H.265, H.265+ reduces

storage by up to 50% with the same maximum bitrate in most scenes. You need to reboot the camera if you want to turn on or turn off the H.264+/H.265+. If you switch from H.264+ to H.265+ directly, and vice versa, a reboot is not required by the system.

Notes:

- Upgrade your video player to the latest version if live view or playback does not work properly due to compatibility.
- With H.264+/H.265+ enabled, the parameters such as profile, I frame interval, video quality, and SVC are greyed out.
- With H.264+/H.265+ enabled, some functions are not supported. For those functions, corresponding interfaces will be hidden.
- H.264+/H.265+ can spontaneously adjust the bitrate distribution according the requirements of the actual scene in order to realize the set maximum average bitrate in the long term. The camera needs at least 24 hours to adapt to a fixed monitoring scene.

Max. Average Bitrate:

When you set a maximum bitrate, its corresponding recommended maximum average bitrate will be shown in the Max. Average Bitrate box. You can also set the maximum average bitrate manually from 32 Kbps to the value of the set maximum bitrate.

Profile:

When you select H.264 or H.265 as video encoding, you can set the profile. Selectable profiles vary according to camera models.

I Frame Interval:

Set I Frame Interval from 1 to 400.

SVC:

Scalable Video Coding is an extension of the H.264/AVC and H.265 standard. Select OFF/ON to disable/enable the SVC function. Select Auto and the device will automatically extract frames from the original video when the network bandwidth is insufficient.

Smoothing:

It refers to the smoothness of the stream. The higher value of the smoothing is, the better fluency of the stream will be, though, the video quality may not be so satisfactory. The lower value of the smoothing is, the higher quality of the stream will be, though it may appear not fluent.

3.   Click **Save** to save the settings.
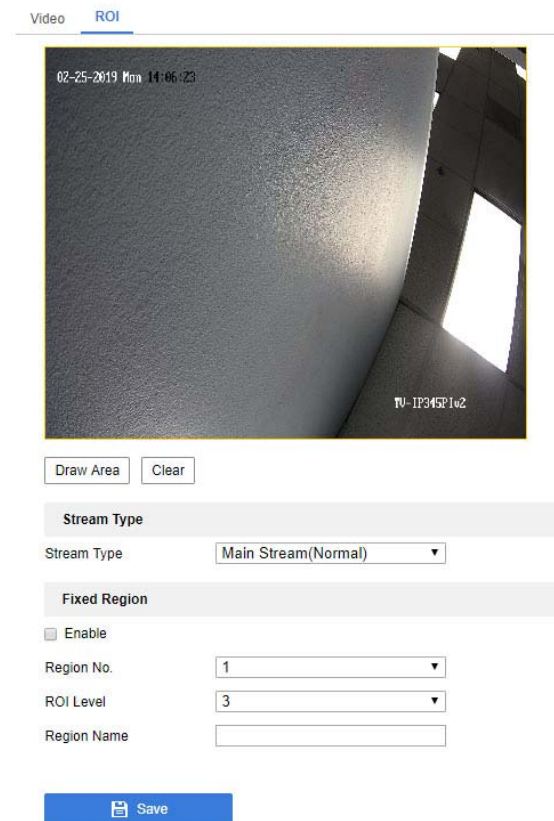
   Note:

   The video parameters vary according to different camera models. Refer to the actual display page for camera functions.

ROI

ROI (Region of Interest) encoding helps to discriminate the ROI and background information in video compression, which means, the technology assigns more encoding resource to the region of interest, thus to increase the quality of the ROI whereas the background information is less focused.

Note: ROI function varies according to different camera models.

1. Select the Stream Type for ROI encoding.

2. Check the checkbox of **Enable** under Fixed Region item.

3. Set **Fixed Region** for ROI.

   (1) Select the Region No. from the drop-down list.

   (2) Check the **Enable** checkbox to enable ROI function for the chosen region.

   (3) Click **Drawing**. Click and drag the mouse on the view screen to draw a red rectangle as the ROI region. You can click **Clear** to cancel former drawing. Click **Stop Drawing** when you finish.

   (4) Select the ROI level.

   (5) Enter a region name for the chosen region.

   (6) Click **Save** the save the settings of ROI settings for chosen fixed region.

   (7) Repeat steps (1) to (6) to setup other fixed regions.

4. Set **Dynamic Region** for ROI.

   (1) Check the checkbox to enable **Face Tracking**.

   Note: To enable face tracking function, the face detection function should be supported and enabled.

   (2) Select the ROI level.

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

Note: ROI level means the image quality enhancing level. The larger the value is, the better the image quality would be.

Image

Display Settings
Adjust video image quality, lightness, and color settings here.

- **Image Adjustment**

  Brightness describes bright of the image, which ranges from 1 to 100.

  Contrast describes the contrast of the image, which ranges from 1 to 100.

  Saturation describes the colorfulness of the image color, which ranges from 1 to 100.

  Sharpness describes the edge contrast of the image, which ranges from 1 to 100.

- **Exposure Settings**
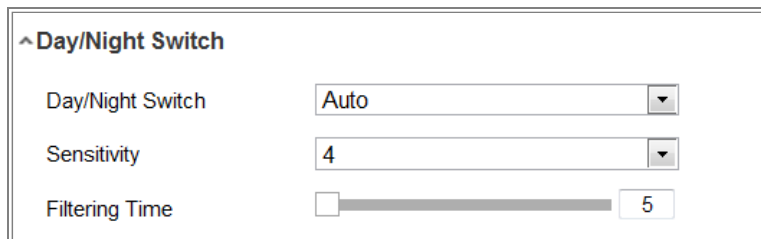
  If the camera is equipped with the fixed lens, only **Manual** is selectable, and the iris mode is not configurable.

  The **Exposure Time** refers to the electronic shutter time, which ranges from 1 to 1/100,000s. Adjust it according to the actual luminance condition.

- **Day/Night Switch**

  Select the Day/Night Switch mode according to different surveillance demand.

  Day, Night, Auto, Scheduled-Switch, and Triggered by alarm input are selectable for day/night switch.

  Day: the camera stays at day mode.

  Night: the camera stays at night mode.

  Auto: the camera switches between the day mode and the night mode according to the illumination automatically. The sensitivity ranges from 0 to 7, the higher the value is, the easier the mode switches. The filtering time refers to the interval time between the day/night switch. You can set it from 5s to 120s.

- **Backlight Settings**

  BLC Area: If you focus on an object against strong backlight, the object will be too dark to be seen clearly. BLC compensates light to the object in the front to make it clear. OFF, Up, Down, Left, Right, Center, Auto, and Custom are selectable.

  Note: If BLC mode is set as Custom, you can draw a red rectangle on the live view image as the BLC area.

  WDR: Wide Dynamic Range can be used when there is a high contrast of the bright area and the dark area of the scene.

- **White Balance**

  White balance is the white rendition function of the camera used to adjust the color temperature according to the environment.

- **Image Enhancement**

  Digital Noise Reduction: DNR reduces the noise in the video stream. OFF, Normal and Expert are selectable. Set the DNR level from 0 to 100 in Normal Mode. Set the DNR level from both space DNR level [0-100] and time DNR level [0-100] in Expert Mode.

- **Video Adjustment**

  Mirror: It mirrors the image so you can see it inversed. Left/Right, Up/Down, Center, and OFF are selectable.

  Video Standard: 50 Hz and 60 Hz are selectable. Choose according to the different video standards; normally 50 Hz for PAL standard and 60 Hz for NTSC standard.

  Capture Mode: Set the capture resolution at a fixed value.

On Screen Display Settings

Display the camera name and the time the video is shooting on the screen

Display Mode	Not transparent & Not flashing ▼
OSD Size	Auto ▼
Font Color	Black&White Self-adaptive ▼
Alignment	Custom ▼
☑ Display Name	
☑ Display Date	
☑ Display Week	
Camera Name	TV-IP345PIv2
Time Format	24-hour ▼
Date Format	MM-DD-YYYY ▼

Text OverLay

☐ 1

☐ 2

☐ 3

☐ 4

[💾 Save]

1. Check the corresponding checkbox to select the display of camera name, date or week if required.

2. Edit the camera name in the text field of **Camera Name**.

3. Select from the drop-down list to set the time format and date format.

4. Select from the drop-down list to set the time format, date format, display mode, OSD size and OSD color.

5. Configure the text overlay settings.

   (1) Check the checkbox in front of the textbox to enable the on-screen display.

(2)   Input the characters in the textbox.

Note: Up to 8 text overlays are configurable.

6. Adjust the position and alignment of text frames.

Left align, right align and custom are selectable. If you select custom, you can use the mouse to click and drag text frames in the live view window to adjust their positions.

Note: The alignment adjustment is only applicable to Text Overlay items.

7. Click **Save** to save the settings.

Privacy Mask

Display extra information on the screen over the image.
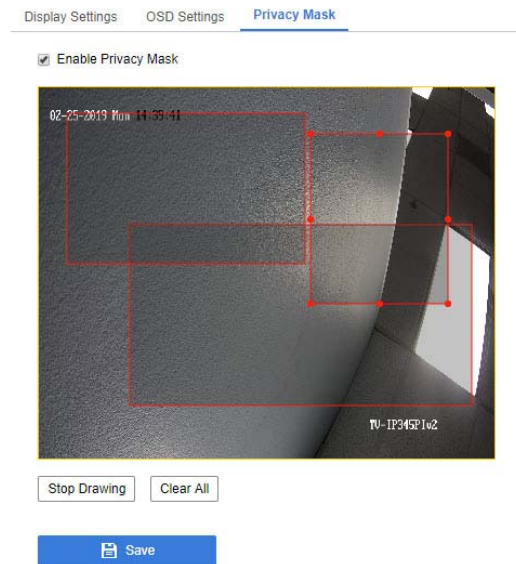
1. Check the checkbox of **Enable Privacy Mask** to enable this function.

2. Click **Draw Area**.

3. Click and drag the mouse in the live video window to draw the mask area.

Note: You are allowed to draw up to 4 areas on the same image.

4. Click **Stop Drawing** to finish drawing or click **Clear All** to clear all of the areas you set without saving them.

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

Events

Motion Detection

Set up how the motion detection event will be triggered and what actions will be triggered.

1. Check the checkbox of **Enable Motion Detection**.

2. Check the checkbox of **Enable Dynamic Analysis for Motion** if you want to mark the detected objects with green rectangles.

3. Click **Draw Area**. Click and drag the mouse on the live video to draw a motion detection area. Click **Stop Drawing** to finish drawing one area.

4. (Optional) Click **Clear All** to clear all of the areas.

5. (Optional) Move the slider to set the sensitivity of the detection.

Steps:

1. Click **Arming Schedule** to edit the arming schedule.

2. Click on the time bar and drag the mouse to select the time period.
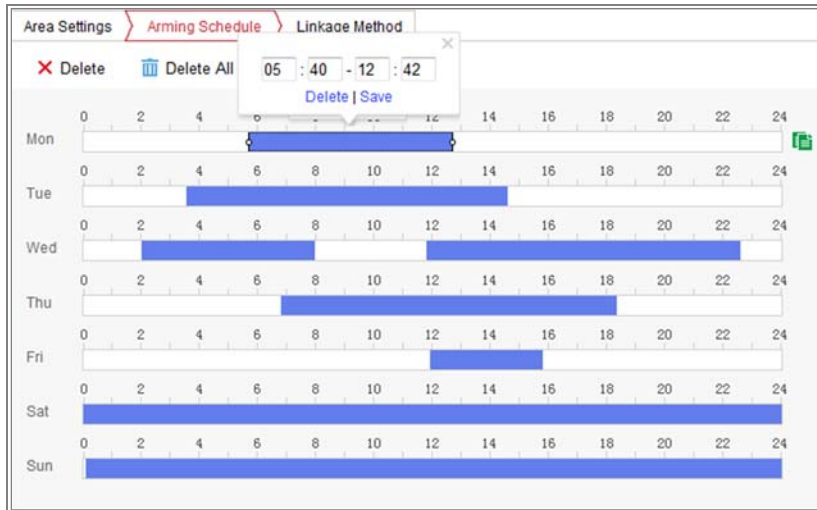
Note: Click on the selected time period, you can adjust the time period to the desired time by either moving the time bar or input the exact time period.

3. (Optional) Click Delete to delete the current arming schedule, or click Save to save the settings.

4. Move the mouse to the end of each day, a copy dialogue box pops up, and you can copy the current settings to other days.

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

Note: The time of each period can't be overlapped. Up to 8 periods can be configured for each day.

Task 3: Set the Linkage Method for Motion Detection

Check the checkbox to select the linkage method. Audible Warning, Send Email, Notify Surveillance Center, Upload to FTP/Memory Card/NAS, Trigger

Channel and Trigger Alarm Output are selectable. You can specify the linkage method when an event occurs.

Note: The linkage methods vary according to the different camera models.

● **Send Email**

Send an email with alarm information to a user or users when an event occurs.

● **Upload to FTP/Memory Card/NAS**

Capture the image when an alarm is triggered and upload the picture to a FTP server.

Storage

Record Schedule

There are two kinds of recording for the cameras: manual recording and scheduled recording. In this section, you can follow the instructions to configure the scheduled recording. By default, the record files of scheduled recording are stored in the local storage or in the network disk.
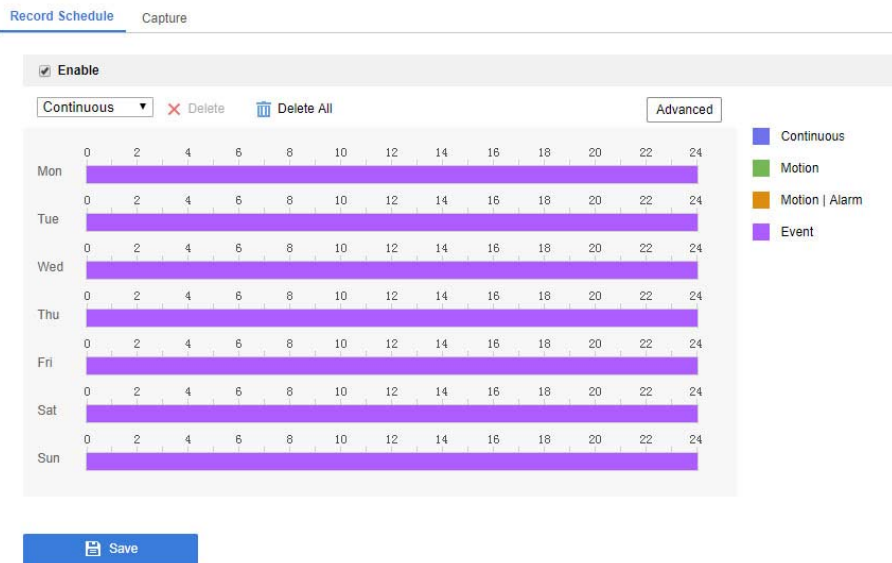
1. Check the checkbox of **Enable** to enable scheduled recording.
2. Click **Advanced** to set the camera record parameters.
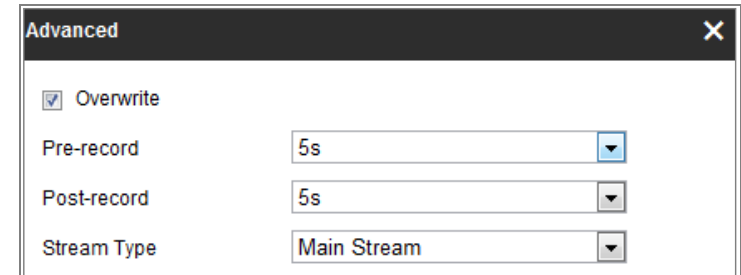
● Pre-record: The time you set to start recording before the scheduled time or the event. For example, if an alarm triggers recording at 10:00, and the pre-record time is set as 5 seconds, the camera starts to record at 9:59:55.

The Pre-record time can be configured as No Pre-record, 5s, 10s, 15s, 20s, 25s, 30s or not limited.

● Post-record: The time you set to stop recording after the scheduled time or the event. For example, if an alarm triggered recording ends at 11:00, and the post-record time is set as 5 seconds, the camera records until 11:00:05.

The Post-record time can be configured as 5s, 10s, 30s, 1 min, 2 min, 5 min or 10 min.

● Stream Type: Select the stream type for recording.

Note: The record parameter configurations vary depending on the camera model.

3. Select a **Record Type**. The record type can be Continuous, Motion Detection, Alarm, Motion | Alarm, Motion & Alarm, and Event.

- **Continuous**

    If you select **Continuous**, the video will be recorded automatically according to the time of the schedule.

- **Record Triggered by Motion Detection**

    If you select **Motion Detection**, the video will be recorded when the motion is detected.

    Besides configuring the recording schedule, you have to set the motion detection area and check the checkbox of Trigger Channel in the Linkage Method of Motion Detection Settings interface.

- **Record Triggered by Alarm**

    If you select **Alarm**, the video will be recorded when the alarm is triggered via the external alarm input channels.

    Besides configuring the recording schedule, you have to set the **Alarm Type** and check the checkbox of **Trigger Channel** in the **Linkage Method** of **Alarm Input Settings** interface.

- **Record Triggered by Motion & Alarm**

    If you select **Motion & Alarm**, the video will be recorded when the motion and alarm are triggered at the same time.

Besides configuring the recording schedule, you have to configure the settings on the **Motion Detection** and **Alarm Input Settings** interfaces.

- **Record Triggered by Motion | Alarm**

    If you select **Motion | Alarm**, the video will be recorded when the external alarm is triggered or the motion is detected.

    Besides configuring the recording schedule, you have to configure the settings on the **Motion Detection** and **Alarm Input Settings** interfaces.

- **Record Triggered by Events**

    If you select **Event**, the video will be recorded if any of the events is triggered. Besides configuring the recording schedule, you have to configure the event settings.

4. Select the record type, and click-and-drag the mouse on the time bar to set the record schedule.

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

Capture

You can configure the scheduled snapshot and event-triggered snapshot. The captured picture can be stored in the local storage or network storage.

3. Click **Save** to save the settings.

4. Go to **Capture Parameters** tab to configure the capture parameters.

   (1) Check the **Enable Timing Snapshot** checkbox to enable continuous snapshot.

   (2) Select the picture format, resolution, quality and capture interval.

   (3) Check the **Enable Event-triggered Snapshot** checkbox to enable event-triggered snapshot.

   (4) Select the picture format, resolution, quality, capture interval, and capture number.

5. Set the time interval between two snapshots.

6. Click **Save** to save the settings.

1. Go to **Capture Schedule** tab to configure the capture schedule by click-and-drag the mouse on the time bar. You can copy the record schedule to other days by clicking the green copy icon on the right of each time bar.

2. Click **Advanced** to select stream type.

Regulations

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

RoHS

This product is RoHS compliant.

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the Directive 2004/108/EC and 2006/95/EC. The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the Directive 2004/108/EC and 2006/95/EC:

Safety /EMC

EN 60950-1: 2006 + A11: 2010 + A12: 2011 + A2: 2013
EN 55024: 2010 + A1: 2015
EN 55032: 2015

EMC Directive 2014/30/EC / RoHS Directive 2011/65/EU
WEEE Directive 2012/19/EU / REACH Regulation (EC) No. 1907/2006
Low Voltage Directive 2014/35/EC

Česky [Czech]	TRENDnet tímto prohlašuje, že tento TV-IP344PI je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 2004/108/ES a 2006/95/ES.
Dansk [Danish]	Undertegnede TRENDnet erklærer herved, at følgende udstyr TV-IP344PI overholder de væsentlige krav og øvrige relevante krav i direktiv 2004/108/EF og 2006/95/EF.
Deutsch [German]	Hiermit erklärt TRENDnet, dass sich das Gerät TV-IP344PI in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 2004/108/EG und 2006/95/EG befindet.
Eesti [Estonian]	Käesolevaga kinnitab TRENDnet seadme TV-IP344PI vastavust direktiivi 2004/108/EÜ ja 2006/95/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
English	Hereby, TRENDnet, declares that this TV-IP344PI is in compliance with the essential requirements and other relevant provisions of Directive 2004/108/EC and 2006/95/EC.
Español [Spanish]	Por medio de la presente TRENDnet declara que el TV-IP344PI cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 2004/108/CE y 2006/95/CE.
Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑTRENDnet ΔΗΛΩΝΕΙ ΟΤΙ TV-IP344PI ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 2004/108/ΕΚ, 2006/95/ΕΚ και.

Français [French]	Par la présente TRENDnet déclare que l'appareil TV-IP344PI est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 2004/108/CE, 2006/95/CE et.
Italiano[Italian]	Con la presente TRENDnet dichiara che questo TV-IP344PI è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 2004/108/CE e 2006/95/CE.
Latviski [Latvian]	AršoTRENDnetdeklarē, ka TV-IP344PI atbilstDirektīvas 2004/108/EK un 2006/95/EK būtiskajāmprasībām un citiemar to saistītajiemnoteikumiem.
Lietuvių [Lithuanian]	Šiuo TRENDnet deklaruoja, kad šis T TV-IP344PI atitinka esminius reikalavimus ir kitas 2004/108/EB ir 2006/95/EB Direktyvos nuostatas.
Nederlands [Dutch]	Hierbij verklaart TRENDnet dat het toestel TV-IP344PI in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 2004/108/EG en 2006/95/EG.
Malti [Maltese]	Hawnhekk, TRENDnet, jiddikjara li dan TV-IP344PI jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 2004/108/KE u 2006/95/KE.
Magyar [Hungarian]	Alulírott, TRENDnet nyilatkozom, hogy a TV-IP344PI megfelel a vonatkozó alapvetõ követelményeknek és az 2004/108/EK és a 2006/95/EK irányelv egyéb elõírásainak.
Polski [Polish]	Niniejszym TRENDnet oświadcza, że TV-IP344PI jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 2004/108/WE i 2006/95/.
Português [Portuguese]	TRENDnet declara que este TV-IP344PI está conforme com os requisitos essenciais e outras disposições da Directiva2004/108/CE e 2006/95/CE.
Slovensko [Slovenian]	TRENDnet izjavlja, da je ta TV-IP344PI v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive2004/108/ES in 2006/95/ES.
Slovensky [Slovak]	TRENDnettýmtovyhlasuje, že TV-IP344PI spíñazákladnépožiadavky a všetkypríslušnéustanoveniaSmernice 2004/108/ES a 2006/95/ES.
Suomi [Finnish]	TRENDnet vakuuttaa täten että TV-IP344PI tyyppinen laite on direktiivin2004/108/EY ja 2006/95/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska [Swedish]	Härmed intygar TRENDnet att denna TV-IP344PI står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 2004/108/EG och 2006/95/EG.

Limited Warranty

TRENDnet warrants its products against defects in material and workmanship, under normal use and service, for the following lengths of time from the date of purchase.

TV-IP344PI – 3 Years Warranty

If a product does not operate as warranted during the applicable warranty period, TRENDnet shall reserve the right, at its expense, to repair or replace the defective product or part and deliver an equivalent product or part to the customer. The repair/replacement unit's warranty continues from the original date of purchase. All products that are replaced become the property of TRENDnet. Replacement products may be new or reconditioned. TRENDnet does not issue refunds or credit. Please contact the point-of purchase for their return policies.

TRENDnet shall not be responsible for any software, firmware, information, or memory data of customer contained in, stored on, or integrated with any products returned to TRENDnet pursuant to any warranty.

There are no user serviceable parts inside the product. Do not remove or attempt to service the product by any unauthorized service center. This warranty is voided if (i) the product has been modified or repaired by any unauthorized service center, (ii) the product was subject to accident, abuse, or improper use (iii) the product was subject to conditions more severe than those specified in the manual.

Warranty service may be obtained by contacting TRENDnet within the applicable warranty period and providing a copy of the dated proof of the purchase. Upon proper submission of required documentation a Return Material Authorization (RMA) number will be issued. An RMA number is required in order to initiate warranty service support for all TRENDnet products. Products that are sent to TRENDnet for RMA service must have the RMA number marked on the outside of return packages and sent to TRENDnet prepaid, insured and packaged appropriately for safe shipment. Customers shipping from outside of the USA and Canada are responsible for return shipping fees. Customers shipping from outside of the USA are responsible for custom charges, including but not limited to, duty, tax, and other fees.

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Product Warranty Registration

Please take a moment to register your product online.
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