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SyncroIP Series IP Cameras

Software Manual

Instruction Manual

English Version 1.0

www.digimerge.com
www.flir.com/security

TABLE OF CONTENTS

OVERVIEW

This manual covers the following topics related to your FLIR SyncroIP camera:

- Web browser configuration interface (page 2).
- Firmware update tool (page 38).
- PC CMS Software (page 41).
- Smartphone / tablet apps (page 56).

Notes

- For physical installation instructions, please refer to the Quick Connection Guide for your camera model.
- The following models have a different web interface and supporting software: DND13TL2, DNB14L2, DNB13TL2, DNV14TL2, DNE14TL2. For instructions, please refer to the respective manual for these cameras.

WEB CONFIGURATION INTERFACE

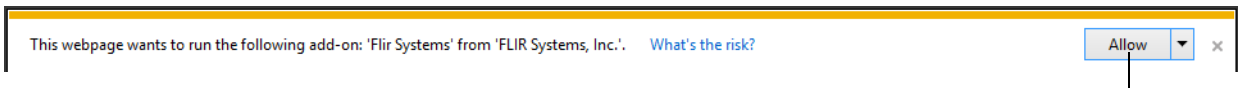
The camera includes a built-in web interface that can be accessed using a web browser.

Supported Browsers

- Google Chrome, Mozilla Firefox, and Apple Safari® (via Webplugin)
- Microsoft Internet Explorer® 8.0 or later, 32-bit version (via ActiveX®)

Internet Explorer Setup

1. Open Internet Explorer and enter the camera's IP address in the address bar in the following format: *http://IP address:HTTP Port*.
   - **For example:** *http://192.168.0.100:80*
2. A notification bar appears asking if you would like to install ActiveX® plugins. Click **Install** or **Allow** to install the plugins.



Click Allow or Install

3. Enter the camera user name (default: **admin**) and password (default: **admin**) and click **Login**.

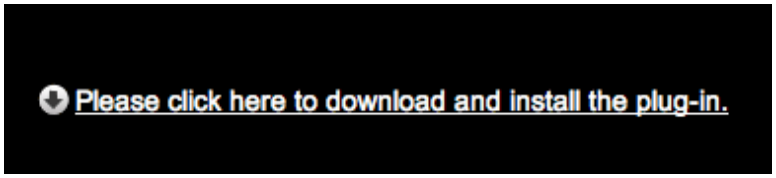
Enter user name (default: admin)
Enter password (default: admin)

Safari Setup

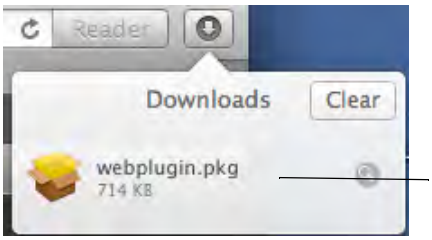
1. Open Safari® and enter the camera's IP address in the address bar in the following format: *http://IP address:HTTP Port*.
   - **For example:** *http://192.168.0.100:80*
2. Enter the camera user name (default: **admin**) and password (default: **admin**) and click **Login**.

Enter user name (default: admin)
Enter password (default: admin)

3. Click **Please click here to download and install the plug-in**.



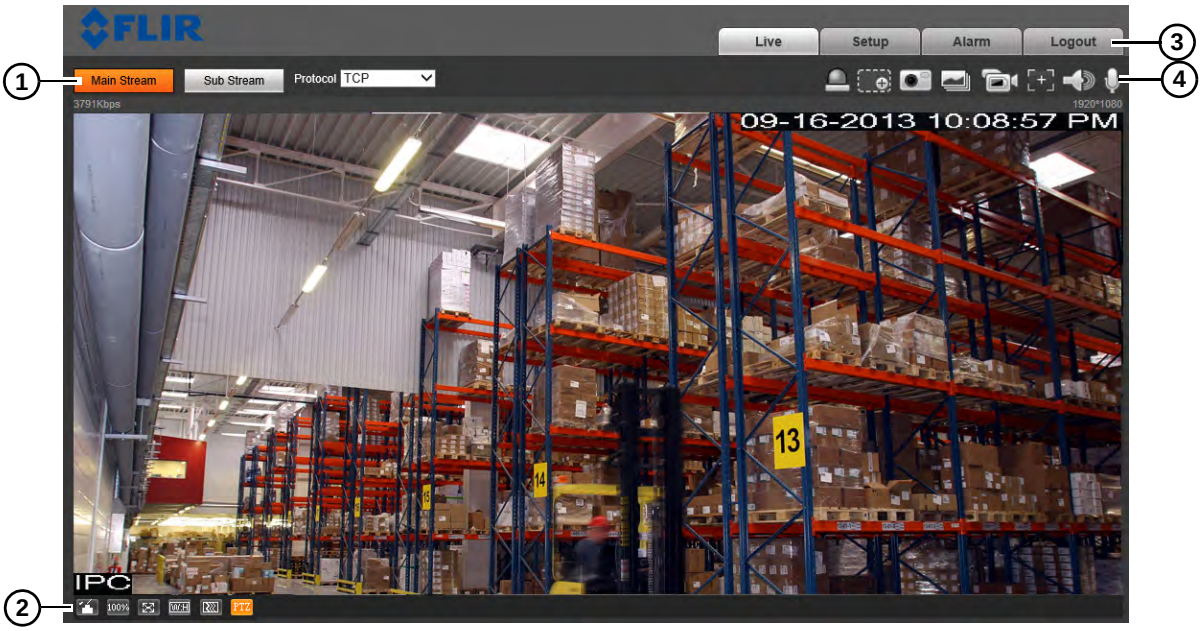
4. Double-click **webplugin.pkg** in the downloads list to install. Follow the prompts to install.



NOTE: If video from the camera does not appear after installation, quit Safari by right-clicking on the Safari icon in the dock and then selecting **Quit**. Then restart Safari and log back into your camera.

Live View

Upon login, the web interface opens to the Live View.



NOTE: Some functions are not available on all IP camera models, based on the features available.

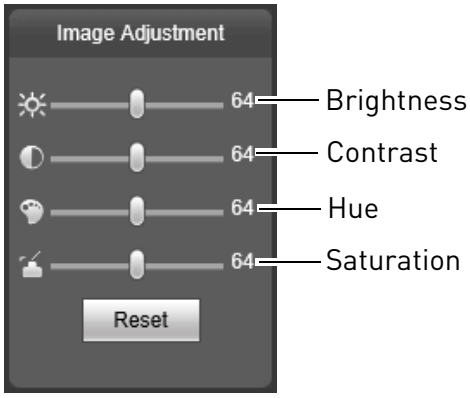
1. **Stream/Protocol Select:** Allows you to select the video stream and protocol used in Live View.
   - **Main Stream:** Click to view the Main Stream. The Main Stream provides better picture quality and resolution, but requires higher bandwidth.

- **Sub Stream:** Click to view the Sub Stream. The Sub Stream is recommended for better performance when viewing the camera remotely.
- **Protocol:** Select the protocol that will be used to stream video: **TCP or UDP**.

NOTE: Multicast is not supported.

2. **Video Display Controls** 

- **Color Settings:** Click to open color settings.



- **Original Size:** Click to view the video in its original size. This depends on the resolution and if you are viewing the Main Stream or Sub Stream.
- **Full Screen:** Click to view the video in full screen. Double-click or press **ESC** to exit full screen.
- **Width/Height Ratio:** Click select **Original** to use the original proportions of the image or **Adaptive** to adapt the image proportions to the size of the screen.
- **Realtime/Fluency:** Click to select **Realtime**, **Normal**, or **Fluency**.
- **PTZ Controls (PTZ cameras only):** Click to hide/show PTZ camera controls. For details, see "PTZ Controls (PTZ Cameras Only)" on page 5.

3. **Menu Tabs**

- **Live:** Click to access Live View.
- **Playback:** Click to playback video from the camera's microSD card (cameras that support microSD only).
- **Setup:** Click to setup camera functions.
- **Alarm:** Click to configure alarms.
- **Logout:** Log out of the camera.

4. **Live View Functions** 

- **Alarm Output:** Click to activate an alarm output device connected to the camera (cameras with alarm I/O only).
- **Digital Zoom:** Click to activate digital zoom mode. Then, click-and-drag in the video area to select an area to zoom in.

- **Snapshot:** Click to save a snapshot from the camera to your computer hard drive. To configure the folder where snapshots are saved, see "Path" on page 14.

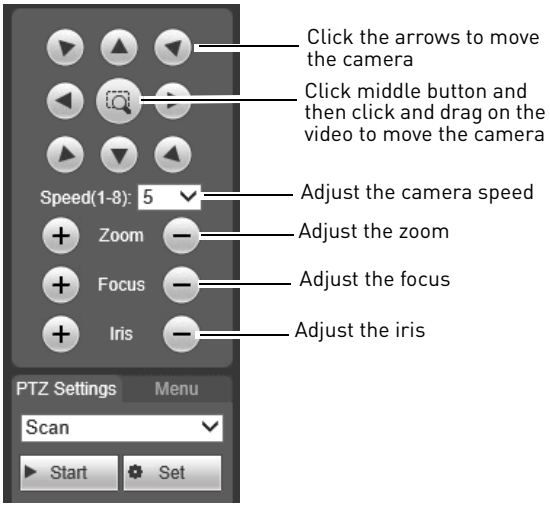
NOTE: Depending on your computer's security settings, you may need to run your browser as administrator to save snapshots or manual recordings.

- **Triple Snapshot:** Save the next three frames from the camera as snapshots.
- **Manual Record**: Click to start manually recording live video to your computer hard drive. Click again to stop recording. To configure the folder where manual recordings are saved, see "Path" on page 14.
- **Manual Focus (motorized lens cameras only):** Click to display the AF Peak and AF Max parameters for auto focus. The closer AF Peak and AF Max are, the better the focus effect is. To configure auto focus, see "Zoom and Focus (Motorized Lens Cameras Only)" on page 11.
- **Audio Output:** Click to mute/un-mute audio coming from the camera (audio-enabled cameras only; must have self-powered microphone connected to the camera).
- **Intercom:** Click to activate the intercom to the camera (audio-enabled cameras only; must have amplifier or speakers connected to the camera.
- **Help:** Click to access the built-in help file.

PTZ Controls (PTZ Cameras Only)

From Live View, click PTZ to open the PTZ control panel.

PTZ Control Panel

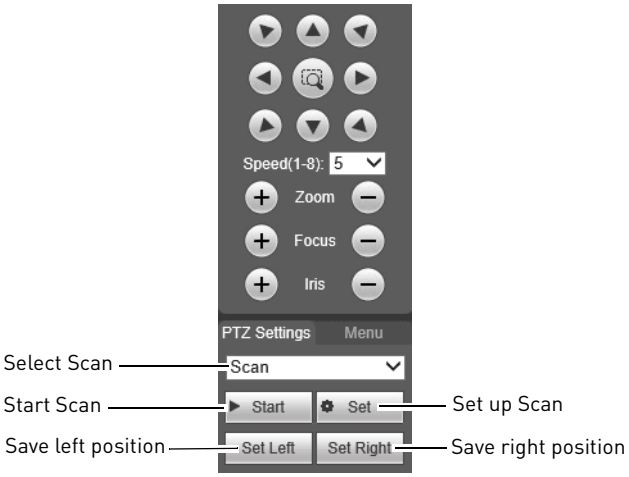


Scan

You can use the Scan function to have the camera move automatically between two points.

To configure scan function:

1. Select **Scan** under PTZ Settings.



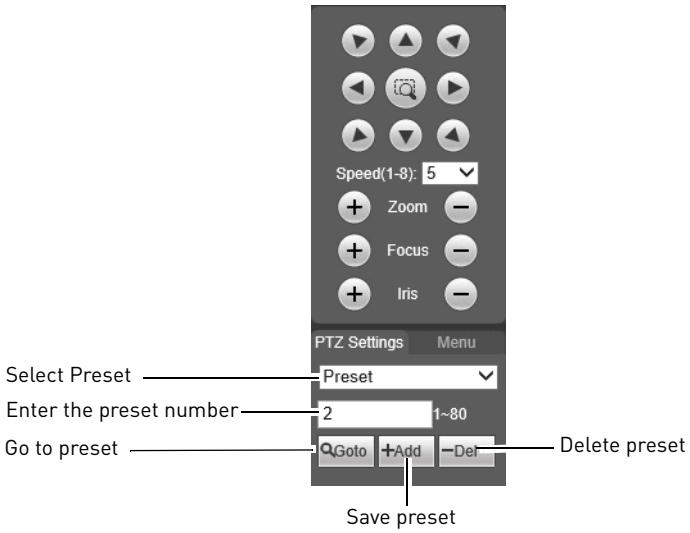
2. Click **Set**.
3. Move the camera into the desired left position and then click **Set Left** to save.
4. Move the camera into the desired right position and then click **Set Right** to save.
5. Click **Save**.
6. Click **Start** to start the Scan.

Preset

You can save preset positions in the camera to recall them later.

To save presets:

1. Select **Preset** under PTZ Settings.



2. Enter the number of the preset you would like to save.
3. Move the camera into the desired position.
4. Click **Add** to save the preset.

To go to a preset:

1. Enter the number of the preset you would like to go to.
2. Click **Goto**.

To delete presets:

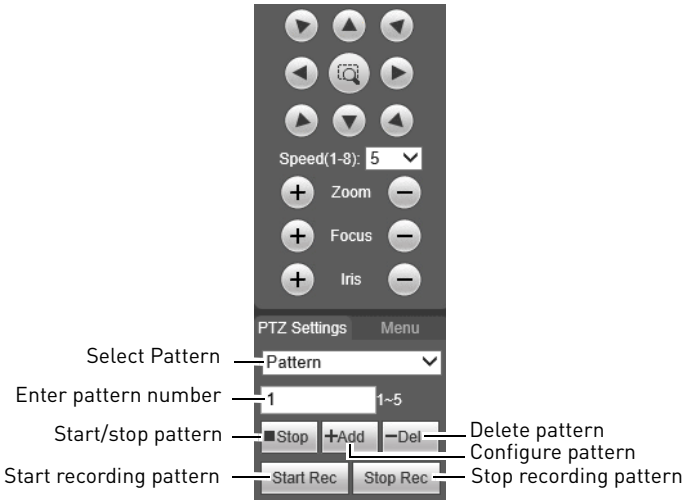
1. Enter the number of the preset you would like to save.
2. Click **Del**.

Pattern

You can use the pattern function to record a series of camera movements to recall later.

To save a pattern:

1. Select **Pattern** under PTZ settings.



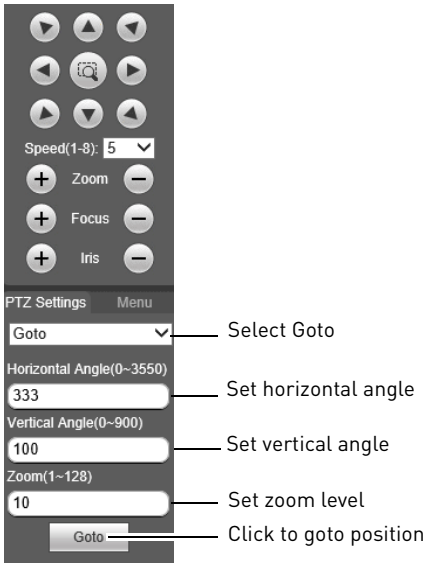
2. Enter the number of the pattern you would like to save.
3. Click **Add**.
4. Click **Start Rec**. Use the PTZ controls to save a series of movements.
5. When you finish recording the pattern, click **Stop Rec**.

To run a pattern:

- Click **Start**.

Goto

The Goto function allows you to move the camera to a position with specified parameters.



To move the camera to a specified position:

1. Select **Goto** under PTZ settings.
2. Enter the **Horizontal Angle** you would like to move the camera to between 0~3550.
3. Enter the **Vertical Angle** you would like to move the camera to between 0~900.
4. Enter the **Zoom** level between 1~128.
5. Click **Goto** to go to the specified position.

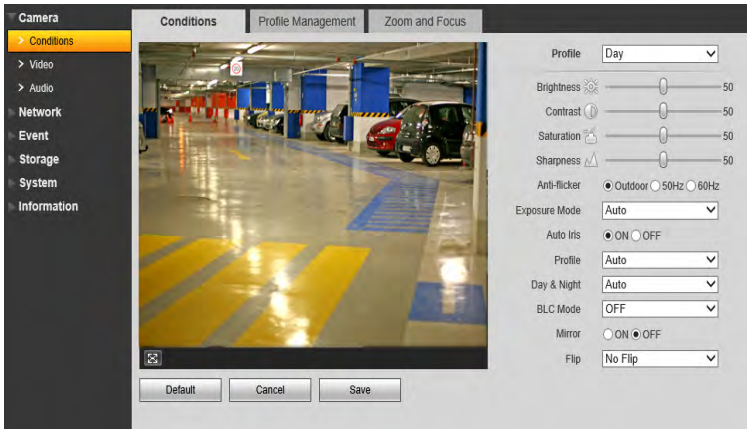
Setup

The Setup menus allow you to configure camera settings.

Camera

Conditions

The Conditions menu allows you to configure the image sensor settings for the camera. As you make adjustments, the effects will be shown in the video display.



NOTE: Some settings described below may not be available, depending on the features of your camera model.

To configure the image sensor settings:

1. Configure the following:
   - **Profile:** Select the camera settings profile you would like to configure: **Day**, **Night**, or **Normal**.
   - **Brightness:** Adjust the brightness of the image between **0** and **100**.
   - **Contrast:** Adjust the contrast of the image between **0** and **100**.
   - **Saturation:** Adjust the color saturation of the image between **0** and **100**.
   - **Sharpness:** Adjust the sharpness of the image between **0** and **100**. Higher sharpness will make edges in the image clearer, but may increase noise in the picture.
   - **Anti-flicker:** Select the anti-flicker mode depending on the environment:
     - **Outdoor:** The system will use the exposure mode to adjust for lighting.
     - **50Hz:** The system will compensate for lighting using 50Hz AC power (i.e. for Europe).
     - **60Hz:** The system will compensate for lighting using 60Hz AC power (i.e. for North America).
   - **Exposure:** Select the exposure mode.
     - **Auto:** The system will automatically adjust the brightness and exposure based on the environment.
     - **Low Noise:** The system will automatically adjust the gain to reduce the amount of noise in the image. Set the minimum and maximum **Gain Scope**. Increasing the max gain will increase the noise reduction.

    - **Low Motion Blur:** The system will automatically adjust the shutter to reduce motion trails in the image. Set the minimum and maximum **Shutter Scope**.
    - **Manual:** Configure manual exposure settings. Configure the **Shutter Regulate** and **Gain Scope**.
- **Profile:** Select the white balance mode.
    - **Auto:** Automatic white balance.
    - **Sunny:** White balance mode for daylight.
    - **Night:** White balance mode for night time.
    - **Customized:** Manual white balance. Use the sliders to configure the **Red Control** and **Blue Control**.
- **Auto Iris (auto iris cameras only):** Select **ON** to enable auto iris or **OFF** to disable auto iris.
- **Day & Night:** Select one of the following day / night modes.
    - **Color:** Camera will be in day mode at all times.
    - **Auto:** Camera will automatically change between day and night mode based on the lighting.
    - **B/W:** Camera will be in black and white at all times.
- **BLC Mode:** Select one of the following modes:
    - **BLC (Backlight Compensation):** The camera automatically adjusts the exposure for a clearer image in the darkest areas of the video. Click **Default** to use default settings or Customized to adjust the BLC area. The darker the area you select, the brighter the image will be.
    - **WDR (Wide Dynamic Range):** The camera compensates for changes in brightness across the image to enhance the picture quality of both light and dark areas. Adjust the WDR level between **1** and **100**.
    - **HLC (Highlight Compensation):** The camera dims the brightest areas of the image to make them clearer. Adjust the HLC level between **1** and **100**.
    - **Off:** Disable this function.
- **Mirror:** Select **ON** to flip the camera left and right.
- **Flip:** Select one of the options to flip the image or **No Flip** to disable. Note that 90° rotations are not supported if the Main Stream is set above 720p resolution.

2. Click **Save** to save changes. Click **Cancel** to return to last saved configuration. Click **Default** to return to factory defaults.

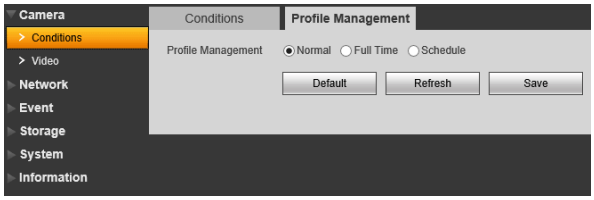
Profile Management

The Profile Management tab allows you to set which Condition Profile to use at what times.

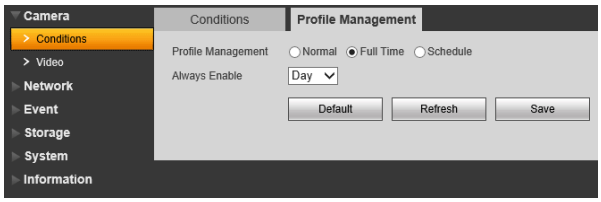
To configure the condition profile:

1. Select one of the following options:

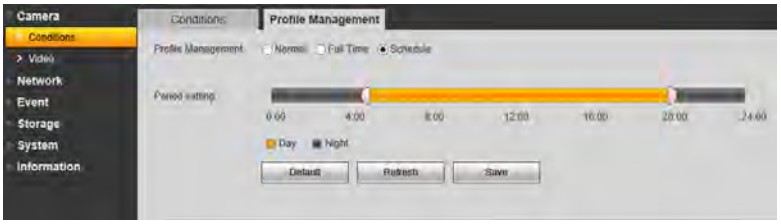
- **Normal:** Camera will use the Normal profile at all times.



- **Full Time:** Select the profile the camera will use at all times.



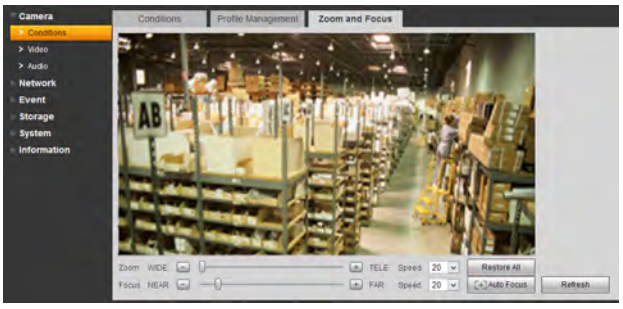
- **Schedule:** Configure a schedule that the camera will use for Day (yellow) and Night (black) profiles. Click and drag in the time bar to set the schedule.



2. Click **Save** to save changes.

Zoom and Focus (Motorized Lens Cameras Only)

For motorized lens cameras, you can use the Zoom and Focus tab to adjust the lens.

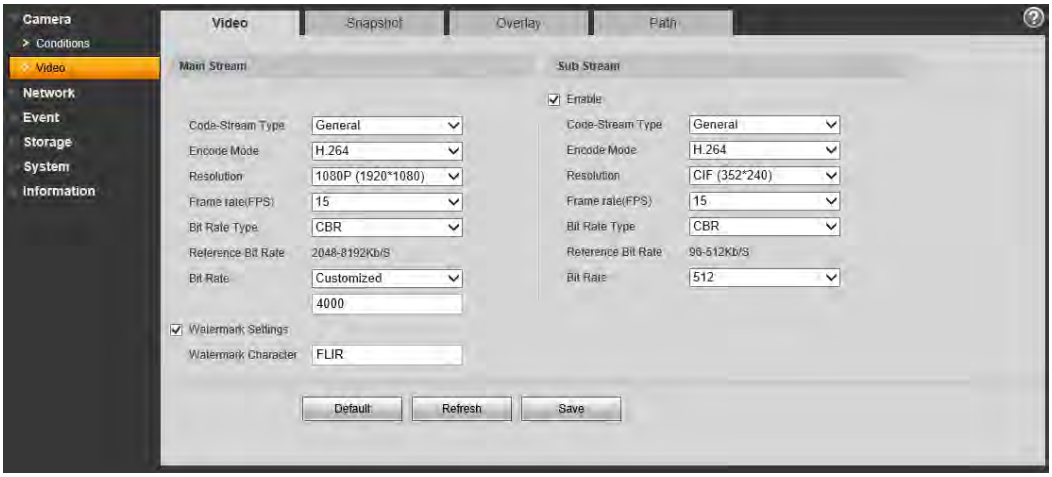


- **Zoom:** Click **+/-** or use the slider to adjust the zoom level.
- **Focus:** Click **+/-** or use the slider to adjust the focus.
- **Auto Focus:** Click to have the camera automatically adjust the focus to the currently selected zoom level.

NOTE: Adjustments in this menu are automatically saved.

Video

The Video menu allows you to configure the encoding settings for the camera. Video settings are divided into Main Stream and Sub Stream.



To configure video quality settings:

1. Check **Enable** under Sub Stream to enable the sub stream or uncheck to disable.
2. For the Main Stream and Sub Stream, configure the following:
   - **Code Stream Type:** For the Main Stream, select **General** to configure settings when motion is not detected or **Motion** to configure settings when motion is detected.
   - **Encode Mode:** Select the encoding type: **H.264** (Main H.264 profile), **H.264H** (High Profile H.264), **H.264B** (Baseline H.264 profile), **MJPEG**.

     NOTE: A much higher bitrate and faster connection is required to maintain image quality using MJPEG. It is recommended to use H.264 unless you have special requirements.
   - **Resolution:** Select the desired resolution for the video stream. There is a different recommended bit rate depending on the resolution selected.

     NOTE: You may not set the resolution above 720p if the Flip function is activated.
   - **Frame Rate (FPS):** Select the desired frame rate for the video stream between **1** and **30** FPS.
   - **Bit Rate Type:** Select **CBR** (Constant Bit Rate) or **VBR** (Variable Bit Rate). If you select VBR, you can select the **Video Quality** between **1** (lowest) and **6** (best).
   - **Reference Bit Rate:** Recommended bit rate range based on the resolution and frame rate settings you have selected.
   - **Bit Rate:** Select the desired bit rate for each video stream or select **Customized** and enter the bit rate in Kbps.
   - **I Frame:** Select the interval for I frames. It is recommended to select 2 unless you have special requirements.
3. Under **Watermark Settings**, check to enable watermark to protect against video tampering.
4. Under **Watermark Character**, enter the desired watermark text.
5. Click **Save** to save changes.

Snapshot

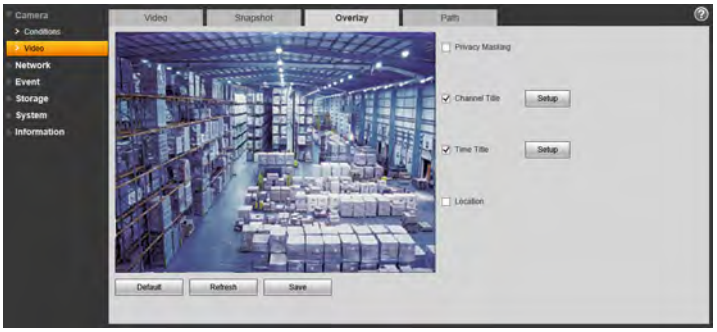
The Snapshot menu allows you to configure images quality settings for snapshots.

To configure snapshots:

1. Configure the following:
   - **Snapshot Type:** Select **General** to configure snapshots taken using scheduled recording. Select **Event** to configure snapshots activated by alarms.
   - **Image Size:** The image size of snapshots is the same as the resolution for the stream selected.
   - **Quality:** Select the image quality for snapshots between **1** (lowest) and **6** (highest).
   - **Snapshot Stream:** Select **Main Stream** to take snapshots from the Main Stream or **Sub Stream** to take snapshots from the Sub Stream.
   - **Interval:** Select the interval between snapshots between **1** and **7** seconds.
2. Click **Save** to save changes.

Overlay

The Overlay tab allows you to configure the OSD text on the camera video display.



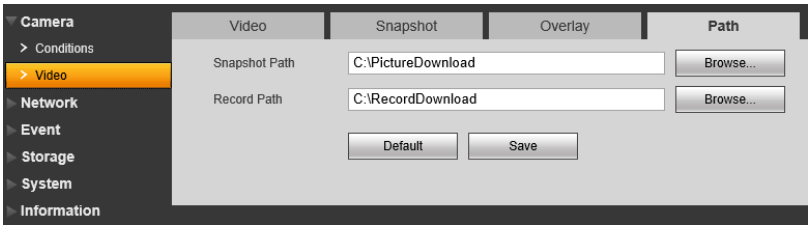
To configure the OSD:

1. Check **Privacy Masking** to enable privacy masking. Then, click **Setup** to configure privacy areas. You may have up to 4 privacy areas.
   - Click the corners of a privacy area to adjust the size of the privacy area.
   - Right-click to delete the currently selected privacy area.
   - Click and drag outside of the privacy areas to create a new privacy area.
   - Click **Save** to save changes.
2. Under **Channel Title**, check to show the channel title. Click **Setup** to enter a custom channel title.
3. Under **Time Title**, check to show the time. Click **Setup** and then check **Week Display** to show the day of the week.

4. Under **Location**, check to add a custom message, and then click **Setup** to enter a custom message up to 5 lines.
5. Click **Save** to save changes.

Path

The Path tab allows you to configure the folder where snapshots and manual recordings are saved.



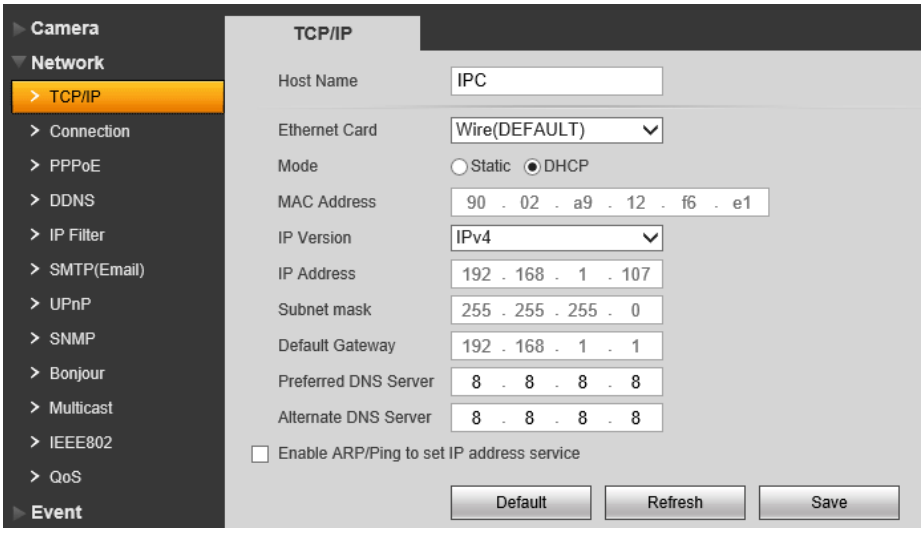
To configure the recording and snapshot folder:

1. Configure the following:
   - **Snapshot Path:** The folder on your hard drive where snapshots are stored. Click **Browse** to select a different folder.
   - **Record Path:** The folder on your hard drive where manual recordings are stored. Click **Browse** to select a different folder.
2. Click **Save** to save changes.

Network

TCP-IP

The TCP-IP menu allows you to configure the camera for DHCP or Static IP addressing.



To configure IP address settings:

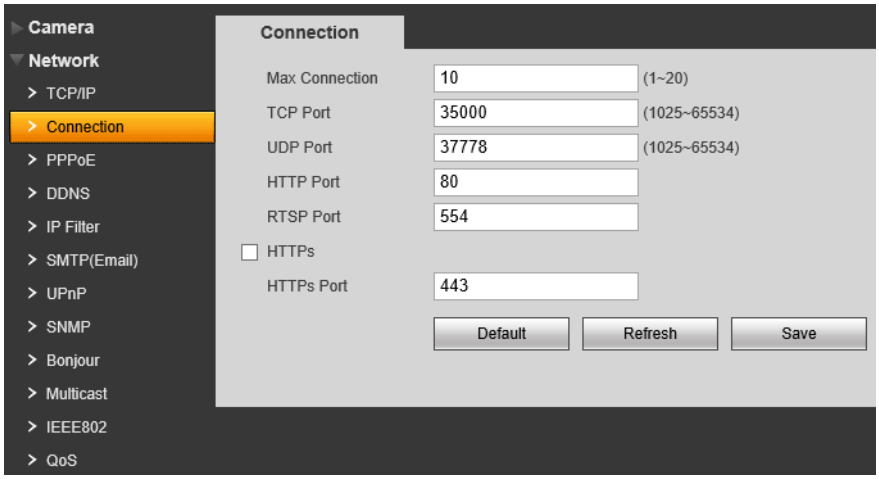
1. Under **Host Name**, enter the Host Name for the camera up to 32 characters.
2. Under **IP Version**, select **IPV4** or **IPV6**.

3. Under **Mode**, select **Static** or **DHCP**. If you select Static, configure the **IP Address**, **Subnet Mask**, **Default Gateway**, **Preferred DNS Server**, and **Alternate DNS Server**.
4. Click **Save** to save changes.

Connection

The Connection menu allows you to configure the camera ports and maximum connections to the camera. You must port forward the HTTP (default: **80**) and TCP (default: **35000**) port numbers on your router to enable remote connection to your camera

NOTE: If you are not using an and are setting up multiple cameras in the same network for remote access, you must assign unique TCP and HTTP ports for each camera. Two cameras cannot share the same port number.



To configure connection settings and ports:

1. Under **Max Connection,** enter the maximum number of devices that can connect to the camera at the same time between **1** and **20**.
2. Configure the following port settings:

   - **TCP Port:** Enter the TCP (Client) Port number (default: **35000**). The TCP port is used to stream video to remote computers or mobile devices. The TCP Port must be port forwarded to enable remote connection to your camera.
   - **UDP Port:** Enter the UDP Port number (default: **37778**). The UDP Port is used for special applications only.
   - **HTTP Port:** Enter the HTTP Port (default: **80**). The HTTP Port is used to access the camera's web interface. The HTTP Port must be port forwarded to enable remote access.

   NOTE: If you change the HTTP Port to anything other than 80, you must enter colon (:) and the HTTP port in your web browser to access the camera (e.g. *http://tomsmith.myddns-flir.com:85*).

   - **RTSP Port:** Enter the RTSP Port (default: **554**). The RTSP Port is used for special applications.
3. (Optional) To enable HTTPS, check **HTTPs On**. To connect to the camera using HTTPS, you must forward the HTTPS port (default: 443) on your router. You must also connect to the camera using the following format:

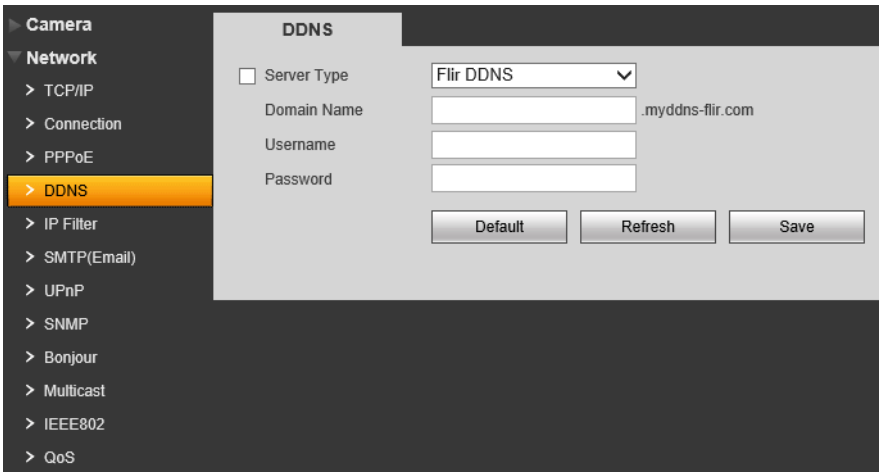
   - *https://IP or DDNS address:HTTPS Port*
   - **For example:** *https://tomsmith.myddns-flir.com:443*

4. (Optional) To configure the HTTPS port, enter the custom port number under **HTTPS Port** (default: **443**).
5. Click **Save** to save changes.

PPPoE (Unsupported)

DDNS

The DDNS menu allows you to set up the camera with a free FLIR DDNS account for remote connectivity. You can register for a FLIR DDNS account at ddns.myddns-flir.com.



To configure DDNS:

1. Under **Server Type**, check the checkbox and select **FlirDDNS**.
2. Under **Domain Name**, enter the Domain Name from the confirmation email you received after registering for DDNS.
3. Under **Username**, enter the User Name from the confirmation email.
4. Under **Password**, enter the Password from the confirmation email.
5. Click **Save**.

NOTE: It may take between 10~15 minutes for the DDNS server to update with your new DDNS address.

IP Filter

The IP Filter allows you to create a white list of device MAC or IP addresses that can access the camera. If you use the IP filter menu, devices that are not on the white list will not be able to

remotely connect to the camera.

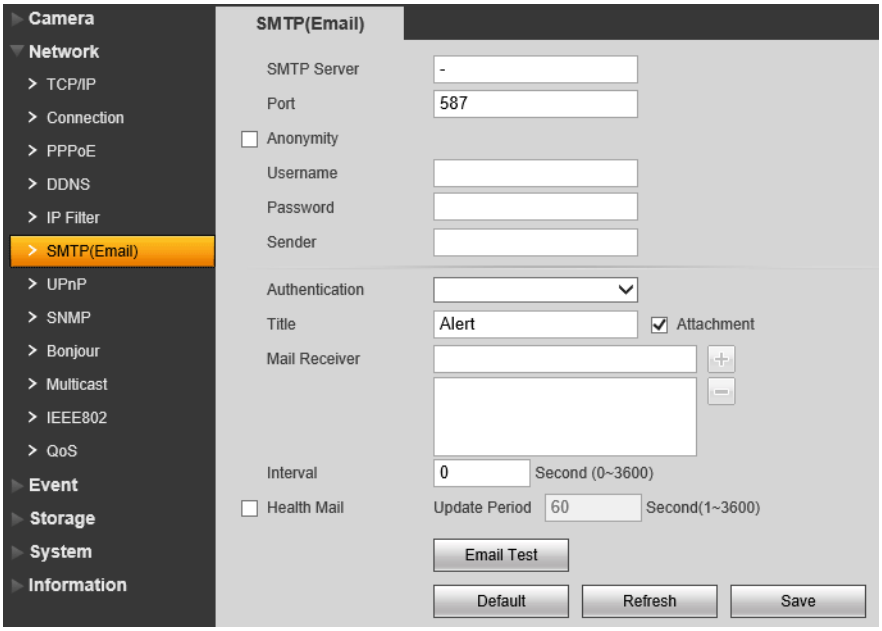
> ⚠ If you enable the IP filter the camera will block any device that is not listed. Make sure the correct devices are added to the list, or you may not be able to access the camera.

To filter connections based on IP or MAC addresses:

1. Click **Add IP/MAC**.
2. Select **IP Address** or **MAC Address** and then enter the address of the device you would like to add to the white list.
3. Click **Save**.
4. Check **Trusted Sites**.
5. Click **Save** to save changes.

SMTP (Email)

The SMTP menu allows you to set up email alerts for motion or alarms.



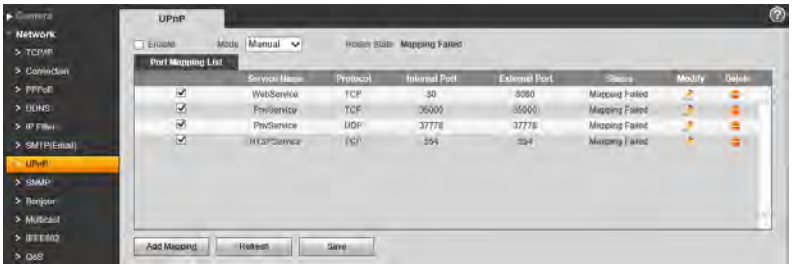
To configure SMTP Settings:

1. Under **SMTP Server**, enter the SMTP server address.

2. Under **Port**, enter the Port used by the server.
3. Check **Anonymity** if the server allows anonymous logins or uncheck to enter credentials to access the server.
4. Under **Username**, enter the user name of the sender's account.
5. Under **Password**, enter the password of the sender's account.
6. Under **Sender**, enter the sender's email account.
7. If the server uses encryption, select **SSL** or **TLS** under **Authentication**.
8. Under **Interval**, select the interval for sending email alerts. The system will only send email alerts after this interval has passed.
9. Check **Health Mail** to enable the camera to send health alerts. If you enable health alerts, enter the interval in seconds under **Update Period**.
10. Click **Email Test** to send a test email using the settings you have entered.
11. Click **Save** to save changes.

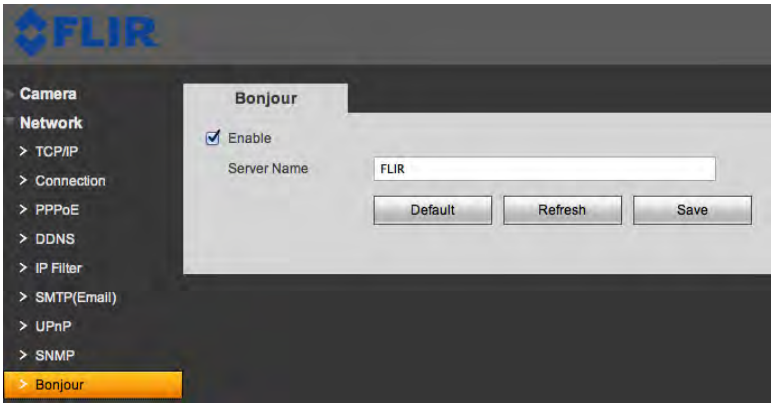
UPnP

UPnP allows you to map port numbers between the LAN and the Internet. Depending on your router version, you may need to disable UPnP function.



Bonjour

The Bonjour menu allows you to enable the Bonjour service to easily detect the camera on a local network when using a Mac.

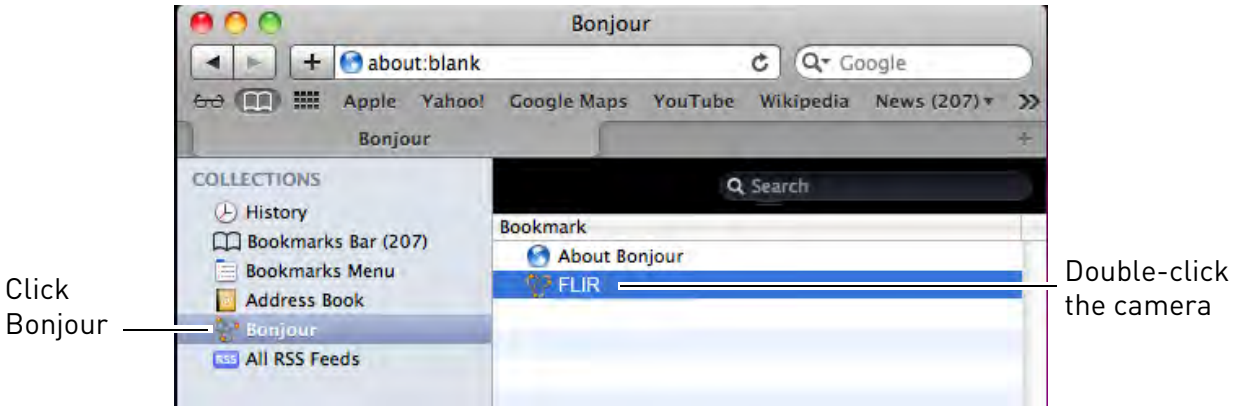


To enable / disable the Bonjour service:

1. Check **Enable** to enable Bonjour or uncheck to disable.
2. Under **Server Name**, enter the name of the camera that will show up when accessing the camera through Bonjour in Safari.
3. Click **Save** to save changes.

To access the camera through Bonjour:

1. In Safari, click  to open the Bookmarks menu.
2. Click **Bonjour**, the IP Camera will appear in the list.



3. Double-click the IP camera to open it in a browser tab.

SNMP (Unsupported)

Multicast (Unsupported)

IEEE802 (Unsupported)

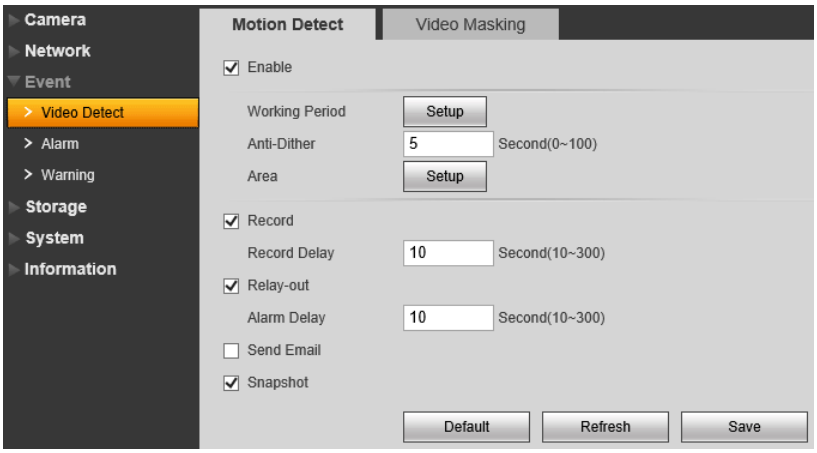
QOS (Unsupported)

Event

Video Detect

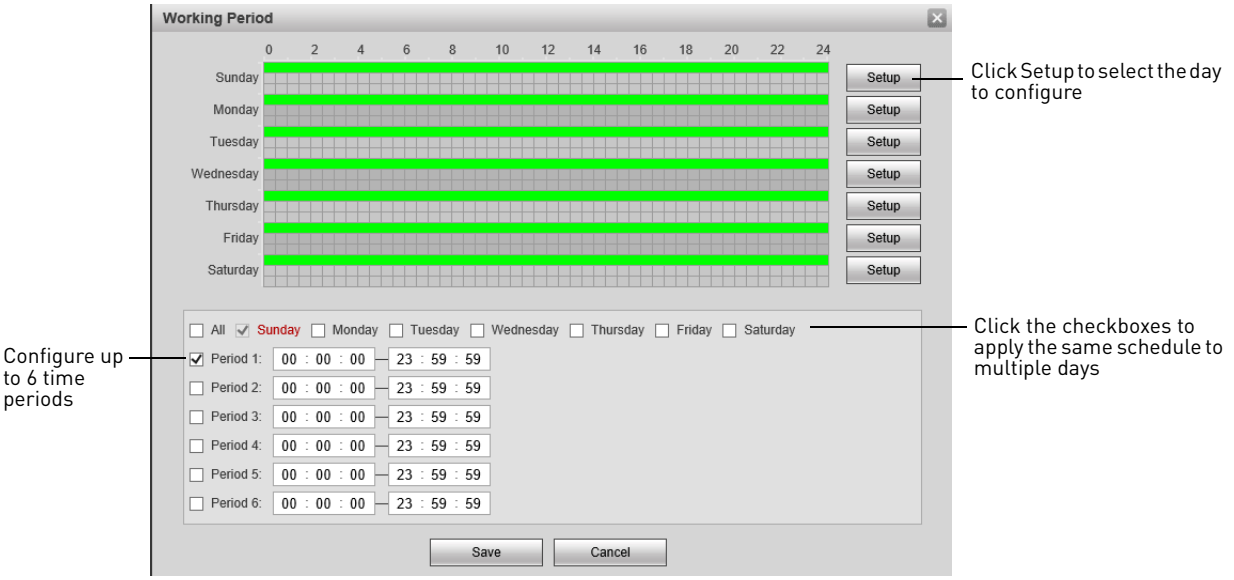
The Video Detect menu allows you to set up motion detection and recording.

> **NOTE:** Recording functions require an FTP server or microSD card. Some camera models do not support microSD recording.



To set up motion detection settings:

1. Check **Enable** to enable motion detection.
2. To configure a schedule when motion detection will be activated, click **Setup** next to Working Period.

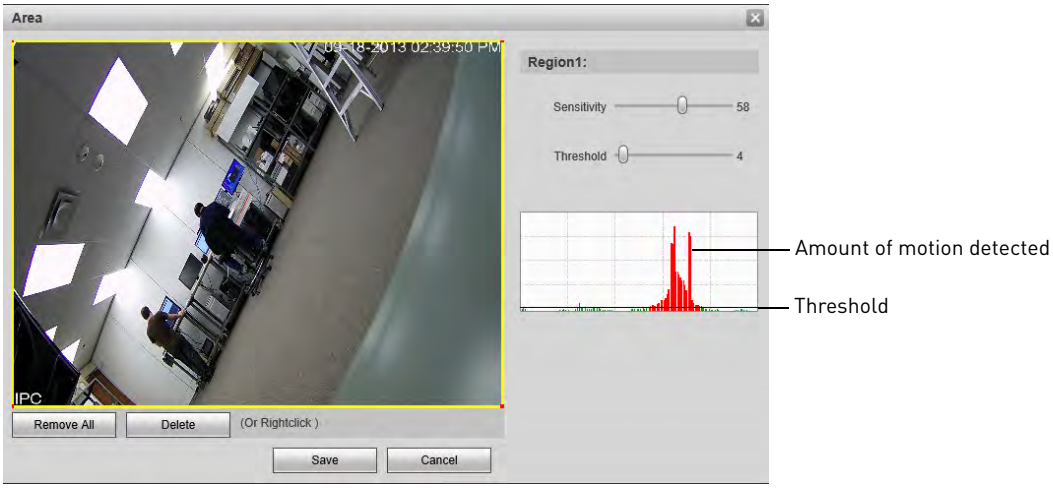


- Select the day you would like to configure by clicking the **Setup** buttons. You can apply the same schedule to multiple days using the checkboxes.
- Configure up to 6 time periods when motion detection will be activated.
- Click **Save**. Repeat the steps above if you would like to apply a different schedule to different days.

3. Under **Anti-dither**, enter the anti-dither time. After a motion event occurs and motion stops, if motion is detected within the anti-dither time, the system continues the motion event and includes the new motion within the first event, rather than creating a new motion event.
4. To configure the motion grid, click **Setup** next to **Area**.

- Areas where motion detection is enable are represented by yellow boxes.
- To resize an area, click on one of the corners and drag.
- To move an area, click inside and drag.
- Right-click to delete the selected area.
- Click and drag outside of all areas to draw a new area. You may have up to 4 motion areas.
- Use the sliders to adjust the **Sensitivity** and **Threshold** for motion detection.
    - The **Sensitivity** determines how sensitive the camera is to motion. For example, if the sensitivity is high, small amounts of motion will score higher on the graph. It is recommended to select a Sensitivity between 30~70.
    - The **Threshold** determines how much motion is required to trigger an alarm or recording. It is represented by the horizontal line on the graph. If the amount of motion in the area exceeds this line, it will trigger an alert. It is recommended to select a Threshold between 10~50.
    - Each motion area can have a separate Sensitivity and Threshold value.

- Click **Save**.

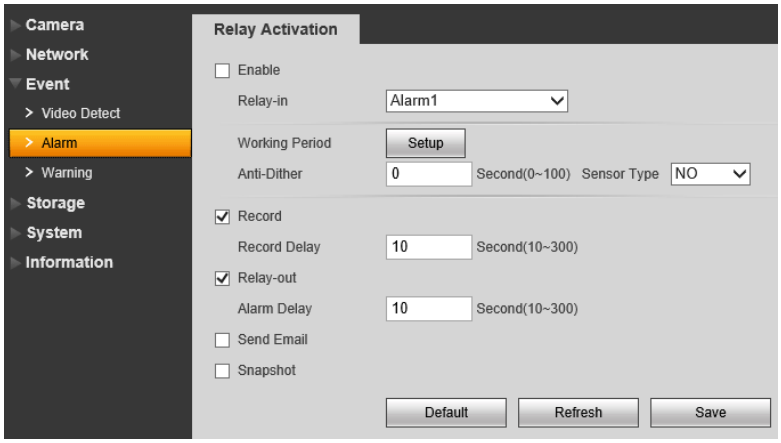


5. Check **Record** to record when motion is detected. microSD or FTP recording must be configured to use this function.
6. Enter number of seconds the camera will record after motion is detected under Record Delay.
7. Check **Relay Out** to trigger an external alarm device when the camera detects motion. The camera must have an Alarm Output to use this function.
8. Enter the number of seconds the camera will trigger the external device under Alarm Delay.
9. Check **Send Email** for the camera to send an email alert when motion is detected. Email settings must be configured to receive email alerts.
10. Check **Snapshot** for the camera to save a snapshot when motion is detected. microSD or FTP recording must be configured to use this function.
11. Click **Save** to save changes.

Video Masking (Unsupported)

Alarm (Cameras with Alarm I/O Only)

The Alarm menu allows you to configure settings for alarm devices. Your camera must have an alarm I/O connector to use alarm devices.



To configure alarm device settings:

1. Configure the following:
   - Under **Relay-In**, select the alarm device you would like to configure.
   - Check **Enable** to enable the selected alarm In device.
   - Click **Setup** next to Working Period to set a schedule for alarm device activation.
   - Under **Anti-Dither**, enter the latch time in seconds.
   - Under **Sensor Type**, select **NO** (Normally Open) or **NC** (Normally Closed) depending on the type of sensor used.
   - Check **Record** to record when a sensor device is triggered.
   - Under **Record Delay**, enter the amount of time the system will record when a sensor device is triggered.
   - Check **Relay-out** to activate an alarm output device (e.g. strobe light) when the sensor device is triggered. The camera must have an alarm output to use this feature.
   - Check **Send Email** for the camera to send out an alert email when the sensor device is triggered.
   - Check **Snapshot** for the camera to save a snapshot to FTP or microSD when the sensor device is triggered.
2. Click **Save** to save changes.

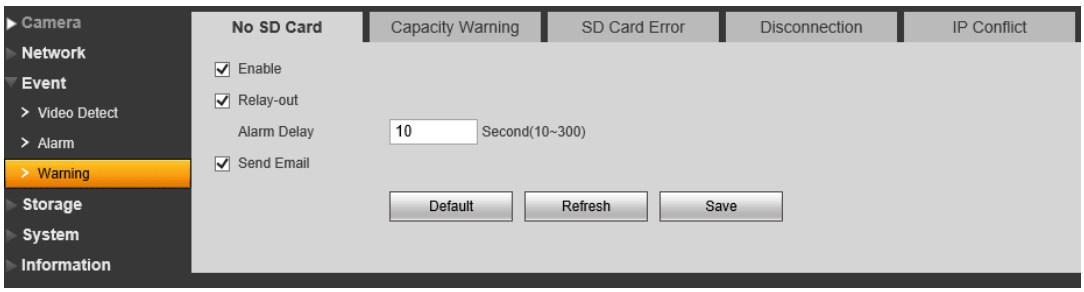
Warning

The Warning menu allows you to configure system warnings. The following system warning types are supported: No SD Card, SD card Capacity Warning, SD Card Error, Disconnection, and IP Conflict.

NOTE: No SD Card, Capacity Warning, and SD Card Error are only available on cameras that support microSD.

No SD Card

A No SD Card error occurs if recording is set in the camera, but there is no microSD or SD card installed.



To configure No SD Card errors:

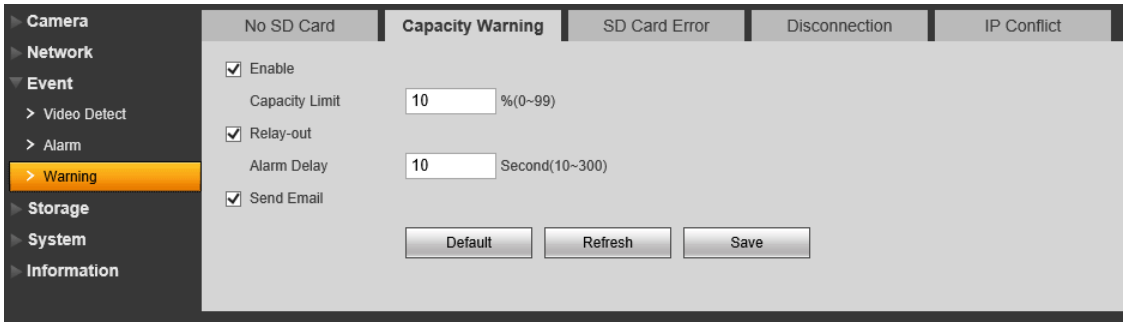
1. Check **Enable** to enable No SD Card errors.
2. Check **Relay-out** to trigger an alarm out device when No SD Card errors occur. Under **Alarm Delay**, enter the number of seconds the alarm out device will be activated.

   NOTE: Relay-out is only available if your camera supports alarm output.

3. Check **Send Email** to send an email alert when No SD Card errors occur.

Capacity Warning

A Capacity Warning occurs when the recording destination (microSD or SD card or FTP server) reaches capacity.



To configure Capacity Warnings:

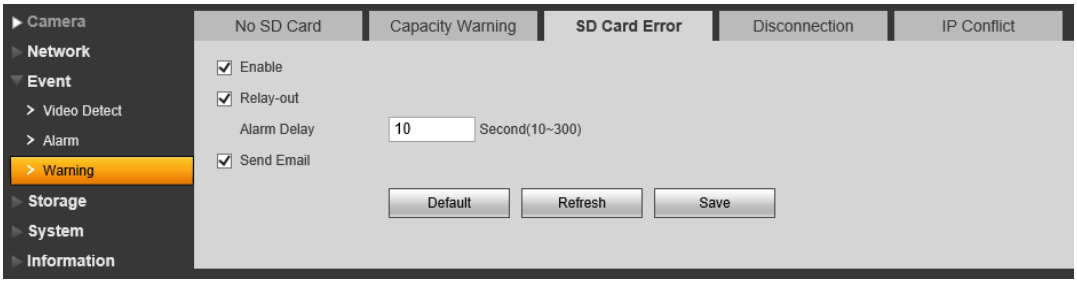
1. Check **Enable** to enable Capacity Warnings.
2. Under **Capacity Limit**, set the percentage of free space on the recording destination that will trigger a Capacity Warning. For example, if you enter 10% and your microSD card is 1GB, a warning will occur when there is only 100MB of free space remaining.
3. Check **Relay-out** to trigger an alarm out device when Capacity Warnings occur. Under **Alarm Delay**, enter the number of seconds the alarm out device will be activated.

   NOTE: Relay-out is only available if your camera supports alarm output.

4. Check **Send Email** to send an email alert when Capacity Warnings occur.
5. Click **Save** to save changes.

SD Card Error

An SD Card Error occurs if an error occurs recording to the microSD or SD card (for example if the SD card is damaged or is using the wrong file system).



To configure SD Card Errors:

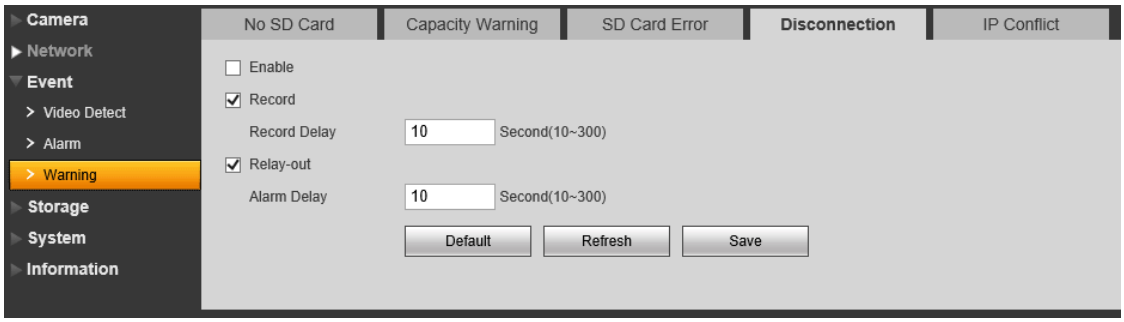
1. Check **Enable** to enable SD Card Errors.
2. Check **Relay-out** to trigger an alarm out device when SD Card Errors occur. Under **Alarm Delay**, enter the number of seconds the alarm out device will be activated.

   NOTE: Relay-out is only available if your camera supports alarm output.

3. Check **Send Email** to send an email alert when SD Card Errors occur.
4. Click **Save** to save changes.

Disconnection

A Disconnection error occurs if the camera is disconnected from the network.



To configure Disconnection Errors:

1. Check **Enable** to enable Disconnection errors.
2. Check **Record** to record to the microSD or SD card when Disconnection errors occur.

   NOTE: The camera must support microSD or SD card recording to use this function.

3. Under **Record Delay**, enter the number of seconds the camera will record after a Disconnection error.
4. Check **Relay-out** to trigger an alarm out device when Disconnection errors occur. Under **Alarm Delay**, enter the number of seconds the alarm out device will be activated.

   NOTE: Relay-out is only available if your camera supports alarm output.

5. Check **Send Email** to send an email alert when Disconnection errors occur.
6. Click **Save** to save changes.

IP Conflict

An IP Conflict error occurs if another device is assigned the same IP address as the IP camera.

To configure IP Conflict errors:

1. Check **Enable** to enable IP Conflict errors.
2. Check **Record** to record to the microSD or SD card when IP Conflict errors occur.

   NOTE: The camera must support microSD or SD card recording to use this function.

3. Under **Record Delay**, enter the number of seconds the camera will record after an IP Conflict error.
4. Check **Relay-out** to trigger an alarm out device when IP Conflict errors occur. Under **Alarm Delay**, enter the number of seconds the alarm out device will be activated.

   NOTE: Relay-out is only available if your camera supports alarm output.

5. Check **Send Email** to send an email alert when IP Conflict errors occur.

6. Click **Save** to save changes.

Storage

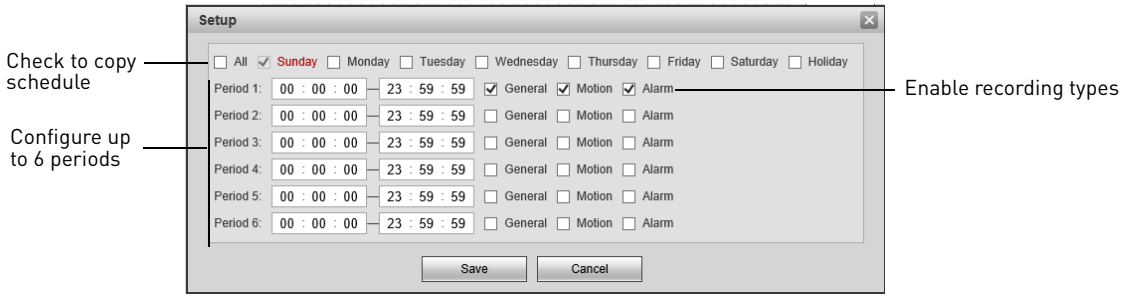
The Storage menu allows you to configure recording settings.

Record Schedule

The Record Schedule determines the schedule for video recording to SD card or FTP.

To configure the recording schedule:

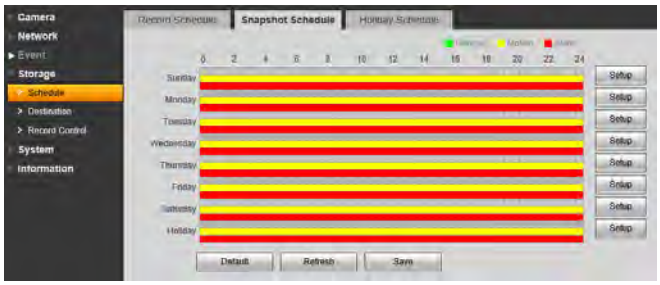
1. Click **Setup** next to the day you would like to configure.
2. Use the checkboxes if you want to copy the schedule to other days.
3. Configure up to 6 time periods for recording. For each period, enter a time range and check the recording types you would like to enable during that period:
   - **General:** Continuous recording.
   - **Motion:** Motion activated recording.
   - **Alarm:** Alarm activated recording.



4. Click **Save**.

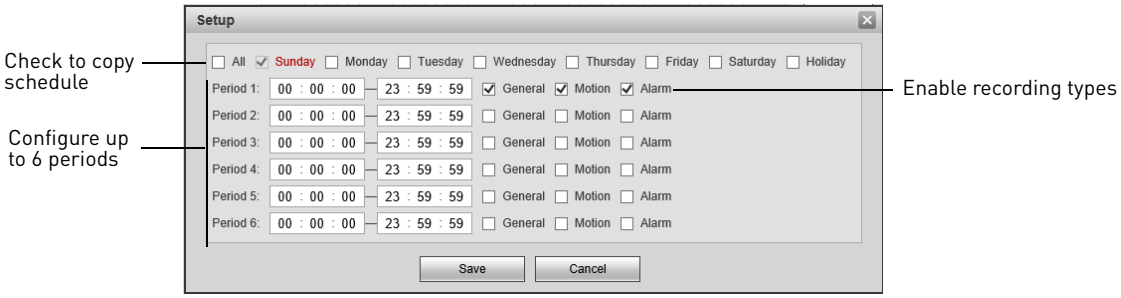
Snapshot Schedule

The Snapshot schedule determines the schedule for snapshot recording.



To configure the snapshot schedule:

1. Click **Setup** next to the day you would like to configure.
2. Use the checkboxes if you want to copy the schedule to other days.
3. Configure up to 6 time periods for recording. For each period, enter a time range and check the recording types you would like to enable during that period:
   - **General:** Continuous recording.
   - **Motion:** Motion activated recording.
   - **Alarm:** Alarm activated recording.



4. Click **Save**.

Holiday Schedule

The Holiday Schedule allows you to set certain days of the year as holidays.

To configure the holiday schedule:

1. Check **Record** or **Snapshot** to enable holidays for that recording type.
2. Use the calendar to select which days are holidays.
3. Click **Save**.

Destination - Path

The Path tab allows you to select if the camera records to microSD or FTP.

To select the recording destination:

1. Under **Record** or **Snapshot**, check **Local** to record to the microSD card or **FTP** to record to FTP. For video recording or snapshot recording, you cannot record to both microSD and FTP.
2. Click **Save**.

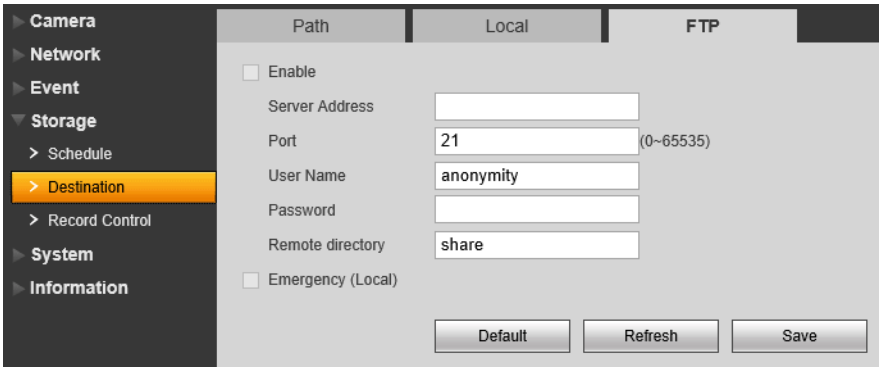
Destination - Local

The Local tab allows you to format or configure the microSD card installed in the camera.

- Click **Read Only** to set the microSD card on read only mode. This disables microSD recording.
- Click **Read & Write** to enable recording on the microSD card.
- Click **Hot Swap** to unmount the microSD card if you would like to eject it from the camera.
- Click **Format** and then click **Yes** to format the microSD card. The camera will reboot once the format is completed.

Destination - FTP

The FTP tab allows you to set up settings for recording to an FTP server.



To set up FTP settings:

1. Check **Enable** to enable recording to FTP.
2. Configure the following:

- **Server Address:** Enter the IP address or DNS address of the FTP server.
- **Port:** Enter the FTP server port number.
- **User Name:** Enter the user name for the FTP server.
- **Password:** Enter the password for the FTP server.
- **Remote directory:** Enter the recording directory on the FTP server (e.g. *share*).

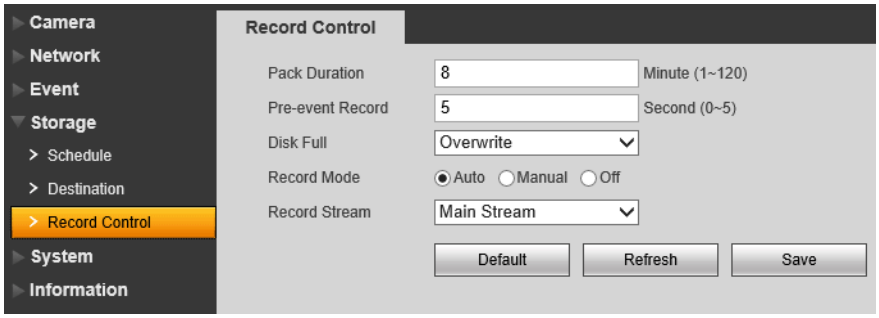
NOTE: The recording directory must be located one level below the root directory. For example *share* is acceptable, but not *share/*.

- Check **Emergency (Local)** to enable microSD recording if the FTP server cannot be reached.

3. Click **Save** to save changes.

Record Control

The Record Control menu allows you to configure recording parameters for the camera.



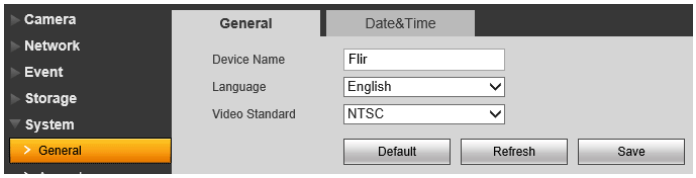
To configure recording parameters:

1. Under **Pack Duration**, enter the duration in minutes that the camera will use to pack video files.
2. Under **Pre-event Record**, enter the duration in seconds that the camera will pre-record before motion events.
3. Under **Disk Full**, select **Overwrite** to overwrite recordings when the recording medium is full or select **Stop** to stop recording when the recording medium is full.
   - Under **Record Mode**, select **Auto** to record according to the schedule, select **Manual** to record continuously, or select Off to disable recording.
4. Under **Record Stream**, select **Main Stream** to record using the Main Stream settings, or select **Substream** to record the substream.
5. Click **Save** to save changes.

System

General

The General menu allows you to configure general camera settings.

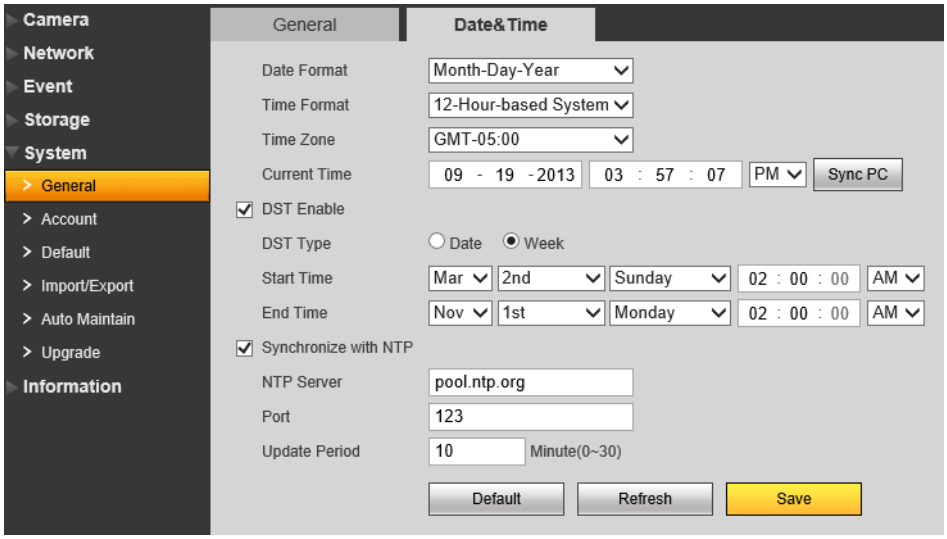


To configure general camera settings:

1. Under **Device Name**, enter a name for the camera.
2. Under **Language**, select the language that will be used for the web browser interface.
3. Under **Video Standard**, select **NTSC** (North America) or **PAL** (Europe).
4. Click **Save**.

General - Date & Time

The Date & Time tab allows you to set up date and time settings for the IP camera.



To configure date & time settings:

1. Configure the following:
   - **Date Format:** Select the date format.
   - **Time Format:** Select the time format (12 hour or 24 hour).
   - **Time Zone:** Select your time zone.
   - **Current Time:** Enter the current time or click **Sync PC** to sync your IP camera to your PC's clock.
2. If your area uses Daylight Savings Time (DST) check **DST Enable**. If you enable DST, configure the following:
   - **DST Type:** Select **Date** to select a date for the time change or select **Week** to select the week and day for the time change.
   - **Start Time and End Time:** Enter the start and end times for Daylight Savings.
3. Check **Synchronize with NTP** to synchronize the camera clock with an NTP time server. A constant Internet connection is required to use NTP. If you enable NTP, configure the following:
   - **NTP Server:** Enter the NTP server address.
   - **Port:** Enter the port for the NTP server.
   - **Update Period:** enter the interval the camera will use to update the time.
4. Click **Save**.

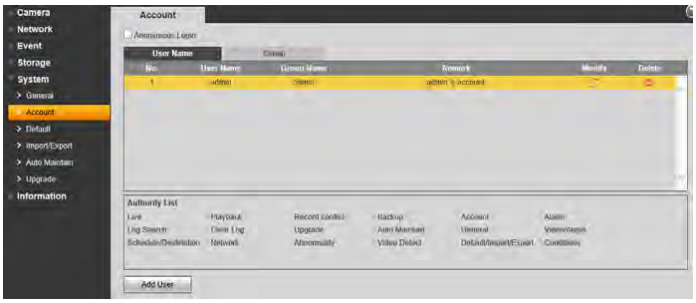
Account

The Account menu allows you to configure user accounts and user groups. The camera can support up to 18 user accounts and up to 8 groups. User accounts must be assigned to a group and inherit permissions from user groups, but an individual user account can be given less permissions than the group.

The camera includes a unique admin account that cannot be deleted. The admin account is the

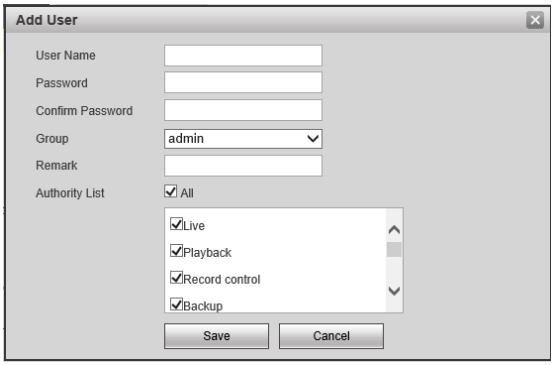
only one that can change permissions assigned to user accounts. Accounts given permission to access the Account menu may change the password for other accounts. Accounts not given permission to access the Account menu may not change any account passwords, including their own. It is essential to change the password of the admin account from the default to prevent unauthorized access to your camera.

You may also check **Anonymous Login** to allow users to connect to the camera without entering a user name or password. Users connecting anonymously are given limited access to the camera: they may only view live video and the Alarm list.



To create a user account:

1. Click **Add User**.
2. Configure the following:



- **User Name:** Enter a user name for the user. The user name can be up to 15 characters including letters, numbers, and underscores.
- **Password:** Enter a password for the user account.
- **Group:** Assign the user account to a group. The user account will inherit permissions from the group, which will be updated under Authority List.
- **Remark:** (Optional) Enter a description for the user account.
- **Authority List:** Use the checkboxes to assign permissions to the user account.

3. Click **Save**.

To create a user group:

1. Click the **Group** tab.

2. Click **Add Group**.

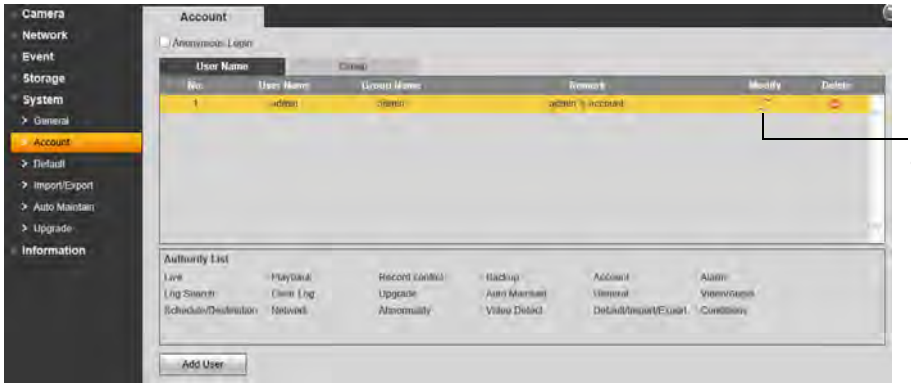
3. Configure the following:

- **Group:** Enter a name for the group.
- **Remark:** (Optional) Enter a description for the group.
- **Authority List:** Use the checkboxes to assign the default permissions for user accounts added to this group.

4. Click **Save**.

To modify a user account or group:

1. Select the **User** or **Group** tab.
2. Click  next to the account or group you would like to delete.

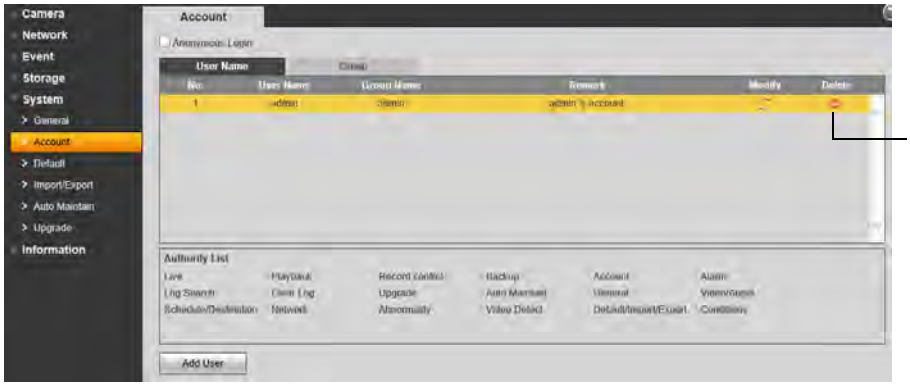


3. Edit the account or group details and then click **Save**.

To delete a user account or group:

1. Select the **User** or **Group** tab.

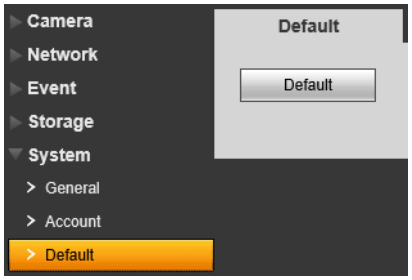
2. Click next to the account or group you would like to delete.



3. Click **OK**.

Default

Click the **Default** button and then click **OK** to reset the camera to default settings. The camera will reboot.



Import/Export

The Import/Export menu allows you to export your camera's configuration or import a saved configuration.

To export the camera's configuration:

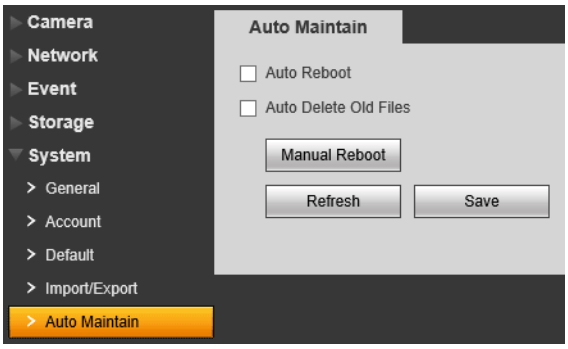
1. Click **Export**.
2. Select a location on your computer and then click **Save**.

To import the camera's configuration:

1. Click **Import**.
2. Select the configuration file you would like to backup and then click **Open**.

Auto Maintain

The Auto Maintain menu allows you to reboot the camera manually or on a automatic schedule. Rebooting the camera regularly ensures system stability. It also allows you to automatically delete old video files.



To manually reboot the camera:

- Click **Manual Reboot** and then click **OK** to reboot the camera.

To configure auto reboot:

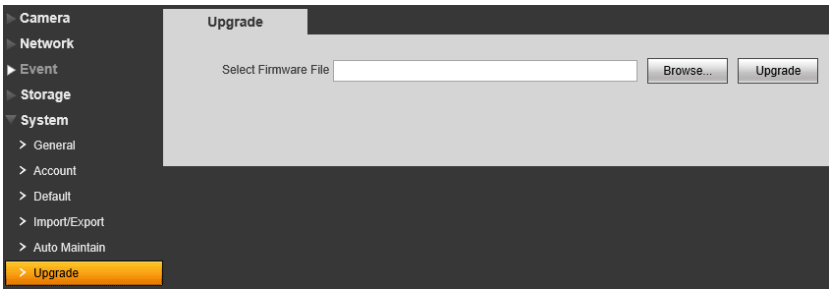
1. Check **Auto Reboot** to set the camera to reboot automatically on schedule.
2. Select the day and time for the camera to reboot.
3. Click **Save**.

To configure auto delete:

1. Check **Auto Delete Old Files**.
2. Enter the number of days the camera will retain video files.
3. Click **Save**.

Upgrade

The Upgrade menu allows you to upgrade the camera firmware. When firmware upgrades are released, they are available for free from www.digimerge.com.



To upgrade the camera firmware:

1. Download and extract the firmware from www.digimerge.com.
2. Click **Browse**.
3. Select the firmware file on your computer and then click **Open**.
4. Click **Upgrade**. The camera will upgrade the firmware and then reboot.

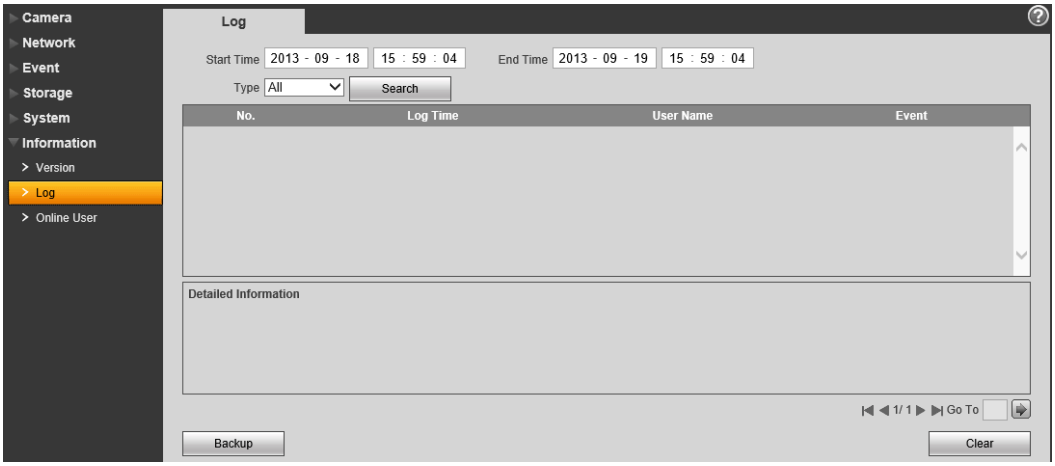
Information

Version

The Version menu shows you information related to the product and firmware version.

Log

The Log menu allows you to view system logs for the camera.



To view system logs:

1. Under **Start Time** and **End Time**, enter the start time and end time for your search.
2. Under **Type**, select the type of log you would like to search for: **All**, **Setting**, **Data**, **Event**, **Record**, **Account**, and **Clear Log**.
3. Click **Search**.

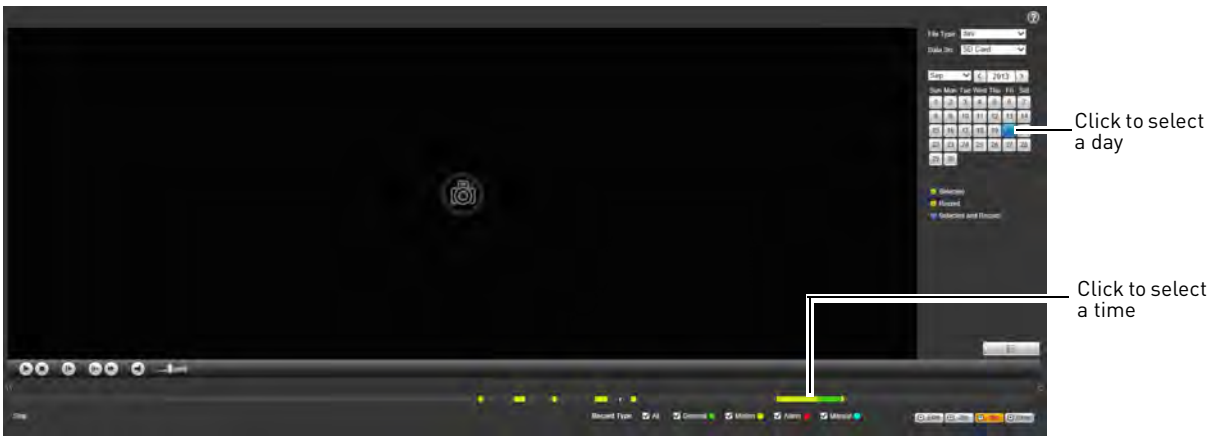
   - (Optional) Click **Backup** to save logs to your computer hard drive.
   - (Optional) Click **Clear** to delete all system logs.

Playback (Cameras with microSD Only)

Playback mode allows you to playback video from the camera's microSD card.

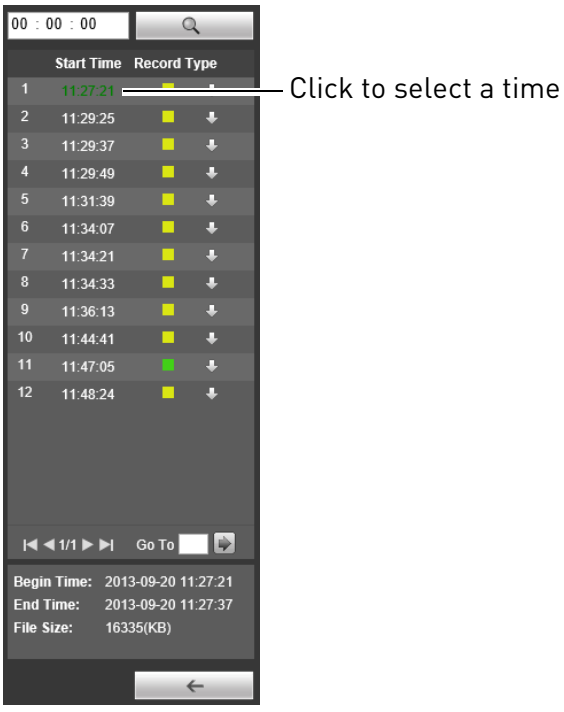
To playback video from the microSD card:

1. Use the calendar to select a day to search for video. The bar on the bottom populates with video recorded on that day.
2. Click in the time bar to start playback.



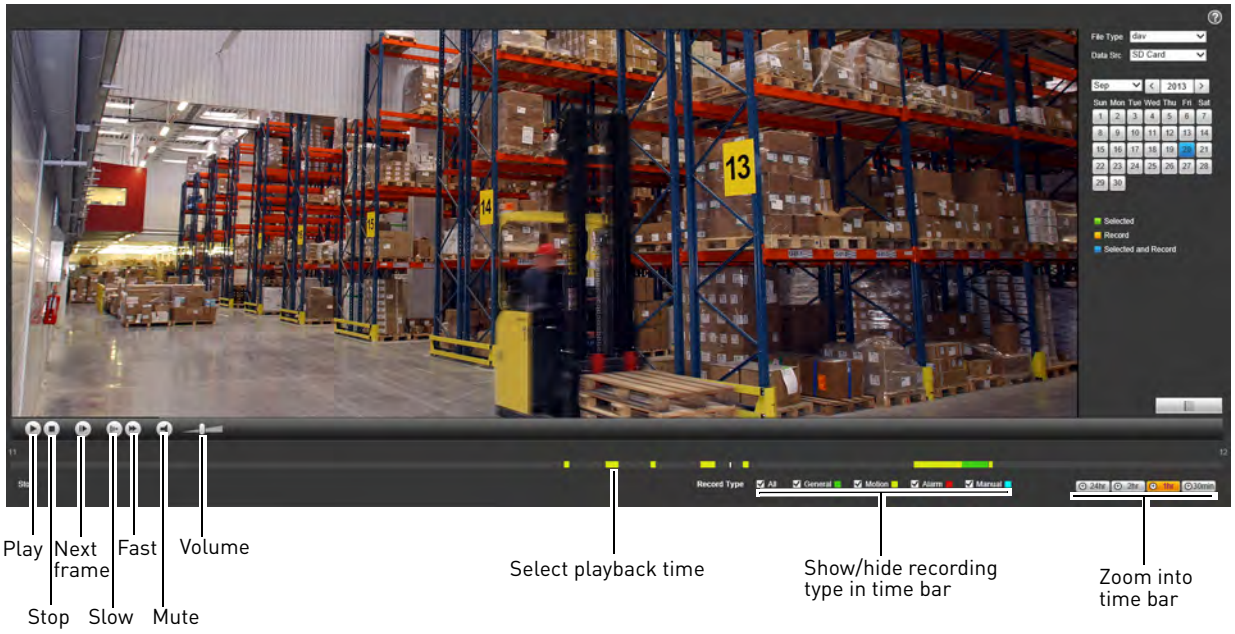
OR

1. Click in the calendar to select a day to search for video.
2. Click  . A list appears with video files from the selected day.
3. Click a time to select it.



4. Click  then  to start playback.

Playback Controls



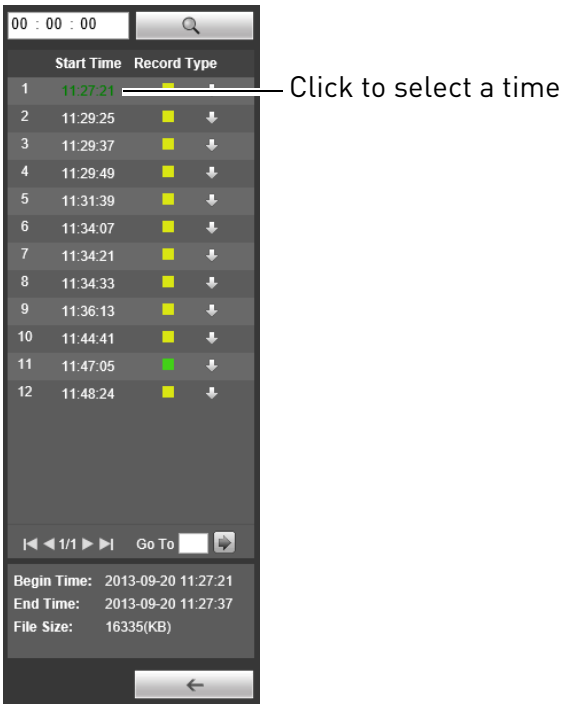
Backing up Video Files

You can download video files to your computer hard drive. Video files are saved in (.dav) format. You can use the video player available from www.digimerge.com to play backup video files.

To backup video files:

1. Click in the calendar to select a day to search for video.
2. Click [ ]. A list appears with video files from the selected day.

3. Click next to the video file you would like to download to your computer hard drive.



UPGRADE TOOL

To perform a firmware upgrade over the LAN or Internet, a Config Tool is provided on the CD or www.digimerge.com. In an effort to continuously improve the functionality of our products, firmware upgrades are available as a free download on www.digimerge.com.

> **NOTE:** The Config Tool is supported on PC only. Firmware upgrades can also be completed using the web browser interface (see "Upgrade" on page 33).

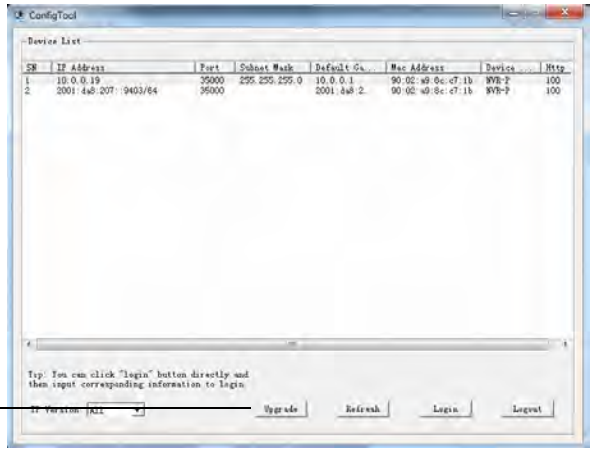
Installing a Firmware Upgrade Over the LAN

Prerequisites:

- Connect your IP camera to a router or switch on your network.
- Download a firmware upgrade from www.digimerge.com, if one is available. Extract the contents.

To perform a firmware upgrade over the LAN:

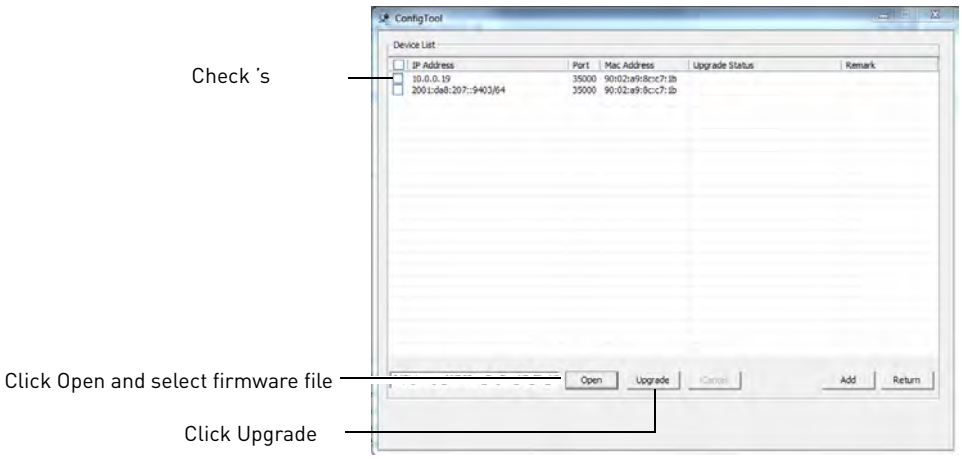
1. Download the Config Tool from www.digimerge.com.
2. Extract the contents into a folder.
3. Open the folder and right-click **ConfigTool.exe** and **Run as administrator**. If a Windows Firewall warning appears, click **Allow Access**. The Config Tool scans your LAN for IP cameras.
4. Click **Upgrade**.



Click Upgrade

5. Check any IP cameras you would like to upgrade.
6. Click **Open**. Select the upgrade firmware file (.bin).

7. Click **Upgrade**. Wait for the upgrade to complete. **Do not power off the system or disconnect the power cable during upgrade.** The system will restart when the upgrade is complete.



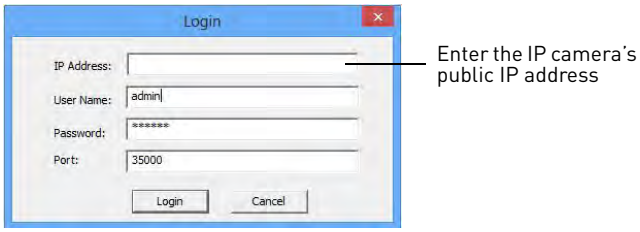
Installing a Firmware Upgrade Over the Internet

Prerequisites:

- Port forward the Client Port (default: **35000**) on the IP camera's local router.
- Obtain the public IP address of the IP camera.
- Download a firmware upgrade from www.digimerge.com, if one is available. Extract the contents.

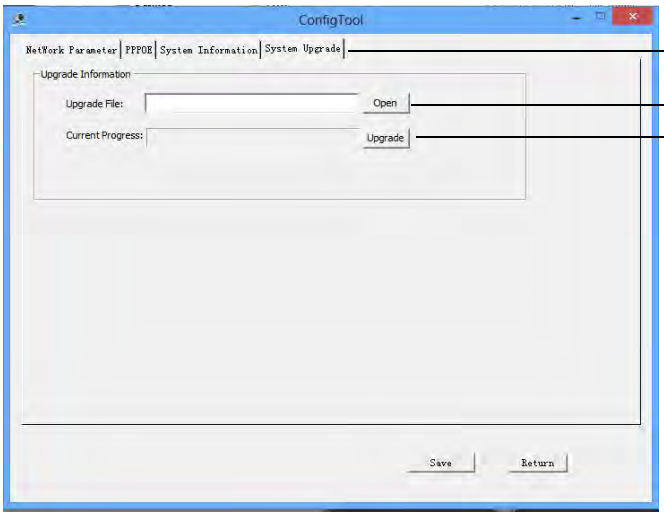
To perform a firmware upgrade over the Internet:

1. Download the Config Tool from www.digimerge.com.
2. Extract the contents into a folder.
3. Open the folder and right-click **ConfigTool.exe** and **Run as administrator**.
4. Click **Login**.
5. Under **IP Address**, enter the public IP address of the IP camera. Edit the **User Name**, **Password**, or **Port** if these have been changed from the default values.



6. Click **Login**. The Config Tool logs in to the IP camera.
7. Click **System Upgrade**.
8. Click **Open**. select the firmware file (.bin).

9. Click **Upgrade**. Wait for the upgrade to complete. **Do not power off the system or disconnect the power cable during upgrade.** The system will restart when the upgrade is complete.



FLIR SYNCROIP CENTRAL MANAGEMENT SOFTWARE FOR PC

FLIR SyncroIP CMS is a central management software that allows you to view and manage multiple s and IP cameras.

System Requirements

Your system must meet or exceed the system requirements below:

Description	Requirement
CPU	Core 2 Duo 3.0GHz
Operating System	Windows™ 8/7/Vista
Memory	2GB
Video	512 MB of video memory and above
Network (LAN)	10/100 BaseT Network
Network (WAN)	1 Mbps upstream
	*High-speed Internet service is required to remotely connect to your system.

NOTE: To connect to your system on Mac, please visit www.digimerge.com for instructions.

Installing FLIR SyncroIP CMS

Install FLIR SyncroIP CMS from the CD included with your IP camera or by downloading it from www.digimerge.com. It is recommended to visit www.digimerge.com for the latest software versions.

To start the software:

- Double-click the FLIR SyncroIP CMS icon ( ) on the desktop.
- Click **Login**.

NOTE: The CMS default User Name is **admin** and the Password is **admin**.

Adding an IP camera from the Local Area Network (LAN)

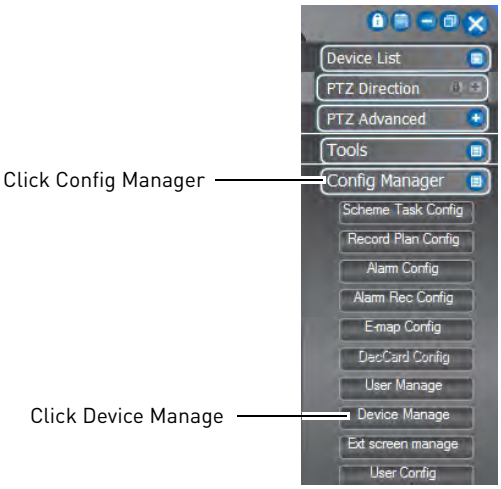
Once you open the software, you can add an IP camera.

Prerequisites:

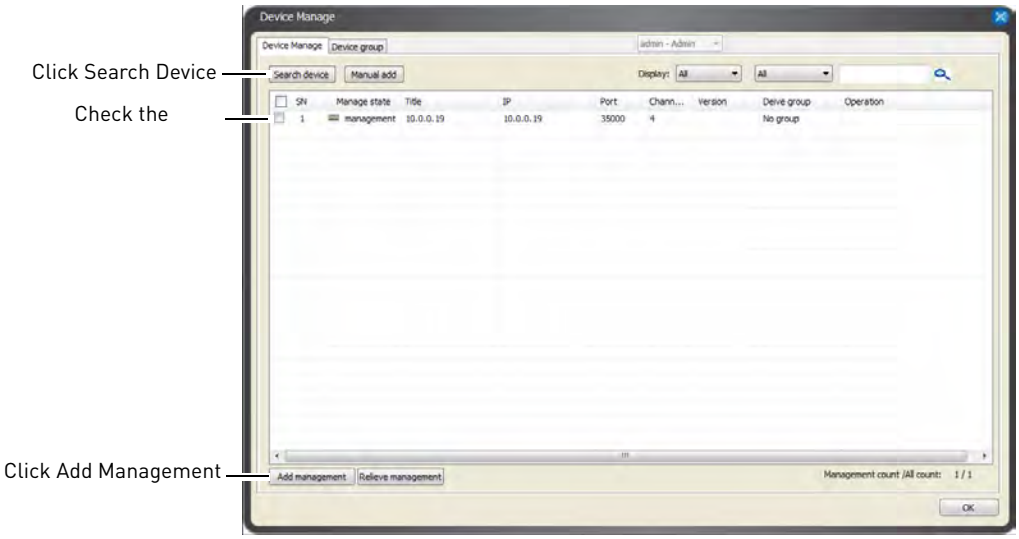
- Connect the IP camera to a router or switch on the network.
- Install the CMS on a computer in the same LAN as the IP camera.

To add a :

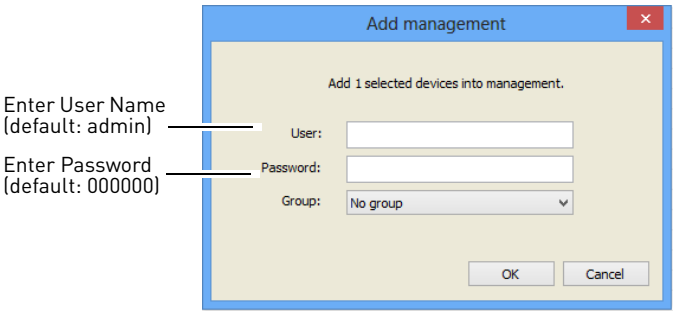
1. Click **Config Manager→Device Manage**.



2. Click **Search Device**. If a Windows Firewall alert appears, click **Allow**.
3. Check the IP camera and click **Add Management**.

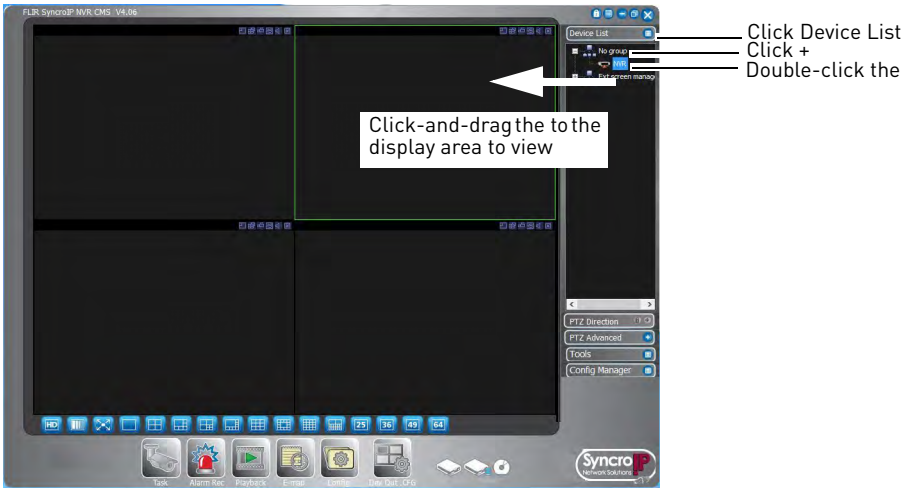


4. Enter the **User Name** (default: **admin**) and **Password** (default: **admin**) for the IP camera and click **OK**.



5. Click **OK**.
6. Click **Device List**.

7. Click **+** next to No Group.
8. Double-click the IP camera.
9. Click-and-drag the IP camera to the display area to view.



Adding an IP camera using a DDNS address

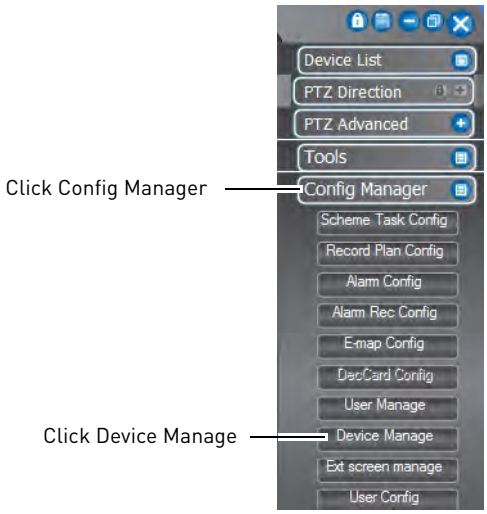
If you have IP camera systems with DDNS set up, you can add them to the CMS.

Prerequisites:

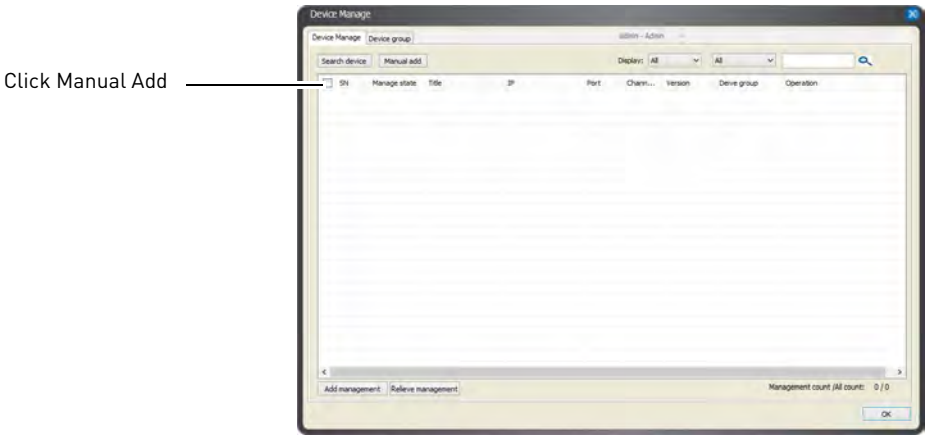
- Create a DDNS account. For details, see the Quick Network Guide provided with your camera or see “DDNS” on page 16.
- Enter the DDNS information into the IP camera locally.
- Port forward the Client and HTTP ports (default, ports **80** and **35000**) on the router.

To add an IP camera using a DDNS address:

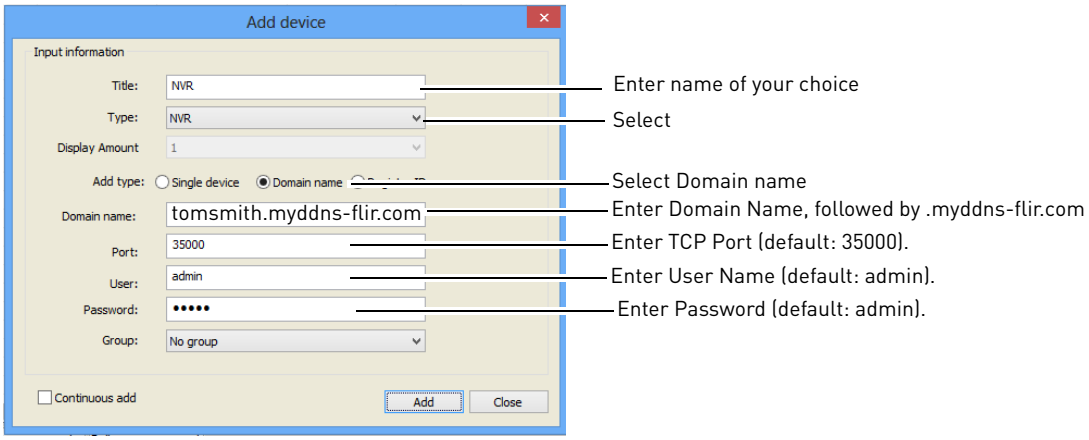
1. Click **Config Manager→Device Manage**.



2. Click **Manual Add**.

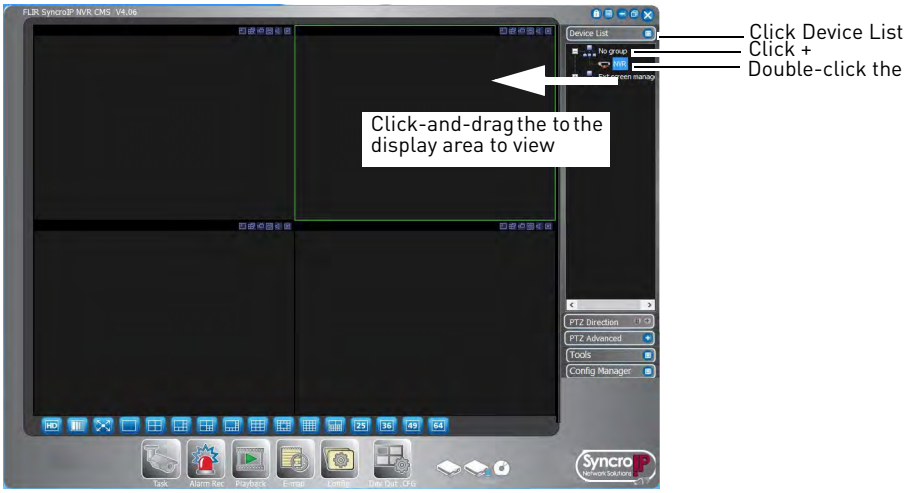


3. Configure the following:
   - **Title:** Enter a name for your IP camera of your choice (e.g. home or office).
   - **Type:** Select **IP Camera**.
   - **Add Type:** Select **Single Device**.
   - **Domain Name:** Enter the **Domain Name** from the confirmation email after your registered for DDNS, followed by **.myddns-flir.com**.
   - **Port:** Enter the **Client Port** (default: **35000**).
   - **User:** Enter the IP camera's user name (default: **admin**).
   - **Password:** Enter the IP camera's password (default: **admin**).

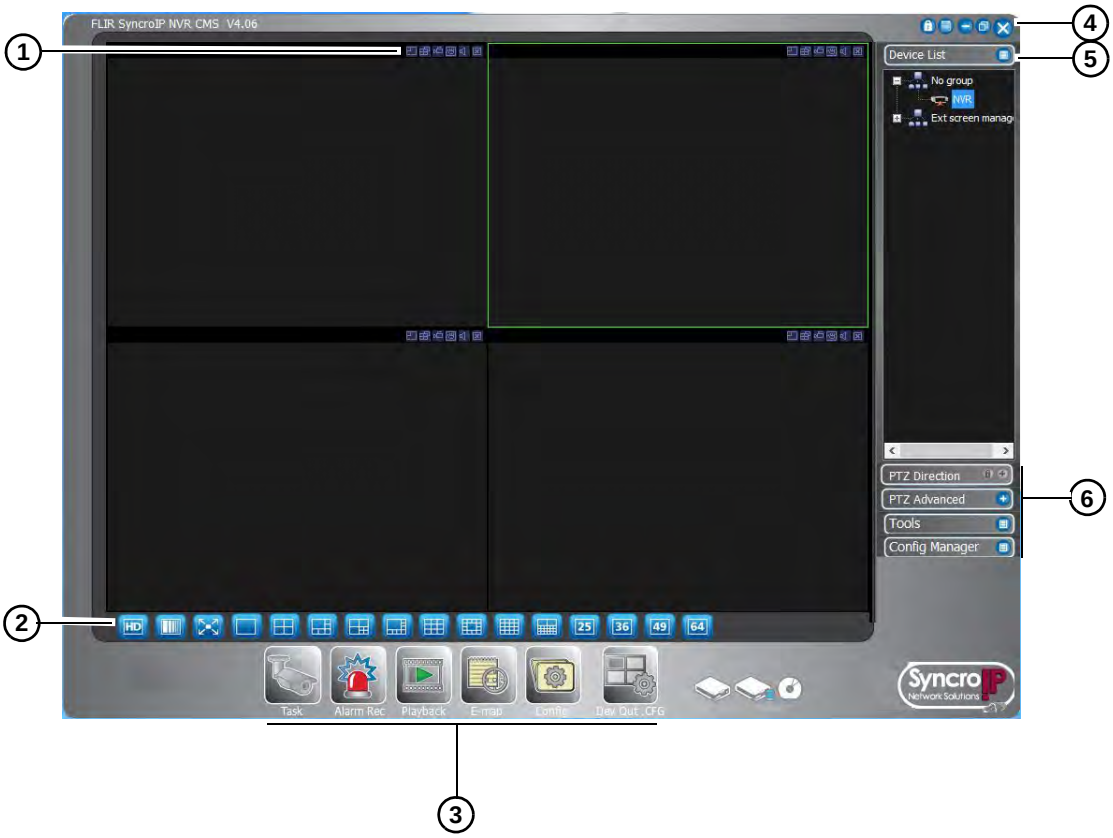


4. Click **Add**, then click **OK**.
5. Click **Device List**.
6. Click **+** next to No Group.
7. Double-click the IP camera.

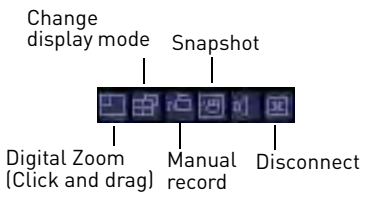
8. Click-and-drag the IP camera to the display area to view.



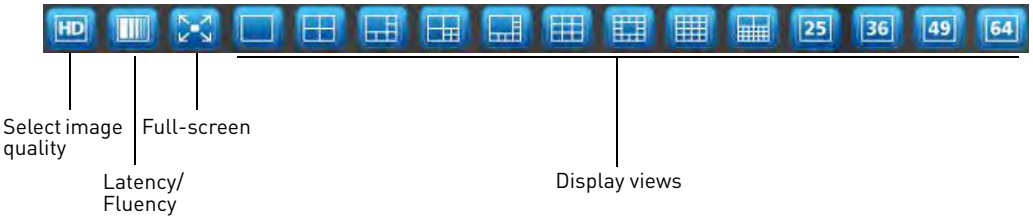
CMS Live Viewing Overview



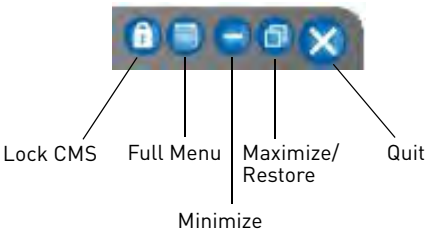
1. **Camera Controls:**



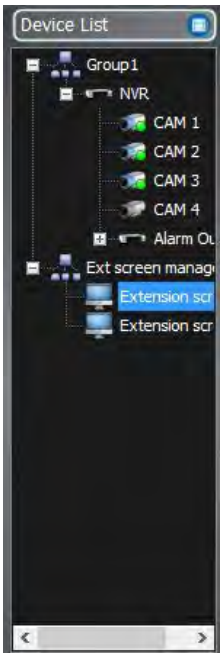
2. **Live View Toolbar:**



3. **CMS Quick Menus:** Click to access key CMS functions.
4. **CMS Window Controls:**



5. **Device List:** Open 's and IP cameras in live display.
   - Click **+** next to 's, Groups, or IP cameras to expand.
   - Click and drag 's, Groups, or IP cameras to the display area to open.
   - Right-click 's, Groups, or IP cameras to view system options.



6. **CMS Menus:**
   - **PTZ Direction:** Access basic PTZ controls.
   - **PTZ Advanced:** Access advanced PTZ controls (e.g. Auto Scan, Tour, etc.).
   - **Tools:** Contains the following menus: Begin Record Plan, NVD Control, Health Report, Log Search, Alarm Video, Alarm Output, Color Config, Volume.
   - **Config Manager:** Contains the following menus: Scheme Task Config, Record Plan Config, Alarm Config, Alarm Rec Config, E-Map Config, DecCard Config, User Manage, Device Manage, Ext Screen Manage, User Config.

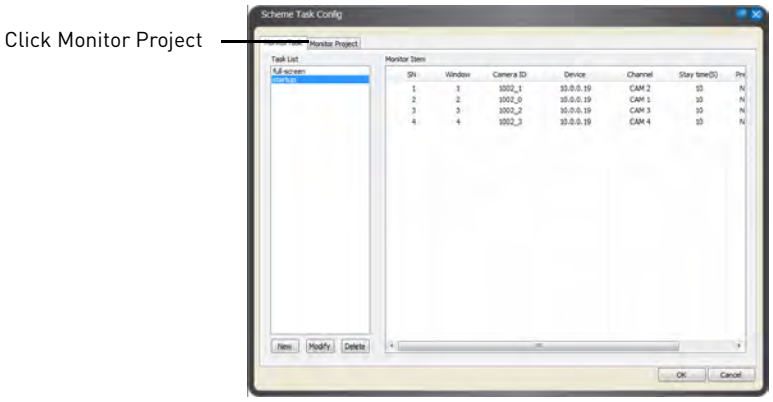
Configuring Projects

Once you have multiple tasks set up, you can configure projects to automatically cycle through them.

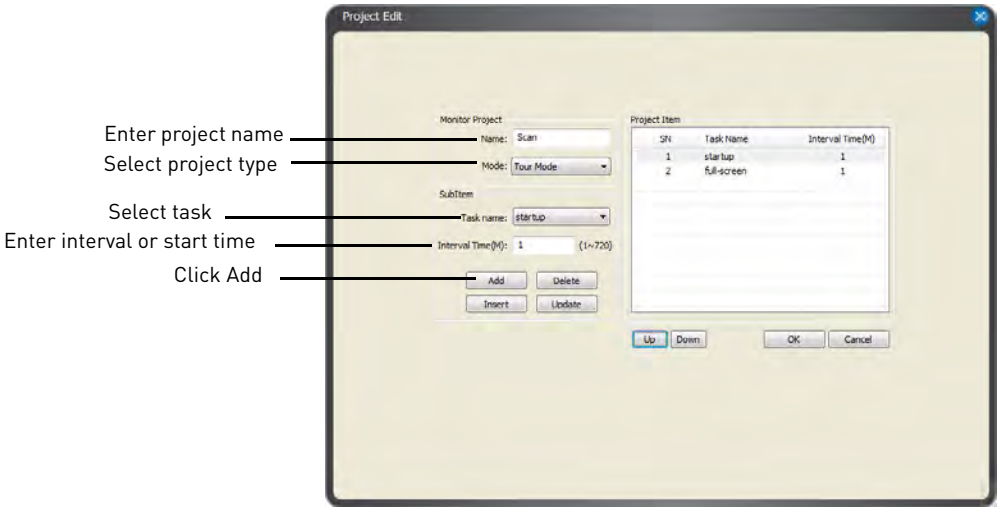
To configure a project:

1. Click **Config Manager→Scheme Task Config**.

2. Click **Monitor Project**.



3. Click **New**.
4. Enter a **Name** for the project. **You may not change the name after the project is created.**
5. Under **Mode**, select **Tour Mode** or **Schedule Mode**. Tour Mode will cycle through tasks on a fixed interval. Schedule Mode will switch tasks at a pre-defined time of the day.



6. Under **Task Name**, select the task you would like to add to the project.
   - If you selected Tour Mode, enter the **Interval Time** in minutes that the task will run for before changing to the next task.
   - If you selected Schedule Mode, enter the time of day when the task will start running.
7. Click **Add**.
8. Repeat steps 6-7 for each additional task you would like to add to the project.
9. Click **OK**. Click **OK** to save changes.

Running Tasks and Projects

- Once you have configured tasks or projects, you may run them by clicking **Task (**  **)** and then selecting the task or project you would like to run.
- You may also select a task or project to run when you first launch the CMS. For details, see "Configuring CMS Options" on page 51.

Using E-Map

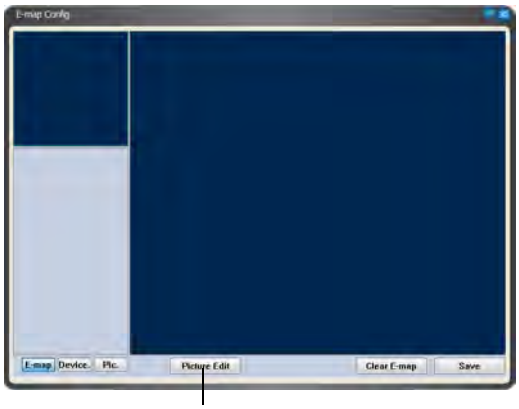
The E-Map feature allows you to visually map your cameras over a .jpg image.

Configuring E-Map

Use the steps below to select a .jpg image to use for the E-Map and place your cameras.

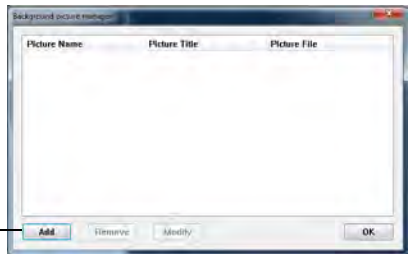
To configure the E-Map:

1. Click **Config Manager→E-Map Config**.
2. Click **Picture Edit**.



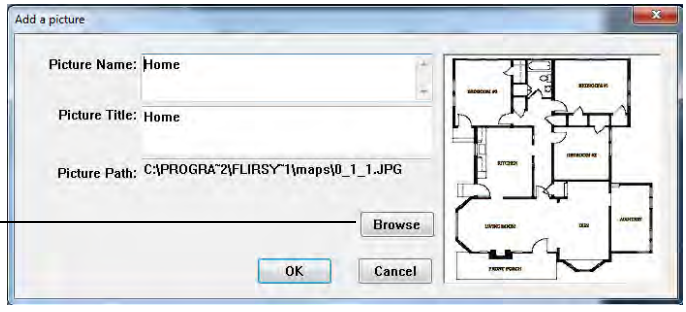
Click Picture Edit

3. Click **Add**.



Click Add

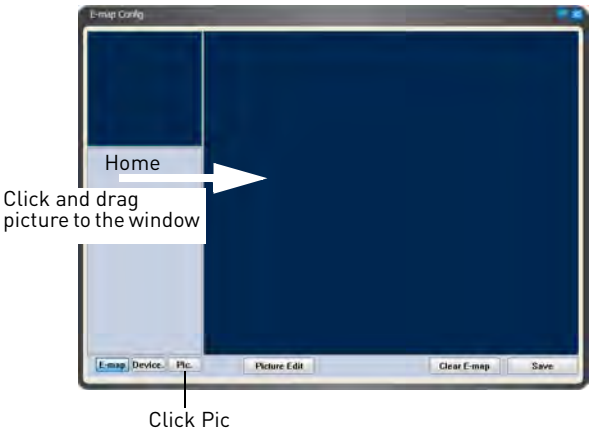
4. Click **Browse**. Select a .jpg image on your computer to use as the E-Map.
5. Enter a **Name** and **Title** for your E-Map of your choice.



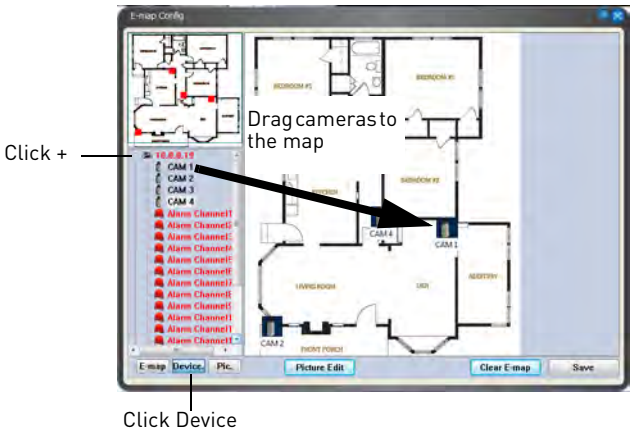
Click Browse to select a .jpg image

6. Click **OK**.

7. Click **Pic**.



8. Click-and-drag the picture to the window to use it for the E-Map.
9. Click **Device** to view a list of connected s and IP cameras.
10. Click **+** next to an or IP camera. To place cameras, drag cameras from the list to the map.



11. Click **Save**.

NOTE: To delete all E-Map data, including images and camera positions, click **Clear E-Map**.

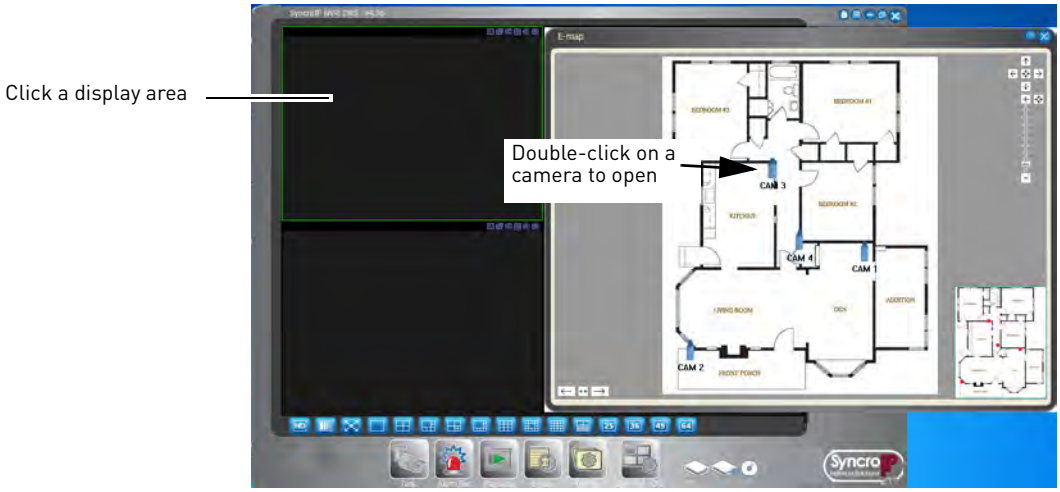
Opening Cameras from E-Map

Once you have configured your E-Map, you can use it to open cameras in live display.

To open cameras from E-Map:

1. Click **E-Map (** **)**.

2. Click on a display area in the main CMS window, then double-click on the camera to open it.

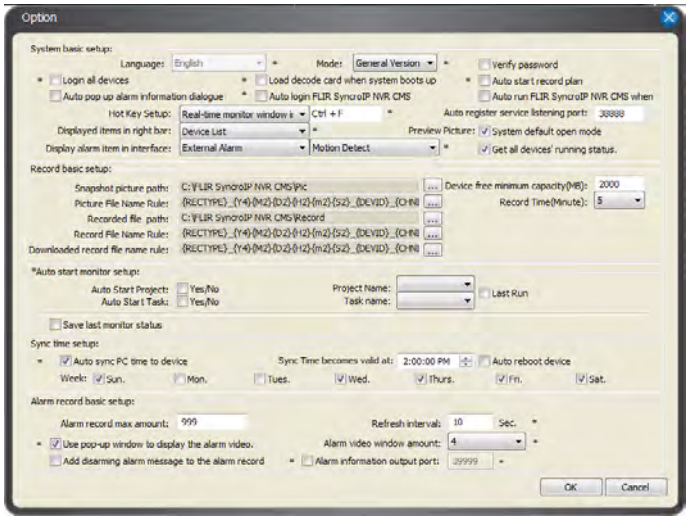


Configuring the CMS

You can configure settings for the CMS such as the admin password, recording directories, and start up settings through the Config menu.

Configuring CMS Options

1. Click **Config(**  **)→Options.**
2. Configure the following:



- **Verify password:** Check to require passwords when logging into or closing the CMS.
- **Log in all devices:** Check to allow the CMS to log into all s and IP cameras when it opens.
- **Auto start record plan:** Check to have the CMS automatically start the record plan, which allows recording to the computer hard drive when it opens. To configure the record plan, click **Config Manager→Record Plan Config**.

- **Auto Login FLIR SyncroIP CMS:** Check for the CMS to automatically log in the admin account when it is opened.
- **Hotkey Setup:** Configure hotkeys for the CMS. Use the drop-down menu to select the command, and then click inside the box on the right and enter the hotkey.

NOTE: Do not use F12 as a hotkey. F12 is reserved for the system debug command.

- **Displayed items in the right bar:** Select which right-side menu is opened when the CMS opens.
- **Record Time (M):** Select the length in minutes of video files recorded on your computer hard drive. For example, if you select 15 minutes, the system will save a new video file for every 15 minutes of recording.
- **Snapshot picture path:** Click **...** to select the default save folder for snapshots.
- **Picture file name rule:** Click **...** to define the file name rule for snapshots.
- **Recorded file path:** Click **...** to select the default save folder for manual recordings.
- **Recorded file name rule:** Click **...** to select the file name rule for manual recordings.
- **Downloaded file path:** Click **...** to select the folder for downloaded recording files.
- **Download record file name rule:** Click **...** to define the file name rule for downloaded recording files.
- **Device free minimum space (MB):** Enter the amount of minimum space in MB to maintain on the computer hard drive. The system will stop recording when only this much space is left.
- **Auto Start Project:** Check for the CMS to automatically run a project when opened. Select the project it will run under **Project Name**.
- **Auto Start Task:** Check for the CMS to automatically run a task when opened. Select the task it will run under **Task Name**.
- **Last Run:** Check for the CMS to start the last used task or project when opened.
- **Save last monitor status:** Check to have the CMS restore the previously used display mode when opened.
- **Auto sync PC time to device:** Check to have the s and IP cameras sync the clock with the system time on the PC.
- **Sync time becomes valid at:** Select the time that s or IP cameras will sync their clocks with the PC's system time.
- **Week:** Select days that s or IP cameras will sync their clocks with the PC's system time.
- **Auto reboot device:** Check to enable s or IP cameras to reboot when the time sync occurs.

3. Click **Ok** to save changes. Close the CMS and restart it to update the configuration.

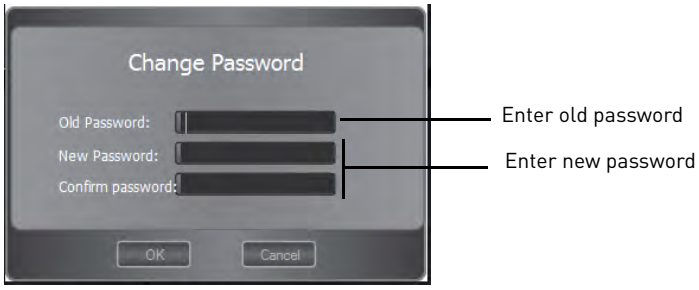
Changing the CMS Admin Password

You can change the admin password that is used to log into the CMS. The default password is admin.

NOTE: The CMS will automatically populate the admin password unless you enable Verify Password under **Config→Options**.

To change the CMS admin password:

1. When logged in as the admin account, click **Config(**  **)→Modify Password**.
2. Under **Old Password**, enter the old password.
3. Under **New Password** and **Confirm Password**, enter the new password.



4. Click **OK**.

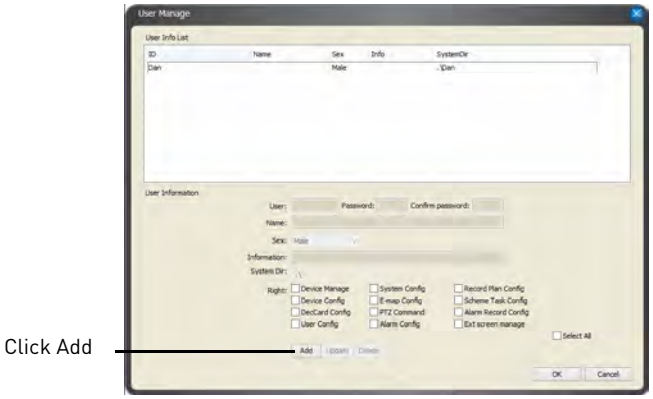
Adding User Accounts to the CMS

You can create multiple user accounts for the CMS with varying levels of access to the system. These user accounts are only used for access to the CMS software and are separate from the passwords on the or IP camera systems.

> **NOTE:** To make sure users must enter their user name and password to access the CMS, you must make sure Verify User is checked and Auto Login is unchecked in **Config→Options**. For details, see "Configuring CMS Options" on page 51.

To add a user account to the CMS:

1. Click **Config Manager→User Manage**.
2. Click **Add**.



3. Configure the following:
   - **User:** Enter the user name for the account.
   - **Password/Confirm:** Enter the password for the account.
   - **Name/Sex/Information:** (Optional) Enter descriptive details about the user account.
   - **Right:** Check the permissions that will apply to the user account.
4. Click **Save**. Click **OK** to save changes.

Multi-Monitor Support

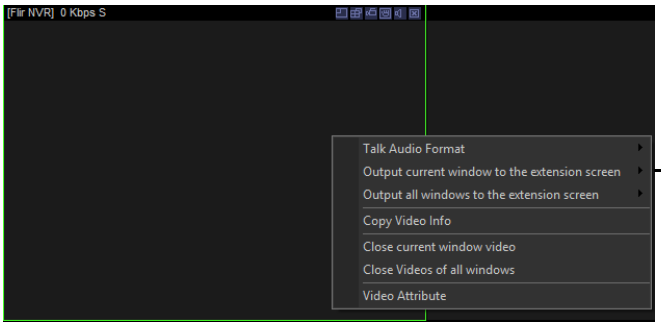
The CMS supports up to 4 monitors on a single system. The recommended system specifications are listed below. If your system does not meet the requirements below, you may experience slow system performance.

Minimum system recommendations to run the CMS on multiple monitors:

- Intel Core i5 or i7 processor.
- 6 GB of RAM.
- Geforce 9500GT video card, 1GB or greater.

Opening Cameras in Secondary Monitors

- **To open a single channel on a secondary monitor:** Open it in a window on the main screen, then right-click on the display area, and select **Output current window to extension screen**. Select the monitor you would like to send the channel to.
- **To open multiple-channels on a secondary monitor:** Open your desired channel view, then right click in the display area, and select **Output all windows to extension screen**. Select the monitor you would like to send them to.



Managing Secondary Monitors

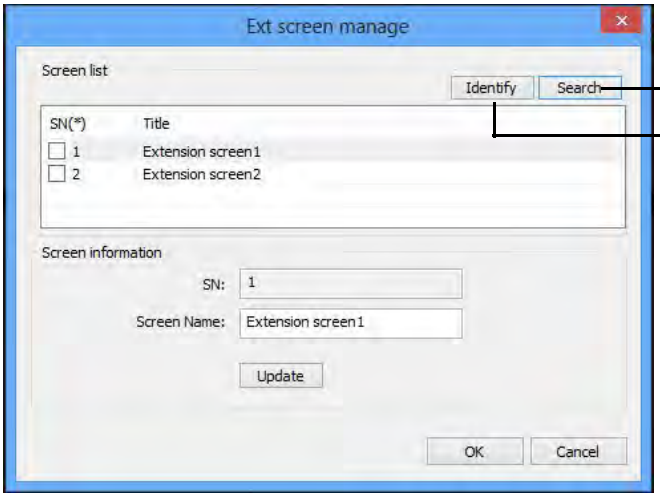
Use Ext Monitor Config to configure settings for secondary monitors. You can select which monitors you would like to enable. Enabled monitors start up when you open the CMS software.

You can close secondary monitors by clicking on them and then pressing **ESC**. However, you must close the CMS software and restart it to re-open windows on secondary monitors.

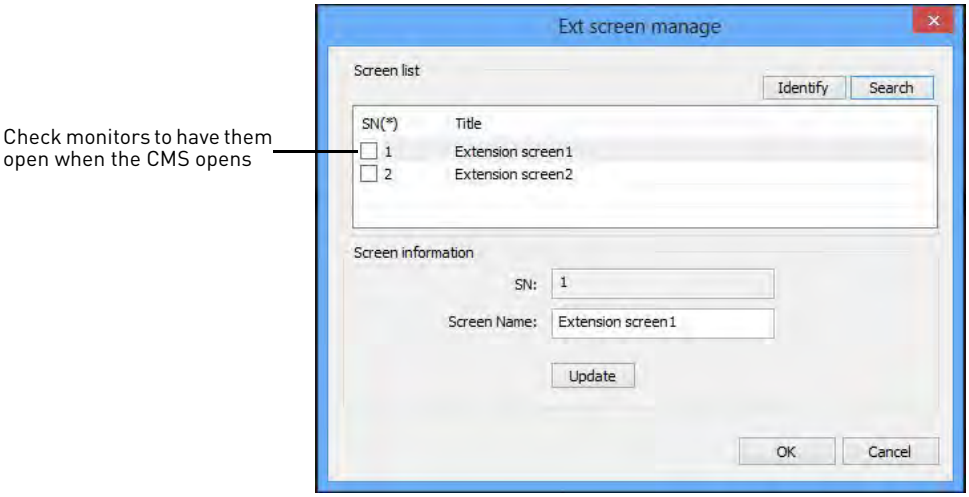
To manage secondary monitors:

1. Click **Config Manager→Ext Screen Manager**.

2. Click **Search** to detect secondary monitors or **Identify** to display the monitor number assigned to each secondary monitor.



3. Check monitors to open them when the CMS software opens or uncheck to disable.



4. Click **OK** to save changes. Restart the CMS software to open the new monitor configuration.

SMARTPHONE AND TABLET APPS

iPhone

FLIR SyncroIP NVR is an iPhone app that allows you to remotely view your IP camera.

System Requirements

- iOS 4.3 or later.

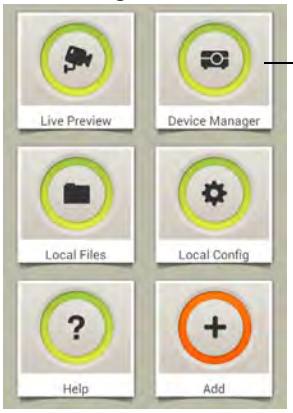
Prerequisites

- Port **80** and **35000** (or your HTTP and Client Ports, if you have changed them) must be port forwarded on your router to your camera's IP address.
- You must create a DDNS account, and have the DDNS settings configured in your IP camera.
- The IP camera must have Internet access.
- You must have a DDNS address to log in remotely.
- An iTunes account.

NOTE: You will need to create an iTunes account before you can download the app. An iTunes store account requires a valid credit card number. The app is free of charge.

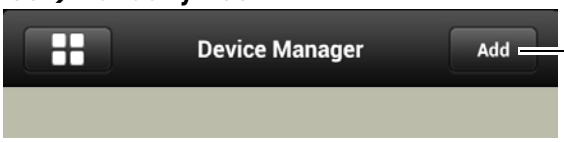
Connecting to your IP camera on an iPhone

1. Download **FLIR SyncroIP NVR** for free from the App Store.
2. Tap on the FLIR SyncroIP NVR icon ( ) to start the app.
3. Tap .
4. Tap **Device Manager**.

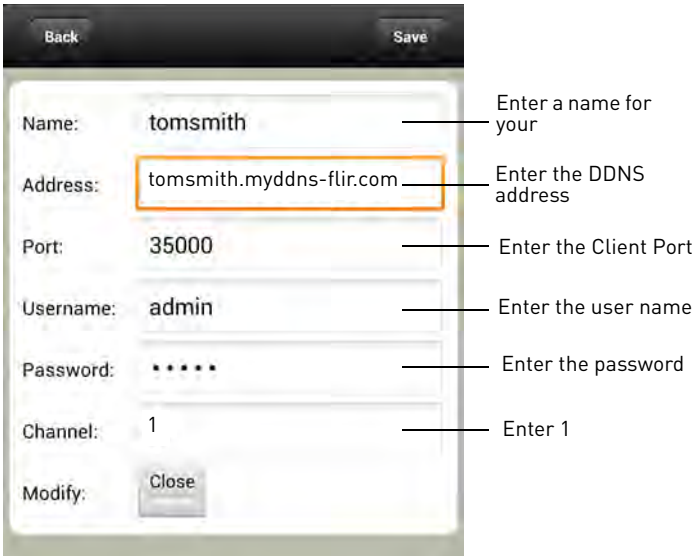


Device Manager

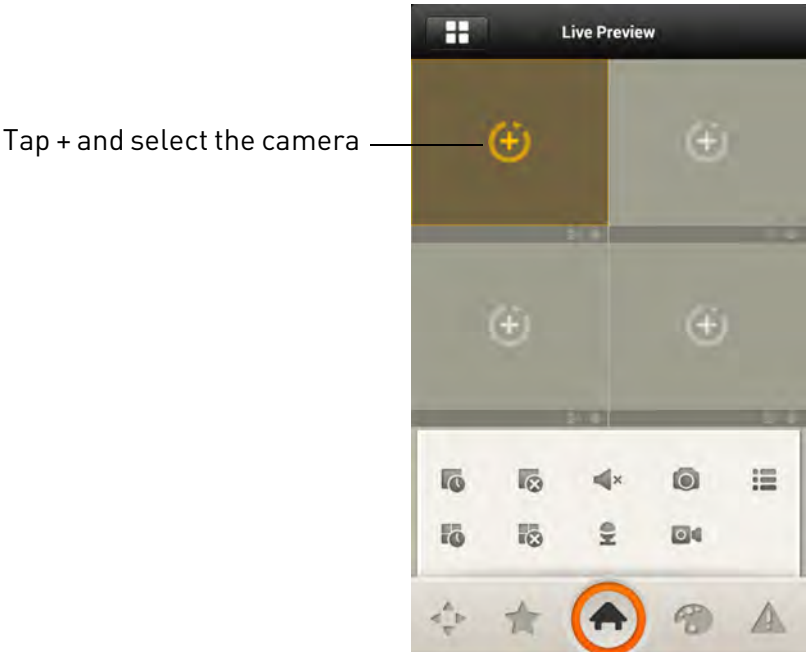
5. Tap **Add→Manually Add**.



6. Configure the following:
   - **Name:** Enter a name for your IP camera of your choice.
   - **Address:** Enter your **DDNS address** (e.g. *tomsmith.myddns-flir.com*).
   - **Port:** Enter the **Client Port** (default: **35000**).
   - **Username:** Enter the IP camera's **User Name** (default: **admin**).
   - **Password:** Enter the IP camera's **Password** (default: **admin**).
   - **Channel:** Enter **1**.

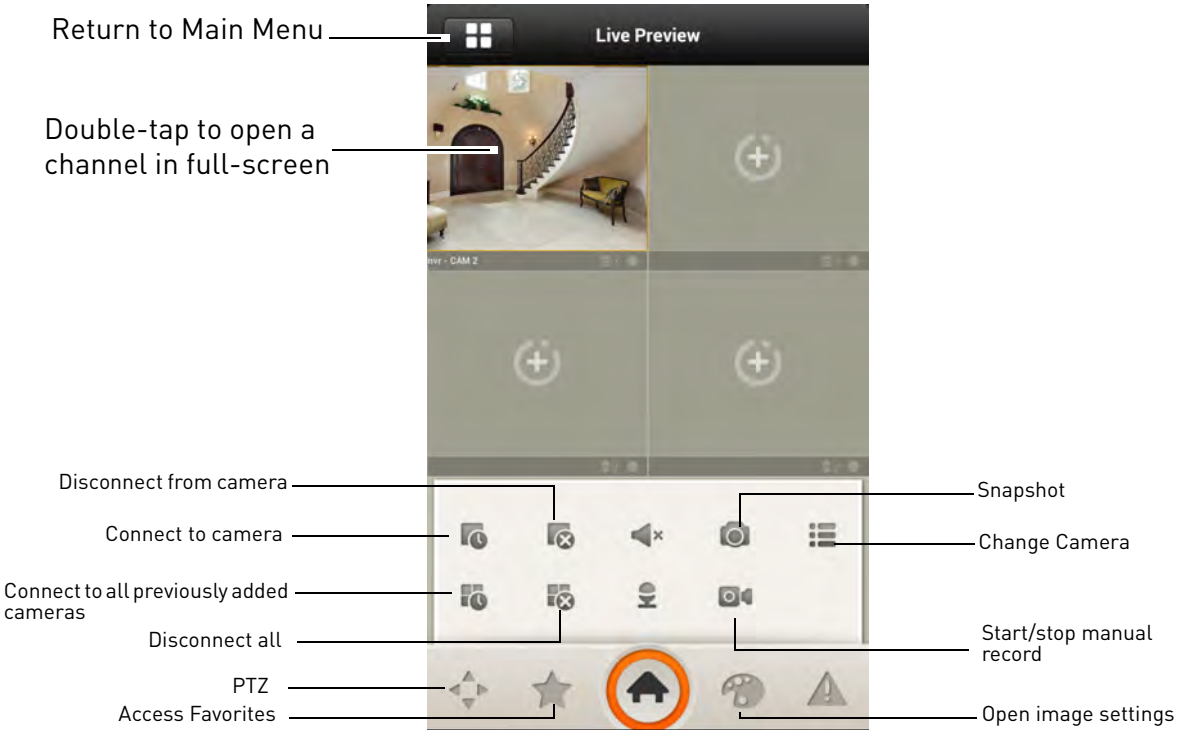


7. Tap **Save**.
8. Tap  .
9. Tap **Live Preview**.
10. Tap **+** on one of the display areas and select the camera to open it in the selected display area.



FLIR SyncroIP NVR Interface

You can use **FLIR SyncroIP NVR** in portrait and landscape mode.



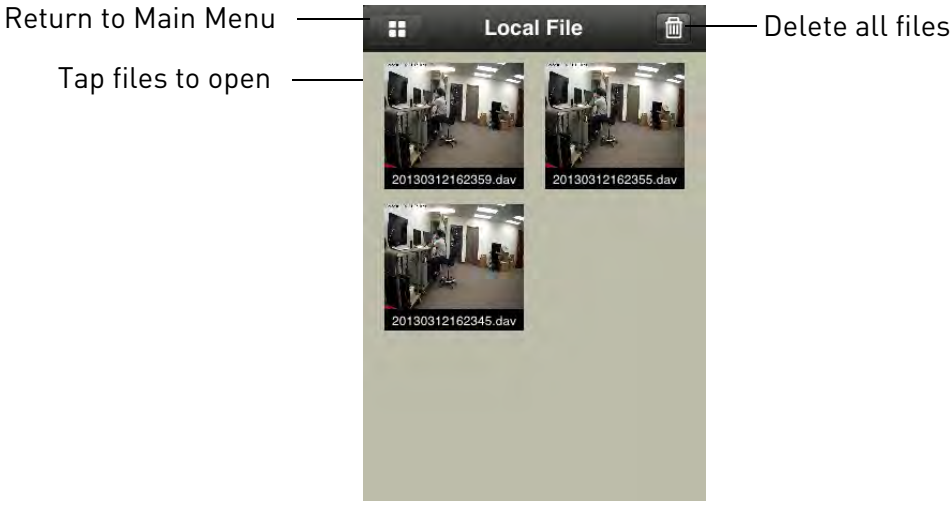
Viewing Videos with Local File

If you have saved videos using **FLIR SyncroIP**, you may open them with Local File.

NOTE: You may open screenshots using the Photos app.

To access Local File:

- From the Main Menu, tap **Local File**.



Using Playback Mode on iPhone

You can access recorded video on your IP camera's microSD card using your iPhone.

> **NOTE:** You must configure your camera to record the sub stream to use playback mode on mobile devices. For details, see "Record Control" on page 28.

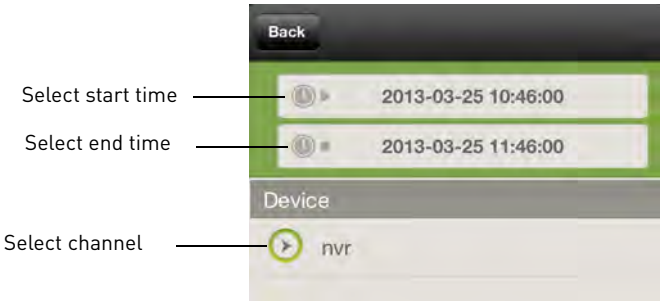
To use Playback Mode:

1. From the Main Menu, tap **Playback**.

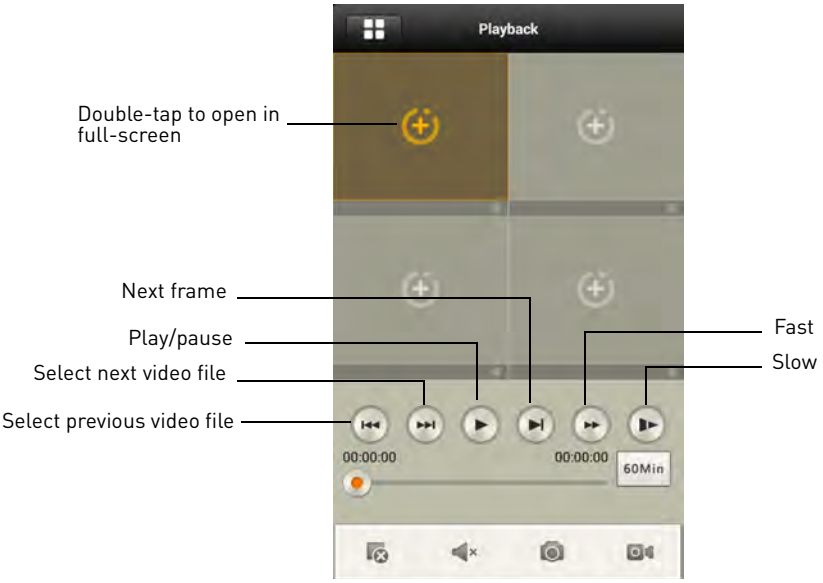
   NOTE: If Playback is not shown, tap **Add**, check **Playback**, and return to the Main Menu.

2. Tap **+**.

3. Select the start and end times to playback.
4. Select a camera to playback.

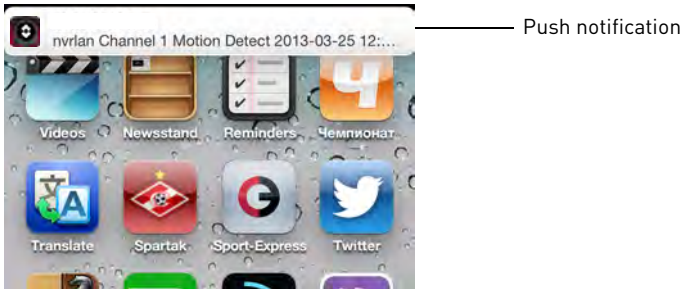


5. Use the on-screen controls to control playback.



Enabling Push Notifications

You can have the app send push notifications to the notifications area on your device when the camera detects motion. Once you have received a push notification, you can select it to open live video from the camera.



NOTE: Motion detection must be activated to receive push notifications. For details on enabling motion detection, see "Video Detect" on page 19.

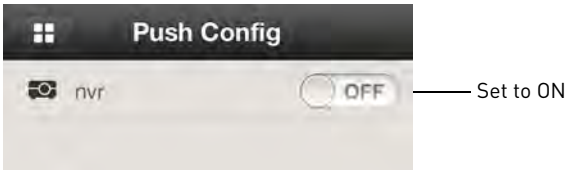
NOTE: Your camera must be configured to record the sub-stream to open video from push notifications. For details on configuring sub-stream recording, see "Record Control" on page 28.

To enable Push Notifications:

1. From the Main menu, tap **Push Config**.

   NOTE: If Push Config is not shown, tap **Add**, check **Push Config**, and then return to the Main Menu.

2. For the IP camera you would like to configure, set the slider to **ON**.



3. Tap **Motion Detect** and then check **CAM 1**.

4. Tap **OK**. A test notification will be sent to your device. After this, whenever the selected cameras detect motion, you will receive a notification.

Device Manager

You can use Device List to manage your IP cameras and NVRs.

To access Device List:

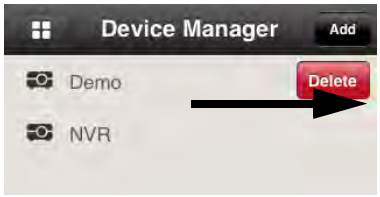
- From the Main Menu, tap **Device Manager**.

To edit a device:

1. Tap the device in Device Manager.
2. Edit the connection details as needed.
3. Tap **Save**.

To delete a device:

1. Swipe right on the device you would like to delete.



Swipe right on the device you would like to delete and tap delete

2. Tap **Delete**. Tap **OK** to confirm.

iPad

FLIR SyncroIP NVR HD is an iPad app that allows you to remotely view your IP camera.

System Requirements

- iOS 4.3 or later.

Prerequisites

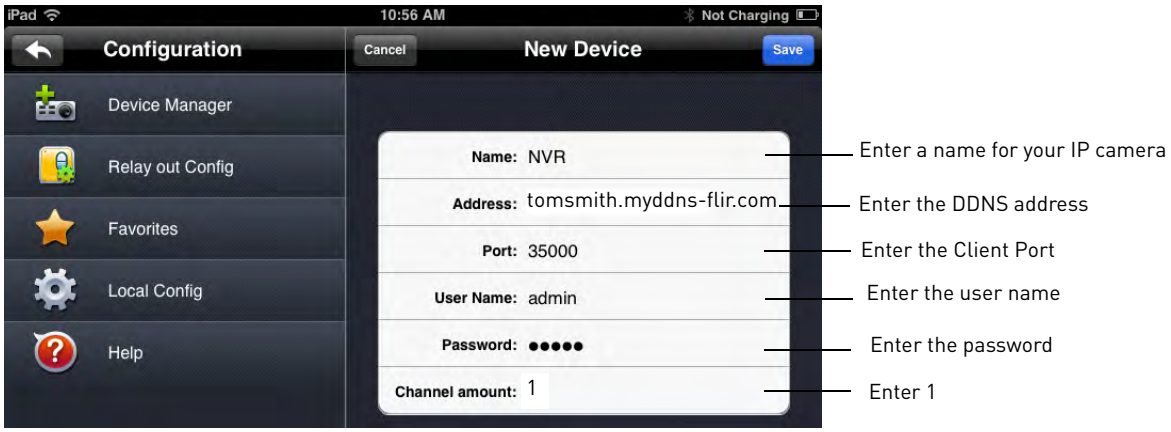
- Port **80** and **35000** (or your HTTP and Client Ports, if you have changed them) must be port forwarded on your router to your camera's IP address.
- You must create a DDNS account, and have the DDNS settings configured in your IP camera.
- The IP camera must have Internet access.
- You must have a DDNS address to log in remotely.
- You will need to create an iTunes account before you can download the app. An iTunes store account requires a valid credit card number. The app is free of charge.

Connecting to your IP camera on an iPad

1. Install **FLIR SyncroIP NVR HD** for free from the App Store.
2. Tap on the **FLIR SyncroIP NVR HD** icon () to start the app.
3. Tap  then  .
4. Tap **Device Manager**.

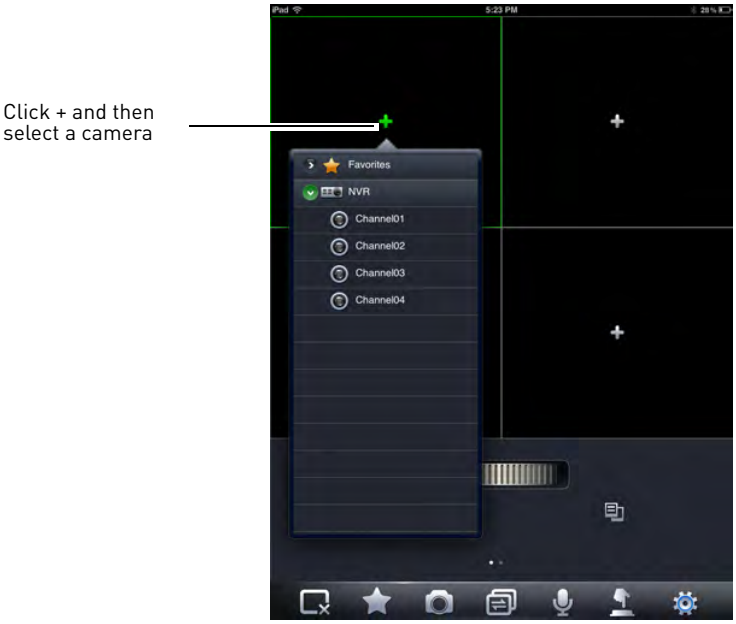
5. Tap **Add**.

6. Configure the following:



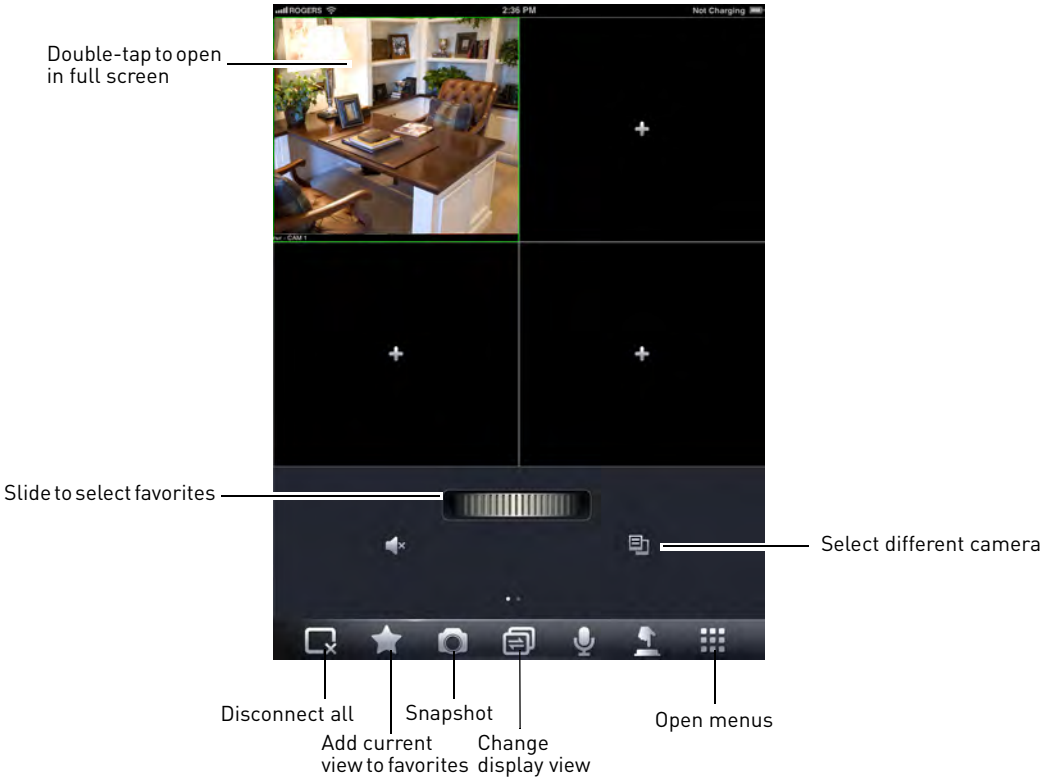
- **Name:** Enter a name for your IP camera of your choice.
- **Address:** Enter your **DDNS address** (e.g. *tomsmith.myddns-flir.com*).
- **Port:** Enter the **Client Port** (default: **35000**).
- **Username:** Enter the IP camera's **User Name** (default: **admin**).
- **Password:** Enter the IP camera's **Password** (default: **admin**).
- **Channel amount:** Enter **1**.

7. Tap **Save**.
8. Tap  .
9. **In landscape mode:** tap a channel and then select the camera you would like to view on the left.
   OR
   In portrait mode: tap **+** on one of the display areas and select the camera you would like to open.



FLIR SyncroIP NVR HD Interface

You can use **FLIR SyncroIP NVR HD** in landscape or portrait mode.



Device Manager

Device Manager allows you to manage your IP cameras and NVRs.

To access Device Manager:

1. From live view, tap  then  .
2. Tap **Device Manager**.

To delete a device:

1. Tap the device to select it.
2. Tap  . Tap **Yes** to confirm.

To modify a device:

1. Tap a device to select.
2. Tap the device again to open the edit screen.
3. Update the connection details as needed and then tap **Save**.

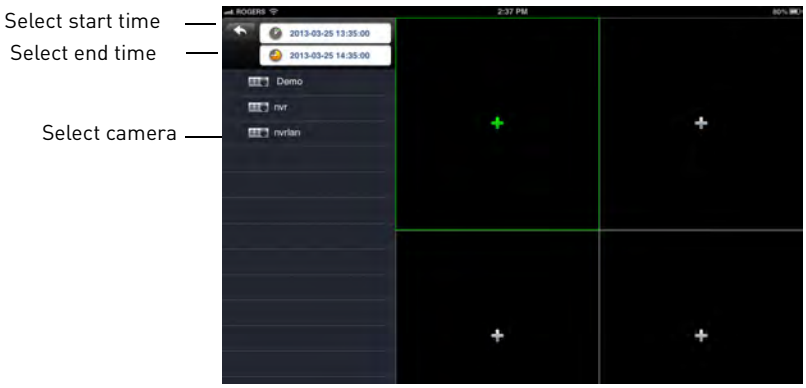
Using Playback Mode on iPad

You can access recorded video on your IP camera using your iPad.

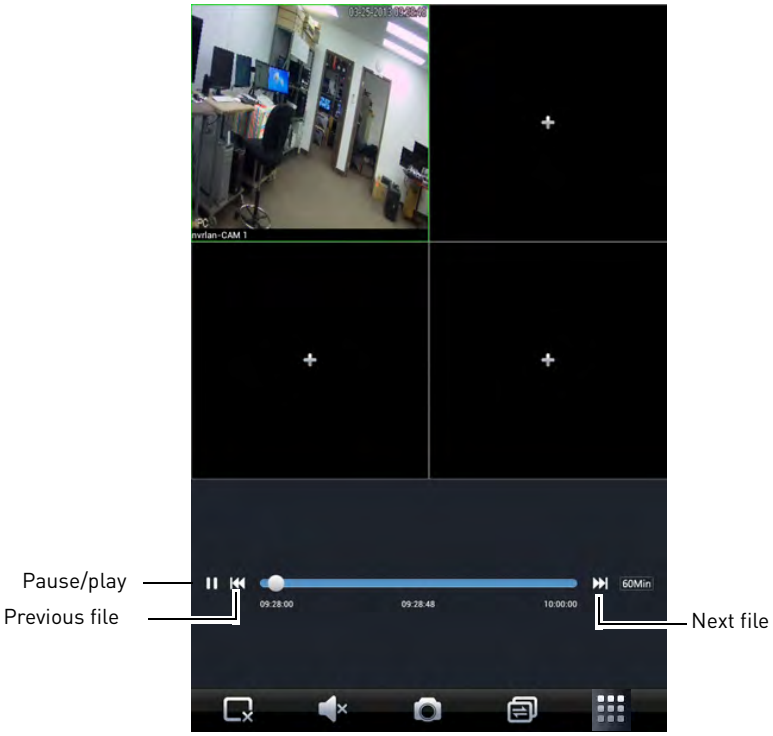
NOTE: You must configure your camera to record the sub stream to use playback mode on mobile devices. For details, see "Record Control" on page 28.

To use Playback Mode:

1. From Live View tap  then  .
2. **In Portrait Mode:** Tap **+**, select the start time and end time for your search, and select the camera you would like to playback.
   OR
   In Landscape Mode: Select the start time and end time for your search, and select the camera you would like to playback.



3. Use the playback controls.



NOTE: Playback controls are only shown in portrait mode.

Enabling Push Notifications

You can have the app send push notifications to the notifications area on your device when the camera detects motion. Once you have received a push notification, you can select it to open live video from the camera that detected motion.

NOTE: Motion detection must be activated to receive push notifications. For details on enabling motion detection, see "Video Detect" on page 19.

NOTE: Your camera must be configured to record the sub-stream to open video from push notifications. For details on configuring sub-stream recording, see "Record Control" on page 28.

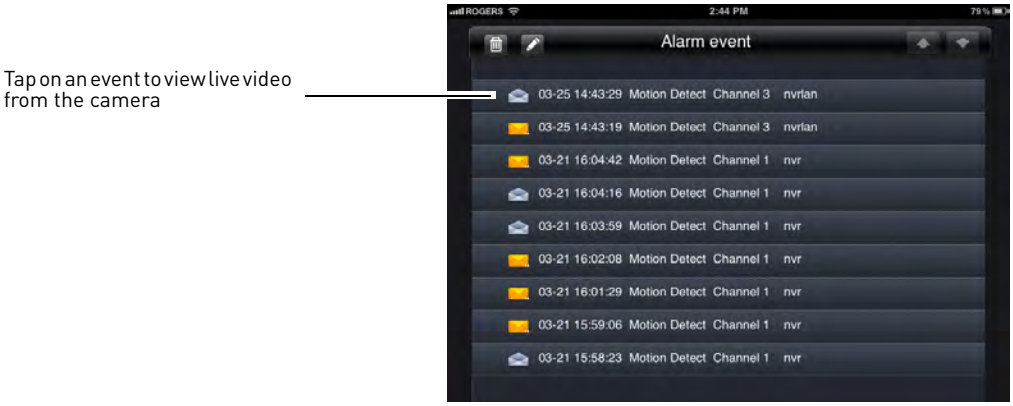
To enable Push Notifications:

1. From live view, tap  then  .
2. Tap **Alarm Push**.
3. Set the slider to **ON** next to the IP camera you would like to configure.

4. Tap **Motion Detect** then check **CAM 1**.

5. Tap **OK**. A test notification will be sent to your device. After this, whenever the selected cameras detect motion, you will receive a notification.

   NOTE: You can see a list of notifications through the Event List menu. To show the Event List menu, from live view, tap  then  .



Android Phones

FLIR SyncroIP NVR allows you to remotely view your IP camera on Android smartphones.

A separate app is available to remotely view your IP camera on Android tablets, to make better use of the larger screen size. For details, see "Android Tablets" on page 73.

Compatible Devices

- Android OS (2.2 and above).

Prerequisites

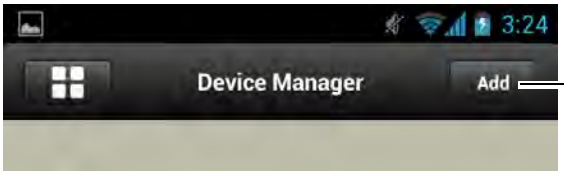
- Port **80** and **35000** (or your HTTP and Client Ports, if you have changed them) must be port forwarded on your router to your camera's IP address.
- You must create a DDNS account, and have the DDNS settings configured in your IP camera.
- The IP camera must have Internet access.
- You must have a DDNS address to log in remotely.

Connecting to your IP Camera on an Android Phone

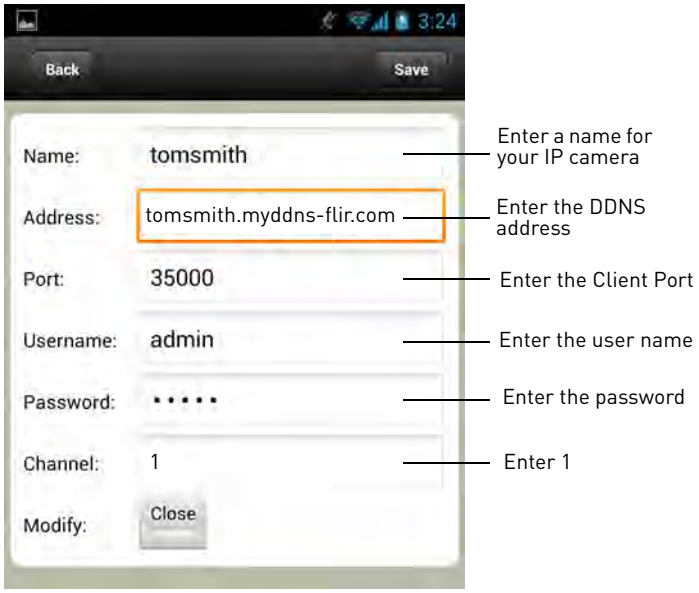
1. Download **FLIR SyncroIP NVR** for free from the Google Play Store.
2. Tap on the FLIR SyncroIP NVR icon () to start the app.
3. Tap  .

4. Tap **Device Manager**.

5. Tap **Add→Manually Add**.

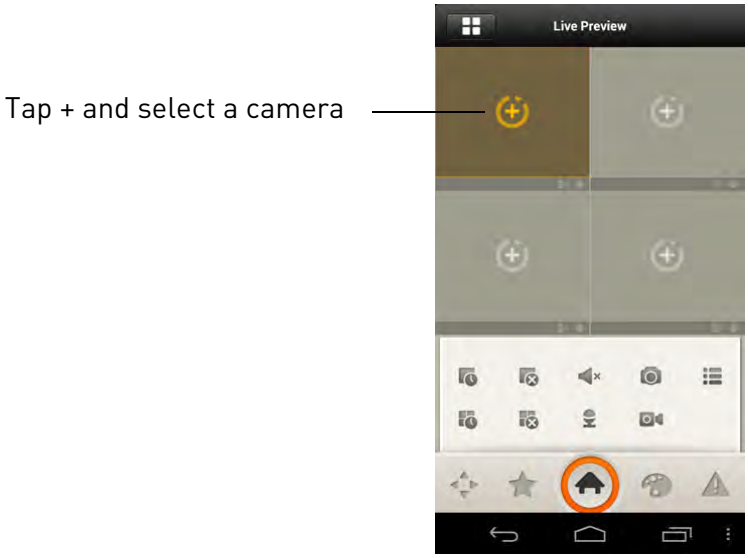


6. Configure the following:
   - **Name:** Enter a name for your IP camera of your choice.
   - **Address:** Enter your **DDNS address** (e.g. *tomsmith.myddns-flir.com*).
   - **Port:** Enter the **Client Port** (default: **35000**).
   - **Username:** Enter the IP camera's **User Name** (default: **admin**).
   - **Password:** Enter the IP camera's **Password** (default: **admin**).
   - **Channel:** Enter **1**.



7. Tap **Save**.
8. Tap  .
9. Tap **Live Preview**.

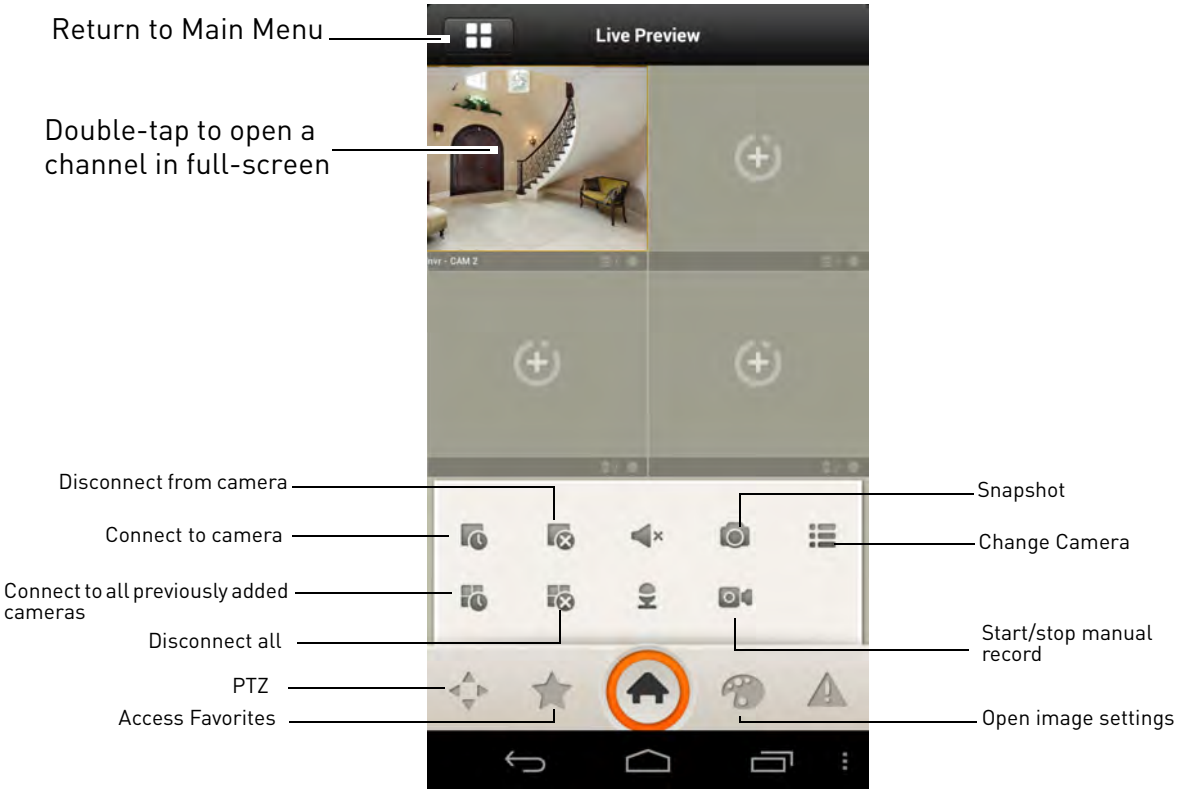
10. Tap **+** on one of the display areas and select the camera you would like to open in the selected display area.



11. Repeat to view additional cameras.

FLIR SyncroIP NVR Interface

You can use **FLIR SyncroIP NVR** in portrait and landscape mode.

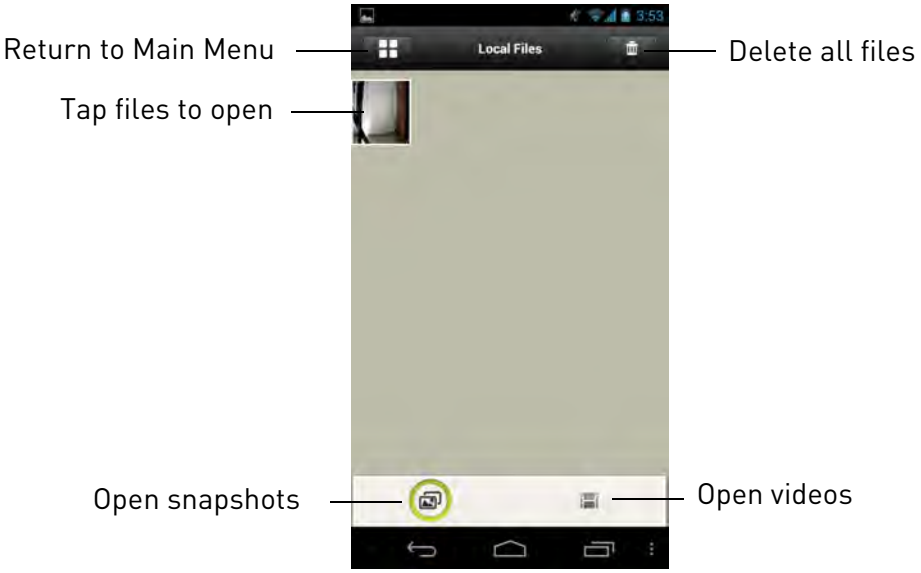


Viewing Snapshots and Videos with Local Files

If you have saved snapshots or videos using **FLIR SyncroIP NVR**, you may open them with Local Files.

To access Local Files:

- From the Main Menu, tap **Local Files**.



Using Playback Mode on Android Phones

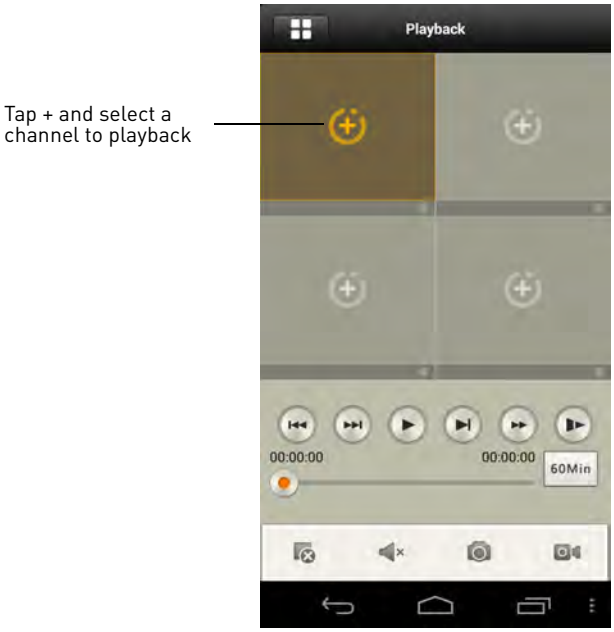
You can access recorded video on your IP camera using your Android phone.

> **NOTE:** You must configure your camera to record the sub stream to use playback mode on mobile devices. For details, see "Record Control" on page 28.

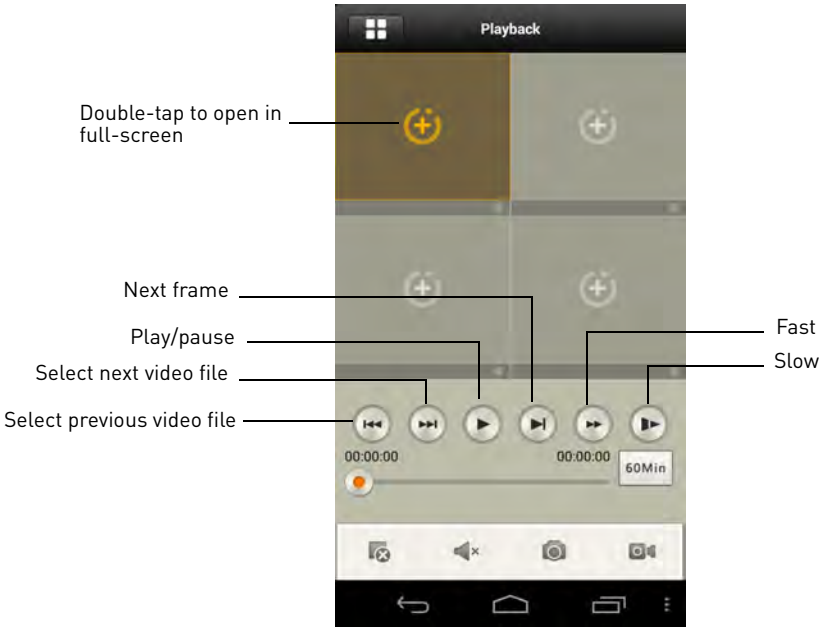
To use Playback Mode:

1. From the Main Menu, tap **Playback**.
2. If Playback is not shown, tap **Add**, check **Playback**, and return to the Main Menu.

3. Tap **+** and select a camera to playback.



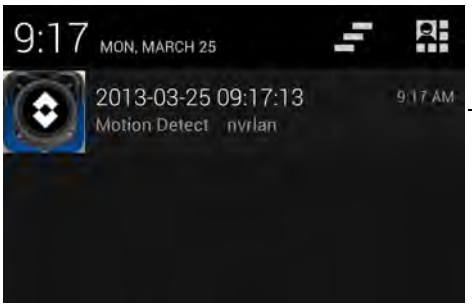
4. Select the date then the start and end times to playback.
5. Use the on-screen controls to control playback.



Enabling Push Notifications

You can have the app send push notifications to the notifications area on your device when one of your cameras detects motion. Once you have received a push notification, you can select it to open

live video from the camera that detected motion.



Push notification

NOTE: Appearance of notifications may differ depending on the model of your device

NOTE: Motion detection must be activated to receive push notifications. For details on enabling motion detection, see "Video Detect" on page 19.

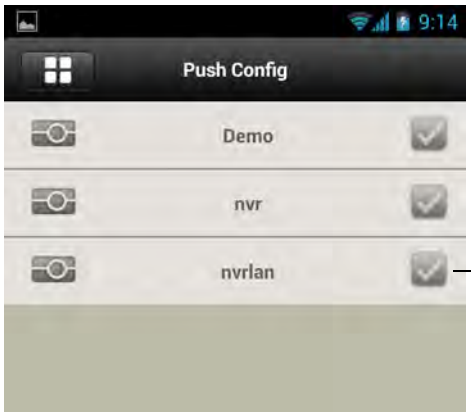
NOTE: Your camera must be configured to record the sub-stream to open video from push notifications. For details on configuring sub-stream recording, see "Record Control" on page 28.

To enable Push Notifications:

1. From the Main menu, tap **Push Config**.

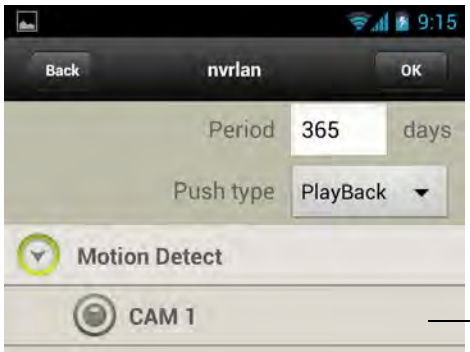
   NOTE: If Push Config is not shown, tap **Add**, check **Push Config**, and then return to the Main Menu.

2. Tap the IP camera you would like to configure.



Select the IP camera

3. Tap **Motion Detect** and then check **CAM 1**.



Check CAM 1

4. Tap **OK**. A test notification will be sent to your device. After this, whenever the selected cameras detect motion, you will receive a notification.

Device Manager

You can use Device List to manage your IP cameras and NVRs.

To access Device List:

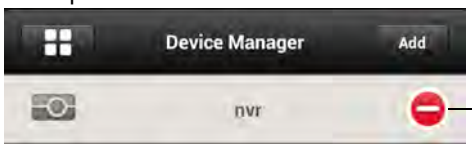
- From the Main Menu, tap **Device Manager**.

To edit a device:

1. Tap the device in Device Manager.
2. Edit the connection details as needed.
3. Tap **Save**.

To delete a device:

1. Swipe the device you would like to delete to the right.
2. Tap **Delete**. Tap **OK** to confirm.



Android Tablets

FLIR SyncroIP NVR HD is an app that allows you to remotely view your IP camera on an Android tablet.

System Requirements

- Android 3.3 or later.

Prerequisites

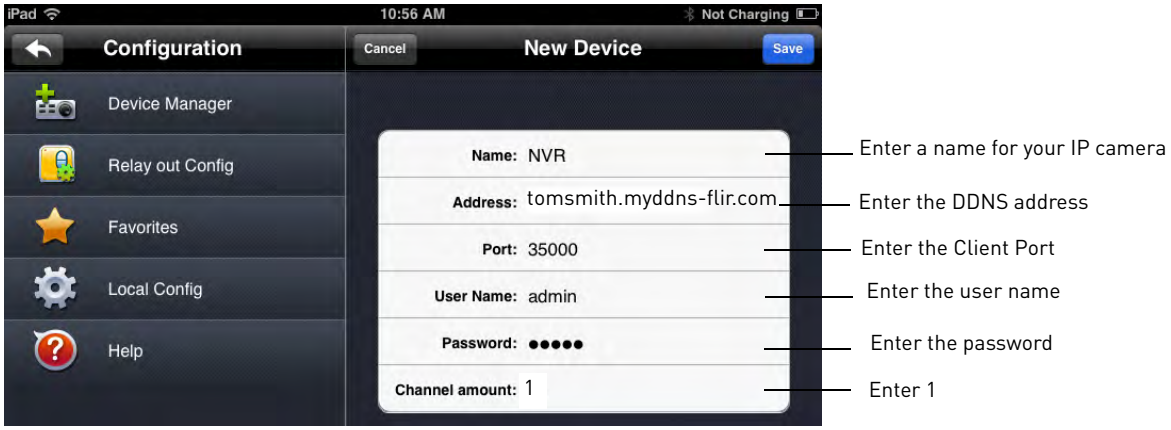
- Port **80** and **35000** (or your HTTP and Client Ports, if you have changed them) must be port forwarded on your router to your camera's IP address.
- You must create a DDNS account, and have the DDNS settings configured in your IP camera.
- The IP camera must have Internet access.
- You must have a DDNS address to log in remotely.

Connecting to your IP Camera on an Android Tablet

1. Install **FLIR SyncroIP NVR HD** for free from the Google Play Store.
2. Tap on the **FLIR SyncroIP NVR HD** icon ( ) to start the app.
3. Tap then .

4. Tap **Device Manager**.

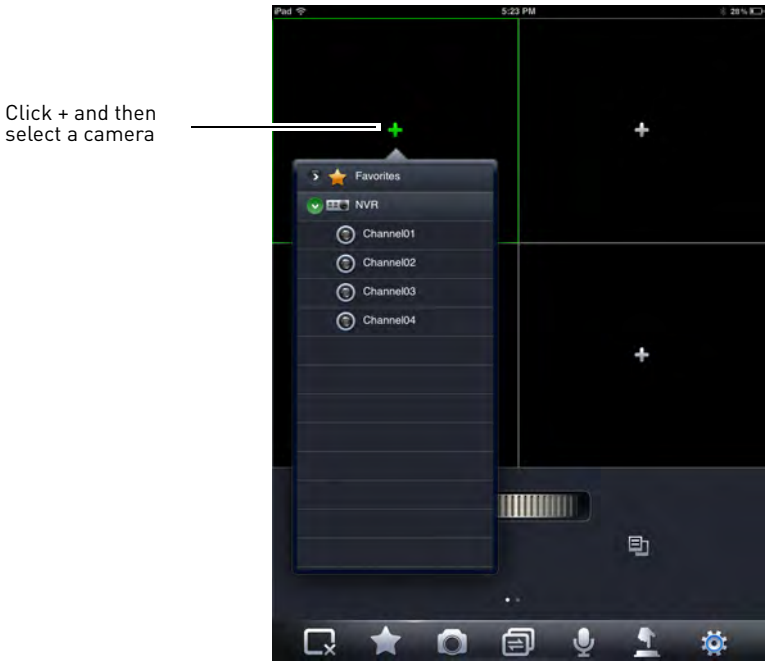
5. Tap **Add**.
6. Configure the following:



- **Name:** Enter a name for your IP camera of your choice.
- **Address:** Enter your **DDNS address** (e.g. *tomsmith.myddns-flir.com*).
- **Port:** Enter the **Client Port** (default: **35000**).
- **Username:** Enter the IP camera's **User Name** (default: **admin**).
- **Password:** Enter the IP camera's **Password** (default: **admin**).
- **Channel amount:** Enter **1**.

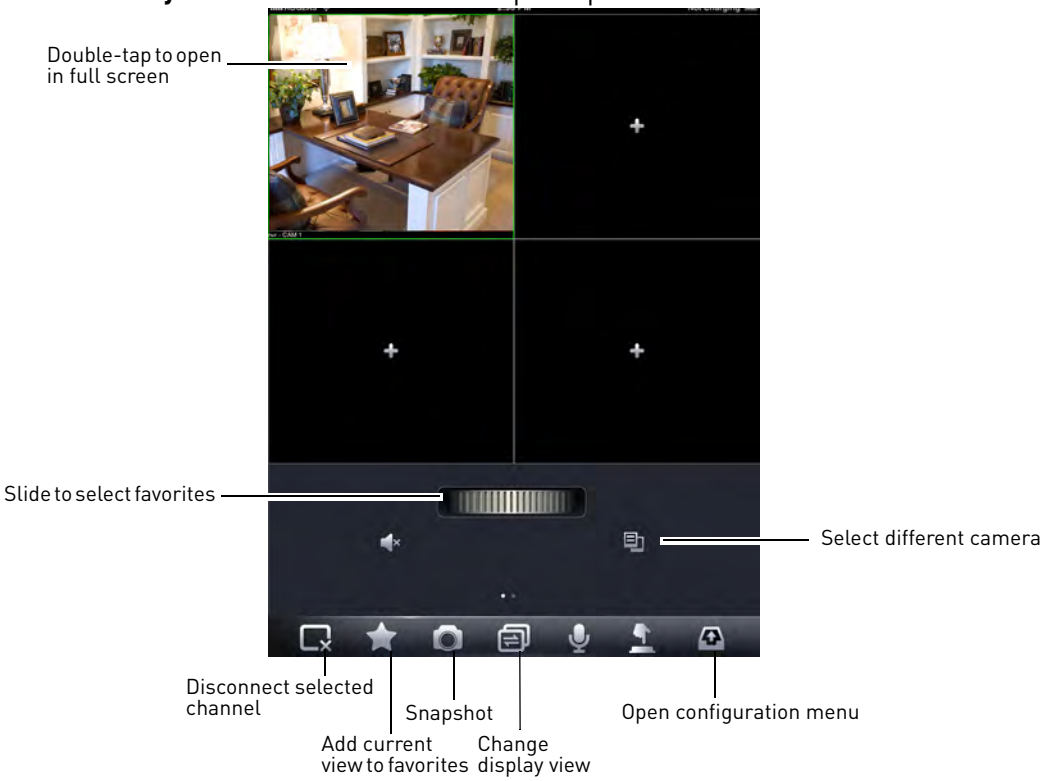
7. Tap **Save**.
8. Tap  .

9. In landscape mode, tap a display area and then select the camera you would like to view on the left. In portrait mode, tap **+** on one of the display areas and select the camera you would like to open.



FLIR SyncroIP NVR HD Interface

You can use **FLIR SyncroIP NVR HD** in landscape or portrait mode.



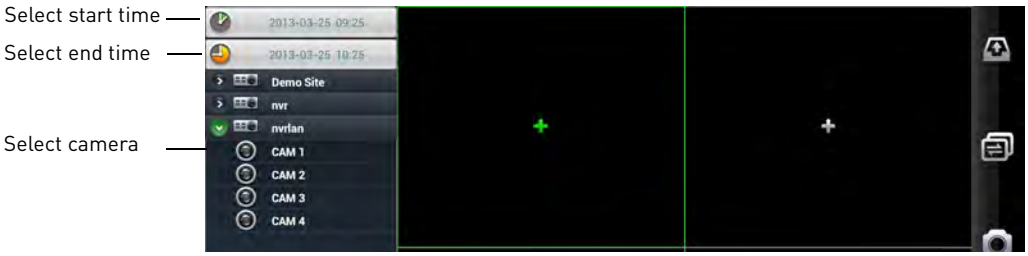
Using Playback Mode on Android Tablets

You can access recorded video on your IP camera using your Android tablet.

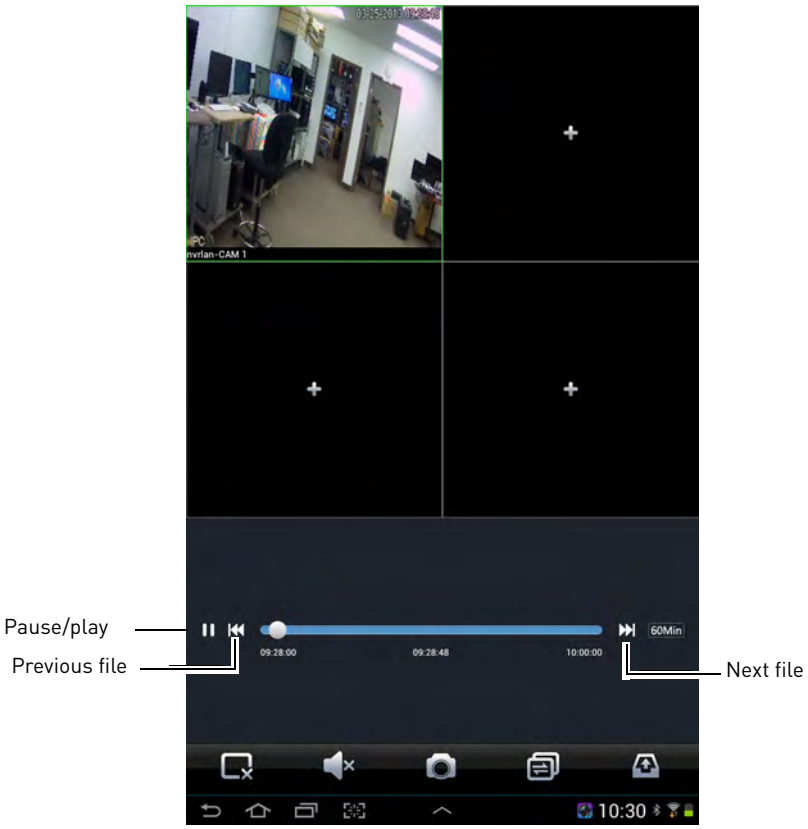
NOTE: You must configure your camera to record the sub stream to use playback mode on mobile devices. For details, see "Record Control" on page 28.

To use Playback Mode:

1. From Live View tap  then  .
2. **In Portrait Mode:** Tap **+**, select the start time and end time for your search, and select the camera you would like to playback.
   OR
   In Landscape Mode: Select the start time and end time for your search, and select the camera you would like to playback.



3. Use the playback controls.



NOTE: Playback controls are only shown in portrait mode.

Enabling Push Notifications

You can have the app send push notifications to the notifications area on your device when the camera detects motion. Once you have received a push notification, you can select it to open live video from the camera.

Push notification

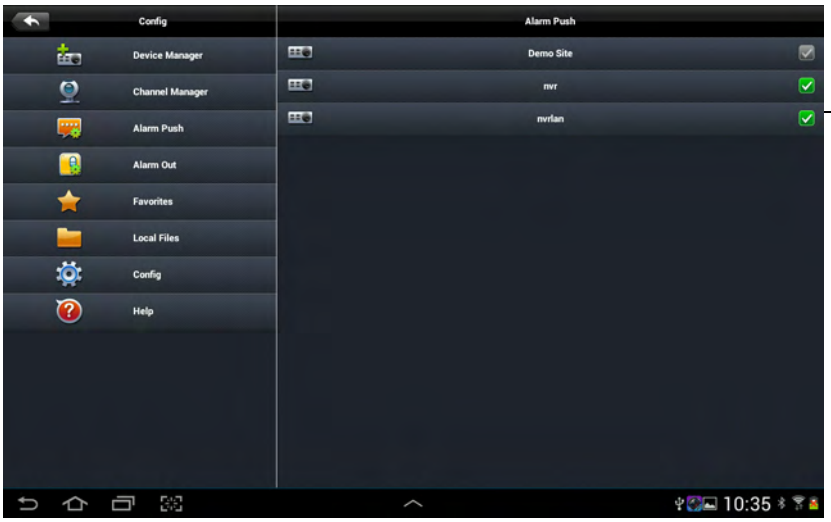
NOTE: Appearance of notifications may differ depending on the model of your device

NOTE: Motion detection must be activated to receive push notifications. For details on enabling motion detection, see "Video Detect" on page 19.

NOTE: Your camera must be configured to record the sub-stream to open video from push notifications. For details on configuring sub-stream recording, see "Record Control" on page 28.

To enable Push Notifications:

1. From live view, tap  then  .
2. Tap **Alarm Push**.
3. Select the IP camera you would like to configure.



Select the IP camera you would like to configure

4. Tap **MotionDetect** then check **CAM 1**.

Check CAM 1

5. Tap **OK**. A test notification will be sent to your device. After this, whenever the selected cameras detect motion, you will receive a notification.

   NOTE: You can see a list of notifications through the Event List menu. To show the Event List menu, from live view, tap  then  .

Tap on an event to view live video from the camera

Device Manager

Device Manager allows you to manage your IP cameras and NVRs.

To access Device Manager:

1. From live view, tap  then  .
2. Tap **Device Manager**.

To delete a device:

1. Tap the device to select it.

2. Tap  . Tap **OK** to confirm.

To modify a device:

1. Tap a device to select.
2. Tap the device again to open the edit screen.
3. Update the connection details as needed and then tap **Save**.

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Need Help?

Please make sure to visit our website www.digimerge.com to receive product updates and information.

3 Easy Ways To Contact Us

Online:
Product support is available 24/7 including product information, user manuals, quick start up guides and FAQ's at www.digimerge.com

By Email:
Technical support (for technical/installation issues)
tech@digimerge.com

By Phone:
North America: 1-866-816-5919
Technical support (for technical/installation issues)
Mon-Fri 8.00 am to 8.00pm EST

We welcome your feedback at
info@digimerge.com

For more information, visit
www.digimerge.com