4MP POE PTZ AI Dome Camera
User Manual

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Welcome

Thank you for purchasing an Amcrest camera!

This user manual is designed to be a reference tool for the installation and operation of your AI camera.
Here you can find information about the camera's features, functions, and information to aid in troubleshooting.

Many of the setup and installation sections below have corresponding videos on YouTube
To access the setup videos, please go to http://amcrest.com/videos

For access to the quick start guide and other support information, go to http://amcrest.com/support
To contact Amcrest support, please do one of the following:

Visit http://amcrest.com/contact

Important Security Warning

To keep your Amcrest camera secure and prevent unauthorized access, please make sure to follow the steps below:



- Always make sure that your camera has the latest firmware as listed on www.amcrest.com/firmware
- Never use the default password for your camera. Always ensure that your password is at least 810 characters long and contains a combination of lowercase characters, uppercase characters as well as numbers.

Overview

This 4MP PTZ outdoor security camera delivers stunning ultra-high-definition video in 4-megapixel resolution, at 30 frames per second. It features a super wide 2.7 – 13.5mm lens and PTZ functionality which allows it to detect objects from up to 678ft away. The camera provides 4 IR LEDs which allow the camera to see at night from up to 98ft away.

The camera also features a built-in microphone and speaker, on-board motion detection, built-in AI features, such as IVS, which can be used for enhanced perimeter protection, and smart motion detection which allows the camera to detect only human and vehicles in the area. The camera also features flexible storage options to store recordings to a microSD card (up to 256GB), FTP, NVR, or using the Amcrest Cloud. All these features can be accessed and customized using a web browser or even using the Amcrest View Pro app using a mobile device.

Installation Guide

Before physically installing your camera, please make sure the installation surface can support at least 3x the weight of the camera. The camera will already come attached with its recommended mounting bracket, wall anchors, mounting screws, as well as an installation template sticker. Before installing your camera and using a microSD card to store footage, please make sure the microSD card (sold separately) is installed first before mounting your camera.

MicroSD Card Installation

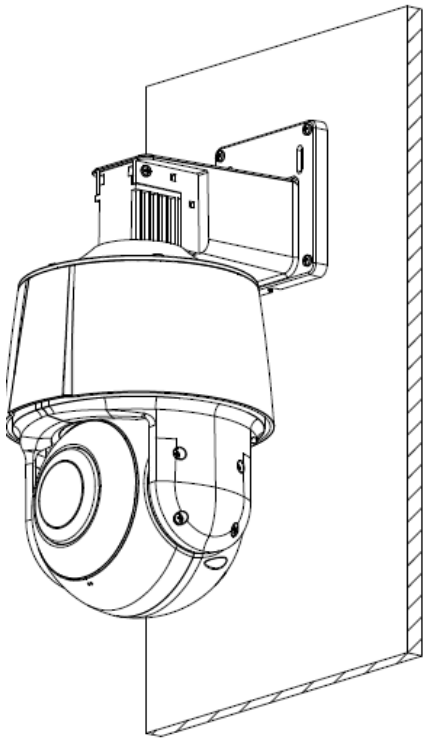
A microSD card can be used to store and view local recordings/snapshots. This camera requires a class 10 or above microSD card formatted to FAT32 to function. The camera can handle a max of 256GB of microSD card storage.

1. Remove the hatch on the back of the camera using a Phillips head screwdriver.
2. Locate the provided microSD card slot and insert the microSD card into the slot and secure.
3. Place the hatch back onto the camera and hand tighten to secure it to the camera.

Physical Installation

Please make sure the installation surface can support at least 3x the weight of the camera. A drill and Phillips head screwdriver may be required to physically install your camera.

1. Peel the sticker of the installation sticker off and place it onto the mounting surface. Use a drill to drill the installation holes and insert the included wall anchors into the holes.
2. Align the holes in the installation bracket with the wall anchors. Insert the installation screws into the holes and use a Phillips head screwdriver to secure the installation bracket to the mounting surface.



Camera Access Setup

This section will provide information on how to setup and access your camera through the following methods:

Local PC (Web User Interface (Web UI), Amcrest Surveillance Pro, etc.)
Amcrest View Pro app
Amcrest Cloud

Note: The default username and password for the camera is **admin**.

App Setup

Amcrest cameras can be used on your mobile device using the following apps:

Amcrest Cloud
Amcrest View Pro

Both apps are free and available in the App Store and Google Play store. Please note, each app requires an iOS 6.0 or later version. Android will require a 3.0 or later version OS to run these apps.

For purposes of this guide, we will use iOS, though both apps. The App Interface may differ slightly from the screenshots below as updates are released. Below, you will find instructions on how to set up your camera up on the Amcrest cloud app as well as the Amcrest View Pro app.

Amcrest Cloud App Setup

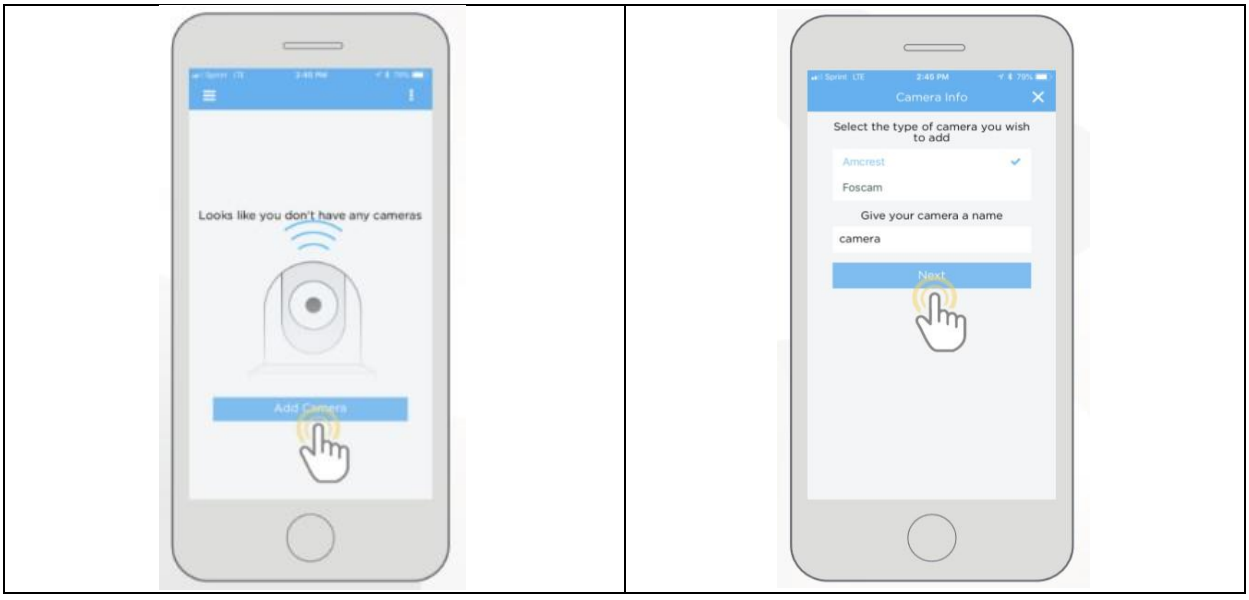
Amcrest Cloud allows you to access your device from anywhere in the world. Please note, you will need an Amcrest Cloud account to proceed with Amcrest Cloud app setup. You can register for a cloud account in the Amcrest Cloud app or from the Amcrest Cloud website at amcrestcloud.com

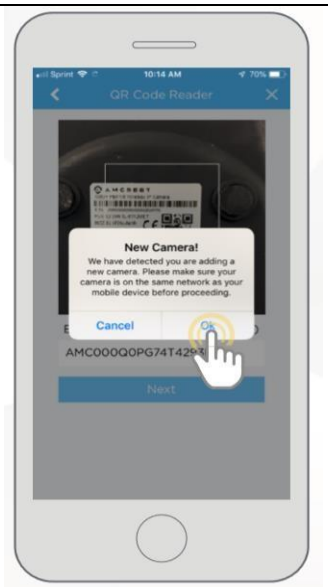
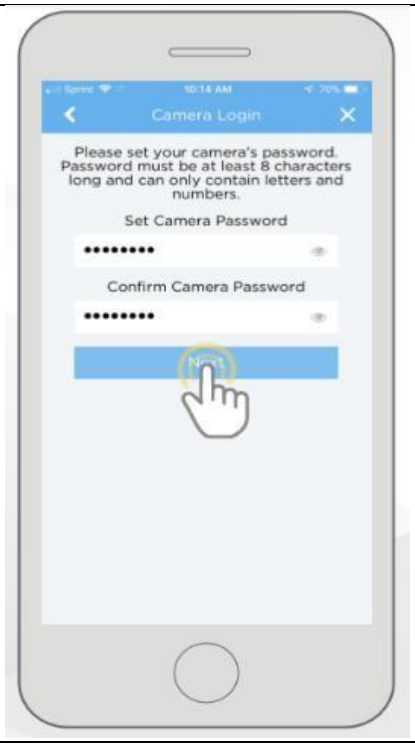
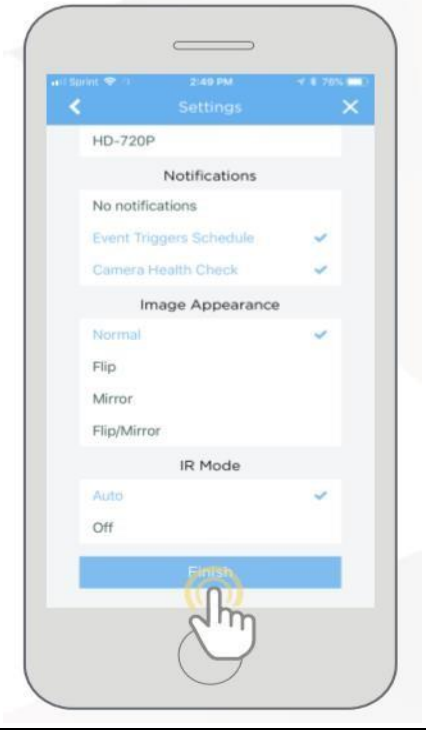
Please make sure your camera is plugged into a power source and your Ethernet cable is connected from the camera to your router.
Make sure your camera and mobile device are on the same network during setup.
To ensure the camera connects to the cloud, a reboot of your camera is recommended. To add your camera onto the Amcrest Cloud app, follow these steps:

1. Download and open the Amcrest Cloud app from the App Store or Play Store.

   Note: Connect your mobile device to the same network that your camera is on.

2. Register for an Amcrest Cloud account. To register click on **Sign Up** and fill out the form to complete registration.



3. Tap on **Add Camera**	4. Give your camera a name (Ex. Garage, Living Room, Kitchen, etc.) and tap **Next** to continue.
	
5. Scan the QR code on the back/side/bottom of the camera or manually enter the camera's serial number into the **Enter camera S/N (serial number)** field. Press **Next** to continue.	6. If you are adding a new camera that does not have a set password the app will automatically detect that a new camera is being added. Tap **OK** to proceed.
	

7. Set a new password for your camera. The password must be between 8 to 32 characters long and contain only letters and numbers. When you have finished setting the password for your camera, enter the password again in the **Confirm Camera Password** section. Tap **Next** to continue.	8. Confirm and adjust any needed settings for your camera. When all settings have been confirmed, tap **Finish**.

For more information about the Amcrest Cloud app and its features, visit amcrest.com/support

Amcrest View Pro Setup

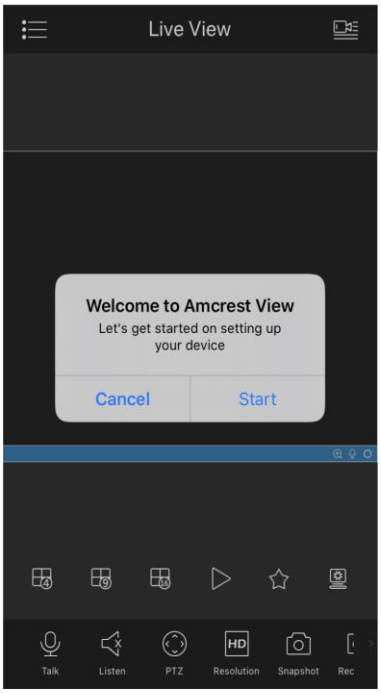
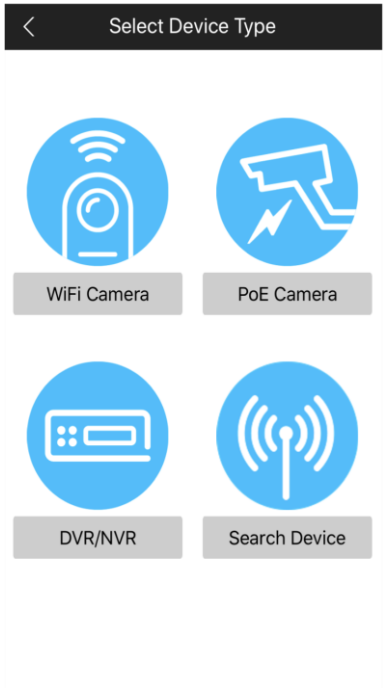
To add your PoE camera to the Amcrest View Pro app follow these steps:

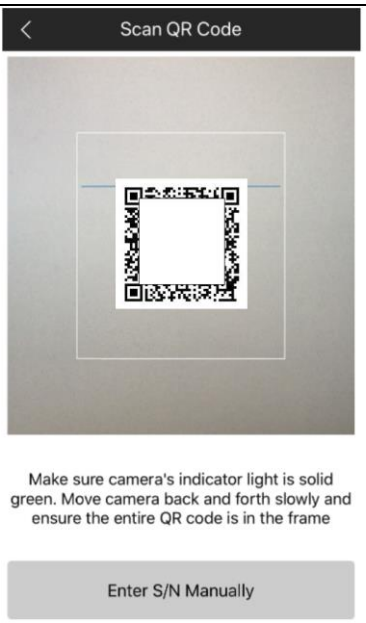
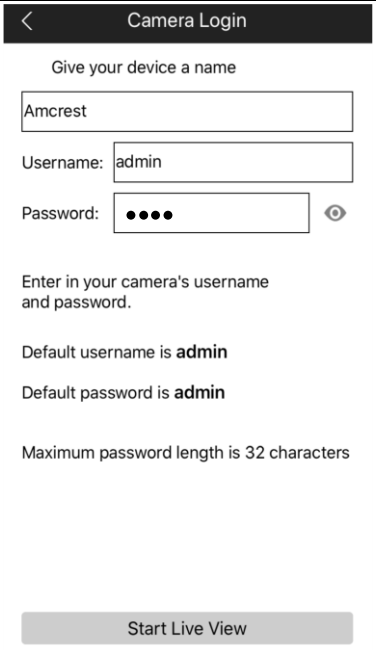
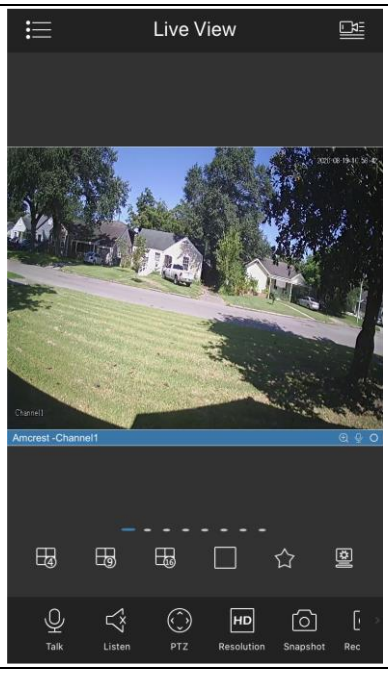
The following steps will continue the app setup process for an Android phone and, though the iPhone version of the app has slightly different steps, most of this process is identical and easy.

Download and install the Amcrest View Pro app for the App Store or Google Play Store.



Open the app on your mobile device and allow the app to load.

	
3. Tap **"Start".**	4. Tap **"POE Camera".**

	
5. Tap **"P2P Connection".** **Note:** IP/Domain/DDNS can be used to establish a DDNS connection. For more information on how to setup a DDNS connection, visit amcrest.com/support	6. Scan the QR code. The QR code can be found on the serial tag along with a scannable barcode.
	
7. Create a name for the device and enter a username and password. The default username and password will be admin. Tap **"Start Live View".**	8. Update the default password for the device and tap **"Start Live View"** to view the device.

For more information about Amcrest View Pro and its functionalities visit amcrest.com/support

Desktop Access Setup

After the camera has been successfully connected to your network the web UI can now be accessed. This camera features the latest in Javascript technology which allows you to access your camera using a wide variety of web browsers including Google Chrome, Firefox, Safari, or other mainstream web browsers using your PC or Mac.

To access your camera from your computer you will need to first locate the camera's IP address. To locate the camera's IP address is it highly recommended to download our free Amcrest IP Config Tool software. The Amcrest IP Config Tool can be downloaded at the following web page: amcrest.com/downloads

In the All-Downloads menu, click on **IP Config Software** to begin the free download. Once the download has completed installing, locate the IP address associated with the device you would like to view in the browser. Open the web browser and enter this IP address into the browser. Press Enter to access the web user interface. Enter the username and password for your camera and click **Login** to access the web UI.

Live

By default, the interface opens on the Live tab. The live view tab allows the user to see a live video feed from the camera. Use the Live, Playback, and Cloud Storage options to access these features. For more information on the features provided in this menu, please refer to the details provided below.

Mainstream: Displays the mainstream feed of the camera.
Sub stream: Displays the sub stream of the camera (704*480(D1) resolution).
Setup: Access and customize the camera's features and sub menus.
Alarm: View specific alarm types detected by the camera.
Logout: Log the user out of the interface.

Button	Function Name	Function Description
	Water Removal	Use this option to remove condensation or water droplets from the lens of the camera.
	Warning Light	Click this option to manually activate the built-in red/blue LEDs.
	Siren Activation	Click this option to manually activate the built-in siren.
	Snapshot	Click this button to manually take a snapshot of the live view.
	Audio	Click this button to enable or disable audio output from the camera. This feature allows the user to listen in on the audio the camera's microphone is picking up.

The PTZ tab allows the user to pan, tilt, zoom and focus the camera. Below is a screenshot of the PTZ Control menu.



The PTZ control panel allows the user to position the camera in different ways. Use the directional arrows provided to pan or tilt the camera. To zoom, click the + and – icons provided in the **Zoom** menu. Use the + and – icons in the Focus menu to manually adjust the focus of the camera.

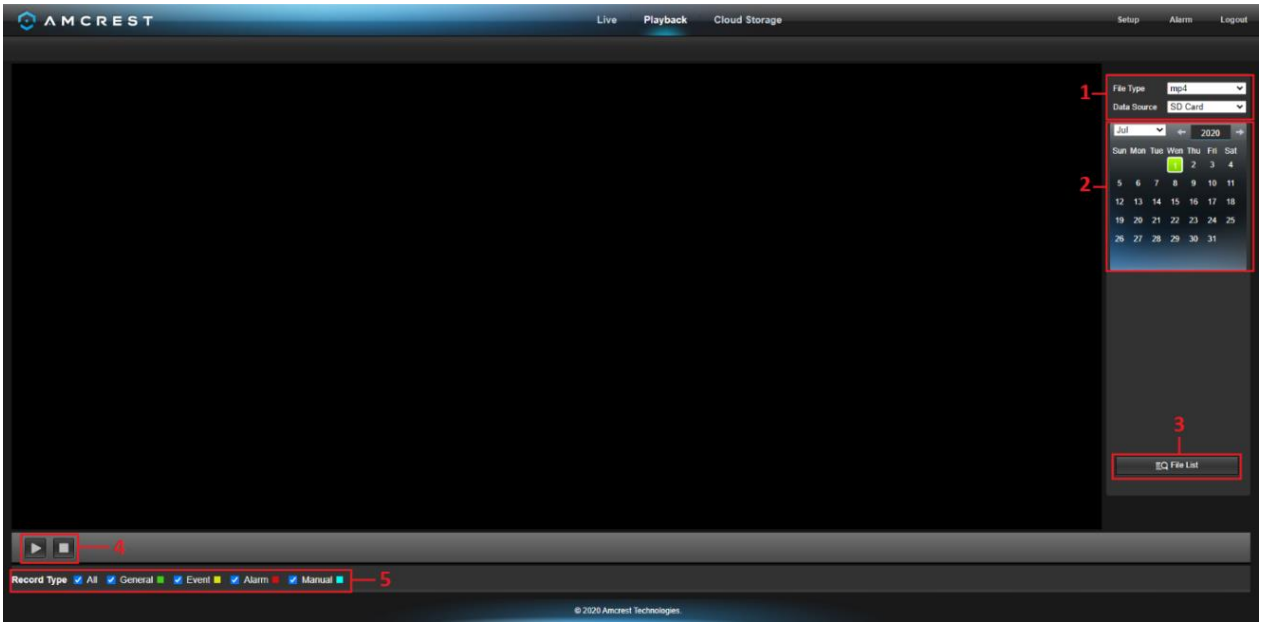
The PTZ function menu allows the camera to call any presets associated with your camera. These presets can be set up in the PTZ menu under function, for more details please refer to section *PTZ.* Once a preset is selected, click the Go To option to call the preset. To select other PTZ function options, click the dropdown menu and select another option.

The Go To option allows the camera to move to a specific coordinate on the screen. The coordinates of the angle can be set horizontally, vertically as well as a zoom coordinate. Enter a numerical value for each option and click "Go to" to enable the function.

The **Assistant** option provides a variety of automated PTZ features, such as: Aux on and Aux off. These features are typically used to control the auxiliary output function of the camera. The auxiliary output function can be used to trigger other devices, such as alarms, lights, or sirens if an external device is applied to the camera. This feature is not typically applicable to most Amcrest devices as it may require the use of a third-party device and hook up.

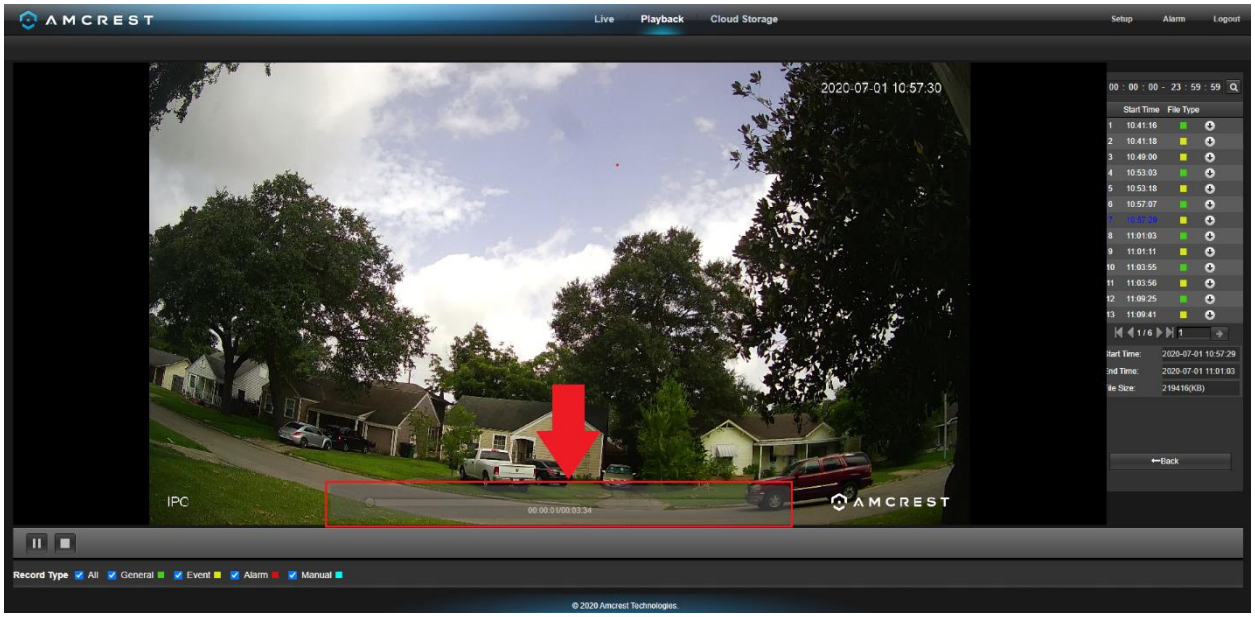
Playback

The Playback tab allows the user to playback the camera's recorded video. Below is a screenshot of the Playback tab:



This is the interface for the playback menu. There are 5 main sections:

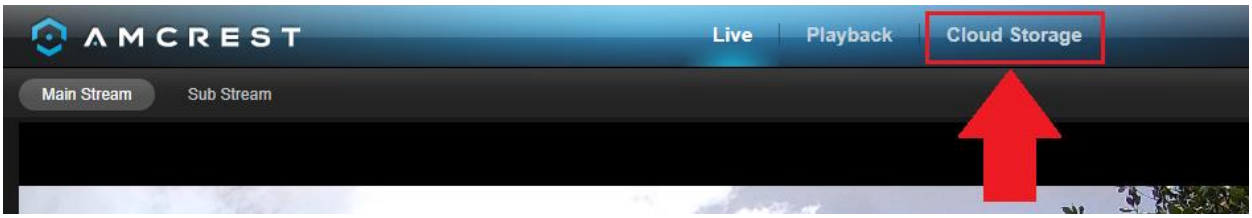
Section 1: Allows the user to filter between video (.mp4) or snapshots (.jpg).
Section 2: Allows the user to playback events based on calendar dates. If events are detected via the microSD card the days will be highlighted indicating recordings are available for that day.
Section 3: The File List option provides a list of all recorded file types reported on a specific day. The files represented in the file list can be played back and downloaded from this menu.
Section 4: Once a recording is selected from the file list, use the play, and stop button to play or stop the recording. An additional slider option will be displayed by hovering the mouse pointer over the playback interface.



Section 5: These options allow the user to filter between recording types such as, General, Motion, Alarm, or Manual events. The "All" option will select all recording types in the interface.

Cloud Storage

The Cloud Storage tab allows the user quick access to the Amcrest Cloud website.



At this website (amcrestcloud.com) users can register for new accounts as well as view or modify existing accounts. For more information on Amcrest Cloud visit: amcrest.com/cloud

Setup

The Setup tab allows the user to change different camera settings including configuration, network, PTZ, AI events, profile management, etc.

Camera

This menu tab allows the user to change different camera settings for video, audio, and encode settings.

Configuration

The Configuration menu allows the user to configure image profiles for normal, day, and night usage. Use the PTZ control options provided to pan/tilt or zoom the feed while configuring the camera. Below is an explanation for each of the fields on the Configuration tab in the Configuration menu item:

Picture

Profile: This dropdown box allows the user to select which profile to modify. The 3 options are Day, Night, and General.

Brightness: This slider is used to adjust playback and record video window brightness. The value ranges from 0 to 100. The default value is 50. The larger the number, the brighter the video is. When you input the value here, the bright section and the dark section of the video will be adjusted accordingly. You can use this function when the whole video is too dark or too bright. Please note the video may become hazy if the value is too high. The recommended value ranges from 40 to 60.

Contrast: This slider is used to adjust playback and recorded video window contrast. The value ranges from 0 to 100. The default value is 50. The larger the number is, the higher the contrast is. You can use this function when the whole video's brightness is accurate but the contrast is not correct. Please note the video may become hazy if the value is too low. If this value is too high, the dark section may lack brightness while the bright section may overexpose. The recommended value ranges from 40 to 60.

Saturation: This slider is used to adjust playback and recorded video window saturation. The value ranges from 0 to 100. The default value is 50. The larger the number, the stronger the color is. This value has no effect on the general brightness of the whole video. The video color may become too strong if the value is too high. For the grey

part of the video, distortion may occur if the white balance is not accurate. Please note the video may not be clear if the value is too low. The recommended value ranges from 40 to 60.
Chroma CNT: This slider is used to adjust how pure or monochromatic the image will be compared to a white surface. The value ranges from 0 to 100. The default value is 50. The larger the number, the stronger the purity of the color. The value has no effect on general brightness or clarity of the video stream however, if the values are too high it could cause stream issues. It is recommended to keep this value at the default setting of 50 to avoid streaming issues.
Sharpness: This slider is used to adjust the sharpness of the video. The value ranges from 0 to 100. The larger the value is, the clearer the edges are and vice versa. Note: The higher the value, the higher likelihood of picture noise occurring. The default value is 50 and the recommended value ranges from 40 to 60.
Sharpness CNT: This slider is used to adjust how pure or monochromatic the sharpness of the image will be compared to a white surface. The default value is 50. The larger the number, the stronger the purity of the sharpness. The value has no effect on general brightness or clarity of the video stream however, if the values are too high it could cause stream issues. It is recommended to keep this value at the default setting of 50 to avoid streaming issues.
Gamma: This slider is used to adjust the gamma of the video. The larger the number, the brighter the video is. The default value is 50 and the recommended value ranges from 40 to 60.
Flip: This dropdown box allows the user to flip the video feed picture. Flipping the picture is recommended only if the camera is mounted upside down.

To reset to default settings, click the **Reset Defaults** button. To refresh the screen, click on **Refresh**. To save the settings, click the **Save** button.

Exposure

This menu allows the user to adjust exposure settings. Below is an explanation of the features listed in this menu.

Profile: This dropdown box allows the user to select which profile to modify. The 3 options are Day, Night, and General.
Anti-Flicker: These options allow the user to select what type of anti-flicker technology will be used for the video feed. The three options are 50 Hz, 60 Hz, and Outdoor. The desired option should offset any flickering effect caused by the electrical current used in the specific area.
Mode: This dropdown menu allows the user to modify certain exposure settings related to the device such as, gain priority, shutter priority or setting a manual gain setting.

Auto: This setting allows the camera to automatically adjust exposure settings while in use.
Shutter Priority: This setting will maximize the fastest shutter speed and will sacrifice the gain in return.
gain First: This setting will maximize the gain for the ideal exposure. Low Noise Basically turns up the ISO to the best setting without sacrificing exposure timing.
Manual - This setting lets you select your shutter speed and have the gain adjust automatically. Selecting customized range will let you both the shutter speed an adjust the gain manually.

Exposure Comp: Use this slider to adjust the exposure compensation. The values range from 0 – 100, 50 is default.
2D NR: This radio button allows the user to turn the 2D Noise Reduction feature on or off.
Grade: This slider allows the user to specify the level of 2D noise reduction level. The value ranges from 1 -50.
3D NR: This radio button allows the user to turn the 3D Noise Reduction feature on or off.
3D NR Level: This slider allows the user to specify the 3D Noise Reduction level. The value ranges from 1-50.

To reset to default settings, click the **Reset Defaults** button. To refresh the screen, click on **Refresh**. To save the settings, click the **Save** button.

BLC Mode

This menu allows the user to adjust back light compensation settings. Below is an explanation of the features provided in this menu.

Profile: This dropdown box allows the user to select which profile to modify. The 3 options are Day, Night, and General.

Mode: This dropdown menu allows the user to select different backlight compensation modes:

OFF: Disables BLC mode.

BLC: Backlight compensation: Default will use the whole image to balance the lighting settings, and Customized will allow you to balance the lighting settings from the target area.

HLC: Highlight compensation is a feature that came out of necessity due to overexposure from strong light sources like headlights or spotlights.

WDR: Wide Dynamic Range makes multiple scans of a scene to provide one balanced and unwashed image that is clear for the user.

To reset to default settings, click the **Reset Defaults** button. To refresh the screen, click on **Refresh**. To save the settings, click the **Save** button.

WB

This menu allows the user to adjust white balance settings. Below is an explanation of the features provided in this menu.

Profile: This dropdown box allows the user to select which profile to modify. The 3 options are Day, Night, and General.

Mode: This option allows the user to choose between different white balance modes.

Auto: Allows the camera to automatically adjust white balance settings while in use.

Indoor: Allows the camera to automatically adjust white balance settings while indoors (Indoor lights)

Outdoor: Allows the camera to automatically adjust white balance settings while outdoors. (Natural light).

ATW: Stands for auto tracing white balance. This setting allows the user to allow the camera to automatically detect white balance values based on the surrounding environment of the camera. This can be set for indoor or outdoor use.

Customized: Displays options that will allow the user to manually adjust specific red or blue values related to white balance.

Sunny: Allows the camera to automatically adjust white balance settings in sunny or bright conditions.

Sodium Lamp: Allows the white balance of the video stream to be adjusted according to light and dark environments. The overall effect is based on the concept of a sodium lamp which adjusts different light spectrums of the video stream based on its surrounding environment.

To reset to default settings, click the **Reset Defaults** button. To refresh the screen, click on Refresh. To save the settings, click the **Save** button.

Day & Night

This menu allows the user to adjust day and nighttime settings. Below is an explanation of the features provided in this menu.

Profile: This dropdown box allows the user to select which profile to modify. The 3 options are Day, Night, and General.

Type: These radio buttons are used to process and filter day & night transitions. ICR will be enabled by default.

Electrical: This option uses an image processing method for day & night transition.

ICR: This option uses an IR filter for day and night transitions.

Mode: This menu allows user to select day & night presets based on the surrounding environment of the camera. For more information on the items listed in this field, refer to the information provided below:

Auto: Uses day and night sensitivity settings to change between color mode, infrared, and black& white modes.

Color - Always represents picture in color, does not use IR or black and white mode. Performs poorly in dimly lit areas unless you are using the Starlight series cameras.

B&W - Allows the user to set the video stream to black and white, however, if the illuminated image is too dark it will switch to IR mode.

Sensitivity: This option allows the user to change the Day/Night Sensitivity of the camera. The three options are Low, Middle, and High. The higher the sensitivity, the quicker the camera will change into another mode depending on the light levels.

Delay: This dropdown box allows the user to set a delay in seconds for how long it takes to switch between Day and Night modes. The values range from 2 seconds to 10 seconds.

To reset to default settings, click the **Reset Defaults** button. To refresh the screen, click on Refresh. To save the settings, click the **Save** button.

Focus & Zoom

This menu allows the user to adjust digital focus and zoom settings.

Profile: This dropdown box allows the user to select which profile to modify. The 3 options are Day, Night, and Normal.

Digital Zoom: These radios buttons allow the user to turn digital zoom on and off.

Zoom Speed: This slider allows the user to adjust the zoom speed of the lens. The default should be 100, but it can range from 0 ~ 100.

Focus Mode: This dropdown menu is used to set focus settings for the camera. The items listed in this menu are as follows:

Auto: Allows the user to set auto focus settings for the camera.

Semi Auto: Allows the user to set focus settings as well as having the camera automatically detect optimal focus settings.

Manual: Allows the user to have full manual control of focus control settings.

Focus Limit: Allows the user to set focus limits (in cm) within the camera. The default is set to auto, which automatically will control focus limits, however, the settings can range from 5cm ~ 10cm.

Sensitivity: This menu allows the user to set sensitivity settings for focus limits. The camera is usually set to Default which allows the focus limits to be adjusted automatically, however, they can also be set to high or low.

Lens Initialization: This option allows the user to reset their focus & zoom settings to default.

To reset to default settings, click the **Reset Defaults** button. To refresh the screen, click on Refresh. To save the settings, click the **Save** button.

Night Vision

This menu allows the user to set night vision settings. The IR light on your camera allows the device to activate night vision. Below is an explanation of the features provided in this menu.

Profile: This dropdown box allows the user to select which profile to modify. The 3 options are Day, Night, and General.
Mode: This dropdown box allows the user to select whether to turn the IR light on or off.

SmartIR – Sets the IRs to automatically turn on or off based on Day & Night conditions.
Manual – Manually turns the IRs on.
OFF – Manually turns the IR LEDs off. Please note, IR LEDs will not turn on at all when this option is selected.

Profile Management

The profile management menu allows the user to manage global profile settings. Below is an explanation for each of the fields on the **Profile Management** tab:

Profile Management: This set of radio buttons allow the user to set what basis the profile management settings run on. There are 3 options: General, Full Time, and Schedule.

General: The system can automatically alternate between night and day based on the profiles for each.
Full Time: The system sticks to one profile the entire time it is running.
Schedule: allows the user to dictate which times of the day are designated for the day profile and the night profile.

To reset to default settings, click the **Reset Defaults** button. To refresh the screen, click on **Refresh**. To save the settings, click the **Save** button.

Video

The video menu allows the user to view and adjust encode, snapshot, overlay, and path settings. Below is an explanation for each of the fields on the **Video** tab in the Video menu item:

Encode Mode: This dropdown box allows the user to select a compression protocol.
Smart Codec: This option allows the user to enable or disable the smart codec. Smart codec is a function in most Amcrest cameras which aim to reduce bandwidth consumption without losing visible image quality by intelligently increasing compression where it will not make a visible difference in the scene.
Resolution: This dropdown box allows the user to set the resolution. The system supports various resolutions, and they can be selected from this dropdown list.
Frame Rate (FPS): This dropdown box allows the user to select a frame rate. Frame rate settings are measured in frames per second (FPS) and can range from 1f/s to 25f/s in PAL mode and 1f/s to 30f/s in NTSC mode.
Bit Rate Type: This dropdown box allows the user to select a bit rate type. The system supports two-bit rate types: CBR and VBR. In VBR mode, video quality can be set.
Reference Bit Rate: This is the recommended bit rate value according to the resolution and frame rate selected.
Bit Rate: This dropdown box allows the user to select a bit rate.
Frame Interval: This field allows the user to set the P frame amount between two I frames. The value ranges from 1 to 150 seconds. Default value is 50. Recommended value is frame rate *2.
Watermark Settings: This function allows the user to verify if the video has been tampered with.
Watermark Character: This field allows the user to set the watermark's text. The default string is Digital CCTV. The maximum length is 85 characters. This string can only include numbers, characters, and underscores.

Sub Stream is a lower quality stream that allows the feed to take up less resources and bandwidth when streaming. The Mainstream and the Sub Stream have the same fields. Sub Stream can be enabled by checking the box next to Enable.

To reset to default settings, click the **Reset Defaults** button. To refresh the screen, click on Refresh. To save the settings, click the **Save** button.

Snapshot

The snapshot tab allows the user to adjust all snapshot settings sent by the camera. This includes the type, size, quality and intervals. Below is an explanation of the features provided in this menu.

Snapshot Type: This dropdown box allows the user to select a snapshot mode. There are two snapshot modes:

General: Snapshots are taken as scheduled.

Event: Snapshots occur when a motion detection alarm or tampering alarm is triggered

Image Size: By default, the screenshot size is the same size as the video feed's resolution.
Quality: Allows the user to select image quality. Quality is adjusted on a scale of 1-6 (Best).
Interval: This is to set snapshot frequency. The value ranges from 1 to 7 seconds. The maximum setting for a customized interval is 50000s/picture.
To reset to default settings, click the **Reset Defaults** button. To refresh the screen, click on Refresh. To save the settings, click the **Save** button.

Overlay

The overlay tab allows the user to customize channel titles, time, OSD information, and/or custom titles. This menu also allows the user to enable or disable the Amcrest overlay on the live view screen. Please note, due to certain limitations within the camera, it does not offer features such as privacy masking. Below is an explanation of the features in this menu.

Channel Title

The Channel Title menu allows the user to enable, disable, and customize channel titles in the interface.

Enable – This radio button allows the user to enable the channel title. The channel title can be placed in different areas of the interface by clicking the title on the interface and moving it with your mouse to a desired area.
Disable – This radio button is used to disable the channel title feature.
Input Channel Title: This field allows the user to customize the text in the channel title.

To reset to default settings, click the **Reset Defaults** button. To refresh the screen, click on **Refresh**. To save the settings, click the **Save** button.

Time

The time menu allows the user to enable or disable the date & time overlay on the live view screen. Enable the Display Day of the Week option to display the day of the week as well in the overlay.

Enable – This radio button allows the user to enable the time overlay. The time overlay can be placed in different areas of the interface by clicking the overlay on the interface and moving it with your mouse to a desired area.
Disable – This radio button is used to disable the time overlay.
Display Day of the Week: This checkbox is used to allow the day of the week to be displayed in the time overlay.

To reset to default settings, click the **Reset Defaults** button. To refresh the screen, click on **Refresh**. To save the settings, click the **Save** button.

OSD Info

The OSD info menu allows the user to enable certain OSD overlay options such as presets, temperature, PTZ Life Warning, Coordinates, Zoom, North, Pattern, Text Overlays, and Input Texts. Below is a description of the features provided in this menu.

Preset: Displays an overlay of a preset on the live view screen when a preset is activated.
Temperature: Displays the current temperature of the internal components of the device.
Coordinates: Displays the latitude and longitude coordinates of the device.
Zoom: Displays the current optical zoom distance while zooming. The camera can zoom up to 25x.
Text Overlay: Allows the user to customize and display a text overlay on the live view screen. To use this feature, enter customized text into the Input Text boxes and click Save to set the overlay. Use the Text Align dropdown menu to align the text. Click Save to set the overlay.
Text Align: Align the OSD text to the right or left of the overlay box.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Logo Overlay

The logo overlay menu allows the user to enable or disable the Amcrest overlay logo in the interface.

Enable – This radio button allows the user to enable the Amcrest Overlay. The logo can be placed in different areas of the interface by clicking the overlay on the interface and moving it with your mouse to a desired area.
Disable – This radio button allows the user to disable the Amcrest Overlay.

To reset to default settings, click the **Reset Defaults** button. To refresh the screen, click on **Refresh**. To save the settings, click the **Save** button.

Custom Overlay

This menu allows the user to enable or disable a customized logo on the live view interface.

To set a custom overlay, click on the enable radio button. Enter the custom text into the Input Custom OSD box and use the Text Align dropdown box to align the text. To enter multiple custom overlays, click on the (+) option and enter the texts into the appropriate boxes. Use the text align menu to align the text left or right.

To reset to default settings, click the **Reset Defaults** button. To refresh the screen, click on **Refresh**. To save the settings, click the **Save** button.

Path

The path menu allows the user to designate a file path on the computer for downloading recordings. Please note, if you are using a browser that does not support a plugin, such as Google Chrome, Firefox, Safari, etc. the default file path will be set as the browser's default download folder. However, this can be updated if accessing the camera in IE mode on Edge, for more information please visit amcrest.com/support

Audio

This menu allows the user to modify audio settings for the camera. This device has a built-in microphone and speaker. Below is an explanation for each of the fields on the Audio menu:

Main Stream: Sets the audio settings for the main stream:
- **Enable**: This checkbox allows the user to enable audio recording.
- **Encode Mode**: This dropdown box allows the user to select an audio format. By default, the camera will be set to AAC encoding.
- **Sampling Frequency**: This dropdown box allows the user to select a sampling frequency for the audio.

Sub Stream: Sets the audio settings for the sub stream:
- **Enable**: This checkbox allows the user to enable audio recording.
- **Encode Mode**: This dropdown box allows the user to select an audio format. By default, the camera will be set to AAC encoding.
- **Sampling Frequency**: This dropdown box allows the user to select a sampling frequency for the audio.

Audio in Device: This field allows the user to select what source to get audio from. The default is the camera's built-in mic. Alternatively, the line in mic can be selected.
Noise Filter: This dropdown box allows the user to enable or disable the audio noise filter function. This function provides cleaner audio quality when enabled.
Microphone Volume: This slider allows the user to select the microphone volume. The value ranges from 0 to 100.
Speaker Volume: This slider allows the user to select the speaker volume. The value ranges from 0 to 100.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Network

This menu section allows the user to change network settings for the camera.

TCP/IP

TCP/IP stands for Transmission Control Protocol/Internet Protocol and it is the language/protocol that allows communication between an internet-connected device, whether on a local network and the Internet. This screen allows for TCP/IP settings to be modified for the camera to establish a connection to the network.

Below is an explanation of the fields on the TCP/IP settings tab:

Host Name: This text field allows the user to change the host device name for the camera. This field supports a maximum of 15 characters.
Ethernet Card: This dropdown box allows the user to select which internet access device to use. If the device is connected to a wired connection and a wireless one at the same time, then this box will have options to pick either of the connections. The Set as Default button allows the user to select one of the connection methods as the default one.
Mode: Static vs DHCP: This radio button allows the user to choose between a static IP address, and a dynamic IP address. DHCP stands for Dynamic Host Configuration Protocol, and this enables the camera to automatically obtain an IP address from another network device such as a server or more commonly, a router. When the DHCP function is enabled, the user cannot modify the IP address, Subnet Mask, or Default Gateway, as these values are obtained from the DHCP function. To view the current IP address, DHCP needs to be disabled.
MAC Address: This field shows the camera's MAC address, which is unique to this device. This number is read only and is used to access a local area network (LAN).
IP Version: This dropdown allows the user to select the IP version. The two options are IPV4 and IPV6.

IP Address: This field allows the user to enter a custom IP address.
Subnet Mask: This field allows the user to enter a custom subnet mask.
Default Gateway: This field allows the user to enter a custom default gateway.
Preferred DNS Server: This field allows the user to enter the preferred DNS server IP address.
Alternate DNS Server: This field allows the user to enter the alternate DNS server IP address.
Enable ARP/Ping to set IP Address Service: This checkbox allows the user to enable the ARP/Ping service to change the IP address service. For more information on this feature, click the help button while on the TCP/IP settings tab.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

P2P

The P2P settings screen is where users can use a QR code to connect their smartphone or tablet to the camera. This feature needs to be enabled for use with the Amcrest View app, or other software that requires P2P.

Below is an explanation of the fields on the P2P settings tab:

Enable: This checkbox allows the user to enable the P2P feature for the camera. This feature must be enabled for the camera to connect to a smartphone or tablet via the Amcrest View app. It is enabled by default.
Status: This field displays the status of the P2P connection. Once the camera is connected to a device, this field should display the word Online.
S/N: This field displays the Token ID for the camera. The Token ID can be used to manually enter the camera's information on a mobile or tablet device in case the QR code scanning feature cannot be used.
QR Code: This image is a Quick Response (QR) code. By scanning this image using the Amcrest View app, this camera can establish a connection with the app.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Connection

The Connection tab is where users can configure port connections. Below is an explanation of the fields on the Connection settings tab:

Max Connections: This field allows the user to specify the maximum number of users that can be connected to the camera at the same time. The maximum number of users the camera can support at one time is 20.
TCP Port: This field designates the Transmission Control Protocol (TCP) port number. The default value is 37777.
UDP Port: This field designates the User Datagram Protocol (UDP) port number. The default value is 37778.
HTTP Port: This field designates the Hypertext Transfer Protocol (HTTP) port number. The default value is 80.
RTSP Port: This field designates the Real Time Streaming Protocol (RTSP) port number. The default value is 554.
HTTPS Port: This field designates the Hypertext Transfer Protocol Secure (HTTPS) port number. The default value is 443.
To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

ONVIF

The ONVIF tab is where users can configure authentication via the ONVIF standard. To enable ONVIF, click the radio button next to Enable, and then click the **Save** button.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

RTMP

RTMP stands for **real-time messaging protocol**. It provides a high-performance transmission of video, and data from an encoder such as an IP camera to a server, which distributes the signal across the internet. Below is an explanation of the options provided in this menu.

Enable: Enable/disable this feature.
Stream Type: Allows the user to choose which stream will be used for RTMP such as mainstream, substream 1 or substream 2.
Address Type: Allows the user to choose between a non-custom or customized stream address.
Encryption: Allows a non-customized stream address to be either encrypted or not encrypted.
IP address: Allows the user to enter an IP address of the RTMP platform if needed.
Connection: The port number of the RTMP protocol. The default port number is 1935.
Custom Address: A custom address is typically used using a custom address type and is formatted as the stream URL/Stream Key

To enable RTMP and live stream the camera to platforms such as YouTube, click the enable option. Enable the stream type, which in this case is mainstream, and select the "Customized" option in the address type field. Navigate to YouTube and select Go Live. Copy and paste the stream URL and stream key (Stream URL/Stream Key) Click Save and allow the stream to load into YouTube. Please note, it is recommended to reduce the resolution to 4MP or below if using RTMP.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

DDNS

DDNS stands for Dynamic Domain Name Server. This technology is used to automatically update name servers in real time to help the camera maintain a persistent address despite changes in location or configuration. What this means is that even when the camera is restarted, moved, or reconfigured, it can keep the same IP address, thus allowing remote users uninterrupted access to the camera, rather than having to request a new IP address to use for remote access anytime a change is made.

To use this feature, users will need to setup an account with a DDNS service. The camera supports a variety of DDNS services such as AMCRESTDDNS and NO-IP DDNS. Based on which service is selected, different options may show on this screen. Please note, AmcrestDDNS is a free DDNS service provided by Amcrest, and it must be renewed every year. A renewal reminder email will be sent to the email entered in the username field below. For more information on how to setup DDNS on your device, please visit amcrest.com/support.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

IP Filter

This screen allows for the filtering of IP addresses, either blocking them, or granting them access to the camera. This feature helps make the camera more secure by limiting remote access only to approved users. Below is an explanation of fields on the IP Filter settings screen:

Trusted Sites: This checkbox allows the user to enable the IP Filter feature for trusted sites.
Add IP/MAC: This button opens a popup that allows the user to add IP or MAC addresses to the trusted site list.
Note: When accessing the camera externally, please add the MAC address of the router on the PC end.
Remove All: This button allows the user to remove all sites from the trusted IP/MAC list.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

SMTP (Email)

This screen allows for the configuring of email settings to permit the camera to send emails when an alarm is triggered. Below is an explanation of fields on the SMTP (Email) settings screen:

SMTP Server: SMTP stands for Simple Mail Transfer Protocol. This field allows the user to enter the SMTP server used by the email service.
Authentication: This dropdown box allows the user to select an encryption type. There are two types of email encryption protocols that are available:
SSL: Secure Socket Layer
TLS: Transport Layer Security
Connection: This field allows the user to enter the port that corresponds to the selected SMTP server.
Login Anonymously: This checkbox allows the user to anonymously login to the server.
Username: This field allows the user to enter the SMTP username.
Password: This field allows the user to enter the password associated with the SMTP username.
Sender: This field allows the user to enter the sender email address. This email address will be the one that sends out all emails pertaining to the alerts and alarm emails sent by the camera.
Title: This field allows the user to define the subject line of the email that is sent to the receivers.
Attachment: This checkbox allows a snapshot of the event to be attached to the email notification.
Recipients: This field allows the user to enter the receiver email address. These email addresses are the ones that will receive any emails pertaining to alert and alarm emails sent by the camera. Up to 3 email addresses can be entered in this field.
Keep Alive: This checkbox allows the user to enable a function to periodically check in with the SMTP server to ensure it can connect correctly.
Update Period: This field allows the user to define, in minutes, how long the system should wait between sending emails. This prevents multiple emails from being sent out.
Email Test: This button causes the system to automatically send out an email to test the connection is OK or not. Prior to the email test, please save the email setup information.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

HTTPS

Hypertext Transfer Protocol Secure (https) is a combination of the Hypertext Transfer Protocol (HTTP) with the Secure Socket Layer (SSL)/Transport Layer Security (TLS) protocol. This menu allows the user to enable and create HTTPS certificates.

To enable HTTPS, click Create. Enter the requested information related to the certificate, region, IP or domain name of the camera, state, location, etc., and click Create. Click Install and allow the cert to be created. Click the download button to download the root cert to your computer. Right click on the root cert and install the certificate to your machine (be sure to place the cert in the Trusted Root Certification Authorities folder).

Once the cert has been installed and properly imported, navigate back to the web interface and click Enable HTTPS, then click Save. The camera will restart, allow the camera to reset. Once the page refreshes, the IP address for the camera will now be secured. A lock icon () will appear next to the IP address.

PTZ

This menu allows the user to set PTZ presets and other PTZ related functions to the camera. While setting PTZ options, use the PTZ control options to pan/tilt or zoom the camera while configuring. Below is an explanation of the features listed in this menu.

Preset: Allows the user to add and delete preset options for PTZ functionality. To begin adding a preset to your camera, click the **Add** button. To refresh the screen click **Refresh**, to delete a preset, press **Delete** or to remove all the presets, click **Remove All**.
Idle Motion: Allows the user to set intervals of idle time before the preset quits. The idle time can be set from 1 ~ 60 minutes.
Power Up: Allows the user to set PTZ controls to enable startup. Click Enable to enable this function, select the Preset, or auto options to enable each function to being on startup.
Time Task: Allows the user to set scheduled periods for PTZ presets to occur. To set a schedule, click the **Enable** check box and select the time task action from the
PTZ Restart: Allows the user to refresh and restart the PTZ function being performed. To restart the PTZ function, click the **PTZ Restart** button.
Reset Defaults: Allows the user to reset all PTZ functions set in the camera to default. Click the **Reset Default** button to reset any set PTZ functions.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Event

This menu allows the user to change different settings for triggering events such as motion detection, smart motion detection, and IVS.

Video Detection

The video detection menu has two tabs: Motion Detect and Video Tamper. This tab allows the user to modify motion detection settings. Below is an explanation of the fields on the **Motion Detection** tab:

Enable: This checkbox enables motion detection for the camera.
Schedule: Clicking this button opens a weekly schedule that can be used to set times.
Click and drag to set motion detection for certain days of the week. Also, periods of motion detection can be set for each day and enabled using the period settings on the bottom half of the screen. There are a total of 6 periods that can be set.
Anti-Dither: This field allows the user to set the anti-dither time. The values in this field can range from 5 to 600 seconds. This time value controls how long the alarm signal lasts. Based on motion detection, a buzzer can go off, a snapshot can be taken, or the camera can begin recording.

Detection Area: Clicking this button opens a pop-up screen that can be used to set detection areas.
When the setup button is clicked, a live stream of the video is shown. The user can then set up to 4 regions, each with their own region name, sensitivity (1-100), and threshold (1-100). Each region has a specific color, and the region selector tool is displayed when the mouse is moved to the top of the screen.
Sensitivity is the amount of change required to increase the motion detected by a percentage. The lower the sensitivity, the more movement is required to trigger an alarm.
Threshold is the level that the motion detection needs to reach to trigger an alarm. The lower the threshold, the more likely that motion will trigger an alarm.
To designate a zone, click and drag the mouse over the area desired. When a colored box is displayed over the live feed, that area is now enabled for motion detection.
After the motion detection zone is set, click the enter button to exit the motion detection screen.
Remember to click the save button on the motion detection settings screen, otherwise the motion detection zones will not go into effect. Clicking the cancel button to leave the motion detection zone and will not save the zone setup.
Record: This checkbox allows the user to enable the camera to record video when a motion detection alarm is triggered.
Record Delay: This field specifies in seconds how long the delay between alarm activation and recording should be.
Send Email: This checkbox allows the user to enable the camera to send an email when a motion detection alarm is triggered.
Snapshot: This checkbox allows the user to enable the camera to take a snapshot when a motion detection alarm is triggered. A single snapshot of the event will be sent after it has been triggered.
PTZ: This checkbox allows the camera to pan/tilt based on a preset set in the PTZ menu once an event is detected.
Siren Activation: This checkbox allows the camera to activate the alarm once an event is detected.
Play Duration: The amount of time the siren will sound.
Warning Light: This checkbox allows the camera to activate the red/blue LEDs once an event is detected.
Mode: The current mode of the warning light LEDs will be set to flicker only.
Flicker Frequency: The intensity of the warning light LEDs after they are activated. Can be set to high, medium, or low depending on the user's preference.
Duration: The amount of time the warning LED will flash.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Video Tamper

This tab allows the user to modify video tamper settings. Below is an explanation of the fields on the Video Tamper tab:

Enable: This checkbox enables a video tamper alarm for the camera.
Schedule: Clicking the **Setting** button opens a weekly schedule that can be used to set times. Click and drag to set video tampering for certain days of the week. Also, periods of video tampering can be set for each day and enabled using the period settings on the bottom half of the screen. There are a total of 6 periods that can be set.
Record: This checkbox allows the user to enable the camera to record video when a video tampering alarm is triggered.
Record Delay: This field specifies in seconds how long the delay between alarm activation and recording should be.
Send Email: This checkbox allows the user to enable the camera to send an email when a video tampering alarm is triggered. A single snapshot of the event will be sent after it has been triggered.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Smart Motion Detection

Smart Motion Detection (SMD) uses an advanced algorithm to detect a human in an area. This helps to reduce the amount of false events detected by the camera from objects such as trees, birds, or other objects that are not human.

Enable: This checkbox enables or disables human detection.
Effective object: Displays that human detection is enabled.
Sensitivity: Choose between low, middle, or high sensitivity. The higher the sensitivity, the more events will be triggered.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Audio Detection

This menu allows the user to modify audio detection settings. Below is a screenshot of the Audio Detection screen: Below is an explanation of the fields on the **Audio Detection** tab:

Input Abnormal: Enable or disable audio detection.
Enable Intensity Change: This checkbox enables the user to adjust sensitivity and threshold settings for audio detection.
Sensitivity: The higher the sensitivity, the more likely that audio will trigger an alarm.
Threshold: The lower the threshold, the more likely that audio will trigger an alarm.
Schedule: Clicking this button opens a weekly schedule that can be used to set times.
Click and drag to set audio tampering for certain days of the week. Also, periods of audio detection can be set for each day and enabled using the period settings on the bottom half of the screen.
Anti-Dither: The amount of time, in seconds, the event will last.
Record: This checkbox allows the user to enable the camera to record video when an audio detection alarm is triggered.
Record Delay: This field specifies in seconds how long the delay between alarm activation and recording should be.
Send Email: This checkbox allows the user to enable the camera to send an email when an audio detection alarm is triggered.
PTZ: This checkbox allows the camera to pan/tilt based on a preset set in the PTZ menu once an event is detected.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Smart Plan

A smart plan acts as the “master switch” for all AI features associated with the camera. A smart plan must be enabled for an AI feature to function. Choose an AI smart plan before enabling an AI feature such as IVS.

To refresh the menu to its original format, click the **Refresh** button. To save a smart plan to your camera, click the **Save** button.

IVS

IVS stands for stands for intelligent video system analytics and is the basis for all the AI rules associated with your camera. The IVS menu allows the user to customize and set IVS rules which allows the camera to produce general behavior analytics and reporting directly from the web user interface.

Setting an IVS Rule

All IVS rules can only be set and/or modified using the web user interface. They cannot be set using the Amcrest View Pro app or any other platforms associated with your device. For more information on setting IVS rule, refer to the information below.

Ensure a Smart Plan has been activated in the Smart Plan menu for IVS.

Access the IVS menu and click on the Add () icon to begin customizing IVS rules.
Use the dropdown menu in the Rule Type column to select which IVS rule you want to use.

Tripwire

Tripwire allows the camera to trigger an event if an object, such as a human or vehicle, crosses the set tripwire line. Below is a description of the features in this menu:

No.: Provides the order in which the IVS rules will be displayed in the menu.
Name: Allows the user to customize a name for their rule. Double click the name in the Rule column to modify.
Rule Type: This dropdown menu allows the user to select an IVS rule type (Tripwire or Intrusion).
Schedule: Allows the user to set a schedule in which the IVS rule will be triggered.
Direction: This dropdown menu allows the user to set which direction the object will be going for the tripwire to be triggered. It can be set left, right, or in both directions (A<->B).
Record: This checkbox allows the user to enable the camera to record video when an IVS event is triggered.
Record Delay: This field specifies, in seconds, how long the delay between IVS events should be. The default is 10 seconds however this can be modified between 10~300 seconds.
Send Email: This checkbox allows the user to enable the camera to send an email when an IVS event is triggered.
PTZ: This checkbox allows the camera to pan/tilt based on a preset set in the PTZ menu once an event is detected.
Siren Activation: This checkbox allows the camera to activate the alarm once an event is detected.
- **Play Duration:** The amount of time the siren will sound.

Warning Light: This checkbox allows the camera to activate the red/blue LEDs once an event is detected.
- **Mode:** The current mode of the warning light LEDs will be set to flicker only.
- **Flicker Frequency:** The intensity of the warning light LEDs after they are activated. Can be set to high, medium, or low depending on the user's preference.
- **Duration:** The amount of time the warning LED will flash.

Draw Rule: This option allows the user to use their mouse to customize (draw) a rule/area on the screen. This will be the area or line in which an IVS rule will be triggered.
Clear: This option is used to clear the drawn rule set on the live monitor screen.
Target filter: Sets a maximum and minimum size in which an event will be triggered.
Clear: Clears the modified target area to draw the target area on the live monitoring screen.
Draw Target: Allows the user to set a target area on the live monitor screen. **An IVS event will not occur outside the target box.**
Pixel Counter: Used to measure and set the number of pixels in the target area on the live monitoring screen.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Setting a Tripwire

1. Select Tripwire from the **Rule Type** drop down menu. Set a name for the rule by double clicking the mouse over the Name of the rule.
2. Click on **Setup** to set a schedule, set your periods (if any) and click **Save** to continue.
3. In the **Direction** menu, choose which direction the object will be going for the tripwire to be triggered.
4. Enable the **Record** checkbox to record the event.
5. Check the **Send Email** and **Snapshot** checkboxes if you would like a snapshot of the event emailed to you. A valid Email address must be established in the camera prior to enabling this setting.
6. Click the **Draw Rule** option and use your mouse to draw the rule on the live monitoring screen. Once the rule has been drawn click the monitoring screen to finish setting the rule. The drawn line will turn blue/green when set depending on the browser you are using.

Note: The target filtering and pixel counter can be used to refine the set rule however for optimal experience it is highly recommended to leave these settings as default

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Intrusion

Intrusion allows the camera to trigger an event if an object, such as a human or vehicle, appears or crosses a set intrusion area set by the user. Below is a description of the features in this menu:

No.: Provides the order in which the IVS rules will be displayed in the menu.
Name: Allows the user to customize a name for their rule. Double click the name in the Rule column to modify.
Rule Type: This dropdown menu allows the user to select an IVS rule type (Tripwire or Intrusion).
Schedule: Allows the user to set a schedule in which the IVS rule will be triggered.
Action: These checkboxes allow the user to choose a parameter filter that will activate a trigger if an object were to cross or appear in the set intrusion area.

- **Cross**: The rule will trigger when a target enters or exits the area.
- **Appears**: The rule will trigger when a target appears inside the area.

Direction: This dropdown menu allows the user to choose whether the rule will be triggered if an object enters, exits, or enters & exits a set line or area.
Record: This checkbox allows the user to enable the camera to record video when an IVS event is triggered.
Record Delay: This field specifies, in seconds, how long the delay between IVS events should be. The default is 10 seconds however this can be modified between 10~300 seconds.
Send Email: This checkbox allows the user to enable the camera to send an email when an IVS event is triggered.
PTZ: This checkbox allows the camera to pan/tilt based on a preset set in the PTZ menu once an event is detected.
Siren Activation: This checkbox allows the camera to activate the alarm once an event is detected.

- **Play Duration:** The amount of time the siren will sound.

Warning Light: This checkbox allows the camera to activate the red/blue LEDs once an event is detected.

- **Mode:** The current mode of the warning light LEDs will be set to flicker only.
- **Flicker Frequency:** The intensity of the warning light LEDs after they are activated. Can be set to high, medium, or low depending on the user's preference.
- **Duration:** The amount of time the warning LED will flash.

Draw Rule: This option allows the user to use their mouse to customize (draw) a rule/area on the screen. This will be the area or line in which an IVS rule will be triggered.
Clear: This option is used to clear the drawn rule set on the live monitor screen.

Target filter: Sets a maximum and minimum pixel size in which an event will be triggered.
Clear: Clears the modified target area to draw the target area on the live monitoring screen
Draw Target: Allows the user to set a target area on the live monitor screen. **An IVS event will not occur outside the target box.**
Pixel Counter: Used to measure and set the number of pixels in the target area on the live monitoring screen

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Setting an Intrusion Area

1. Select Intrusion from the Rule Type drop down menu. Set a name for the rule by double clicking the mouse over the Name of the rule.
2. Click on **Setup** to set a schedule, set your periods (if any) and click **Save** to continue.
3. In the **Action** menu, choose whether the rule will be triggered if an object appears or crosses the set region. Both options can be enabled at the same time if needed.
3. In the **Direction** menu, choose if the rule will be triggered if the object enters only, exits only, or enters & exits a set region.
4. Enable the **Record** checkbox to record the event.
7. Check the **Send Email** and **Snapshot** checkboxes if you would like a snapshot of the event emailed to you. A valid Email address must be established in the camera prior to enabling this setting.
5. Click the **Draw Rule** option and right click on the live monitoring screen. Use the mouse to draw your initial line. Once the initial line is set, right click the mouse again to continue drawing the region. Repeat the process and left click the mouse to complete the region. Right click on the live monitoring screen when finished to set the rule.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Abnormality

This menu allows the user to adjust abnormality event settings. This menu has 4 tabs: SD Card, Network, Illegal Access, and Security Exception.

SD Card

This tab allows the user to set the camera's response to an SD card related abnormality. Below is an explanation of the fields on the **SD Card** settings tab:

Event Type: This dropdown box allows the user to select which SD card abnormality to set event triggers for. The 3 options are No SD Card, SD Card Error, and Capacity Warning.
Enable: This checkbox enables the SD Card abnormality trigger for the camera.
Send Email: This checkbox allows the user to enable the camera to send an email when an SD Card abnormality is detected.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Network

This tab allows the user to set the camera's response to a Network related abnormality. Below is an explanation of the fields on the **Network** settings tab:

Event Type: This dropdown box allows the user to select which Network abnormality to set event triggers for. The 2 options are Disconnection and IP Conflict.
Enable: This checkbox enables the Network abnormality trigger for the camera.
Record: This checkbox allows the user to enable the camera to record video when a network abnormality is detected.
Record Delay: This field specifies in seconds how long the delay between alarm activation and recording should be.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the Save button.

Illegal Access

This tab allows the user to set the camera's response to an Illegal Access related abnormality. Below is an explanation of the fields on the **Illegal Access** settings tab:

Enable: This checkbox enables the Illegal Access abnormality trigger for the camera.
Login Failure: This field allows the user to specify how many failed login attempts must be attempted to trigger an Illegal Access abnormality event.
Send Email: This checkbox allows the user to enable the camera to send an email when illegal access is attempted.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Security Exception

This tab allows the user to set the camera to produce an abnormality alert if a brute force attack of the Web path is detected, a brute force attack of session ID is attempted, a session connection over-limit, or an abnormal program is activated in the trusted environment, etc.

Click the **Enable** check box to enable or disable this feature.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Storage

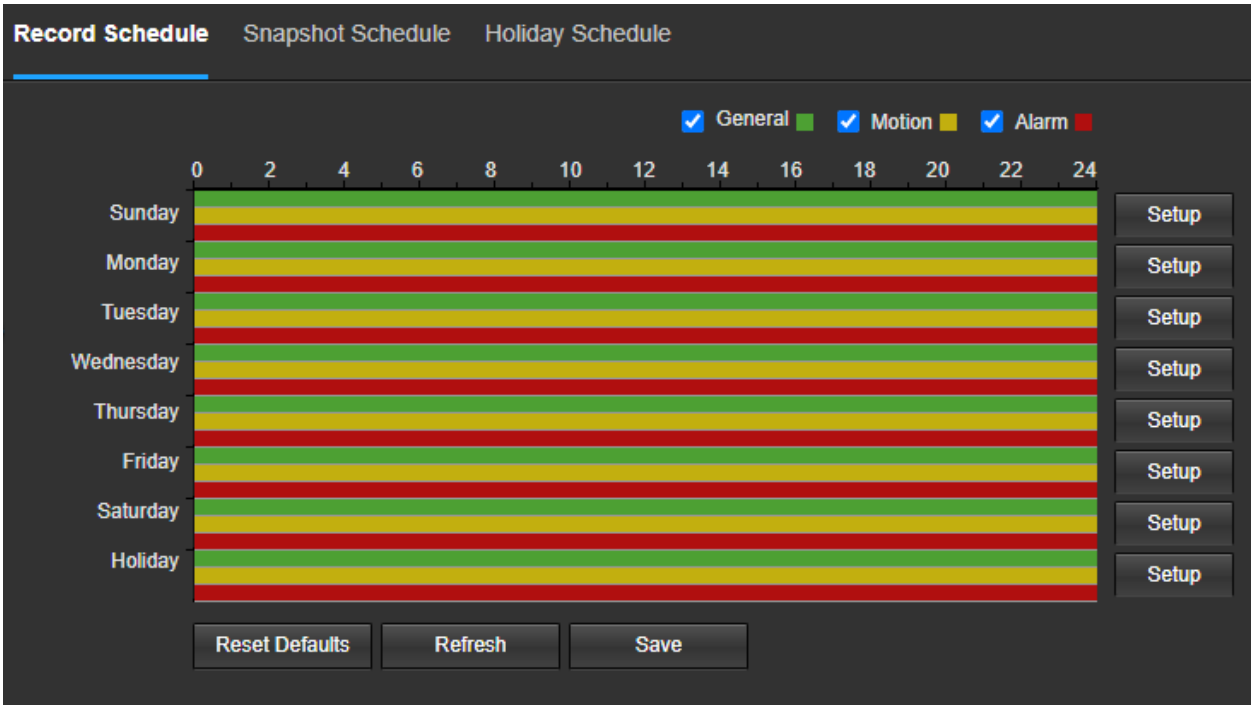
This menu section allows the user to change storage settings for the camera.

Schedule

The schedule menu manages the recording schedule for the camera. This menu has 3 tabs: Record Schedule, Snapshot Schedule, and Holiday Schedule.

Record Schedule

This tab is where video recording settings are configured. Below is a screenshot of the Record Schedule settings screen:



Below is an explanation of the fields on the Record Schedule settings tab:

Record Type: These checkboxes allow the user to select which recording type they want to configure on the schedule. There are 3 types of recordings:

General: General recording means that the camera captures all footage for the specified time period. General recording is represented by the color green.

Motion: Motion Detection recording means that the camera captures only footage when the motion detection alarm is activated. Motion recording is represented by the color yellow.

Alarm: Alarm recording means that the camera captures only footage when an alarm is activated. Alarm recording is represented by the color red.

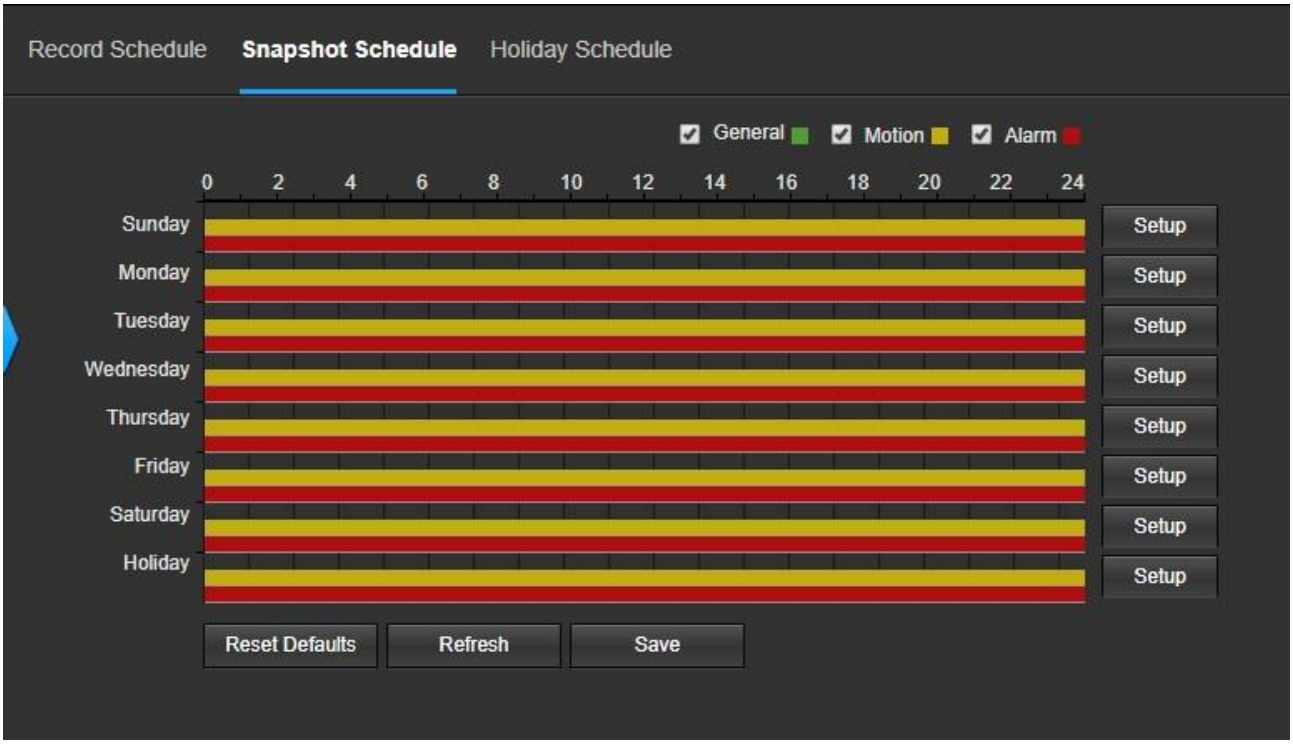
Video Recording Schedule: To specify a video recording range, first select the type of recording desired, then click and drag on the time bar for the desired date. To edit multiple days at once, drag the cursor further up or down to cover the other days.

Setup: Clicking this button opens a screen that allows for recording periods to be set for each day and for each recording type. There are a total of 6 periods that can be set.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Snapshot Schedule

This tab is where snapshot recording settings are configured. Below is a screenshot of the Snapshot Schedule settings screen:



Below is an explanation of the fields on the **Snapshot Schedule** settings tab:

Record Type: These checkboxes allow the user to select which snapshot type they want to configure on the schedule. There are 3 types of snapshots:

General: General means that the camera will take snapshots during the specified time period. General recording is represented by the color green.

Motion: Motion Detection means that the camera only takes snapshots when the motion detection alarm is activated. Motion recording is represented by the color yellow.

Alarm: Alarm means that the camera only takes snapshots when an alarm is activated. Alarm recording is represented by the color red.

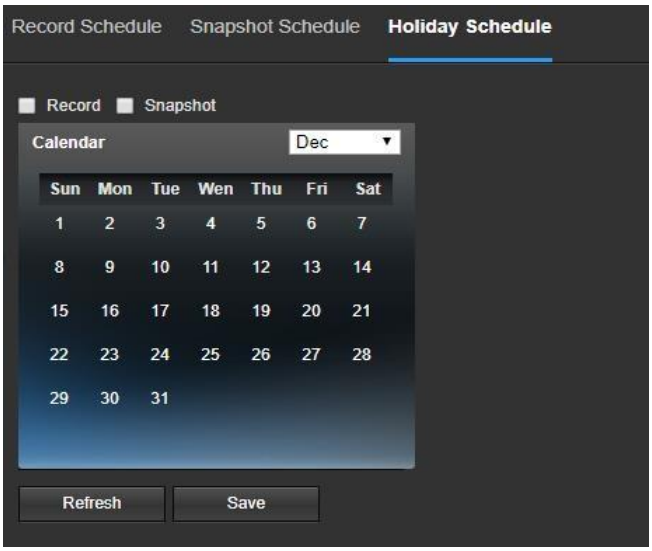
Snapshot Recording Schedule: To specify a snapshot range, first select the type of snapshot desired, then click and drag on time bar for the desired date. To edit multiple days at once, drag the cursor further up or down to cover the other days.

Setup: Clicking this button opens a screen that allows for snapshot periods to be set for each day and for each snapshot type. There are a total of 6 periods that can be set.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Holiday Schedule

This tab is where holiday settings are configured. Below is a screenshot of the Holiday Schedule settings screen:



Below is an explanation of the fields on the Holiday Schedule settings tab:

Record Type: These checkboxes allow the user to select which recording type they want to configure on the schedule. There are 2 types of recordings:
Record: This checkbox is referring to video recording.
Snapshot: This checkbox is referring to snapshot recording.
Calendar: This calendar allows the user to select days to designate as holidays. Once a day is designated, it can be customized to stop recording or snapshots for that day by using the Record and Snapshot checkboxes.

To refresh the page, click the Refresh button. To save the settings, click the Save button.

Destination

This menu controls where recorded media is stored. There are 3 tabs in this menu: Path, SD Card, and FTP. Please note, this model does not support NAS or SFTP.

Path

This tab is where the user can designate a path for recorded video and snapshots to reside in. Below is a screenshot of the Path tab:

Below is an explanation of the fields on the **Path** settings tab:

Event Type: This column designates storage options available to the camera. The options are SD Card, FTP, and NAS.
Scheduled: This checkbox allows a schedule to be enabled for the record path.
Motion Detect: This checkbox allows motion detection record types to be sent to the record path.
Alarm: This checkbox allows alarm record types to be sent to the record path.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

SD Card

This tab is where the user can change SD card settings. Below is an explanation of the fields on the SD Card settings tab:

Device Name: This column designates the name of the SD card that is currently in the camera.
Status: This column designates the status of the SD card.
Attribute: This column designates the read/write attributes for the SD card. By default, this is Read & Write.
Used Capacity/Total Capacity: This column shows the available memory on the SC card.
Read Only: This button allows the user to designate an SD card as read only.
Read & Write: This button allows the user to designate an SD card to read and & write privileges.
Eject: This button is used to eject the SD card from the interface.
Refresh: This button refreshes the SD card table.
Format: This button formats the SD card.

FTP

This tab allows the user to set events to be stored to an FTP. Please note, if saving events to an FTP, please make sure the FTP option is enabled in the Path tab before proceeding. Below is an explanation of the fields provided in this menu.

Enable: Enable an FTP protocol.
Server Address: Enter the IP address FTP server.
Port: Enter the port number FTP server. FTP port will be 21.
Username: Enter the username of the FTP server.
Password: Enter the password associated with the FTP server.
Remote Directory: Enter the directory information in which the events will be stored.
Emergency (Store on SD Card): Allows the camera to store events onto an SD card if the FTP server is unavailable.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Record Control

This menu is where general recording settings are configured. Below is an explanation of the fields on the Record Control settings tab:

Pack Duration: This field allows the user to set how many minutes each file is comprised of.
Pre-event Record: This field allows the user to specify how many seconds before an event should be recorded.
Disk Full: This dropdown box allows the user to designate what the camera should do when the disk is full. There are 2 options: Overwrite or Stop.
Record Mode: This set of radio buttons allows the user to designate the recording mode. The options are Auto, Manual, and Off.
Record Stream: This dropdown box allows the user to specify which stream to record. The options are mainstream and sub stream.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

System

This menu section allows the user to change general settings for the camera.

General

This tab is where the user can configure some basic camera settings. Below is an explanation of the fields on the **General** settings tab:

Device Name: This field allows the user to change the device's name.
Language: This dropdown box allows the user to change the language used in the camera.
Video Standard: This dropdown box allows the user to select either the NTSC or PAL video standard.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Date & Time

This tab is where the user can configure the date and time settings for the camera. Below is an explanation of the fields on the Date & Time settings tab:

Date Format: This dropdown box allows the user to change the date format used in the camera.
Time Format: This dropdown box allows the user to change the time format used in the camera.
Time Zone: This dropdown box allows the user to change the time zone used in the camera.
Current Time: This field allows the user to enter in the date and time manually. Clicking the PC Sync button allows the camera to sync with a Network Time Protocol (NTP) server.
Enable DST: This checkbox allows the user to enable daylight savings time for the camera.
- **DST Type**: This radio button allows the user to select whether DST is based on the week, or a specific day.
- **Start Time**: This dropdown box and field allow the user to enter in the start time for DST.
- **End Time**: This dropdown box and field allow the user to enter in the end time for DST.

Synchronize with NTP: This checkbox allows the user to enable the camera's synchronization with an NTP server.
- **NTP Server**: This field allows the user to enter in an NTP server.
- **Port**: This field allows the user to enter in the port number for the NTP server.

Update Period: This field allows the user to enter in the update period time. This number designates how frequently the camera pings the NTP server to ensure it has the correct time. The range is from 0-30 minutes.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Manage Users

This menu allows the user to change the user accounts on the camera. By default, the camera only has the admin account which has all rights/authorities. Additional accounts can be created on this screen. Below is an explanation of the fields on the Account screen:

Anonymous Login: This checkbox allows the user to enable the anonymous login feature. This allows all user account names to remain hidden on this screen.
Username: This tab shows the usernames available on the camera.

Group: This tab shows the user groups available on the camera.
No.: This column shows the user's number on the user list.
Username: This column shows the usernames of the different accounts on the camera.
Group Name: This column shows the group of the different accounts on the camera.
Description: This column shows a description of the account.
Modify: This column allows the user to modify the user account.
Delete: This column allows the user to delete a user account. Note: The admin account cannot be deleted.
Authority List: This box shows which user rights/authorities are assigned to an account.
Add User: This button allows the user to add a new user to the camera.
Save: This button is used to save the settings.

Peripheral

This menu allows the user to enable or disable the onboard heater of the device. This will be enabled by default and is useful if operating the camera in cold temperatures in which icy or foggy conditions occur.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Default Settings

This menu allows the user to reset the camera and all its settings to the factory settings. Below is an explanation of the items listed in this field:

Default Settings: Only the IP address, user management, and other settings can be recovered after reset. **Factory Default**: Completely resets the camera to factory default settings. No settings can be recovered after the camera has been returned to its factory default settings.

Import/Export

This screen allows the user to import or export settings from the camera. To export the settings, click the Export button. The settings file will be downloaded to your device. Click the Import button to import the settings back into the camera.

Auto Maintain

This tab allows the user to set auto maintenance settings for the camera. Below is an explanation of the fields on the Auto Maintain screen:

Auto Reboot: This checkbox allows the user to enable the auto reboot function. The dropdown box and field to the right of this checkbox allow the user to specify what date and time of the week the camera will auto reboot.
Auto Delete Old Files: This checkbox allows the user to enable the auto deletion of old files on the camera.
Manual Reboot: This button allows the user to manually reboot the camera.

To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Upgrade

This menu allows the user to upgrade the camera's firmware. To upgrade the firmware for your camera, follow the steps provided below:

Go to amcrest.com/firmware
Search for the model number of your camera and download the latest firmware file.
Return to the web user interface for your camera and press the **Browse** button to locate and import the firmware file you just downloaded.
Once the firmware file has been imported, click **Upgrade**.
The device will reset, return to the web user interface. The upgrade is now complete.

Note: When upgrading the camera's firmware, do not disconnect the internet or power from the camera.

Information

This menu section allows the user to view information about the camera for reference purposes.

Version

This screen allows the user to see various information about the camera's software versions, as well as other information. On this screen, software version, web interface version, and ONVIF version are displayed. Also, the S/N (Token ID) is displayed here.

Log

This screen is where the camera's activity log is kept. To view logs for a specific time period, modify the start time and end time fields, choose the type of event (system, setting, data, event, record, manage users, clear log), and click search.

To back up the log, click the Backup button. To clear the log, click the **Clear** button.

Remote Log

The Remote Log menu allows users to retain log information from other remotely connected devices. Below is an explanation of the details in this menu.

Enable: Enables the remote log feature.
IP Address: The IP address of the remote device
Connection: The port number set for the remote device (1~65534) **Device Number:** The number of the device in the network segment.

To reset to default settings, click the **Reset Defaults** button. To refresh the page, click the **Refresh** button. To save the settings, click the **Save** button.

Online Users

This screen allows the user to see which users are online. Click **Refresh** to refresh this table.

Alarm

This screen is where the alarm log is kept. The table on the right shows the alarm log and all the alarm instances that have occurred. The checkboxes allow the user to narrow down which alarms they want to see in the alarm log.

Clicking the checkbox next to Prompt will cause the system to pop up a dialog box anytime an alarm is triggered. Clicking the checkbox next to Play Custom Alarm will use a custom alarm sound for the alarm prompt. Click the Browse button to search for a custom alarm sound to use.

Logout

Clicking the logout button will log you out of the interface and return you to the main login page.

Port Forwarding Remote Web Access Setup

Port Forwarding is an alternative method to setting up remote access for Amcrest cameras. This method should only be used if the UPnP/DDNS Remote Access method did not work.

Below is a step-by-step walkthrough that details how to setup the camera for Remote Web Access using Port Forwarding:

1. Login to your camera, open the main menu then go to Setup -> Network.
2. Open the TCP/IP settings screen.
3. By default, the camera has the mode set to DHCP. Ensure that DHCP is selected. The IP Address, Subnet Mask, Default Gateway, Preferred DNS, and Alternate DNS should all be 0s if DHCP is selected.
4. Click Save to save these settings. This should now open the main menu.
5. From the main menu, go to **Setup -> Network**.
6. On the TCP/IP settings screen, the IP Address, Subnet Mask, Default Gateway, Preferred DNS, and Alternate DNS should all be populated.
7. Click the radio button next to Static, to change the mode to Static.
8. Write down the IP Address that is currently in the IP address field.
9. Click the **Save** button.
10. Using the left-hand menu, go to the Connection menu, and write down the TCP, UDP, and HTTP port number. It is recommended to ensure that these port numbers are at least 5 digits long to prevent any port conflicts. If need be, change each of these port numbers to a 5-digit number that is less than 65535, note the numbers down, and click save before proceeding to the next step.
11. Go to http://www.canyouseeme.org/ and check to ensure each of the port numbers specified in step 10 is open.
12. Write down the manufacturer name, brand, and model name for the router that the camera is connected to, and then proceed to http://www.portforward.com on your web browser.
13. Open the port forwarding guide section on the left-hand side menu.
14. Find the router brand name in the list and click it.
15. Find the router model number and click it.
16. Click the Default Guide link near the middle of the page.
17. This guide will help you take the step necessary to port forward on the router. Follow these steps, and then return to the camera.
18. Login to your camera, open the main menu then go to Setup -> Network.
19. Click the DDNS menu item on the left-hand menu, pick AMCRESTDDNS from the drop-down box, click the checkbox next to Server Type, and then click the Save button on the bottom right.
20. To set a custom DDNS name, fill out the Domain Name field and click Save.
21. Write down the entire Domain Name field, including the white text that says.AmcrestDDNS.com
22. Open a web browser and enter in the DDNS domain name address from step 21, enter in a colon, then type the HTTP port number from step 10 on to the end.
    For example, if the DDNS domain name is http://abc123456789.AmcrestDDNS.com and your HTTP Port is 33333, the URL would be http://abc123456789.AmcrestDDNS.com:33333
23. Enter in login details into the username and password fields and click login.

If the process above is not working, please contact Amcrest Support via one of the following options:

Visit http://amcrest.com/contact and use the email form
Call Amcrest Support using one of the following numbers
Toll Free: (888) 212-7538
International Callers (Outside of US): +1-713-893-8956
USA: (888) 212-7538
Canada: 437-888- 0177
UK: 203-769-2757
Email Amcrest Customer Support support@amcrest.com

Amcrest Cloud Desktop Setup

Amcrest cameras can sync with Amcrest Cloud; a service that stores recorded video streams to enable long-term storage. Amcrest Cloud also allows the user to easily find and download recorded video for playback from any internet connected PC or Mac computer.

For more information on how to setup your camera on Amcrest Cloud please follow the steps provided below:

1. Connect the camera to power and wait 30 seconds for the camera to start-up and initialize.
2. Using a web browser on your PC or Mac, visit www.amcrest.com/cloud and register for a cloud account. Once registered, click the "**Add Camera**" button. Select "Amcrest", give the camera a name, and enter the camera's SN (located on the bottom of the camera), then click "Next".
3. On the settings page, you can adjust optional preferences for your camera. Once settings have been adjusted, click "Finish". Your camera is now successfully set up for cloud access and storage.
4. View your camera live or watch recorded clips using the menu button on the top of the page. You can also use the Amcrest Cloud app on iOS and Android to add more cameras, play recordings, and view your camera live, from anywhere. For more information visit amcrest.com/support
5. For additional assistance, please contact us at www.amcrest.com or give us a call at 1-888-212-7538. Step by step video tutorials available at http://www.amcrest.com/videos

FCC Statement

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

2. The user's manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes, or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

3. (b) For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual: NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance

with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or
television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: -- Reorient or relocate the receiving antenna. -- Increase the separation between the equipment and receiver. -- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. -- Consult the dealer or an experienced radio/TV technician for help.

4. RF exposure warning This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

Appendix A: Toxic or Hazardous Materials or Elements

Component Name	**Toxic or Hazardous Materials or Elements**					
	Pb	**Hg**	**Cd**	**Cr VI**	**PBB**	**PBDE**
Sheet Metal	O	O	O	O	O	O
Plastic Parts	O	O	O	O	O	O
Circuit Board	O	O	O	O	O	O
Fastener	O	O	O	O	O	O
Wire and Cable/Ac Adapter	O	O	O	O	O	O
Packing Material	O	O	O	O	O	O
Accessories	O	O	O	O	O	O

O: Indicates that the concentration of the hazardous substance in all homogeneous materials in the parts is below the relevant threshold of the SJ/T11363-2006 standard.

X: Indicates that the concentration of the hazardous substance of at least one of all homogeneous materials in the parts is above the relevant threshold of the SJ/T11363-2006 standard. During the environmental-friendly use period (EFUP) period, the toxic or hazardous substance or elements contained in products will not leak or mutate so that the use of these (substances or elements) will not result in any severe environmental pollution, any bodily injury or damage to any assets. The consumer is not authorized to process such kind of substances or elements, please return to the corresponding local authorities to process according to your local government statutes.

O: Indicates that the concentration of the hazardous substance in all homogeneous materials in the parts is below the relevant threshold of the SJ/T11363-2006 standard.

X: Indicates that the concentration of the hazardous substance of at least one of all homogeneous materials in the parts is above the relevant threshold of the SJ/T11363-2006 standard. During the environmental-friendly use period (EFUP) period, the toxic or hazardous substance or elements contained in products will not leak or mutate so that the use of these (substances or elements) will not result in any severe environmental pollution, any bodily injury or damage to any assets. The consumer is not authorized to process such kind of substances or elements, please return to the corresponding local authorities to process according to your local government statutes.

Note:

To view setup videos for many of the steps outlined in this guide, go to http://amcrest.com/videos
This user manual is for reference only. Slight differences may be found in the user interface.
All the designs and software here are subject to change without prior written notice.
All trademarks and registered trademarks mentioned are the properties of their respective owners.

To contact Amcrest support, please do one of the following:

Visit http://amcrest.com/contact and use the email form
Call Amcrest Support using one of the following numbers:
Toll Free US: (888) 212-7538
International Callers (Outside of US): +1-713-893-8956
USA: 713-893-8956
Canada: 437-888-0177
UK: 203-769-2757