

AI Digital Video Recorder
Quick Start Guide

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Welcome

Thank you for purchasing an Amcrest AI DVR!

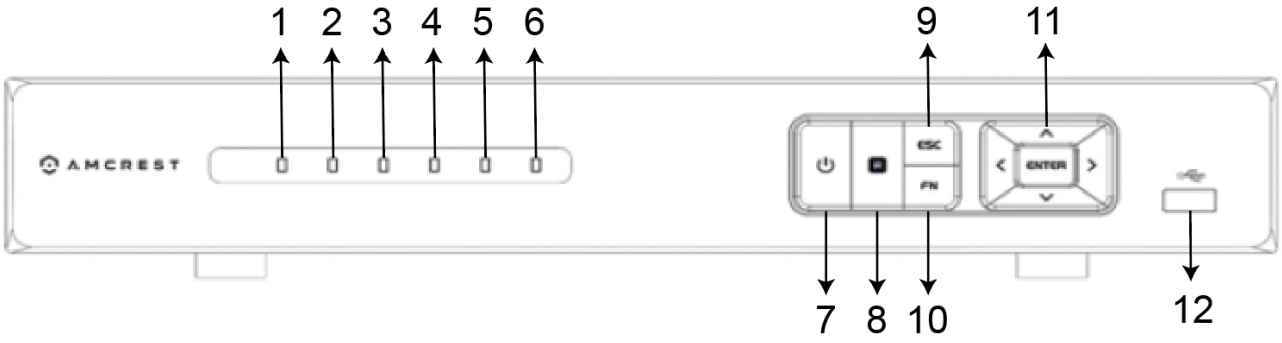
This document is designed to be a reference tool for the installation and operation of your AI DVR. To access or download the full user manual for your DVR, please visit https://amcrest.com/support

Important Safeguards and Warnings

- Use of this product should conform to your local electrical safety codes.
- We assume no liability or responsibility for any fires or electrical shocks caused by improper handling or installation.
- We are not liable for any problems caused by unauthorized modifications or attempted repair.
- Do not store or operate the device in environments below 14°F (-10°C) or exceeding 131°F (55°C).
- Do not use a power supply which exceeds DC12V, 3A as it may cause damage to the unit.

Front/Back Panel Diagrams & Descriptions

Front Panel

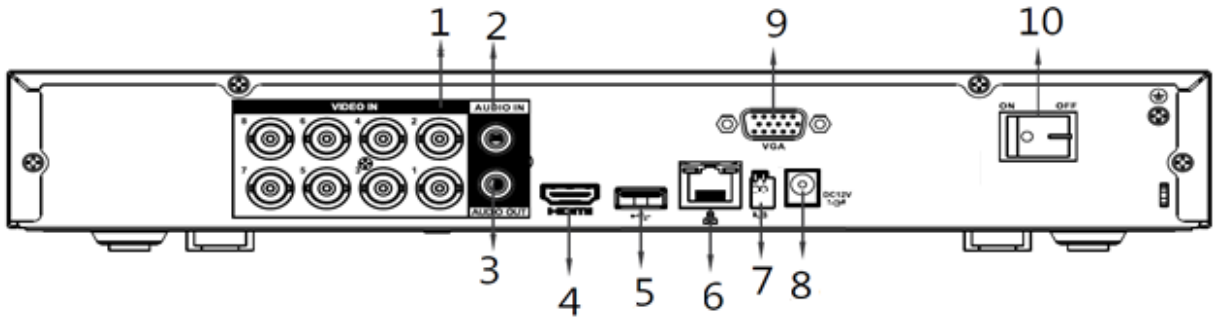


#	Icon	Name	Function(s)
1	Alarm	Alarm Status	When an alarm event occurs, this LED turns blue.
2	REC	Recording Status	When recording to the hard drive, this LED will turn blue.
3	HDD	HDD Status	HDD error or the HDD is at capacity.
4	NET	Network Status	Network error or disconnection has occurred.
5	ACT	Enter	Activates once an operation is confirmed.
6	Power	Power Status	When the DVR is powered on, this LED will remain blue.
7	⏻	Power Button	Press and hold for 3 seconds to boot or shut down the device.
8	IR	Infrared Sensor	Infrared sensor
9	ESC	Escape	Go to the previous menu or cancel the current operation. When in playback, push ESC to restore real-time monitoring.
10	FN	Assist	When is single monitoring mode, push this button to display additional functions such as PTZ control and image color. Backspace function: in numeric/text control, press Fn for 1.5 seconds to delete the character before the cursor. In motion detection setup, use the Fn button and directional keys to adjust the settings. In text mode, push Fn to switch between

			numeric and English characters (small/capitalized), etc. Activates other special functions.
11	▲ / ▼ Enter	Up/Down/Enter	Activates current controls, modifies settings, and allows navigating up and down through options. Increases/Decreases numerals. Goes to the default button. Assists in functions such as PTZ menu.
12		USB 2.0 port	USB 2.0 port: connect a mouse, USB storage device, etc.

Rear Panel

Please note, the rear panel image below is used for reference purposes only. Video input ports may vary model to model.



Please refer to the following chart for detailed information on the rear panel ports:

#	Port Name	Function
1	Video input port	Connects to analog camera to input video signal.
2	Audio input port	Receives audio signal output from an RCA microphone DVR.
3	Audio output port	Outputs audio signal to an external RCA speaker.
4	HDMI port	High definition audio and video signal output port. The port outputs an uncompressed high-definition feed as well as multichannel audio data to a connected HDMI compatible display.
5	USB port	Connects to an external DVR such as, a mouse, or external USB storage DVR.
6	Network port	Connects to Ethernet port.
7	A/B Port	Connects to an external DVR such as, a mouse, keyboard, or external USB storage DVR. Used to connect external alarm wiring (A/B) to the DVR.
8	Power input port	Inputs DC 12V power.
9	VGA port	Outputs analog video data to a connected display with a compatible VGA port.
10	Power Switch	Turn the DVR on or off.

Hard drive installation

A hard drive allows you to store recordings and events from the DVR, this includes playing back previously recorded footage and AI events.

Note: This section *only* applies to DVRs purchased without a hard drive already preinstalled. Most 'kits' or 'bundles will come with a pre-installed hard drive.

The DVR has connections for only 1 hard drive inside the case and the hard drive must be no larger than 10TB (Terabytes).

To install your hard drive, the following is needed:

- A medium sized (regular) Phillips-head screwdriver - *not included*
- A hard drive - *not included (unless you purchased a 'kit' that **does** have one included)*
- Four hard drive fastening screws – *included*

Note: Before installing the hard drive, make sure the DVR is powered off and completely disconnected from power.

		
1. Loosen the screws on the upper cover and side panel.	2. Attach four screws on the HDD (Do not fully tighten, only tighten about 3 times).	3. Place the HDD in accordance with the four holes on the bottom of the casing.
		
4. Turn the DVR upside down and place the screws in firmly.	5. Tighten the HDD screws firmly to the bottom of the DVR.	6. Connect the HDD cable and power cables to the motherboard.

	
7. Put the cover back onto the DVR in accordance with the clip and then place the upper cover back onto the device.	8. Secure the screws on the rear and side panels.

If you need further assistance with installing your hard drive, feel free to contact us at amcrest.com/contacts

Hardware Setup

Before setting up the DVR, you will need the following items which are not included.

A computer monitor or TV with either an HDMI or VGA input
A power strip or surge protector with enough room to power your devices.
A Phillips Head screwdriver to install a hard drive (HDDs may be sold separately).

It is recommended to connect all components of the system as described below *before* mounting any cameras. This is to ensure all components are working before any physical installation takes place. If any components are not functioning, please contact Amcrest by visiting amcrest.com/contacts

Setting up the cable connections

The following instructions will show you how to set up the cables for the DVR, cameras, as well as a monitor or TV screen.

To set up the DVR's cable connections, there are 6 major steps:

1. Connect a monitor or TV screen to your DVR. For purposes of this guide, we will use a VGA connection. Take a VGA cable, and connect one end to the VGA port on your monitor/screen and the other end to the VGA port on the back panel of your DVR.

Note: If you are using an HDMI connection, the system may prompt you to automatically change output resolutions after the device has been initialized.

2. Connect the included USB mouse to a USB port on the DVR.

3. Connect an Ethernet cable to your router. Then, connect the other end of the Ethernet cable to the Ethernet port on the back of the DVR.

4. Secure the coaxial extension cable to the camera's cable port. Then, connect a power adapter to the camera's power adapter port and plug the power adapter into a wall socket or power source.

5. Secure the coaxial cable port from the camera to any of the video (coaxial) ports on the back of the DVR.

6. Connect the power adapter into the back of the DVR, and then plug in the DVR power adapter into an electrical socket to turn on the unit.

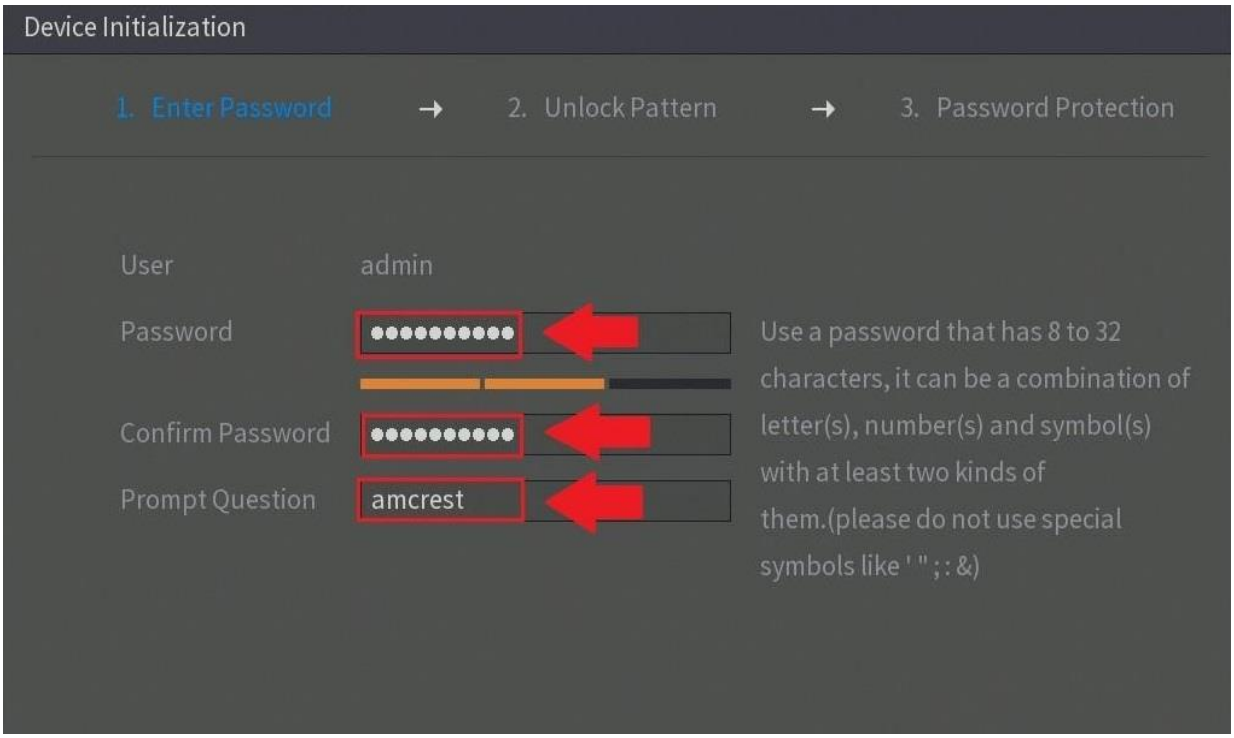
For more information on the installation process please visit amcrest.com/support

Console Setup

After applying power to the DVR, the system will turn on. Allow the DVR to finish loading. The **Device Initialization** screen will appear. Select your location, language, and video standard then click **Next** to continue.

Select your time zone as well as current date and time. Click **Next** to continue.

Password Setting



Create a new admin password for your device. The password for your device should be between 8 and 32 characters with a combination of letters, numbers, and symbols.

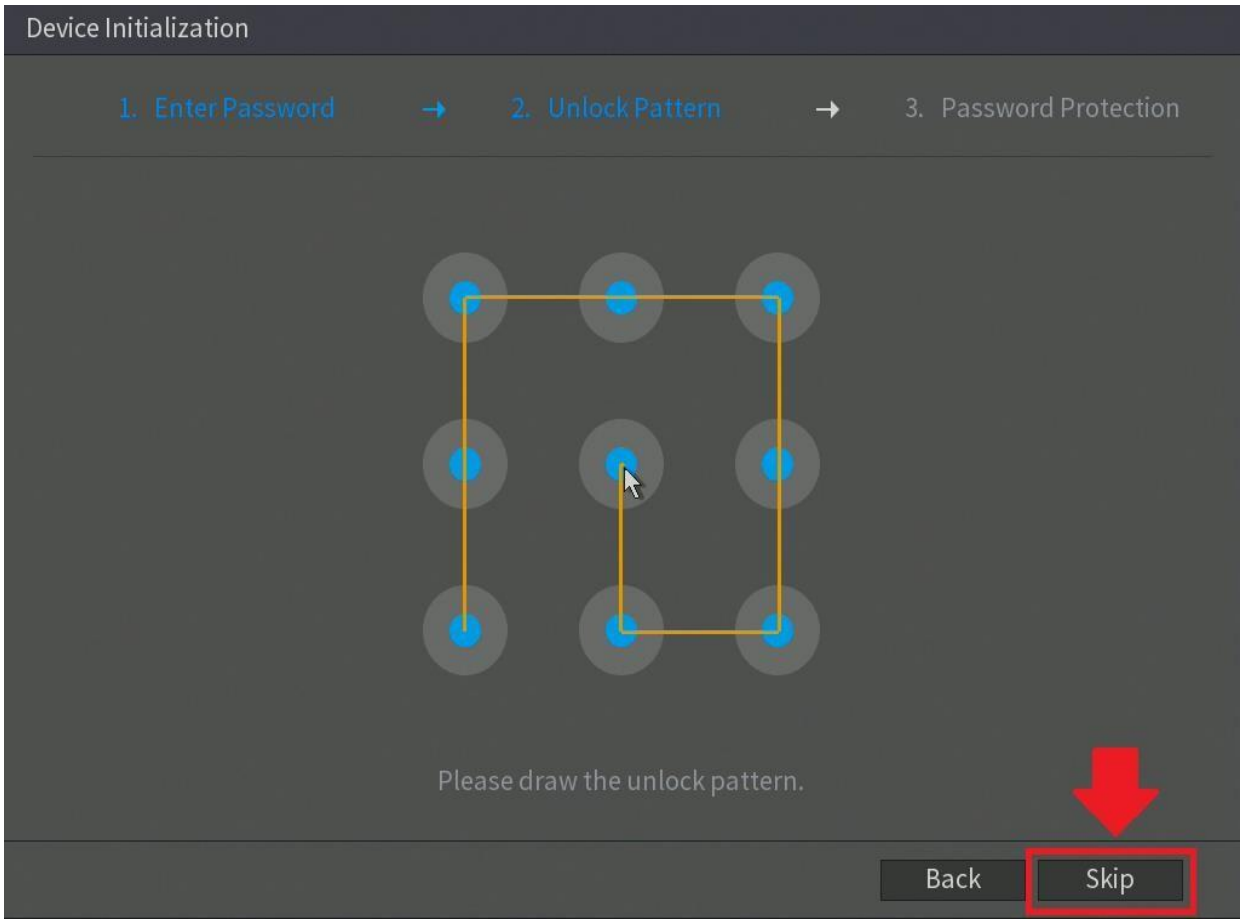
Note: Please do not use special symbols like ‘ “ ; : &

Once you have entered a new password for your device, confirm the password in the next field. Lastly, you will be asked to enter a prompt question for your account. This is useful if you have forgotten your password and would like an easier means of recovering your password. Please use a prompt question that will help you remember the password for your device.

After you have completed this section, click **Next** to continue.

Unlock Pattern

This is an optional security measure for your device. You can also assign an unlock pattern for your admin account. To set an unlock pattern, using your mouse, draw a design which you will remember to access your device. **If you do not wish to assign an unlock pattern, you can click “Skip” to skip this process.**

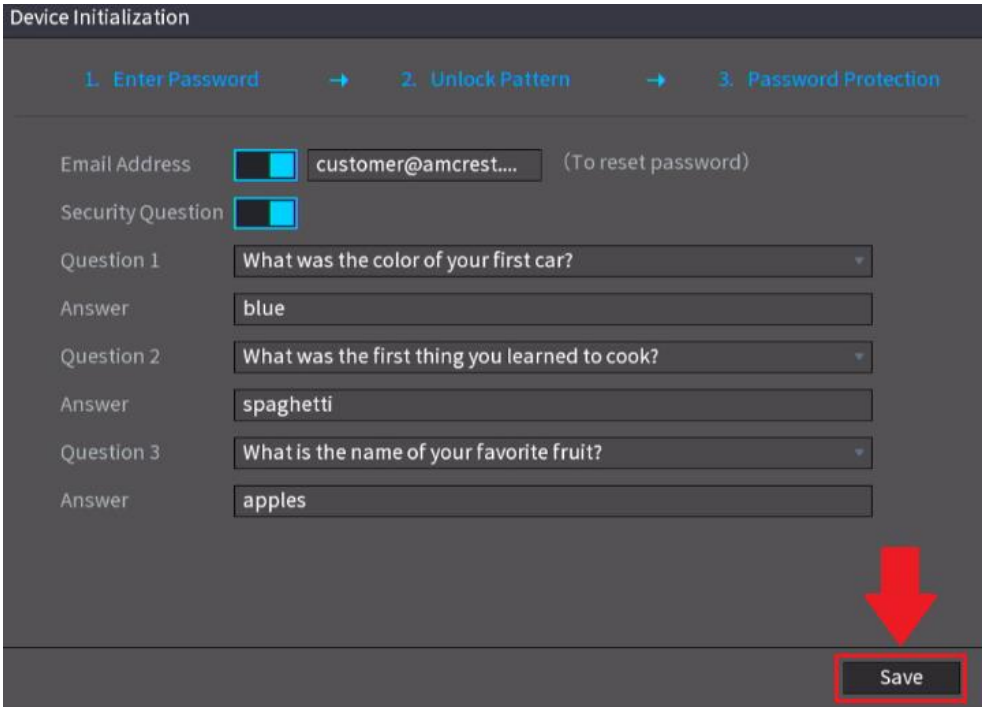


If you have assigned an unlock pattern, you will need to draw the pattern again to confirm.

Password Protection

An Additional means of password protection and retrieval can be set up in this menu. If you would like to reset your password via email, toggle the **Reserved Email** toggle switch to the on position and enter a valid email address in the **Reserved Email** field. The email address will be retained in the system.

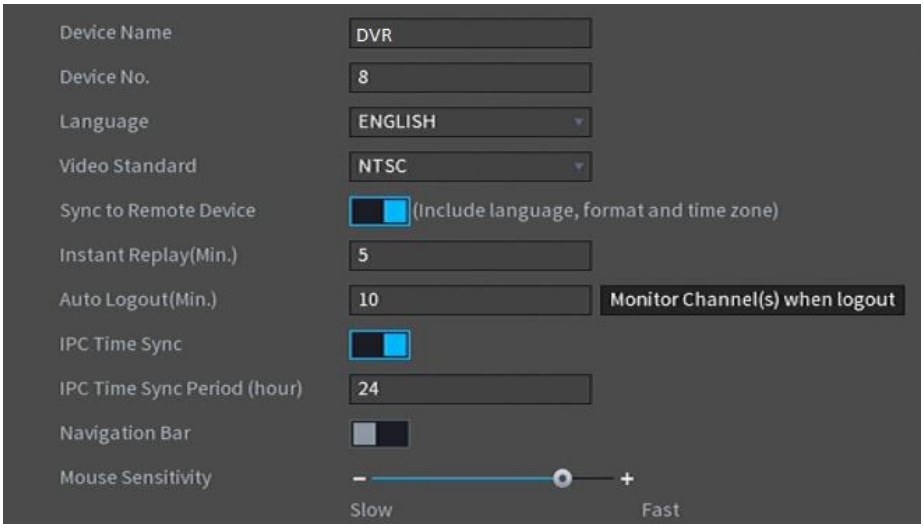
If you do not wish to use an email address, you can enter security questions. To enable security questions, click the toggle switch to the on position in the **Security Question** field. Select a question from the drop-down menus for **Question 1, Question 2,** and **Question 3** and enter the answers to those questions in the **Answer** fields.



Once this section is complete, click on the **OK** button to save your information to the device.

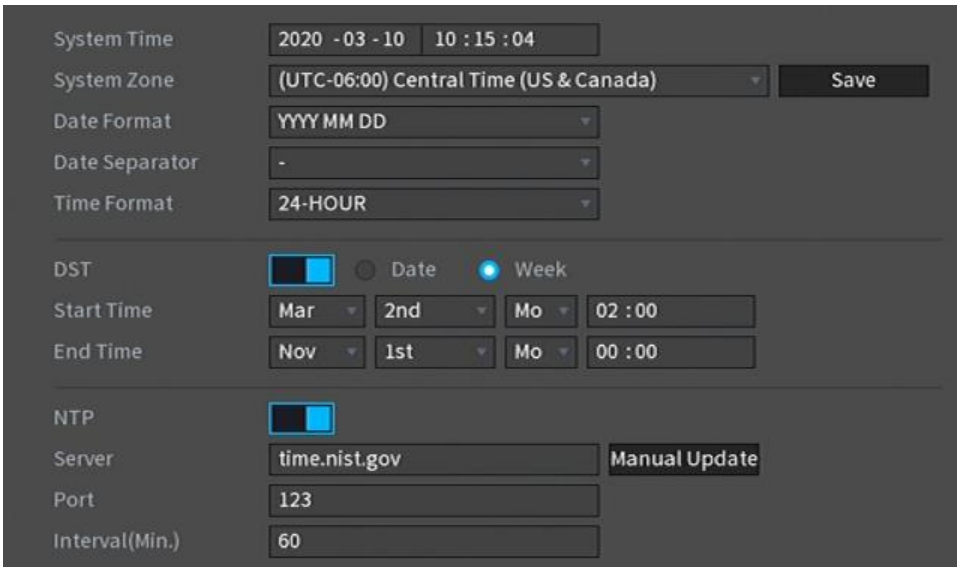
Basic

The next screen is the **Basic** settings screen. This screen allows you to set a language, video standard and other basic settings for the DVR. Once you are satisfied with the settings on this screen, click the **Next** button at the bottom of the screen.



Date & Time

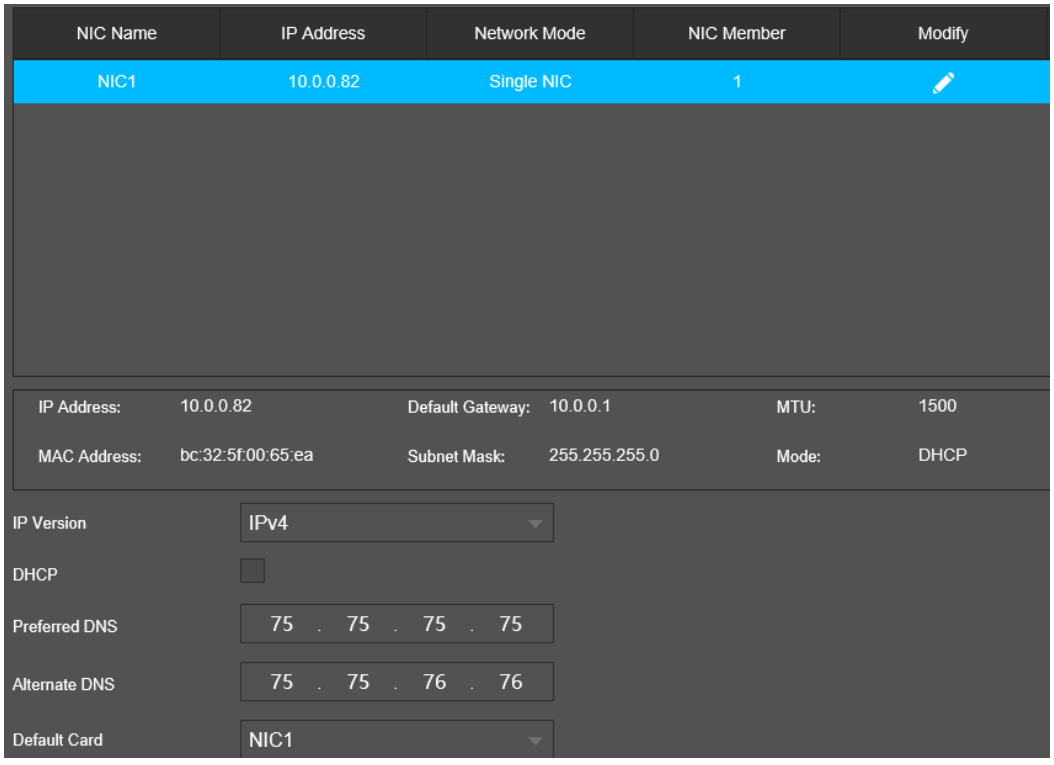
This menu allows you to set the date and time for the DVR. If you wish to utilize daylight savings time, toggle the **DST** toggle switch to the on position. Once you have selected the proper date and time for your device, click the **Next** button to continue.



Note: Make sure to toggle the **NTP** toggle switch to the off position if you do not want to sync your device to the NTP server.

Network

In this screen you can configure basic network settings. Please note, it is highly recommended to have a static IP to ensure the device has a more stable connection with your network, as well as provide a more efficient means of accessing your device remotely. Toggle the **DHCP** toggle switch to the off position.



Note: To test the connectivity of the device to your network, click on the **Test** button. The device will return a network status. To return to the previous menu, click the **Back** button.

Click **Next** to continue.

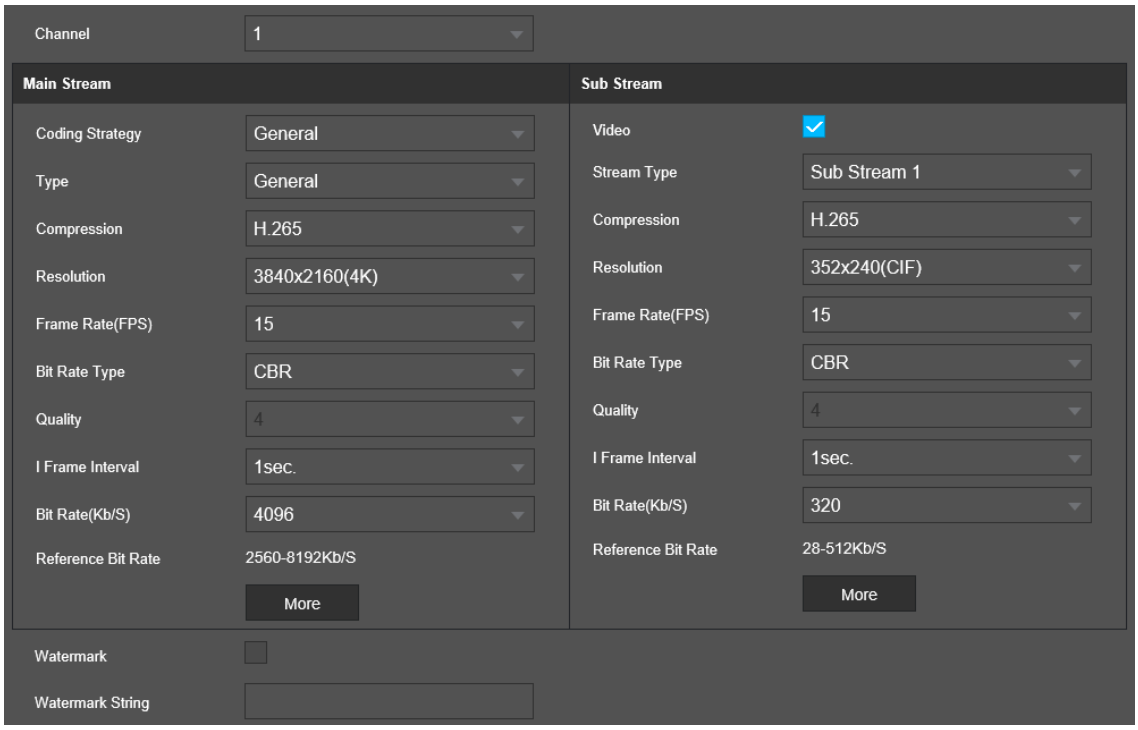
P2P
This option will be enabled by default. It is highly recommended to keep this enabled if you want to use, the Amcrest View Pro mobile app or AmcrestView.com to view your cameras remotely using a P2P connection. Use the provided QR codes to download the mobile app and access the device's serial number.



Click **Next** to continue.

10. Audio/Video

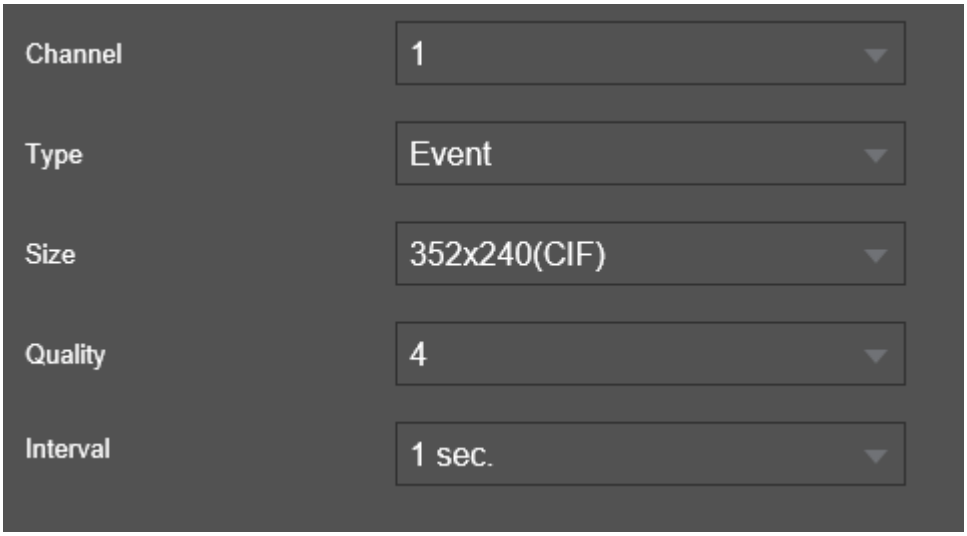
This screen allows you to adjust the video quality and encode settings on the main and sub streams of a connected camera. Use the **Channel** dropdown menu to select a camera if multiple cameras are connected. To access or adjust audio formats (if applicable), click on the **More** tab.



After adjusting the video and audio settings, click **Next** to continue.

Snapshot

This screen allows you to adjust the settings such as the image size, quality, as well as intervals in which the snapshot is retained. Once set, click **Next** to continue.



Basic

The next screen that will appear will be labeled **Basic**. This is where you can configure your hard drive settings including, when to overwrite a full hard drive or customizing an auto-delete option. This option pertains to old files and how long you would like that data to remain on your hard drive. This is can be customized in days and is set with a built-in number pad. Click **Next** to continue.



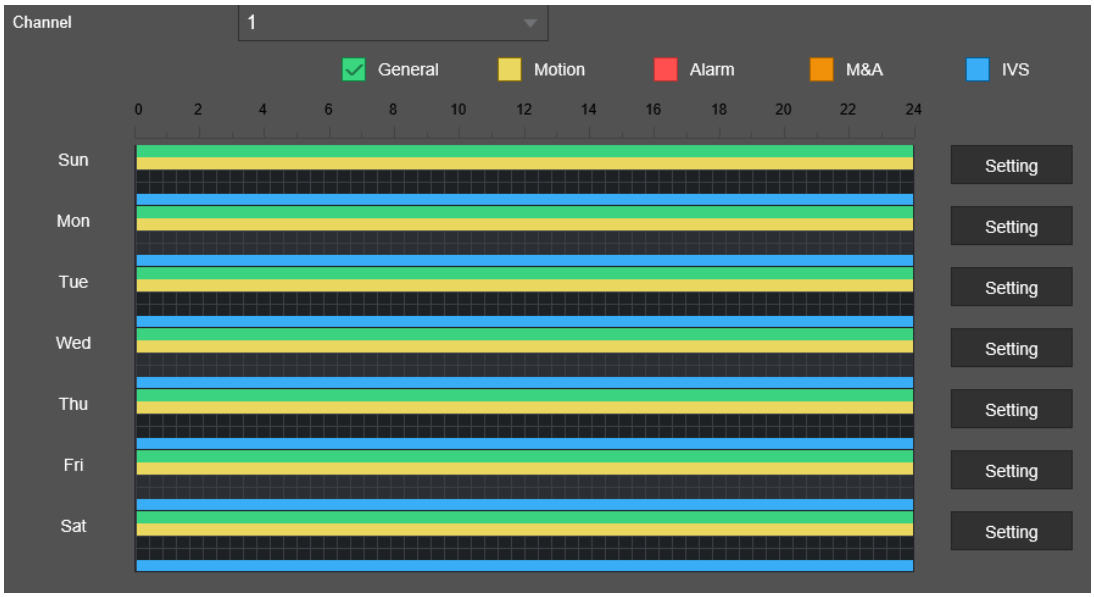
Record

The DVR is configured by default to record general (continuous recording), motion detection, and IVS record types on all channels 24/7, however, this section allows you to create a schedule for your recording types. For more information on how to setup a recording schedule, please refer to section, "*Recording Schedules Setup*". Click **Next** to continue.



Snapshot

The snapshot menu allows you to configure your snapshot settings for scheduled recordings. You can also use this screen to set up general, motion detection, IVS and other recording type schedules for snapshot events. For more information on how to setup a snapshot schedule, please refer to section, "*Recording Schedules Setup*". Click **OK** to continue.

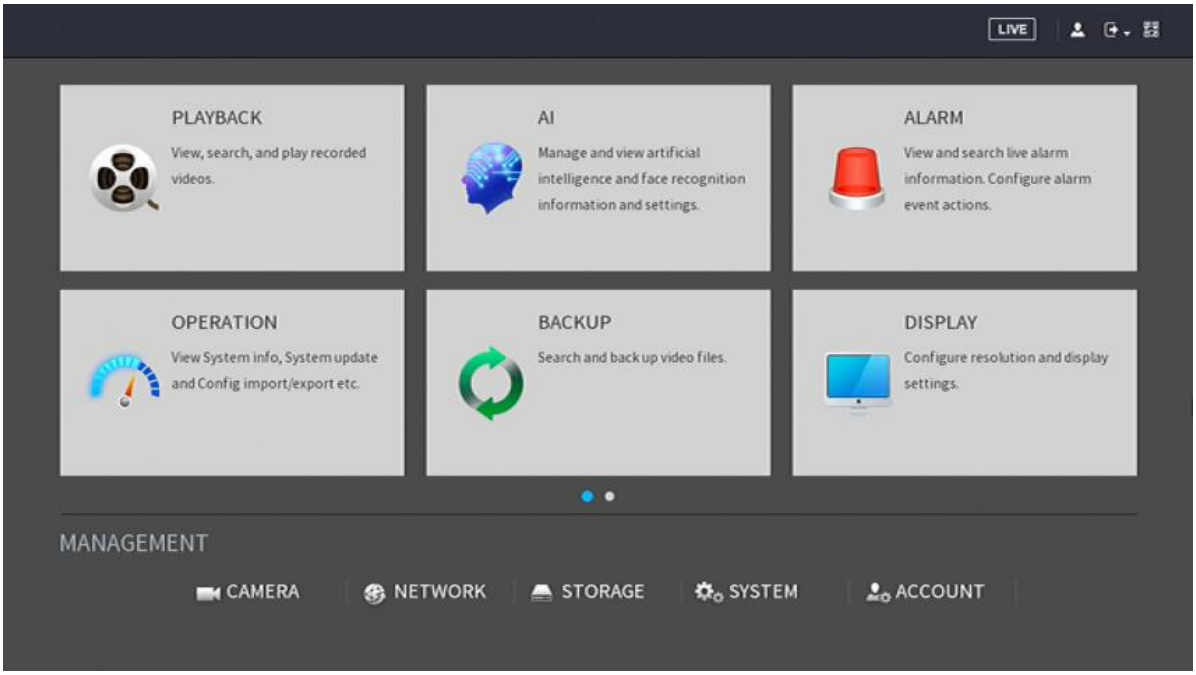


Once the setup process is finished and you have clicked the "**OK**" button, the system may automatically switch the output resolution if you are using an HDMI output connection. Click **OK** If you would like to switch the resolution.

Before following this guide to the next step, that covers the main menu, you will need to right-click on the video wall to display the features menu. In the features menu, click "Main Menu" to access the main menu of the DVR. For more information on the settings in the features menu, please refer to the full user manual for your device at amcrest.com/support.

Main Menu overview

The screenshot below is the main menu screen for the Amcrest DVR local interface:



Below are short descriptions for each of the menu items on the main menu:

SEARCH: View general, motion, and AI event recordings.
ALARM: View and configure live alarm information and notifications.
AI: View, modify, configure, and search for AI events.
MAINTAIN: View system information, updates, configuration import/export settings, etc.
BACKUP: Search and backup video data via an external USB or flash drive.
DISPLAY: Configure resolution and display output settings.
AUDIO: Schedule, manage, and import audio announcements and files.

Management

CAMERA: Review or edit settings for each camera, including video settings (e.g. quality, bit rate, color, etc.).
NETWORK: Review or edit network settings for the DVR (e.g. email, DDNS, UPnP, etc.)
STORAGE: Review or edit storage parameters and settings. (e.g. motion detection, alarm, etc.). Set HDD detection as well as setup FTP settings.
SYSTEM: Review or edit system parameters or configuration, including system maintenance, factory resets and firmware upgrades.
ACCOUNT: Review admin accounts and add new users to device. (e.g. ONVIF users).

IVS, Motion Detection, and Recording Setup

This section will cover how to set up a recording schedule for your DVR. This is applicable to regular (24/7 recordings), motion detection, and IVS recordings. IVS stands for intelligent video system analytics and is the basis for all AI rules associated with your device. This section will also cover how to set up a recording schedule, email alerts with snapshots, etc.

Note: **The DVR can only be set up to save recordings or IVS information if a hard drive has already been installed**. **However, email alerts with snapshots can still work without a hard drive installed.**

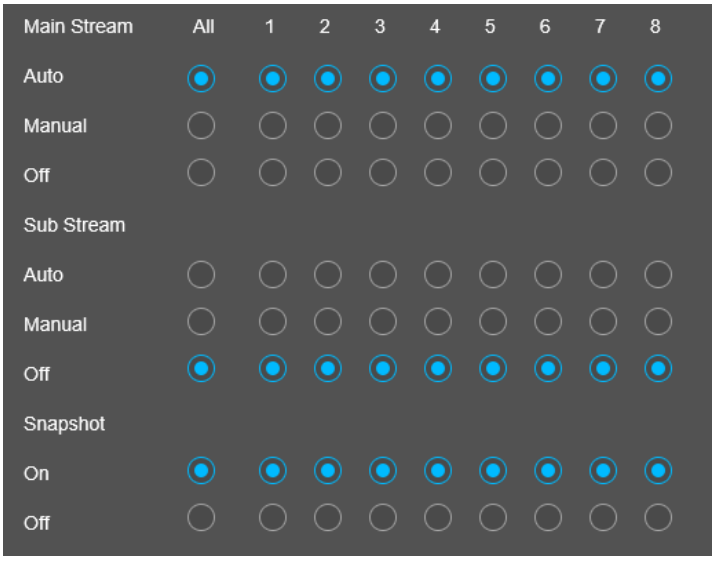
The following setup processes will be shown using the DVR's local interface. However, these same steps can also be done through the web interface on a computer. For more information on how to access your device from a web browser, please refer to section, *"Computer Access Setup".* Despite the difference in appearance, the settings pages have similar organizational structures.

Enabling Recording Options

This menu should be verified to ensure that all recording protocols are enabled. This menu details, per channel, which streams are enabled or disabled in the DVR. To access this menu, please refer to the information provided below.

1. On the main menu, click on **Storage**.

2. Click on **Record Mode**. The Record menu displays all active channels and streams being used for recording. If using snapshots, ensure the **Snapshot** radio button is enabled on each stream. To apply the settings to all channels, click on the **All** radio button.



3. Click on **Apply** to save the settings to your device.

Recording Schedules Setup

1. From the Main Menu, click on **STORAGE** in the **MANAGEMENT** section:

Make sure you are on the **SCHEDULE** > **RECORD** page. This is where you can configure recording schedules for specific recording types. To configure a snapshot schedule, click on the **Snapshot** tab. All events will be saved and accessible via the **Search** menu if a hard drive is installed, whereas snapshot events can be emailed. For more information on how to setup Email snapshots, please refer to section, *"Setting Up Email Alerts".* By default, **Regular** (24/7), **Motion** (Motion Detection) and **IVS** recording types will be activated for all days as indicated by the different colored bars available in this menu.



To choose a channel (or camera) for which to configure, click the number next to **Channel**, then select either a single channel or **All** if you would like the schedule to apply to all channels currently connected to your DVR:



By default, the DVR will have the schedule for each recording type to record 24/7. Also note, that the DVR uses military time from 00:00 to 24:00 instead of 12 a.m. to 12 a.m.
To edit a recording schedule, select a recording option from the colored boxes. Each recording option is color coded: **Green:** General (24/7 recording), **Yellow**: Motion (Motion Detection), **Red:** (Alarm), **Orange:** M&A (a combination of motion detection and alarm recordings), and **IVS**. Select which recording type you would like to modify and then use your mouse to adjust the time via the time bar for your specific recording type.



Click the eraser icon to the right of any day if you would like to clear the entire row of blocks.

To add or remove motion detection blocks to the grid, mark the yellow checkbox next to **Motion**, then click individual cells or click-and-drag for multiple blocks:

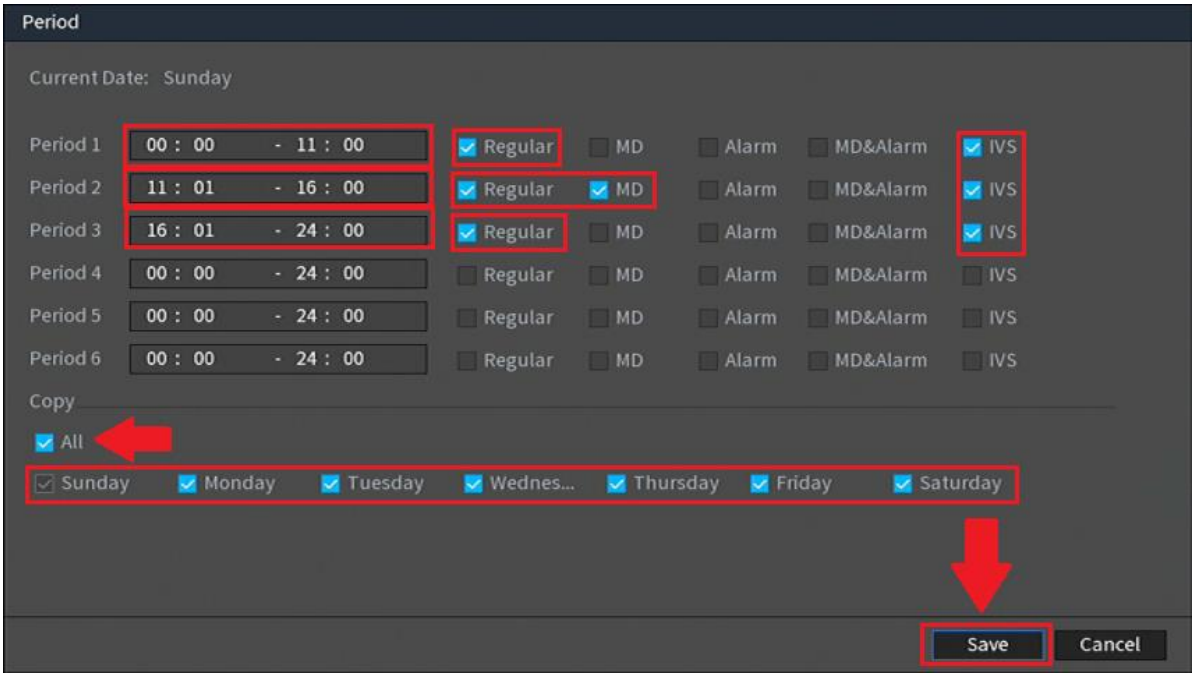


To the left of each day, there are small boxes which can be marked to 'link' days together. This is useful if you want to save time by instantly making changes to multiple days simultaneously.
In the below example, Sunday and Monday are linked, so any blocks that are added or removed for Sunday will automatically and immediately reflect the same for Monday and vice versa:



The same concept applies when configuring other recording schedule types such as IVS.

Another way to configure recording schedules is by manually setting time periods. Click the “gear" icon to the far right of any day to open the **Period** page:



Here, the periods (Periods 1 - 6) will be in displayed in chronological order. You can set either **General**, **Motion, Alarm, M&A or IVS**, checkboxes. You can also copy the period settings over to other days by checking them individually or checking **All**. Make sure to click **OK** when finished.

Now that you have finished configuring the recording schedules, you may need to copy these settings over to other channels (or cameras). By default, A1 (Channel 1) will be selected unless you immediately selected **All** in the channel window previously. Please note, you can copy these settings directly over to another channel by clicking **Copy to.**



In the **Copy to** window, you can select individual channels for any cameras you have added to the DVR or select **All.** Click **OK** when finished.

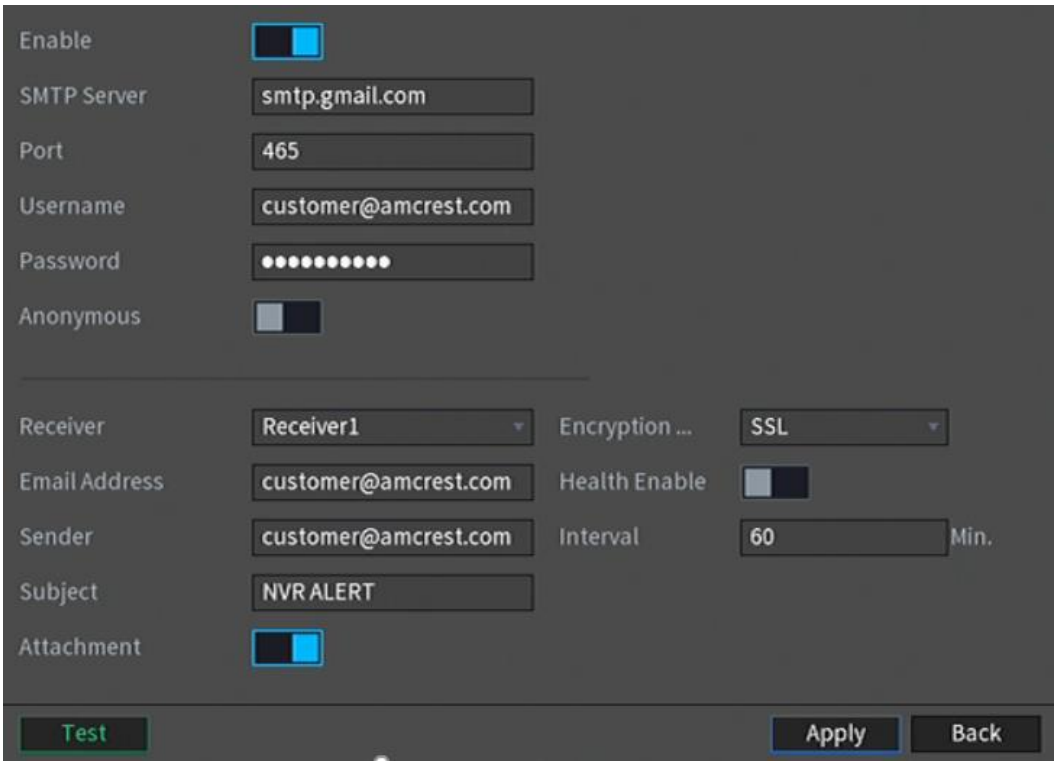
Click **Apply** in the **Record** menu to save your recording schedule.

Setting Up Email Alerts

Setting up Email alerts will allow you to receive snapshots of events via your email. These events can be motion detection, IVS, Face Detection, or other snapshots of events captured by your device. Each event type must have the "**Send Email**" option enabled to allow the feature to send notifications to your email. To setup email alerts, please refer to the information provided below.

1. On the Main Menu, click on **Network** located in the **Management** section.

2. Select the **Email** option located in the Network menu.
3. Enter the SMTP information for your email. In this example, we will be using Gmail, however other email services can also be used. If using Gmail, type in "**smtp.gmail.com**"
4. Enter a port number. This is based on the type of encryption used by your email service. In this example we will be using port **465**, which uses an **SSL** encryption type. If using **TLS**, the port number will be **587**.
5. Enter the email address you will be using in the **Username** field.
6. Enter the password for the email address in the **Password** field.
7. In the **Email Address** field, enter your email address. Enter that same email address in the **Sender** field.
8. Update the subject line for your alerts in the **Subject** field. The default subject line will be DVR Alert however this can be changed to anything you would like to use.
9. Make sure the **Attachment** toggle switch is enabled to enable snapshots to be sent.



10. Click **Apply** and **Test** to verify connectivity.

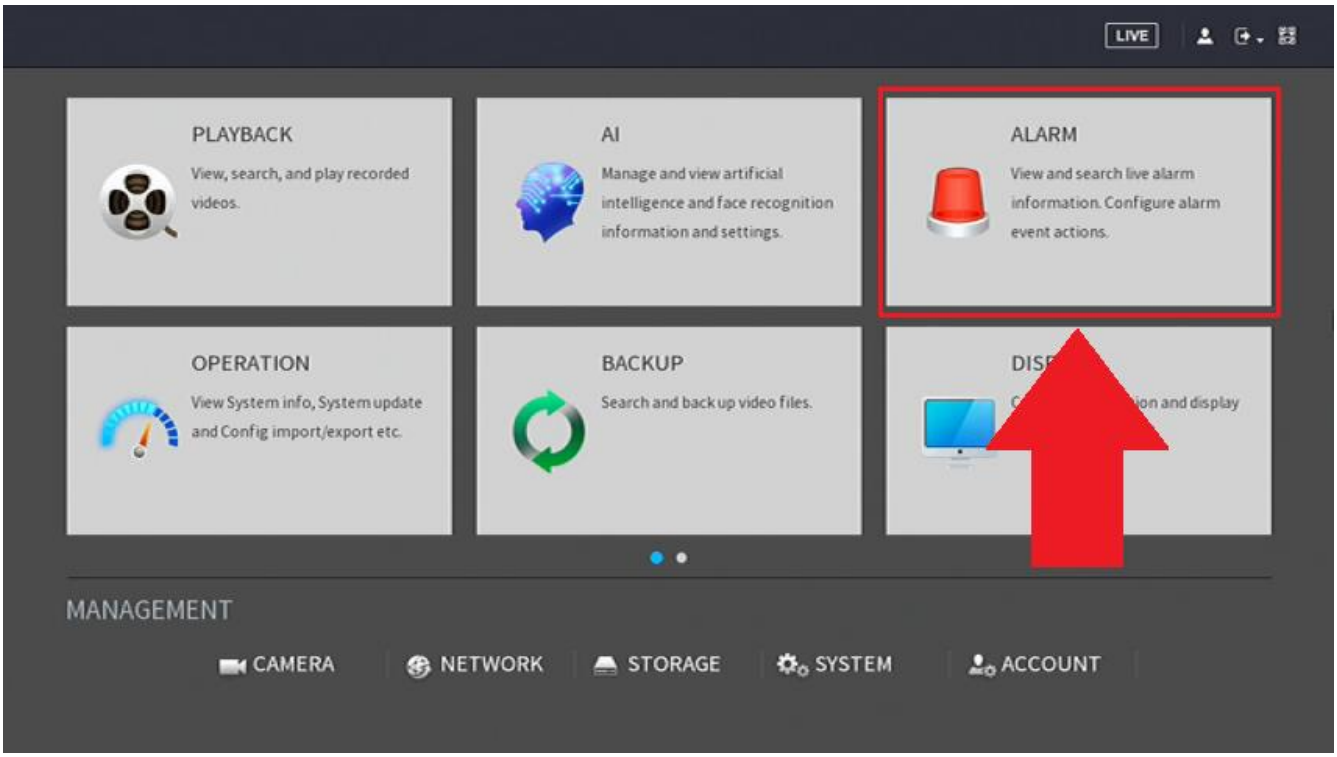
11. Once the test has been successfully sent, check your email to see if you received the email test.

Note: Certain email services, such as Gmail, may require you to allow less secure apps to be enabled to receive a notification. For more information on how to setup email alerts, please visit amcrest.com/support

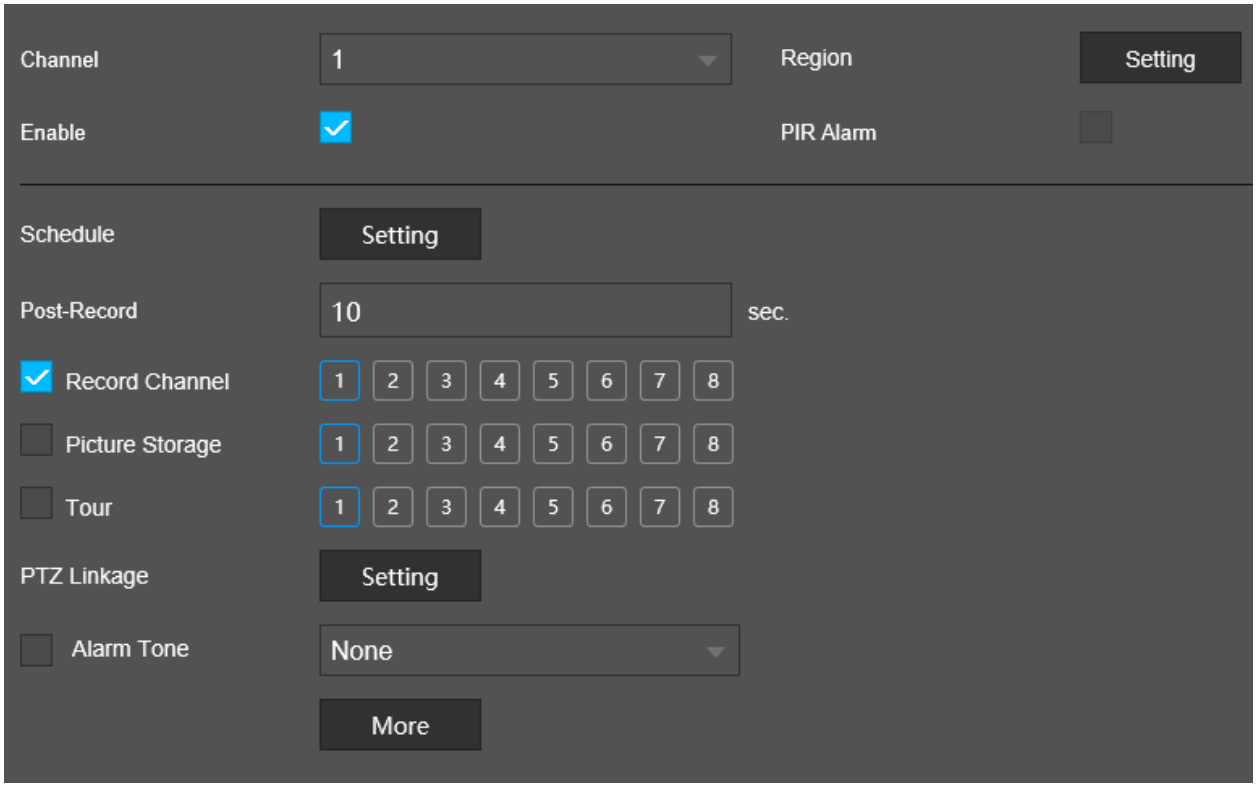
Setting Up Motion Alerts

Motion detection events are different from IVS or other AI events as they do not use AI algorithms to function and can be used in conjunction with IVS or other rules as they are separate features in the system. For more information on configuring motion detection, please refer to the information below.

1. On the Main menu, click on **Alarm**



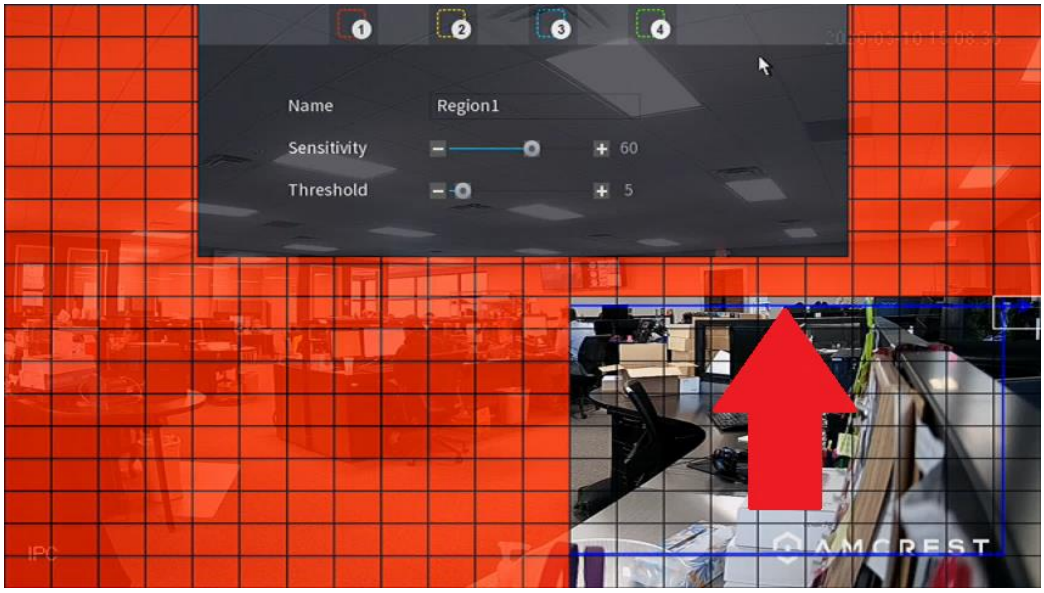
2. Select **Video Detection** to access the **Video Detection** menu. This is the main configuration page for your motion detection settings. Select which channel you are configuring from the Channel drop down menu.



3. Ensure the toggle switch for motion detection is enabled and adjust any motion detection settings or motion schedules accordingly.

Adjusting Region Settings

You can set up “regions" for motion detection using the region grid on your DVR. By default, the entire area of view for your cameras will be highlighted with red blocks indicating that all areas of the live view screen will have active motion detection. However, to prevent false events from occurring, you can use your mouse to block out certain areas.



If you hover your mouse pointer over the top-center of this window, another small window will appear with options to configure **sensitivity** and **threshold** settings as well as to choose from up to **four regions**.

Sensitivity - is the measure of how many pixels on the screen need to change before being considered motion. **0** is the lowest value and **100** is the highest.

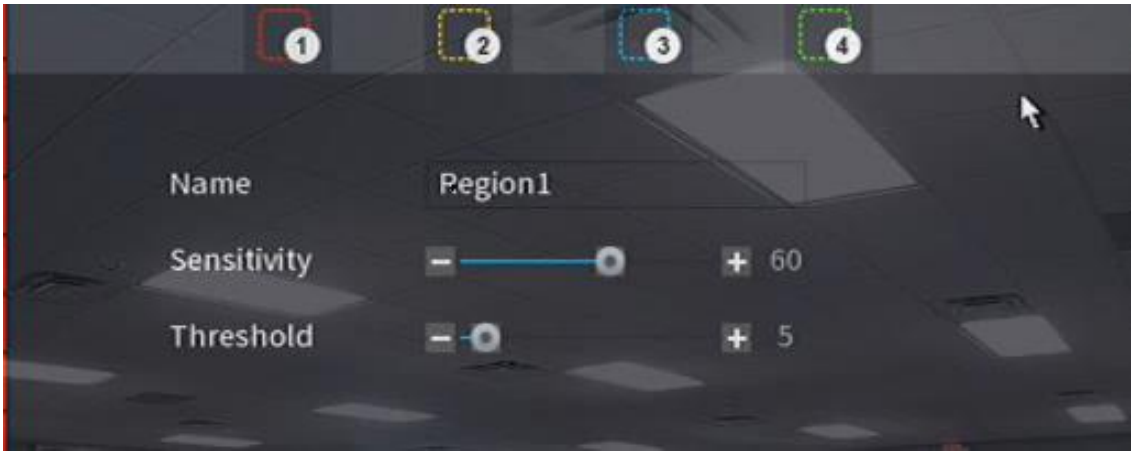
In plain English: Sensitivity is the difference between a squirrel running up a tree, versus a big dog running up to and barking at that tree. A squirrel would trigger motion detection at a *higher* sensitivity because it takes *less change or movement to qualify as motion*. But the dog would trigger motion detection at a *lower* sensitivity because it takes *more change or movement to qualify as motion*.

Threshold - is the degree of movement that needs to occur before the motion is defined as a motion event and is triggered. **0** is the lowest value and **100** is the highest.

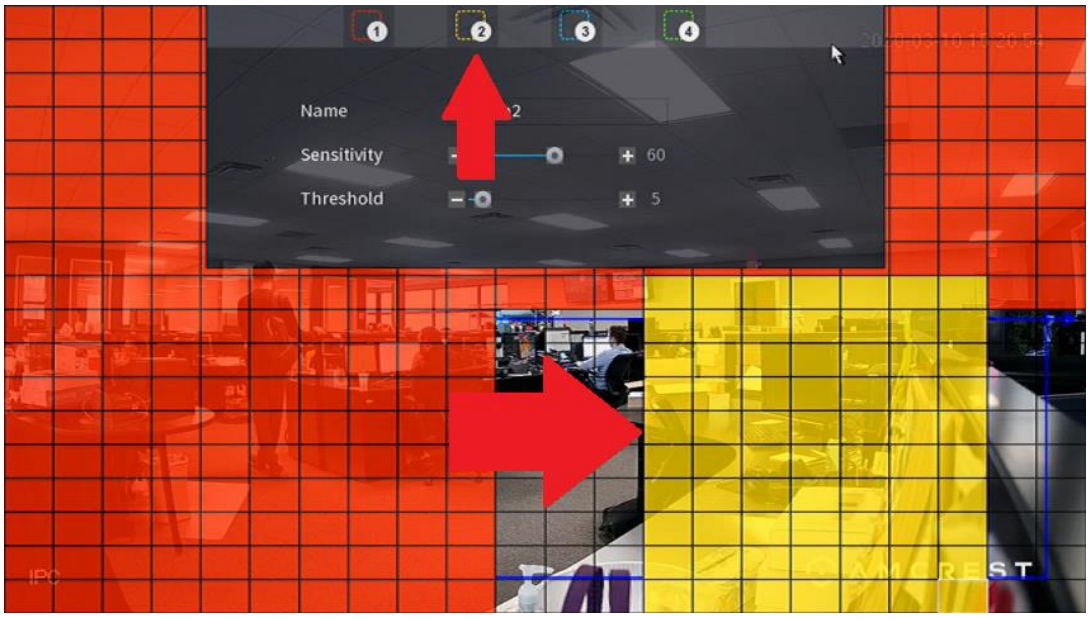
In plain English: Threshold is the difference between a car driving quickly by on a street and a car driving into the field of view, slowing down, and turning into a driveway. The car driving past *would not* trigger motion detection based on a certain threshold setting, but the parking car *would* trigger motion detection with that *same* threshold setting. The *higher* the threshold, the *more time* motion needs to occur before motion detection is triggered. The *lower* the threshold, the *less time* motion needs to occur before motion detection is triggered.

If sensitivity is set to 100 and threshold to 0, motion detection will be triggered by almost any change in the field of view, large or small. But if sensitivity is set to 0 and threshold to 100, motion detection will be extremely difficult to trigger.

The **four regions** are all different colors, so you can customize the field of view of any camera to your specific preferences.



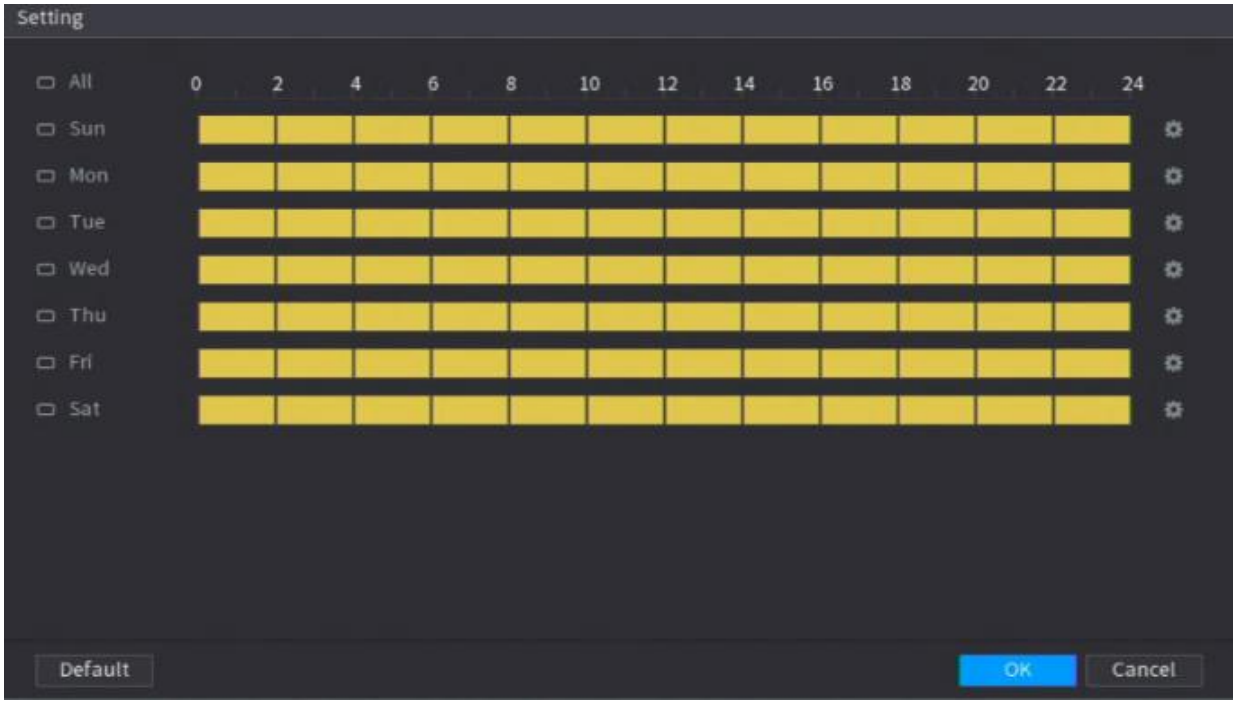
To choose another region, hover your mouse pointer near the top center of the region window, and a small window will appear. Keep your mouse pointer inside that small window and select either region 2, 3, or 4:



You will be able to click individual blocks or click-and-drag an area with the new selected color to highlight portions of the screen. Each new region (or color) has its own unique sensitivity and threshold settings. The different regions/colors can also overlap one another. To exit the regions setting screen, right click your mouse on the interface.

Adjusting Motion Detection Schedules

Motion detection schedules work like the schedules outlined in section: "*Setting Up Recording Schedules."* To adjust a motion detection schedule, click on **Period** and use your mouse to adjust the timeline. Click on the settings (gear) icon to set multiple periods. Click on **OK** to save your schedule.



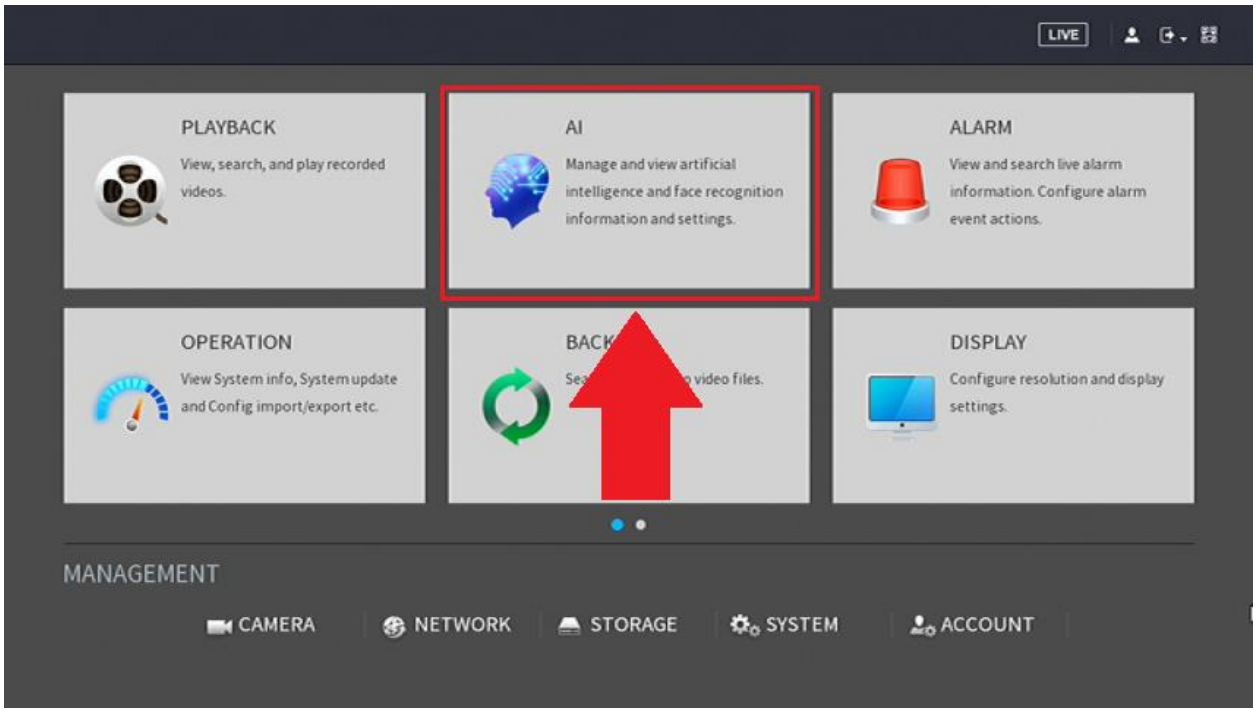
3. Click on **Apply** to save the settings.
Once you have set up your settings for one channel, you can copy them to other channels in the system. If you did not select **All** after clicking **Channel** as previously described, click **Copy to**, to select channels to copy the motion schedule to, then click **OK**.

Click **Apply** to complete the motion detection setup process.

Setting Up AI Events

This section will cover basic setup of the AI events provided by the DVR. The features listed in the AI menu include **Face Detection, Face Recognition, IVS, and SMD**. The AI menu allows you to modify AI features as well as store and access AI events via a **Smart Search**.

Certain AI features such as, face recognition, or other related features may only be available to view via the AI Smart Search menu. To begin setting up AI events, click on the **AI** option available in the main menu.

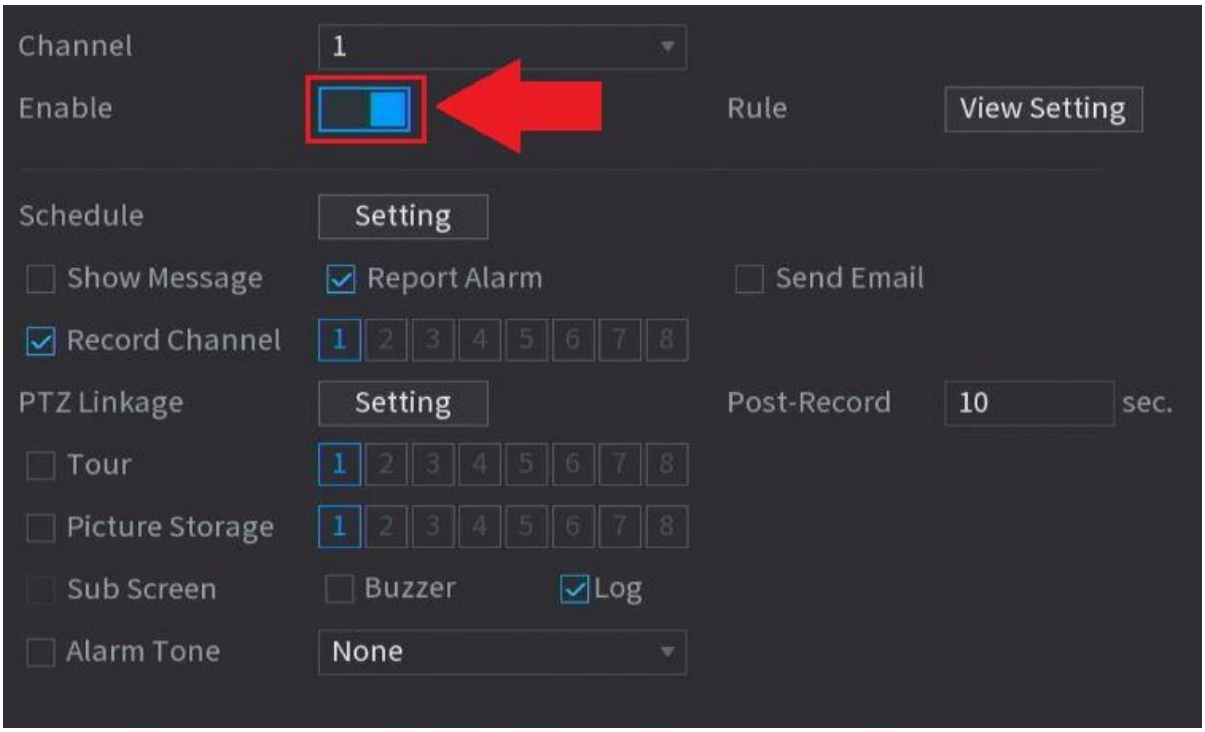


Note: AI features such as IVS, SMD, etc. cannot be used simultaneously with other AI features.

Setting Up Face Detection

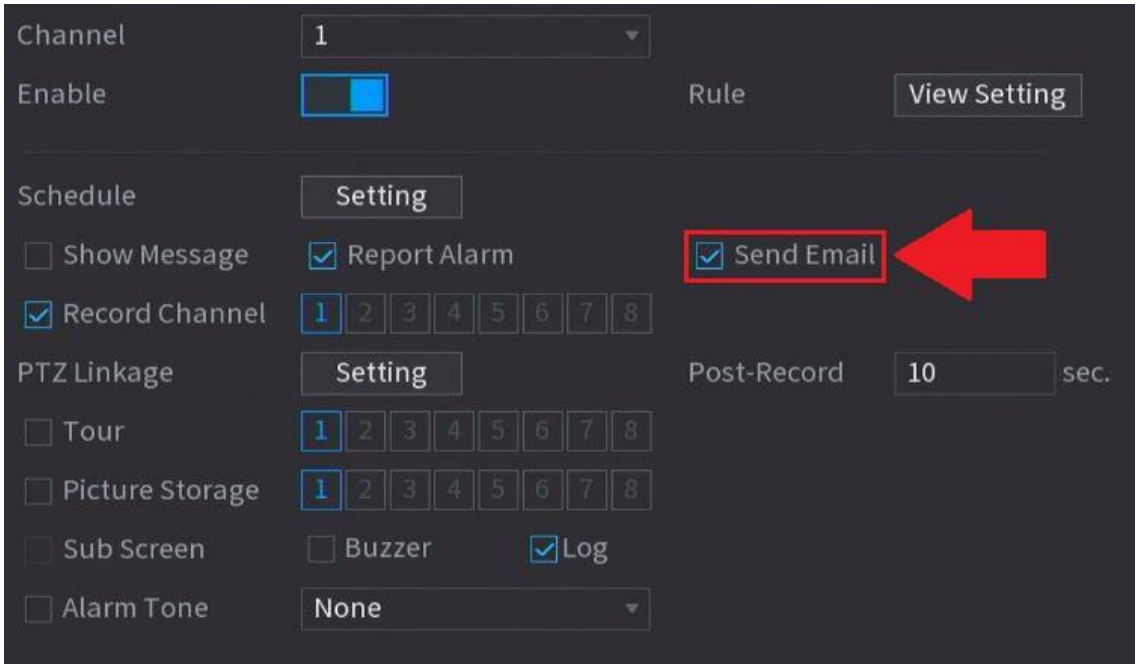
Face detection is used to allow your device to detect and record face image events. For more information on setting up face detection, please refer to the information provided below.

1. Click on the **Face Detection** menu located in the **Parameters** section and select which channel to configure from the Channel dropdown menu. Click the **Enable** switch.



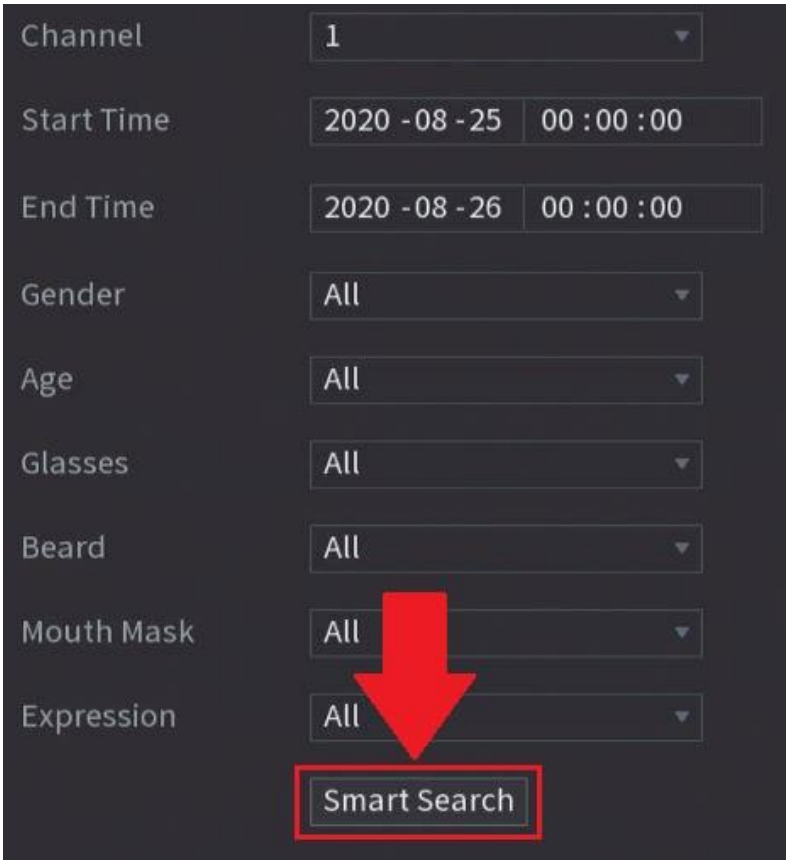
2. It is best to leave the **Rule** settings as default, however, they can be adjusted by clicking on the **View Setting** button. Use your mouse to adjust the minimum (Min) and maximum (Max) size of the face detection area.

3. When triggered, the face detection event will be retained in the face detection smart search menu, or snapshots of the event can be emailed to you. To have a snapshot of the event emailed to you, setup email alerts as described in section: *Setting Up Email Alerts* and click on the **"Send Email"** checkbox. Click **Apply** to save the setting.



Viewing Face Detection Data

All face detection data retained by the system can be accessed via the **Face Detection** option located in the **Smart Search** menu. Enter a start and end date and time for the event you would like to view in the Smart Search interface and click **Smart Search**.



A display of all face detection data will be displayed along with facial attributes. Click on the event you would like to view, and a clip of the event will be displayed in the built-in player. Click on the play icon to view the event.

Using Face Recognition

Face recognition is used in conjunction with face detection to locate and determine facial similarities detected by the system. Images are registered in a face library, by the user, and accessed via a face recognition smart search tool that is built into the DVR.

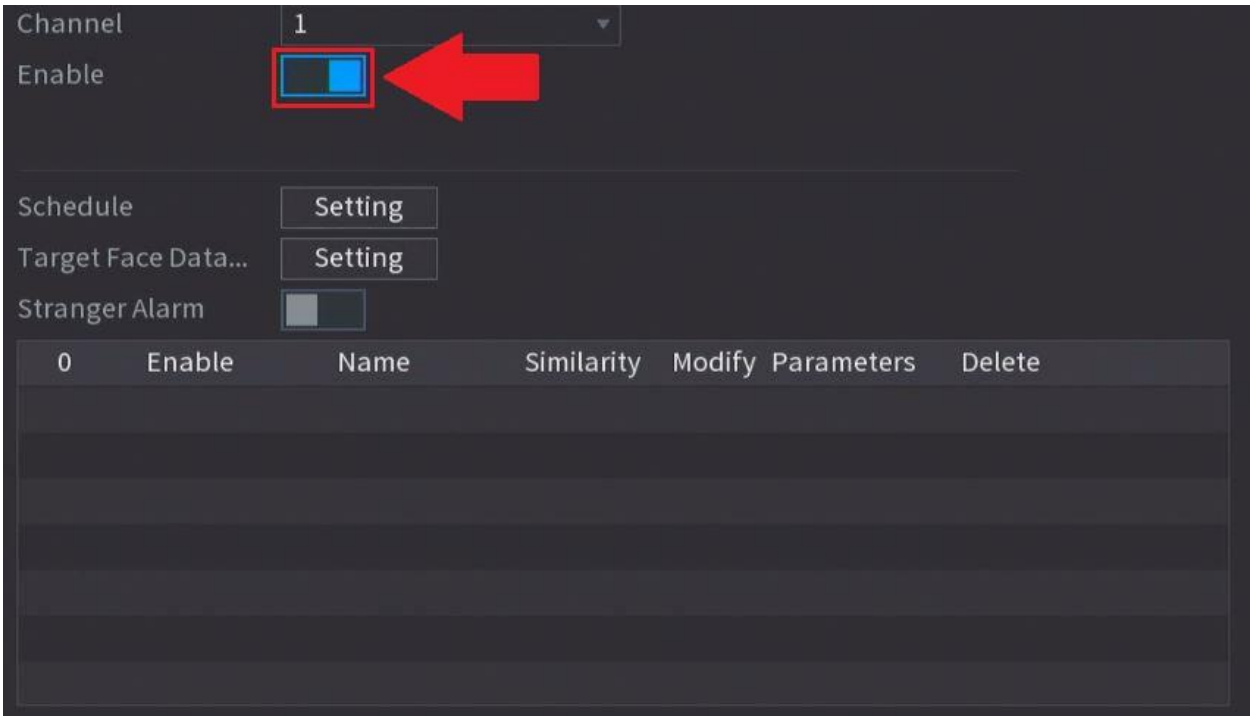
Note: A USB flash drive with applicable facial images (in jpeg format) should be inserted into a USB port on the DVR if you are importing images locally.

There are 2 methods of face recognition, common mode, and stranger mode. Common mode allows the device to use the images registered in the face library as a reference to recognize faces. Stranger mode will alert the system once an unrecognized face is detected.

Note: Common mode can only be setup locally on the DVR or by using Internet Explorer on a PC. If using Face Recognition on other browsers, such as Google Chrome or Firefox, please use Stranger Mode.

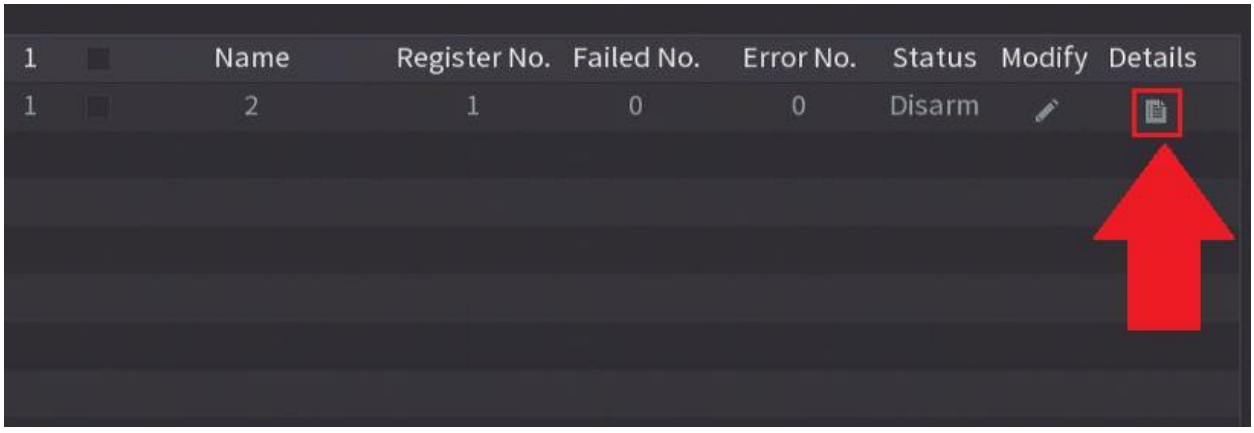
How to Use Common Mode

1. Click on the **Face Recognition** option in the **Parameters** menu and verify the correct channel (camera) is being used. Click on the **Enable** toggle switch to enable the feature. Click on **Apply**.



2. Click on the **Database** option located in the AI menu then click on **Add** to begin registering images to a face library. **A face library must be registered for this feature to function properly.** Enter a name for your face library and click **OK.**

The library will now be saved to the database. Click on the **Details** section to begin adding images into the face library.



If you have a single image to add click **Register ID**, if you have multiple images to add click on **Batch register**. Follow the on-screen prompts to add the images into the library. Once the images have been successfully modeled into the database right click on the interface to exit.

4. Navigate back to the **Face Recognition** menu in the **Parameters** section and click on the **Setting** option in the **Target Face Database** field. Select the face library you just created and click **OK** to insert the library of registered images into the interface.



Note: Enable **Stranger Alarm** to allow the system to alert once an unrecognized face is detected. For more information on stranger alarm and how to use face recognition, please visit amcrest.com/support

5. Click **Apply** to save the face recognition settings to the DVR.

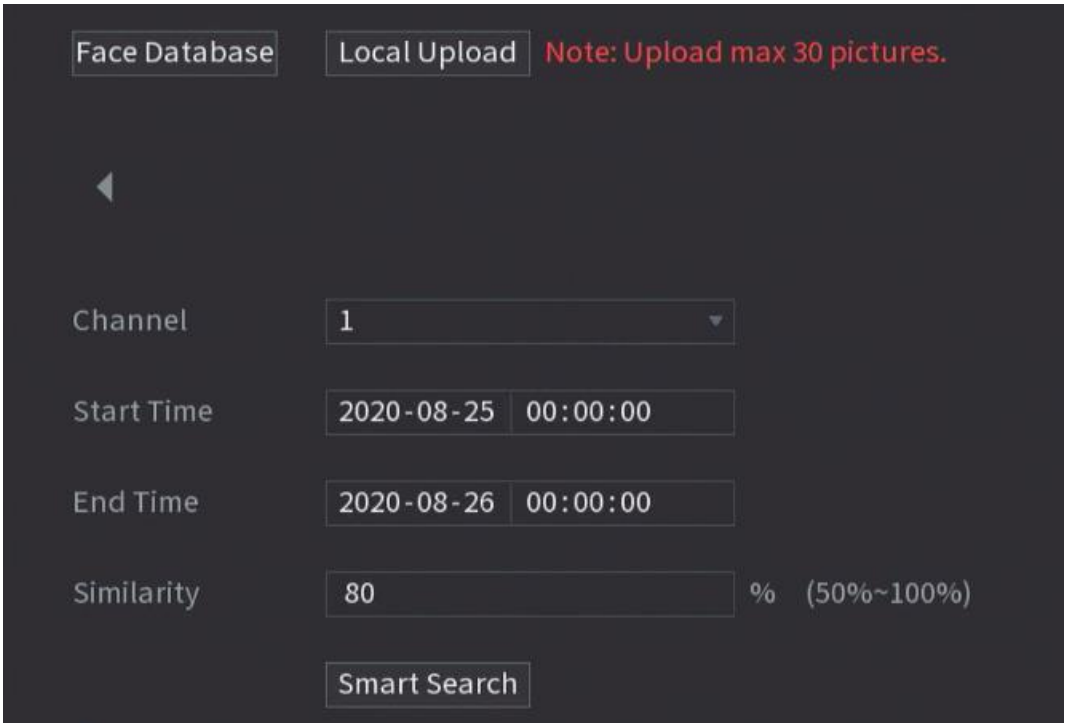
Viewing Face Recognition Data

All face recognition data retained by the system can be accessed via the **Face Recognition** option located in the **Smart Search** menu. A search by attributes or a search by picture can be performed. Searching by attributes will load all face recognition data found in the system whereas searching by a picture will filter and display only the faces chosen by the user.

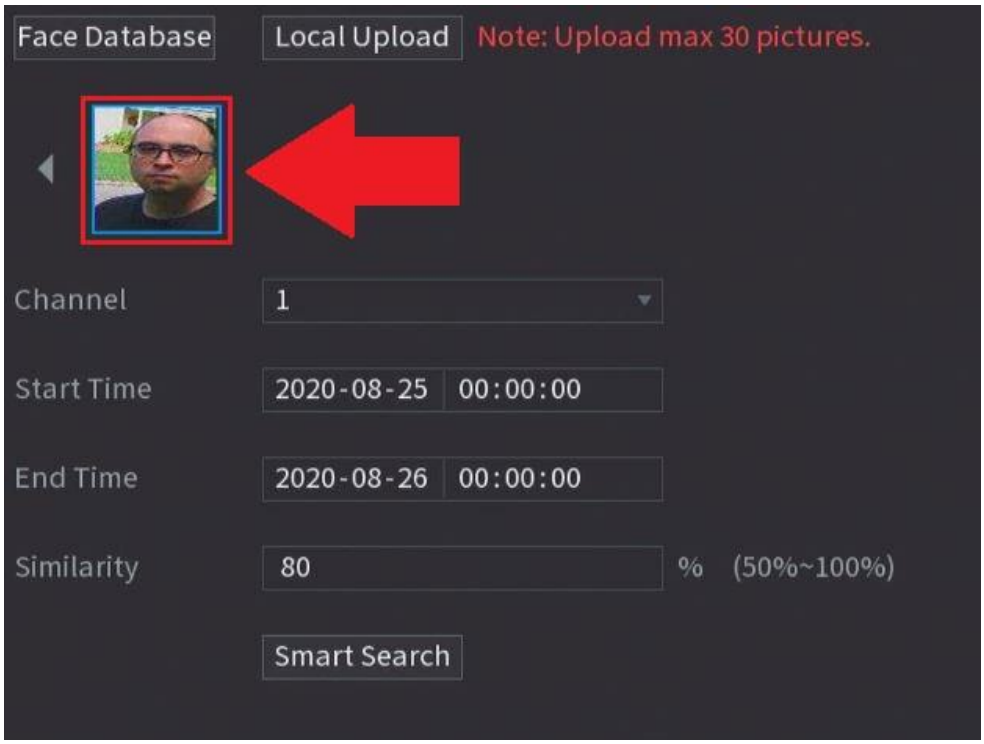
To search by attributes, enter a start and end time of the event in the interface and then click **Smart Search**. The interface will display all face recognition data. To view the event, click on the event you would like to view then click the play button in the interface.



To view specific face recognition data by image, click on the **Search by Picture** tab located in the **Face Recognition** interface.



If searchable images are already uploaded into a face library click on **Face Library** and select an image from the interface, then click **OK** to begin a search. If you would like to add images locally click **Local Upload** and follow the on-screen prompts to upload images. A USB flash drive with applicable images (in jpeg format) can be used to upload images to the DVR. Once an image has been loaded, enter a start and end time of the event, and click **Smart Search.**

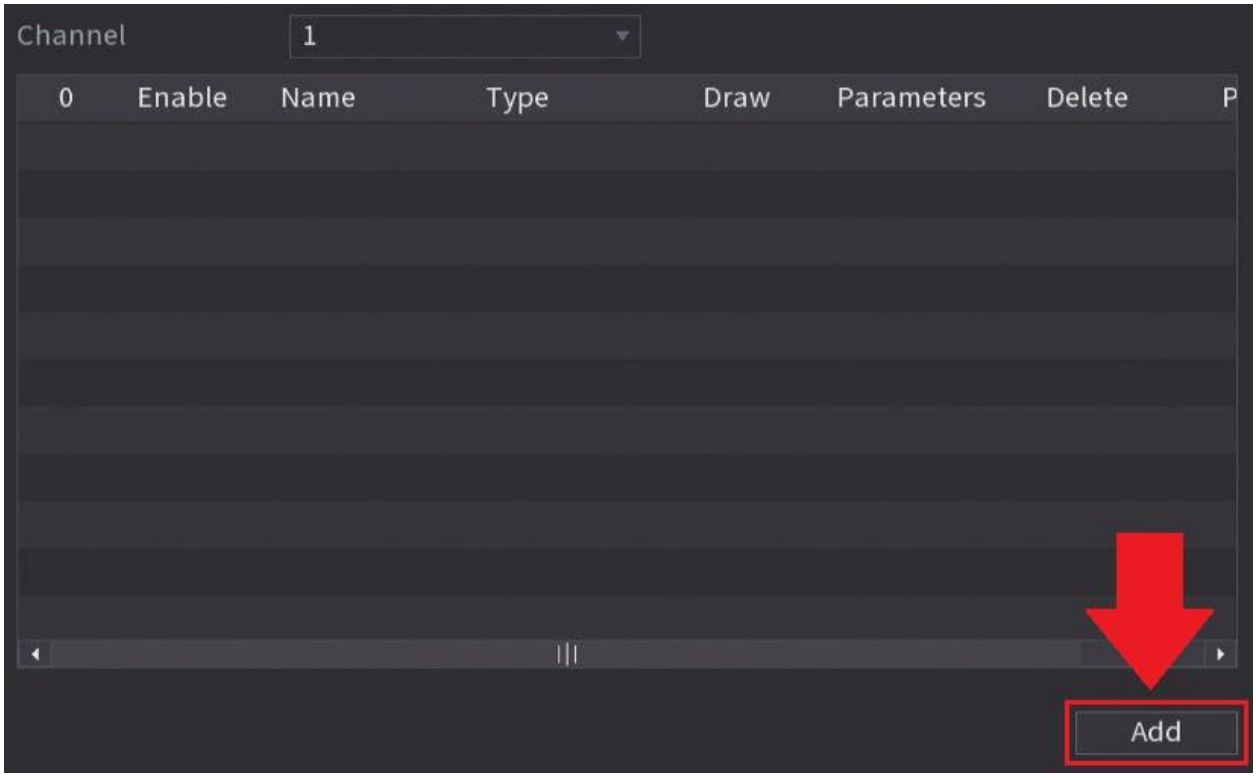


The system will display all face recognition data based on the image selected. All face recognition data can be backed up locally using a USB flash drive.

Setting Up an IVS Rule

IVS stands for intelligent video system analytics which are the basis of all AI rules associated with your device. The DVR currently has 2 built-in IVS features available (Tripwire and Intrusion) For more information on how to setup IVS rules on the DVR, please refer to the information below.

1. Click on the **IVS** option located in the **Parameters** menu and verify the correct channel is being used. Click **Add** to add an IVS rule.

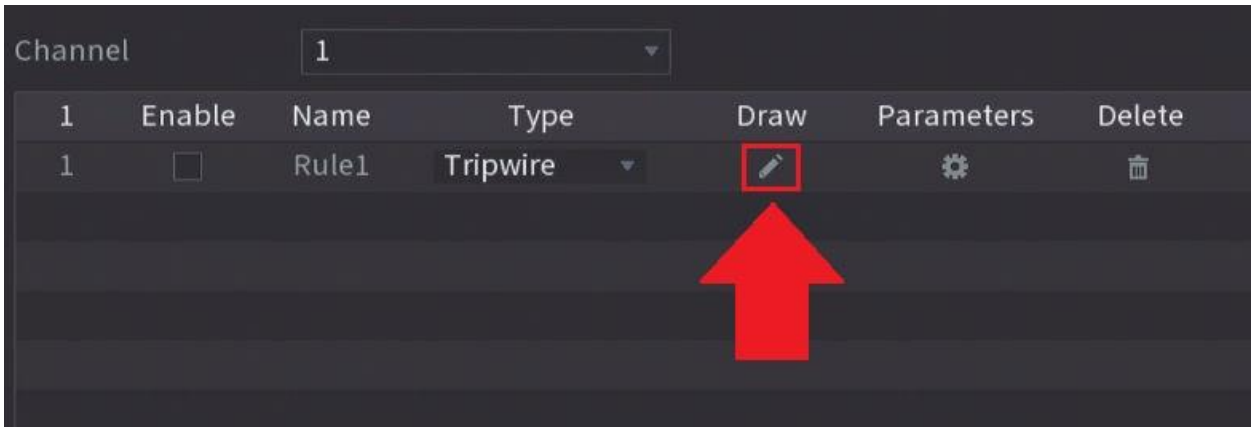


The DVR has two IVS features, tripwire, and intrusion:

Tripwire: Allows the device to trigger an event if an object, such as a human or vehicle, crosses a set tripwire line.
Intrusion: Allows the device to trigger an event if an object, such as a human or vehicle, appears or crosses a set intrusion area.

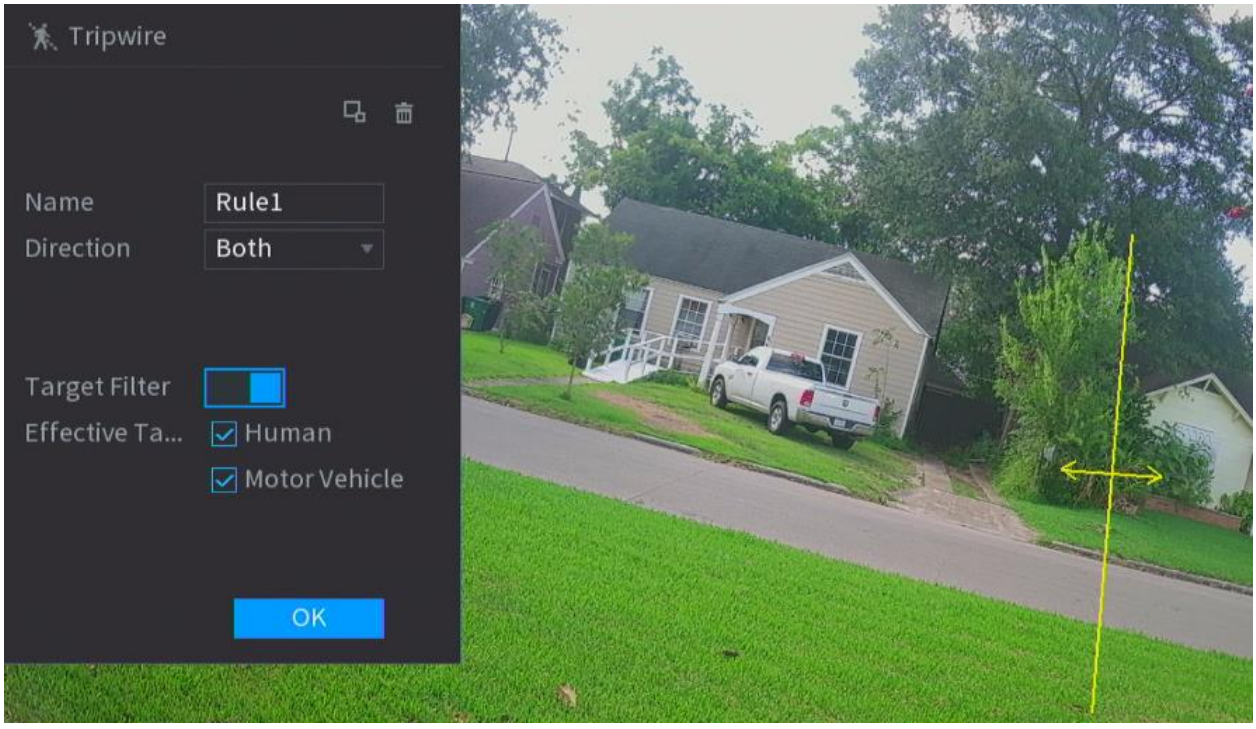
For more information about the AI features available on your device, please visit:
https://amcrest.com/support

2. To configure an IVS rule, click on the **Type** dropdown menu to select an available IVS rule. Once a rule is selected, click on the **Draw** (pencil) icon, to begin configuring the rule.



3. Use your mouse to draw an area or line on the interface. Click on the interface and use your mouse to draw an area or line, click your mouse on the interface when done, then right click to set the area or line to the system.

If you would like to add a name for the rule, enter a name in the **Name** box. The **Direction** drop down menu allows you to choose a direction in which the rule will be triggered. Object filters (Human and Motor Vehicle) can be enabled for accuracy. Click **OK**.



The Target Filter option is used to set a minimum or maximum detection area. It is recommended to leave this as default; however, it can be modified. Use the Clear (trash can) icon to remove a drawn area or line. The **Target Filter** toggle switch enables object filtering options that allow you the ability to determine if a human or vehicle has entered the area. If **Human** is chosen, the rule will only be triggered if a human figure is detected. If **Vehicle** is chosen, the rule will only be triggered if a vehicle is detected by the system. Both object filtering options can be used simultaneously if needed.

4. If you would like to add multiple rules to the device, click on **Add** and repeat the IVS setup process for the rule. Click **Apply** once all IVS rules are set.

Use the **Parameters** (gear) icon to apply any additional settings to an IVS rule, such as enabling email snapshots, etc. To delete an IVS rule, click on the delete (trash can) icon.

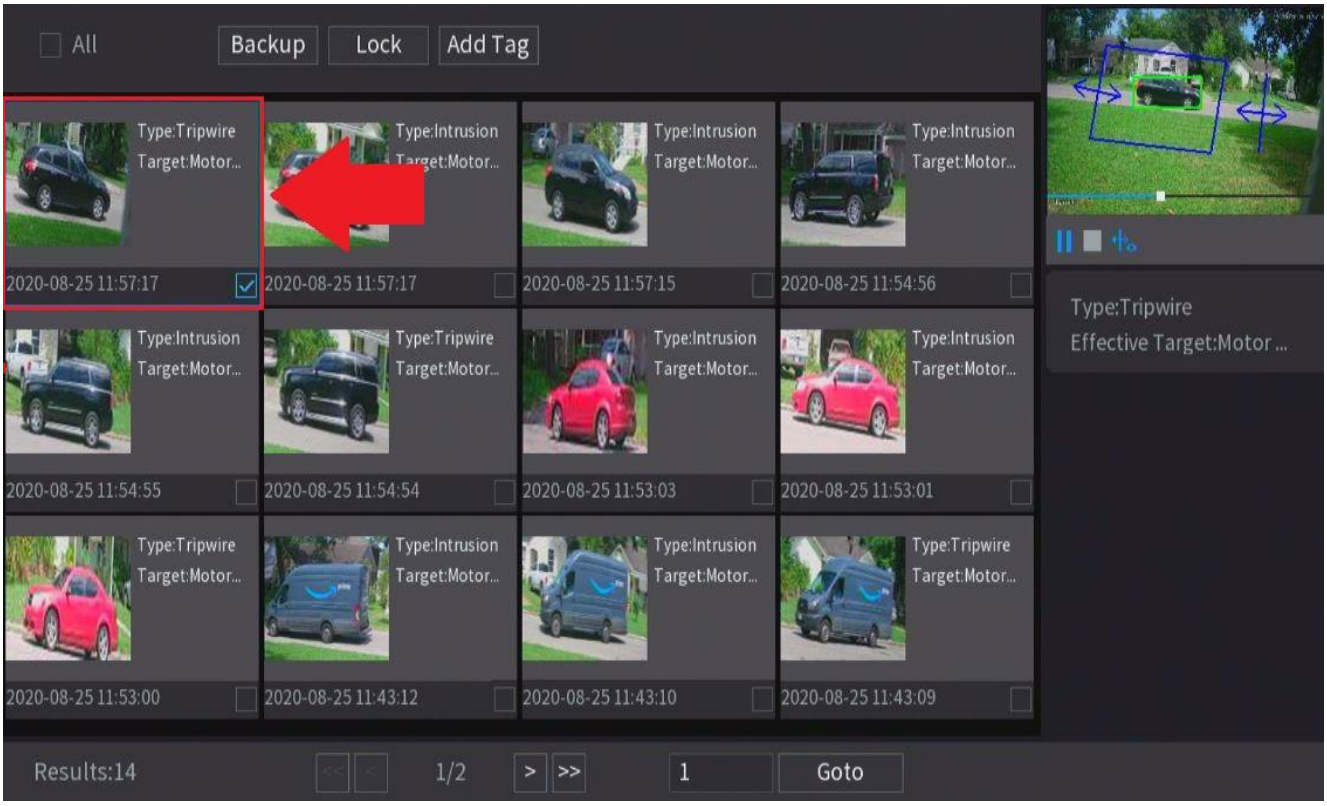


Note: Once an IVS rule is triggered the line or area visible on the live view screen will flash.

Viewing IVS Data

Any IVS data retained on the system can be viewed using the IVS Smart Search interface or via the playback menu if an IVS schedule is set in the system. To learn more about recordings schedules, please refer to section *"Setting Up Recording Schedules".*

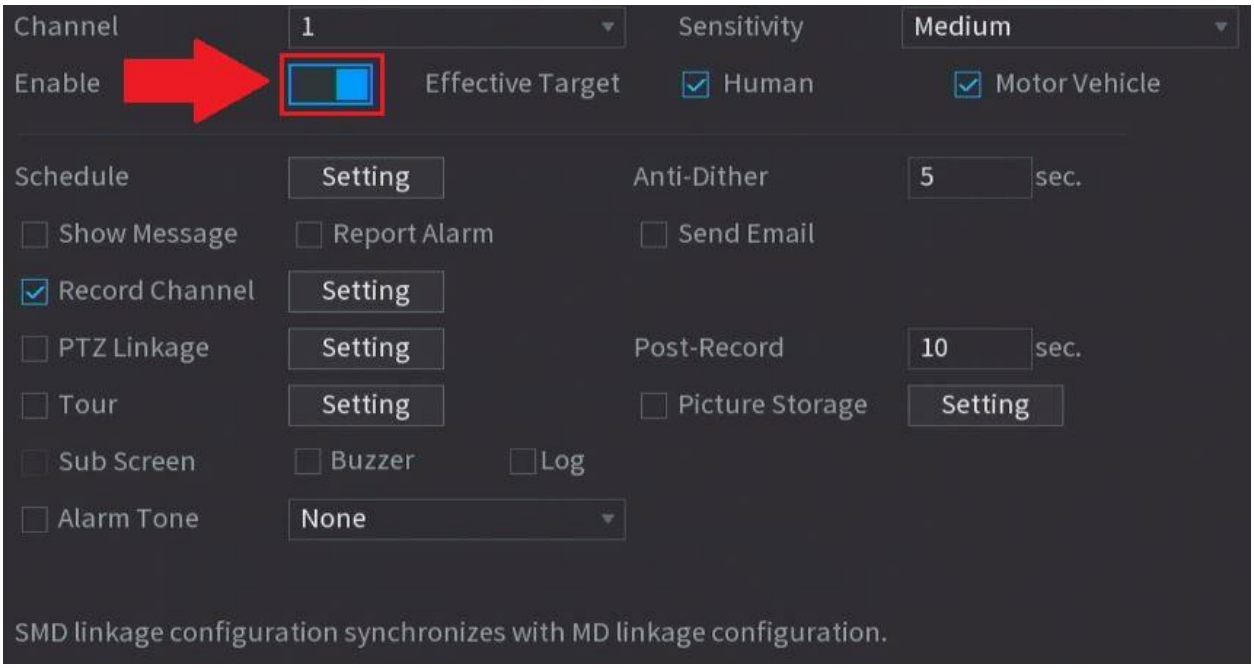
To view IVS data using the IVS smart search interface, click on the **IVS** option located in the Smart Search menu. Enter a start and end time of the event and click **Smart Search**. A layout of all IVS events captured by the device will be displayed. To view the event, select the event from the interface and click the play button.



Smart Motion Detection (SMD)

Smart Motion Detection (**SMD**) uses an advanced algorithm to differentiate human and vehicular shapes within a scene and send alarms only when a person or vehicle is detected. For more information on how to setup SMD please refer to the information provided below.

1. Click on the **SMD** option located in the **Parameters** menu and verify the correct channel is being used. Click on the **Enable** toggle switch to enable the feature.



2. Use the Sensitivity dropdown menu to select a motion sensitivity. Motion sensitivity can range from low, medium, and high. Select an effective target (object filter) option (Human, Vehicle). Both object filters can be enabled at the same time if needed.

3. Click **Apply** to save the SMD settings to the system.

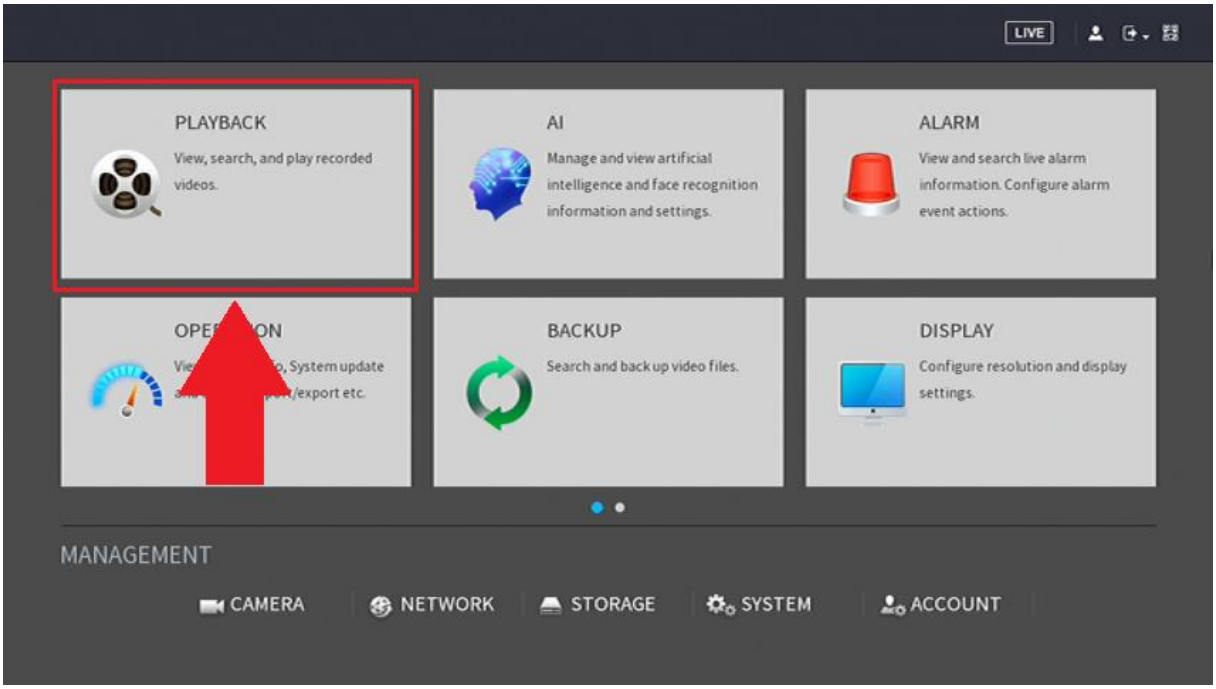
Viewing SMD Events

Any SMD data retained on the system can be viewed using the SMD Smart Search interface or via the playback menu if an SMD schedule is set in the system. To learn more about recording schedules, please refer to section *"Setting Up Recording Schedules".*

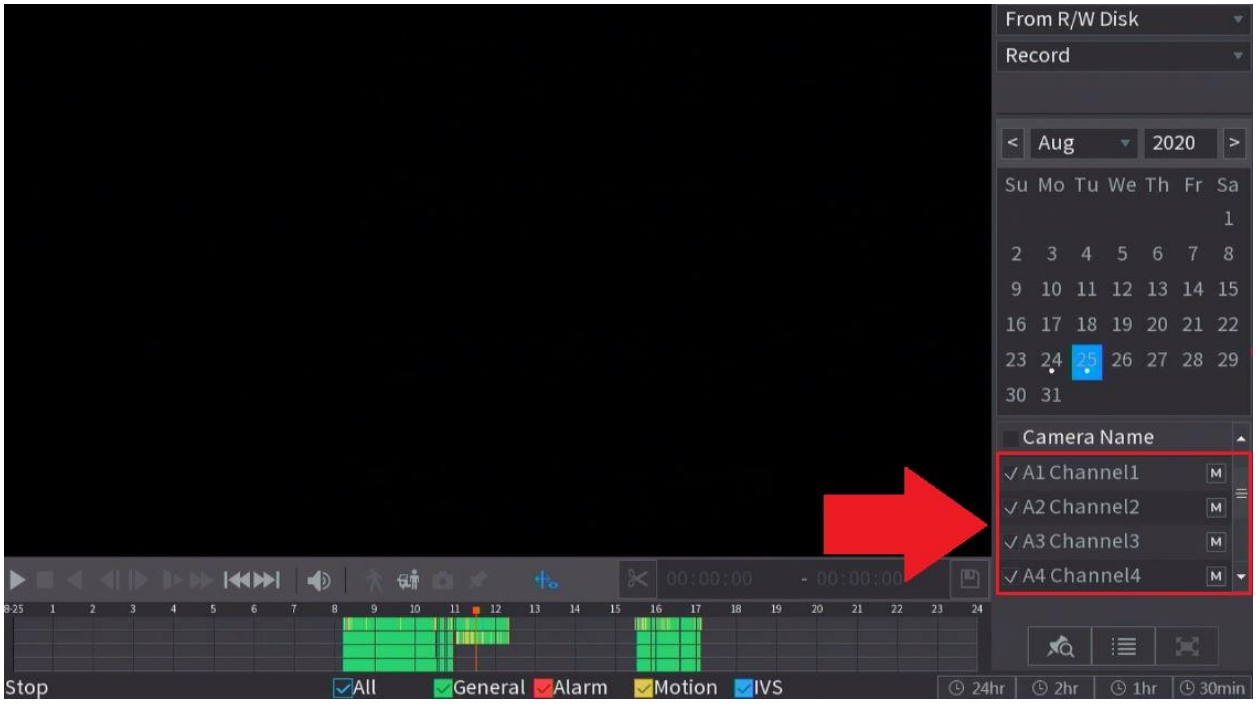
To view SMD data using the SMD smart search interface, click on the **SMD** option located in the Smart Search menu. Enter a start and end time of the event and click **Smart Search**. A layout of all SMD events will be displayed. To view the event, select the event from the interface and click the play button.

Accessing Playback

Motion detection and AI recordings can be accessed in the **Search** option on the main menu. **A hard drive must be installed to access and view recordings from this menu.** To access the playback interface, click on the **Search** option located in the main menu.



To view recordings from the search menu, select the camera you wish to view from the **Camera Name** section by clicking on a checkbox next to the device.

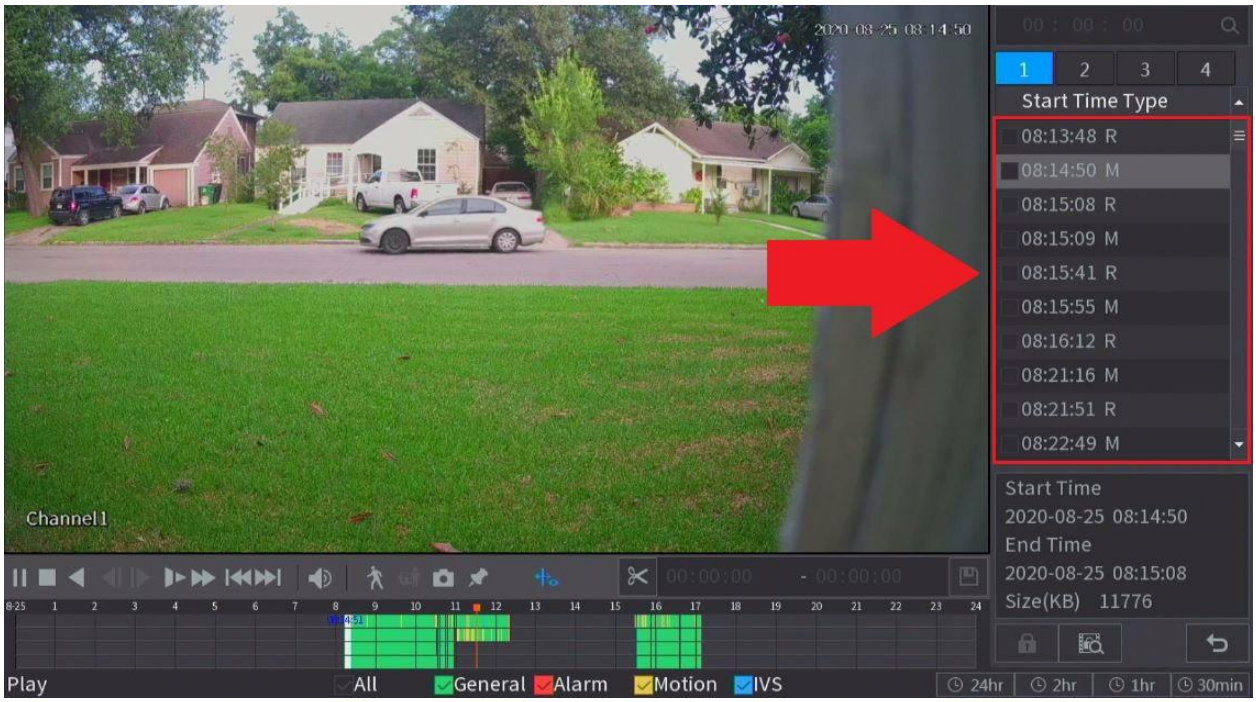


A timeline of the recordings will appear in the interface.

Click the **Play** button ( ) to play all recordings available on the timeline.

Additionally, all days with recordings available will be highlighted in the calendar portion of the interface with a dot.

To select specific days/months or years, use the navigation arrows provided in the calendar. A file list of recordings can also be shown by clicking on the **File List** icon ( ) located in the interface. Once clicked, a list of recordings will be shown based on the time the events were recorded.



To play a recording from the File List menu, double click on the file you want to view. The recording will automatically begin to play in the interface.

How To Upgrade System Firmware

Keeping the firmware on your DVR up to date is an important part of overall system health. For security purposes, it is highly recommended to upgrade the firmware on your device every time a new firmware is available. To locate the most up to date firmware for your DVR please visit https://amcrest.com/firmware-subscribe

Upgrading the firmware for your DVR can be done locally, using a USB flash drive, or via a web browser using the web user interface. For more information on how to access the web user interface please see section, *"Computer Access Setup".*

Upgrading the Firmware Locally

1. Insert a USB flash drive into your computer and go to https://amcrest.com/firmware-subscribe
2. Locate the most up to date firmware for your device and download it to your computer. Save the file to your USB flash drive.
3. Insert the USB flash drive into a USB port on your DVR.
4. On the DVR, go to **Maintain** and click on **Manager**.
5. Click on the **Update**.

6. Locate the firmware file that is on the USB flash drive and then click **OK**.
7. Allow the system to upgrade. The device may reset after the firmware update is complete.

Computer Access Setup

There are 2 ways to access your DVR from a computer, locally or remotely.
Local Access: Logging into your DVR's web interface from a computer or laptop connected to the same network as your DVR (home, office, etc.).
Remote Access: Logging into your DVR's web interface from a computer or laptop connected to a network outside of your home or business network (coffee shop, work computer, etc.)

Local access is preferred by those who do not want to make their DVR accessible from outside their network. *However, there are several options available for remote access that use standardized and secure network protocols including SSL, TLS, DDNS, etc.* Most other users require remote network access by way of their smartphones, tablets, laptops, or computers.

The following section will cover both means of access (local and remote). Keep in mind that any user can have *both* local *and* remote access simultaneously if they so choose.

The following must be considered before accessing the web user interface:

1. *You must access the DVR's web interface with its **IP address**.*
2. *You must install the Amcrest web **browser plugin** If using Internet Explorer (Recommended)*
3. *You must use a compatible web browser such as Internet Explorer (recommended), Firefox (49.0.2) or Safari 11. The DVR can be accessed using Chrome and other browsers, however, some features, such as face recognition may be compromised.*

Note: If you prefer not to use a web browser plugin to access your DVR you can use our free Amcrest Surveillance Pro software to access your device from a computer. To download the software please visit: https://amcrest.com/downloads

If using a web browser, there are 2 ways to access the DVR's IP address:
(1) **Amcrest IP Config**
(2) **Built-in interface**

Amcrest IP Config

Amcrest IP Config software can be installed for free onto your computer from Amcrest's official website. The IP Config software is available for both Windows and Mac operating systems. To get to the downloads page please visit: https://amcrest.com/downloads

After you have downloaded the Amcrest IP config software, please follow the information provided below:

1. Once you see the first page of the installer wizard, click **Next** to continue.

2. On the next page, check the box next to '**I agree'**, then click **Install**.

3. After the progress bar completes, if you see a Windows Security Alert popup, click **Allow access** (if applicable).

4. This brings you to the main screen of the Amcrest IP Config Software. Your DVR will automatically be found on your network and appear in the list (if properly connected with an Ethernet cable to your router). You will also see the IP address associated with your DVR.

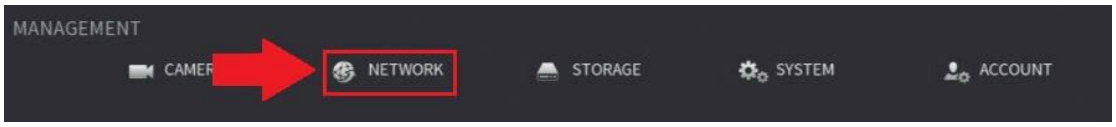
   The ‘e’ icon to the right allows you to launch directly into your web browser from this screen.

Built-in interface method

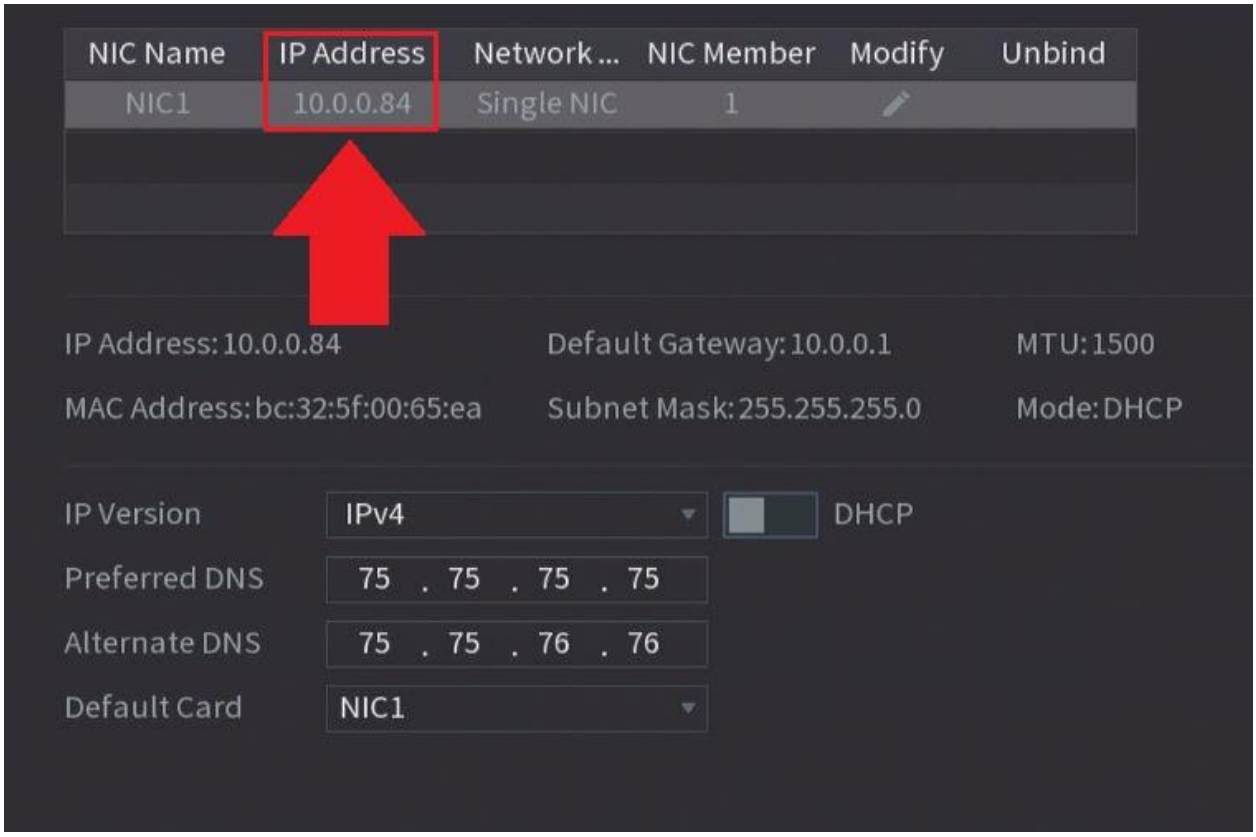
1. Log into your DVR. The live view interface will load.

2. Left-click on the main video wall screen to access the Main Menu, or right-click and choose it from the list.

3. Click the **Network** option located in the Management section of the interface.



4. In the **Network** settings page locate the **TCP/IP** option on the left panel list. Then, locate where it says **IP Address** on the main center page of the window.



5. Write it down. It will look something like ‘192.168.xx.xxx’, or ’10.0.XX.XXX’ depending on your network, router, or service provider.

Note: It does not matter what your IP address looks like, however, the IP address is needed to access the DVR from a web browser. If DHCP is enabled, it is highly recommended to disable it to allow the device to maintain a static IP address. This will help to increase the overall efficiency and security of your device.

Accessing the Web User Interface

To access the web user interface (web UI) for your DVR, open a web browser and type the IP address for your DVR into the browser and press **Enter**. This will pull up the device initialization screen. Set a location, language and video standard then click **Next** to continue.

Choose your Time Zone and System Time then click **Next** to continue.

Enter Password

Like accessing the DVR directly, if you are accessing the DVR for the first time you will need to enter a password for the device. Enter a password. Click **Next** to continue.

Next, it is recommended to secure your DVR with an Email address and security questions. The Email address entered can be used for password recovery purposes in case a password is forgotten or needs to be reset.

Enter a valid email address and then select and answer the security questions provided in the dropdown menu. Click **OK** when done.

When the DVR has been setup successfully you will hear a beep from the DVR and a prompt in the browser letting you know that the initialization is complete. You will then be taken to the login screen. Enter the **username** and **password** for your DVR then click **Login**.

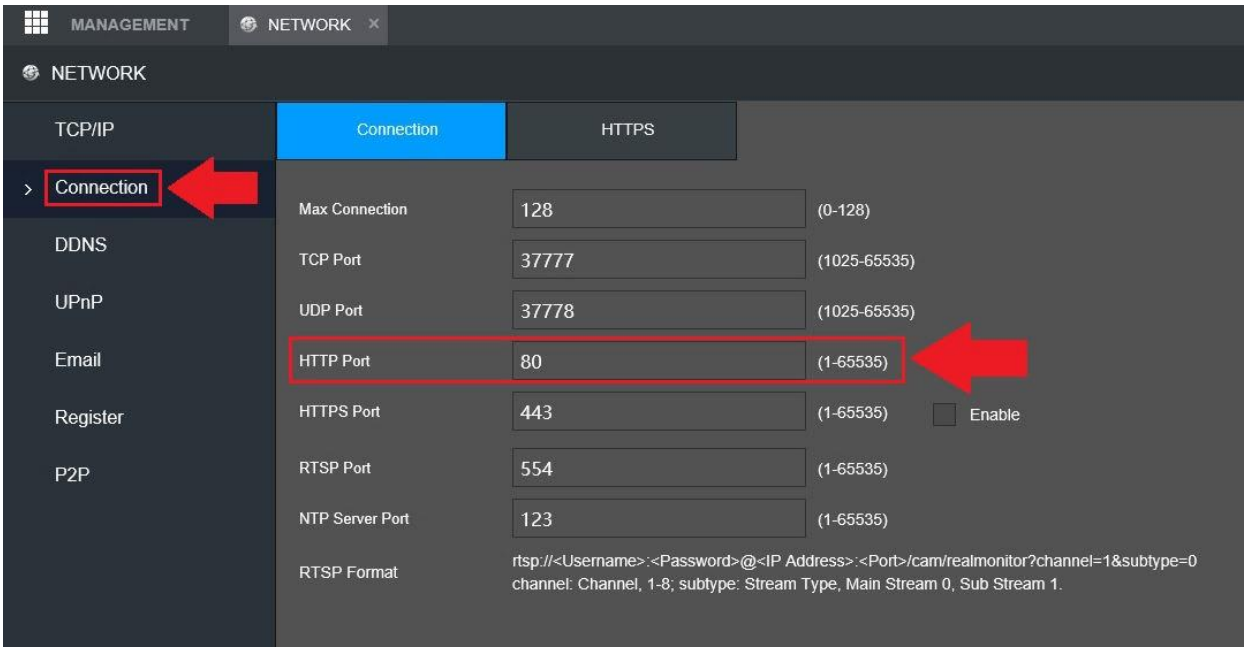
Note: Please allow all permissions to allow the plugins to function in your browser. Once the plugins are allowed the main menu screen will appear.

Accessing the Web User Interface Remotely

For the purposes of this guide, we will outline the most common method for setting up web access. Port forwarding using the HTTP protocol and using Dynamic Domain Name Server (DDNS) is the easiest way to setup stable remote access.

For this method, you should have direct access to your router as well as the ability to port forward the device using the router's built in interface.
Below is a step-by-step walk through that details how to setup the DVR for remote web access using DDNS.

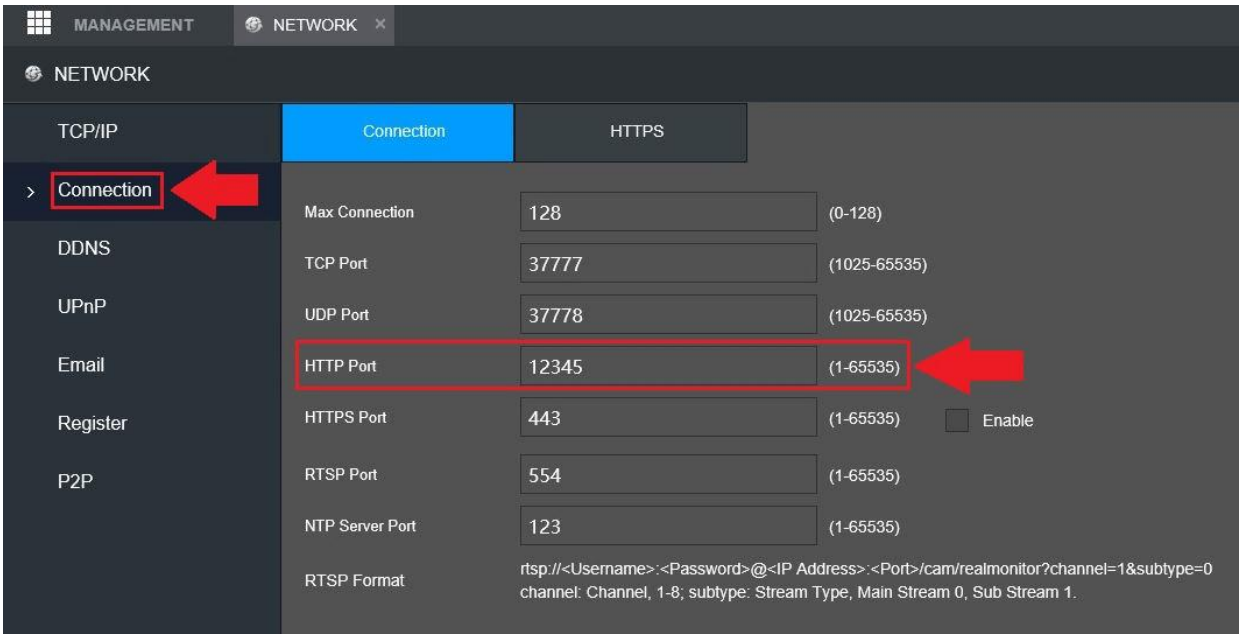
1. Log into the web UI and go to **Management>>Network>>Connection.** In the Connection tab, note the HTTP Port information for your DVR.



It is recommended to ensure the port number is at least 5 digits long to prevent any port conflicts. You can change the port to any 5-digit number that is less than 65535 (e.g. 12345) by clicking the number field and entering a new port number. Write it down, then click **OK**.

2. The system will need to reboot for this change to take effect. Click **OK**.

3. Once the DVR has come back online, log back into the web UI and navigate back to the Connection menu to verify the HTTP port has been updated properly.

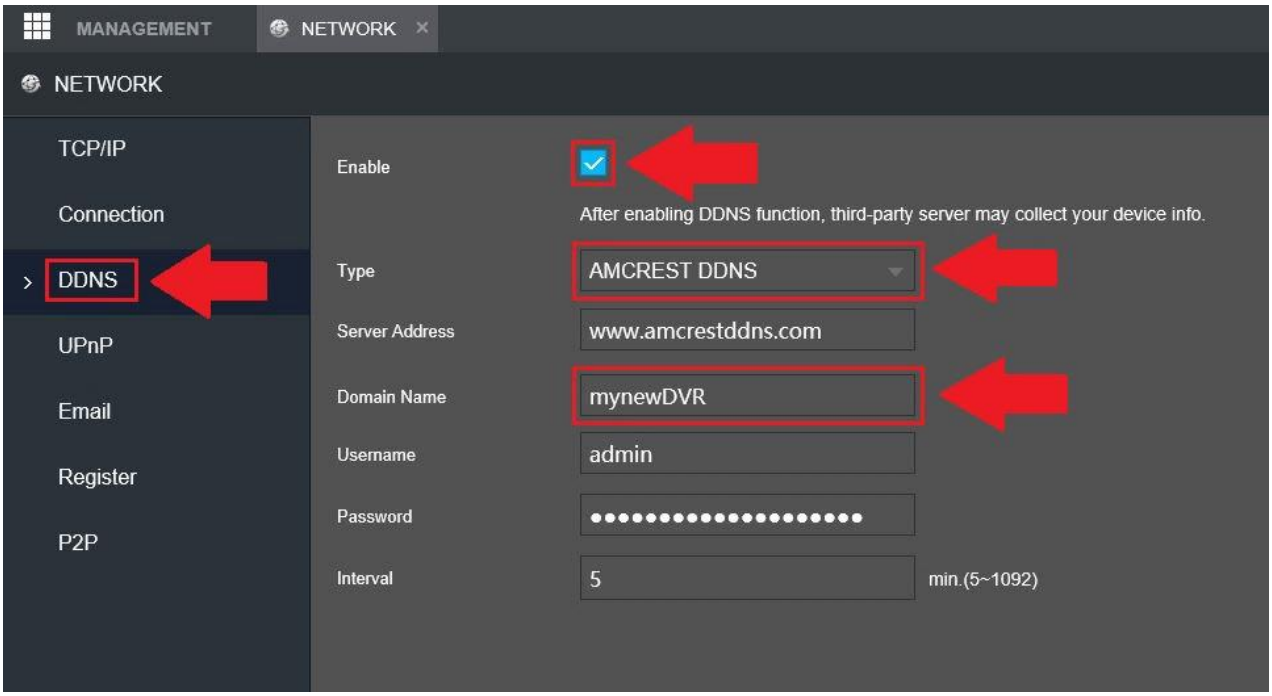


4. Access your router's user interface and port forward the device using the HTTP port information displayed in the system. Every router's port forwarding protocols are unique. For more information

on how to port forward your specific device, please visit portforward.com or refer to the user manual for your specific router.

Note: When port forwarding the DVR in your router, make sure to use the TCP, UDP and updated HTTP protocols displayed in the DVR. If DDNS is not an option, the device can be accessed remotely using the public IP address for your network and the HTTP port used that was port forwarded in your router. To locate your public IP address and verify the connectivity of your system, please visit: canyouseeme.org

5. Click on the **DDNS** menu located in the **Network** tab in the left panel. In the DDNS menu, click on the Enable checkbox to enable DDNS. Make sure the **AMCREST DDNS** type is selected and a domain name for the DVR (one you create) is entered in the Domain Name field. As an example, the Domain Name will be in the following format: mynewDVR.amcrestddns.com



Click **Save** once the DDNS information is entered.

Accessing the Device Remotely
After setting up the DVR in the previous steps provided, open a web browser, and enter in the DDNS domain name address previously setup for your DVR.

For example, if the DDNS domain name is http://abc123456789.amcrestddns.com and your HTTP Port is 12345, the URL would be http://abc123456789.amcrestddns.com:12345

Remote access not working? (troubleshooting steps)

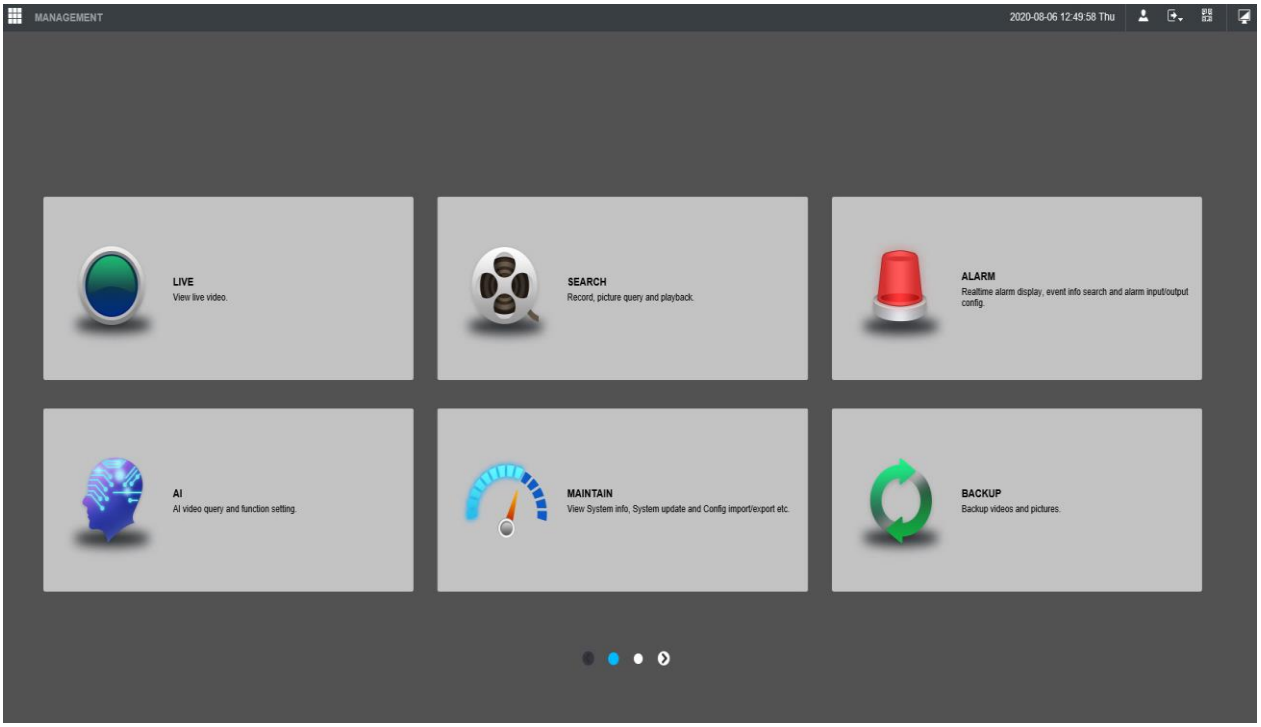
Please contact Amcrest Support via one of the following options:

Visit http://amcrest.com/contacts 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: 713-893-8956
Canada: 437888-0177
UK: 203-769-2757

Web Interface Walkthrough

The web interface will be the main hub for all of you DVR's features. This interface allows you to view manage and control every aspect of your device similarly to the built-in local user interface. This section provides a brief description of the items listed in this menu.



Management: This menu allows you to access camera settings and registration, network settings, storage options, system, and account management. For more information on these features or access to a full user manual, please visit https://amcrest.com/support

Live: This menu takes you to a live view interface. In this menu you can view real-time live video from all connected devices as well as access to Pan/Tilt/Zoom functions (if applicable), and other related live view settings for your device.

Search: This menu allows you to view playback of motion detection, IVS, or continuous recording events. For more information on the features included in the playback menu, please refer to section, *"Accessing Playback".*
Alarm: This tab allows you to view and search live alarm information, configure alarm events and controls such as, Motion Detection, Audio Detection, Abnormality, or other related alarm features. For more information on the features listed in this menu, please refer to the full user manual which can be found at https://amcrest.com/support

AI: This menu allows you to manage and view artificial intelligence features such as, face detection, face recognition, IVS, as well as smart search and IVS playback features. For more information on the features listed in this menu, please refer to section, *"Setting Up AI Events".*

Maintain: This tab allows you to access system logs, current firmware/version information, import/export system config files, upgrade firmware, and other related system operation features. For more information on the items listed in this menu please refer to the full user manual which can be found at https://amcrest.com/support

Back Up: This tab allows you to back up information from your system onto an inserted USB flash drive. An external USB flash drive is needed to store information such as configuration files or other data related to your system.

Display: This tab allows you to configure resolution and display settings for your system. This includes tours and video output settings for your device.

Audio: This tab allows you to configure audio announcements and import audio files into your system. These audio announcements can be used as voice prompts within the system.

Amcrest View Pro App Setup

The Amcrest View Pro app allows instant access to all live camera streams from any location. The app supports a multitude of features and includes both a plug-and-play setup as well as a manual network setup. **Please note, AI features provided by the DVR can only be modified using the local or web UIs and cannot be adjusted using the Amcrest View Pro app.**

The Amcrest View Pro app can be downloaded in both the App Store and Play Store.

Before the DVR can be accessed through the app using the easy plug-and-play method (P2P Setup), **P2P must be enabled on the DVR**.

Enabling P2P on the DVR

P2P should be enabled on your device by default, however, to check if P2P is enabled, please follow the information provided below.

1. Log into your DVR and access the Main Menu.
2. In the **Management** section, click on **Network** then click on **P2P**. Ensure the Enable toggle switch is enabled and the P2P status says "Online". This indicates the P2P option is enabled.

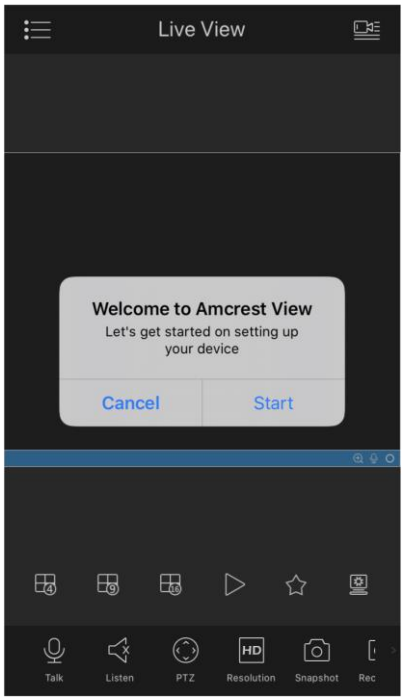
Amcrest View Pro Setup

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.

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



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

<table>
<tr>
<td>
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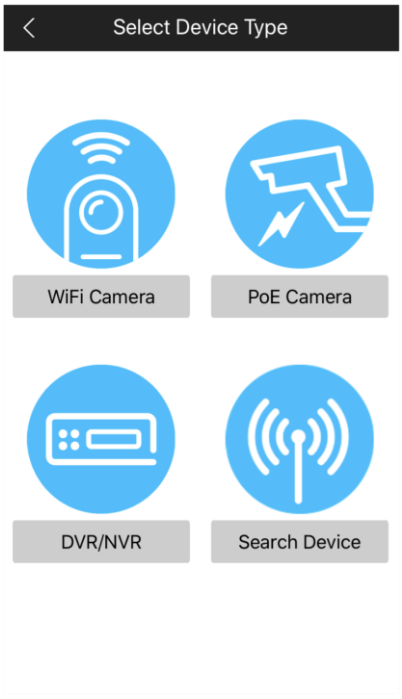
<td>
</td>
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<tr>
<td>3. Tap “Start”.</td>
<td>4. Tap “DVR/NVR”.</td>
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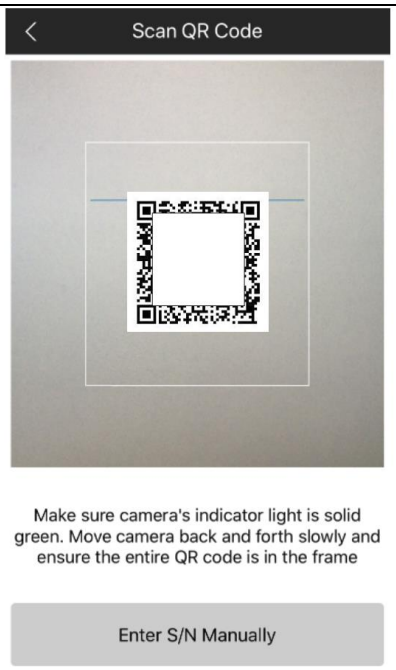
<td>
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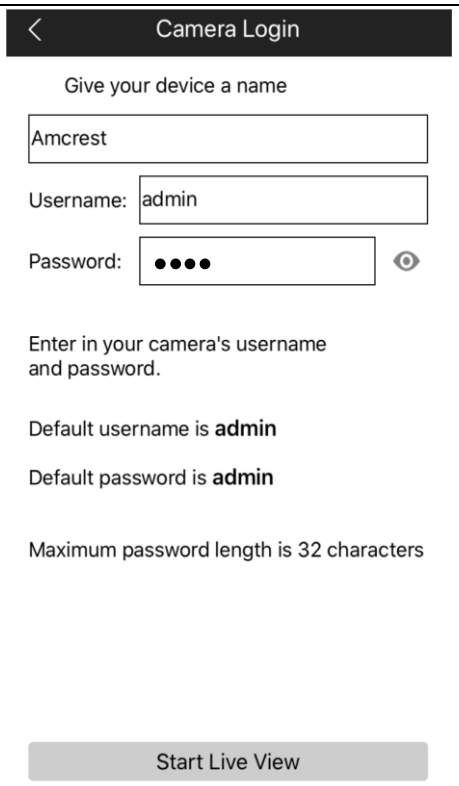
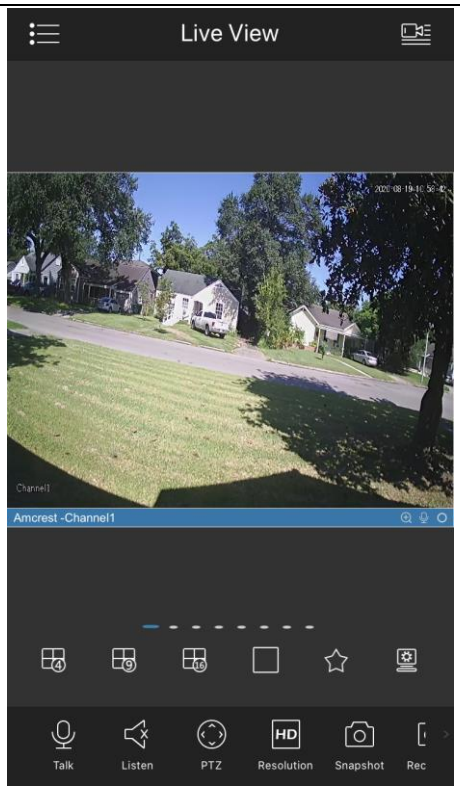
<tr>
<td>5. Tap “P2P Connection”.

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</td>
<td>6. Scan the QR code. The QR code can be found on the serial tag along with a scannable barcode.</td>
</tr>
</table>

	
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.

Note: To locate the serial number, you must either have physical access to the DVR or computer access to the web interface to access the P2P menu. The SN QR code will be the serial number for your device. For more information regarding the Amcrest View Pro app, please visit: https://amcrest.com/support

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.

IC Warning Statement

This device complies with Industry Canada's license-exempt RSSs. Operation is subject to the following two conditions:

(1) This device may not cause interference; and

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and any part of your body.

Pour se conformer aux exigences de conformité CNR 102 RF exposition, une distance de séparation d'au moins 20 cm doit être maintenue entre l'antenne de cet appareil ettoutes les personnes.

References & Contact Information

To view setup videos for many of the steps outlined in this guide, go to http://amcrest.com/videos
For more supplemental information, a full user manual, or to view articles related to your device visit http://amcrest.com/support
For contact information please visit us at https://amcrest.com/contacts or reach out to us directly at 1-888-212-7538

This quick start guide is for reference only. Slight differences may be found in the user interface.
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