



Wi-Fi NVR SecureAlert Wi-Fi NVR Security System

INSTRUCTION MANUAL

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Important Information

FCC Verification

This equipment has been tested and found to comply with the limits for 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 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 the 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

These devices comply with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- These devices may not cause harmful interference
- These devices must accept any interference received, including interference that may cause undesired operation

Important Notice: All jurisdictions have specific laws and regulations relating to the use of cameras. Before using any camera for any purpose, it is the buyer's responsibility to be aware of all applicable laws and regulations that prohibit or limit the use of cameras and to comply with the applicable laws and regulations.

FCC Regulation (for the USA): Prohibition against eavesdropping

Except for the operations of law enforcement officers conducted under lawful authority, no person shall use, either directly or indirectly, a device operated pursuant to the provisions of this Part for the purpose of overhearing or recording the private conversations of others unless such use is authorized by all of the parties engaging in the conversation.

Important Safety Instructions

- Do not operate if wires and terminals are exposed
- Do not cover vents and adequate space for ventilation
- Only use the power adapter supplied with your NVR



This product contains a coin/button cell battery. If the cell battery is swallowed, it can cause severe internal burns and can lead to death. Keep away from babies and small children at all times.

About this Instruction Manual

This instruction manual is written for the Wi-Fi NVR & SecureAlert™ Wi-Fi NVR Security System and was accurate at the time it was completed. However, because of our ongoing efforts to constantly improve our products, additional features and functions may have been added since that time.

Important Password Information

This NVR does not have a default password. A password is created during the Startup Wizard. If password protection has been enabled and you have forgotten your password, your NVR's MAC address can be used to create a new password (see page 16 - [Password Reset](#)).

Warranty Information

USA

Swann Communications USA Inc.
12636 Clark Street
Santa Fe Springs CA 90670
USA

Australia

Swann Communications
Suite 5B, 706 Lorimer Street
Port Melbourne Vic 3207
Australia

United Kingdom

Swann Communications LTD.
2 Canon Harnett Court, Wolverton Mill
Milton Keynes, MK12 5NF
United Kingdom

Warranty Terms & Conditions

Swann Communications warrants this product against defects in workmanship and material for one (1) year from its original purchase date. You must present your receipt as proof of date of purchase for warranty validation. Any unit which proves defective during the stated period will be repaired without charge for parts or labor or replaced at the sole discretion of Swann. The end-user is responsible for all freight charges incurred to send the product to Swann's repair centers. The end-user is responsible for all shipping costs incurred when shipping from and to any country other than the country of origin.

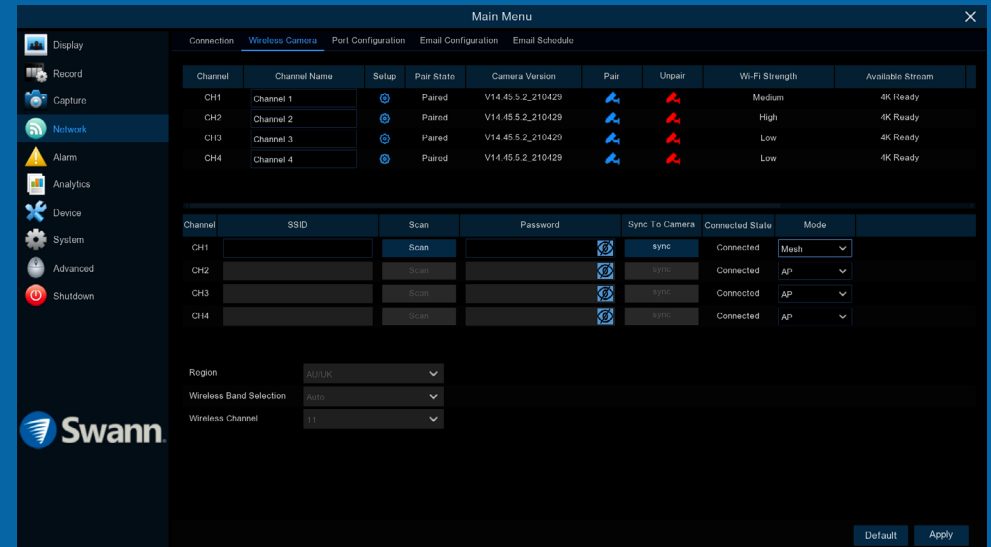
The warranty does not cover any incidental, accidental, or consequential damages arising from the use of or the inability to use this product. Any costs associated with the fitting or removal of this product by a tradesman or other person or any other costs associated with its use are the responsibility of the end-user. This warranty applies to the original purchaser of the product only and is not transferable to any third party. Unauthorized end-user or third-party modifications to any component or evidence of misuse or abuse of your device will render all warranties void.

By law, some countries do not allow limitations on certain exclusions in this warranty. Where applicable by local laws, regulations and legal rights will take precedence.

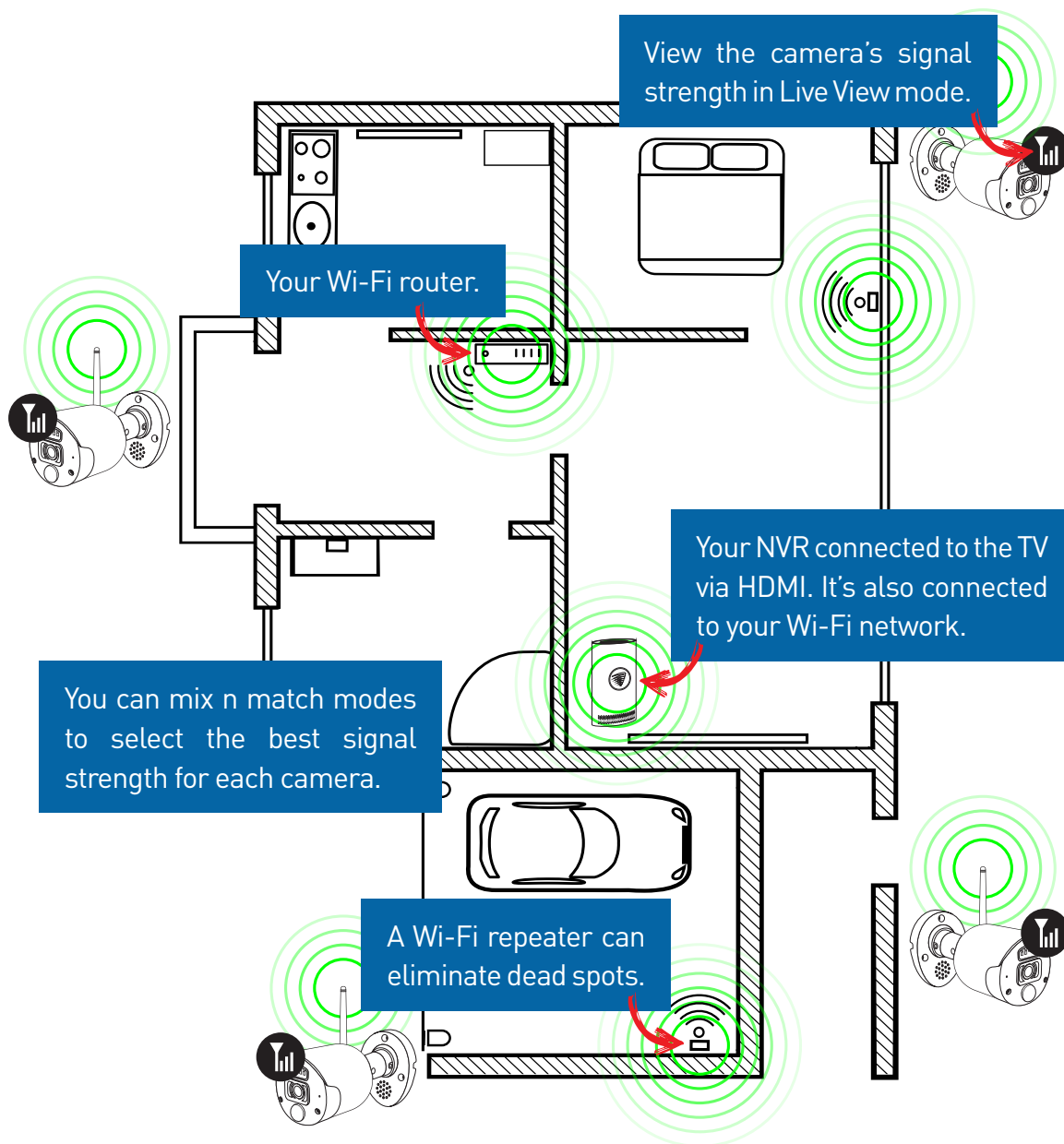
For Australia: Our goods come with guarantees which cannot be excluded under Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Camera Mode & Placement

The cameras provided with your NVR can operate in two different modes. The default mode is AP, where each camera connects to your NVR wirelessly. It does this by using Wi-Fi Direct (a standard that allows two or more devices to establish a connection without needing a Wi-Fi access point or router). The other mode is Mesh. This allows each camera to connect to your Wi-Fi network independent of your NVR, giving you flexibility on where you can mount cameras without signal degradation. If you have a large house, you can install Wi-Fi extenders to provide better coverage over a larger space.



Camera Placement



The layout and size of your residence, Wi-Fi router location, and where your NVR will be installed all play a part in where your cameras are placed and which mode they will operate on.

Also, consider the infrastructure within the residence or if there are multiple stories and other surrounding Wi-Fi-type devices.

In medium and large size dwellings, there might be Wi-Fi dead spots where devices fail to find a Wi-Fi signal or the signal strength is extremely low. You can find these dead spots by walking around your house with your mobile device and looking at the bars indicating the signal strength.

This is typically caused by physical barriers such as a wall or large objects obstructing the Wi-Fi signal. By utilizing one or more Wi-Fi repeaters, you can eliminate these dead spots by extending the coverage of your Wi-Fi network.

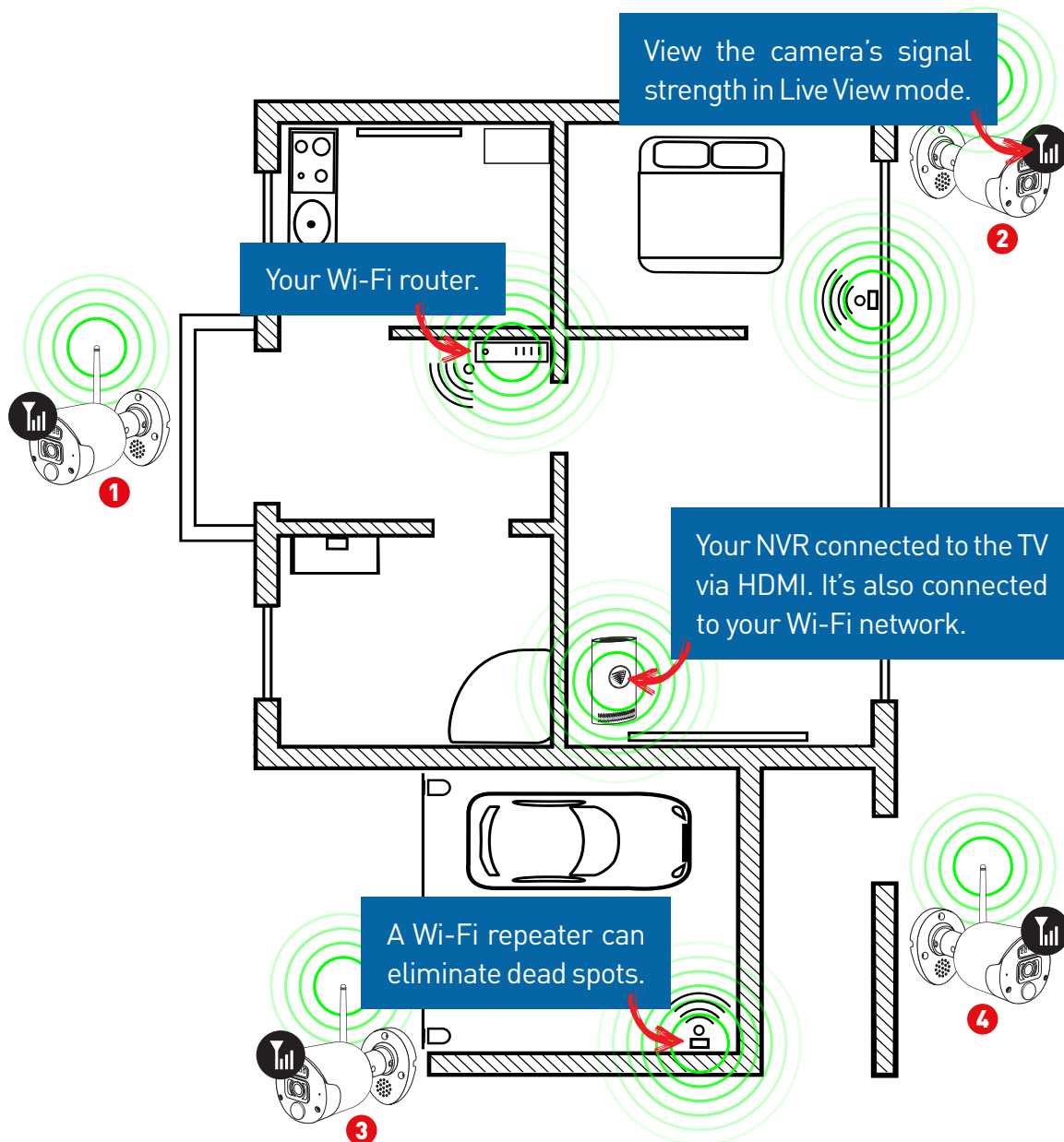
AP: This is the default mode the cameras connect to your NVR. This mode may restrict the distance on where the cameras can be placed due to the signal strength between your NVR and the camera.

Mesh: In this mode, the cameras are connected to your Wi-Fi network. This gives you the advantage of not being restricted to where your NVR is located and where the cameras can be placed.

When looking at the camera's signal strength in Live View mode, aim to have a minimum of two bars for a consistent connection. For example, if the camera has one or two bars in AP mode and three or more bars in Mesh mode, leave this in Mesh mode.

(continued on next page)

Camera Placement



- 1 The camera placed at the front door is connected via Mesh mode to the Wi-Fi router due to the strong signal strength.
- 2 The camera overlooking the backyard is connected via Mesh mode to the Wi-Fi extender located in the bedroom. It was discovered that the bedroom is a Wi-Fi dead spot, so a Wi-Fi extender has been installed to extend the coverage of the Wi-Fi network.
- 3 The camera overlooking the front entrance of the garage is connected via Mesh mode to the Wi-Fi router due to the strong signal strength. An additional Wi-Fi extender can be installed inside the garage to extend the coverage of the Wi-Fi network.
- 4 The camera placed at the rear entrance of the garage is connected via AP mode. As the camera is closer to the NVR than the Wi-Fi router, the signal strength is stronger in this mode than in Mesh mode.

The camera's Wi-Fi signal strength is determined by three strength levels:

At Medium and High strength, the camera will display and record at 4K (NVW800 camera only). At Low strength, it will display and record at 1080p. The signal strength will vary depending on which mode the cameras will operate on and the distance where the cameras will be placed.

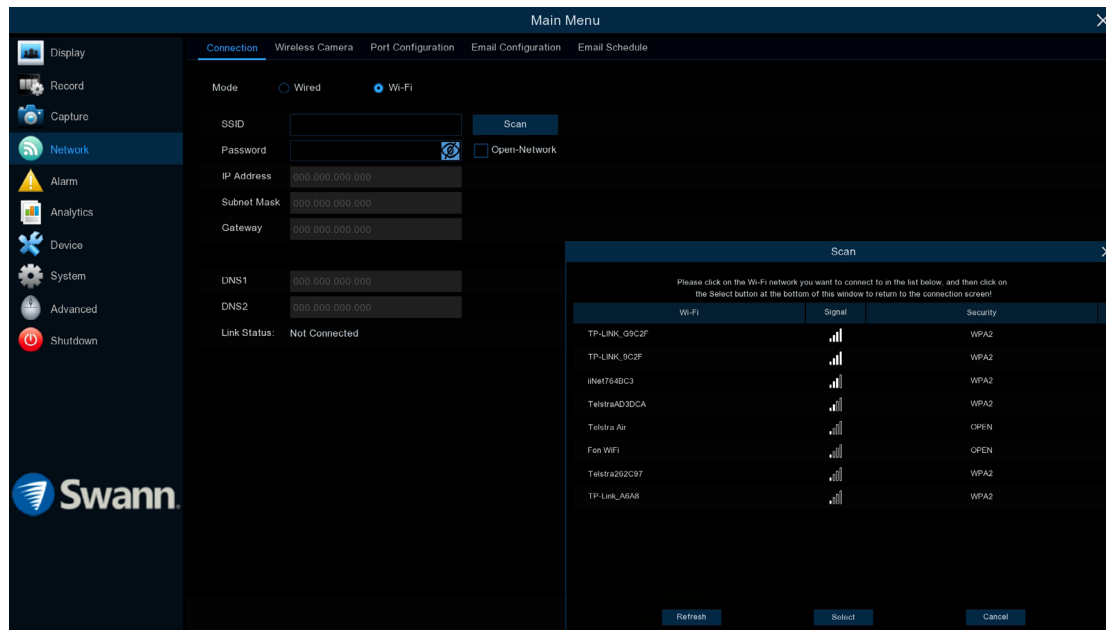
To connect your NVR to your Wi-Fi router see [page 9](#).

To connect cameras to Mesh mode see [page 10](#).

To see technical information about each camera such as Wi-Fi signal strength and available streams see [page 11](#).

To change the wireless channel of your NVR see [page 12](#).

Network: Connection - Wi-Fi



Wi-Fi mode allows wireless communication from your NVR to the router to gain internet access. This gives you the flexibility of placing your NVR in a different location, without having to be physically connected to your router.

→ Click “Default” to revert to default settings.

→ Click “Apply” to save settings.

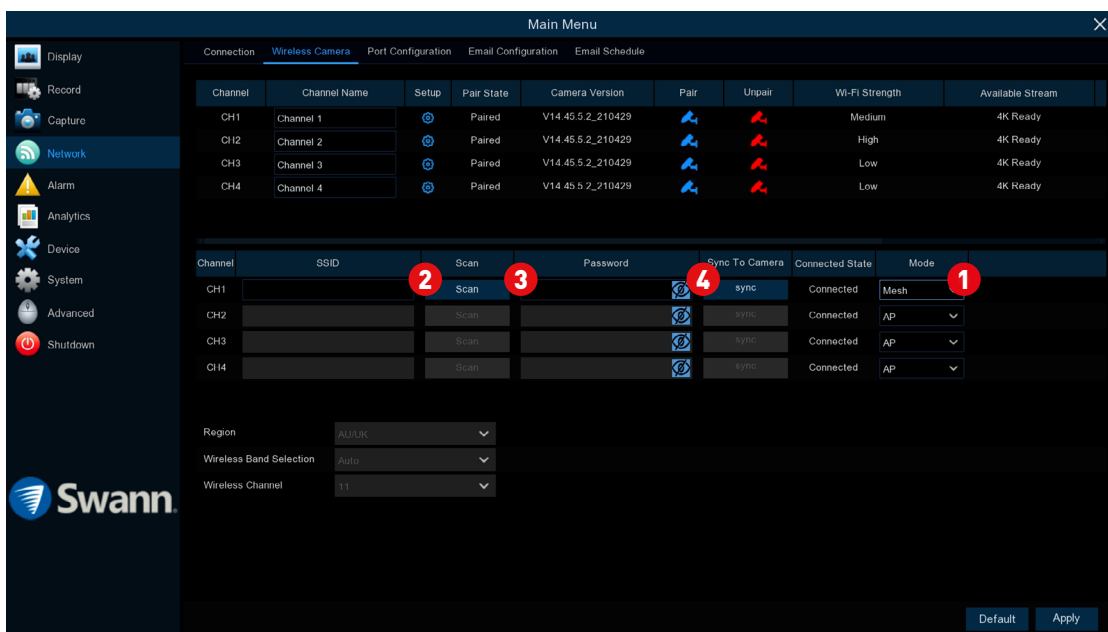
1. Click the “Scan” button. After a short moment, a list of Wi-Fi access points that your NVR detects, will be shown (see inset above). Click on your Wi-Fi access point then click the “Select” button. Click the “Refresh” button if nothing appears.

2. Input the password for your Wi-Fi access point then click the “Apply” button. Make sure the password is correct before proceeding (click the eye icon to display the Wi-Fi password). Click “Open Network” if a password isn’t required.

3. After a short moment, your NVR will connect to your Wi-Fi access point. Click “OK” to continue.

The Link Status will change to Connected indicating a successful connection (if you see Not Connected, check that the Wi-Fi password is correct).

Network: Wireless Camera – Mesh Mode



A mesh network is a group of networking devices that act as a single Wi-Fi network. This can provide better Wi-Fi coverage over a wider space. If you have a large house, additional Wi-Fi extenders can be added to provide better coverage over a wider space. As your cameras can operate in Mesh mode, this gives you greater flexibility on where each camera can be mounted without signal degradation.

- Click “Default” to revert to default settings.
- Click “Apply” to save settings.

Before proceeding, make sure your NVR is connected to your router using the provided Ethernet cable (Wired mode) or via Wi-Fi mode. For Wi-Fi connection instructions, see [page 9](#).

1. Mode: Click the drop-down menu and select “Mesh”.

2. Scan: Click this to scan for your Wi-Fi. After a short moment, a list of Wi-Fi access points that your NVR detects will be shown. Click on your Wi-Fi access point then click the “Select” button. Click the “Refresh” button if nothing appears (if you have one or more Wi-Fi extenders installed, these can also be selected).

The SSID field will be populated after selecting your Wi-Fi access point.

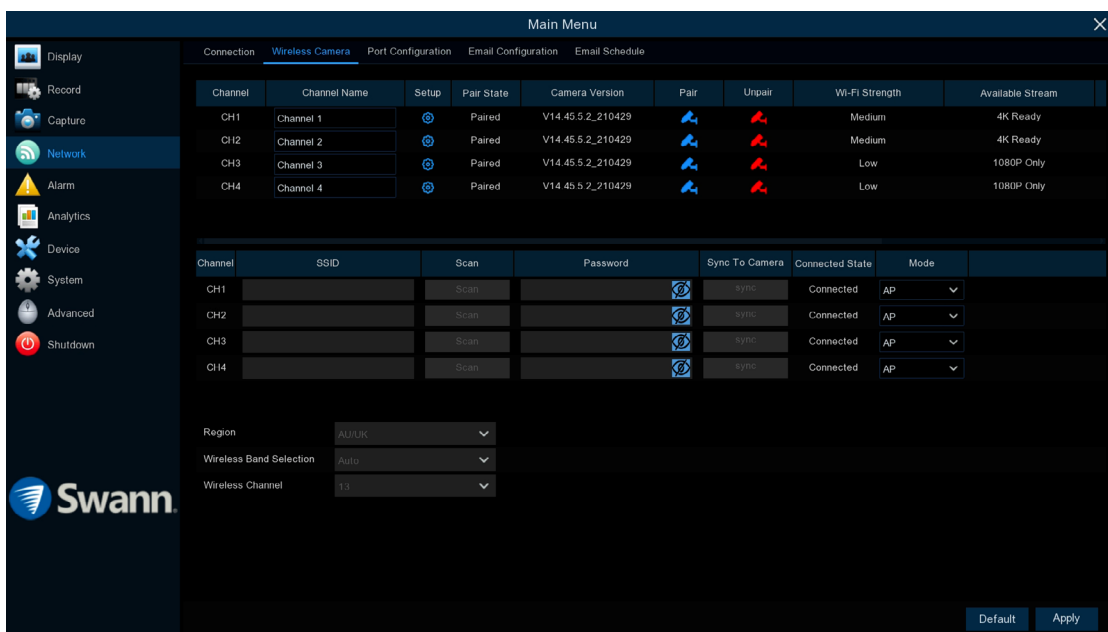
3. Password: Input the password for your Wi-Fi access point (click the eye icon to display the Wi-Fi password).

4. Sync to Camera: Click this to sync the Wi-Fi credentials to the camera. After a short moment, the camera will be connected to your Wi-Fi access point.



If the camera fails to connect to your Wi-Fi access point and is no longer paired to your NVR, change the mode back to “AP”, click “Apply”, then repair the camera to try again. See [page 93](#) for pairing instructions. Be aware that any interruptions to your Wi-Fi network will also interrupt the camera’s stream and recording.

Network: Wireless Camera



The functions here will display technical and status information of the cameras paired to your NVR. You can also change the channel name, adjust image settings as well as change what mode the cameras will operate on.

- Click "Default" to revert to default settings.
- Click "Apply" to save settings.

Channel Name: Enter a name for the camera selected. It can be up to 16 characters in length.

Setup: Click the button to access the camera display settings. You will see the camera display settings on the left (see [page 13](#)).

Pair State: Will state if a camera has been paired or not paired to that particular channel.

Camera Version: This will display the camera's firmware version.

Pair: Click this to pair a camera, then follow the on-screen instructions.

Unpair: Click this to unpair the camera from that channel.

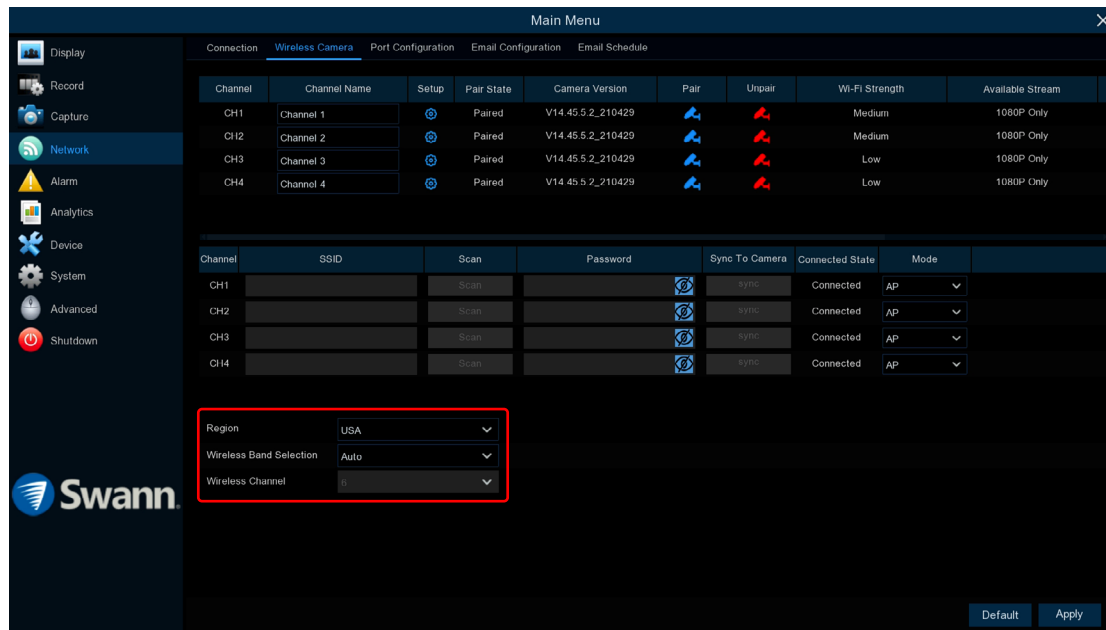
Wi-Fi Strength: Will display the camera's Wi-Fi signal strength (this may update if there are changes to the signal strength).

IP Address: This will display the camera's IP address.

MAC Address: This will display the camera's MAC address.

By default, the cameras pair wirelessly to your NVR using AP mode. Your NVR will assign an IP address to each camera directly. Depending on where your NVR will be located, this may restrict the distance on where the cameras can be mounted due to the signal strength between each device. For a bit more flexibility with camera placement, you can enable Mesh mode (see [page 10](#)) for more information.

Network: Wireless Camera – Wireless Channel



When your NVR is connected to your router using the supplied Ethernet cable, you have the option of changing the wireless channel that the cameras communicate on when in AP mode to avoid signal interference.

- Click “Default” to revert to default settings.
- Click “Apply” to save settings.

If the camera’s signal strength is low even at short distances, changing the wireless channel may improve the situation. Electronics such as cordless phones, garage door openers, microwaves, and the neighbors’ Wi-Fi networks may use the same frequency range. Change the wireless channel to communicate on a different frequency to avoid interference.

Region: Click the drop-down menu and select your region.

Wireless Band Selection: Click the drop-down menu and select “Manual”.

Wireless Channel: Click the drop-down menu and select a different wireless channel. Click the “Apply” button to save.

Go to Live View mode and observe the camera’s signal strength. Wait ten or so minutes to see if the signal strength has improved. If it stays the same or has worsened, try a different channel.

Network: Wireless Camera - Setup



Channel: Select a camera that you would like to edit.

Channel Name: Enter a name for the camera selected. It can be up to 16 characters in length.

Show Name: Leave this enabled to display the camera name in Live View mode, otherwise click the checkbox to disable it.

Hue: This changes the color mix of the image.

Bright: This changes how light the image appears to be.

Contrast: The difference in luminance that makes an object distinguishable.

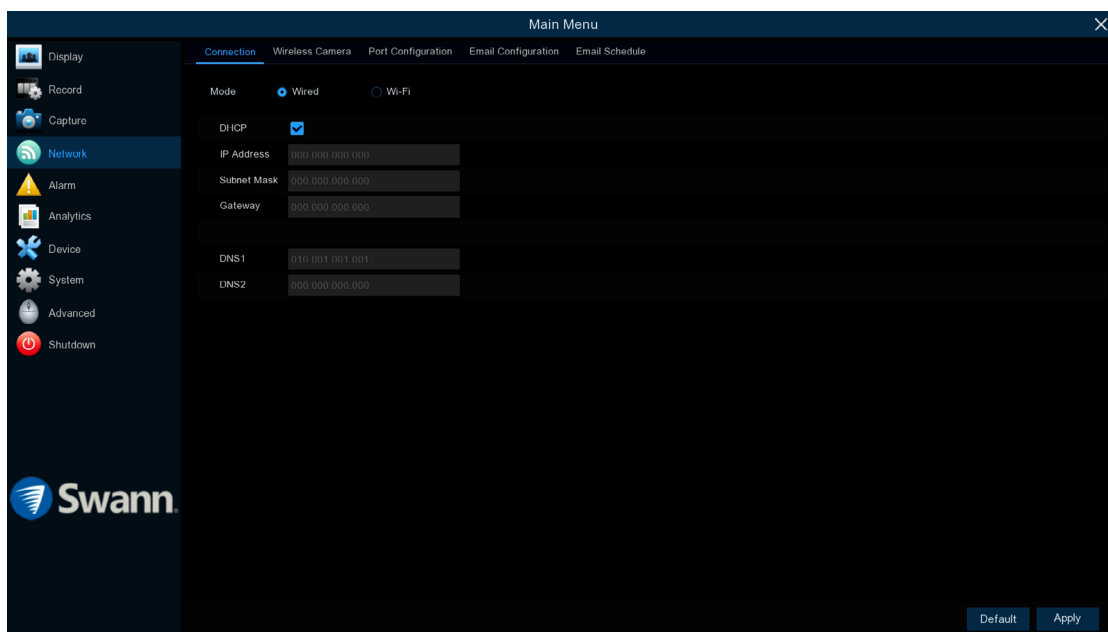
Saturation: This alters how much color is displayed in the image.

Use the slider to adjust each setting. When finished, click the "Apply" button then click "OK". Right-click the mouse to exit.



Any changes made to the display settings available will affect your recordings.

Network: Connection – Wired



As SwannLink Peer-to-Peer technology is utilized to communicate with your network and mobile device, a configuration of the network settings is not required. If you have networking expertise and require specific settings, for example, you want to use a fixed IP address for your devices or you want to use a specific DNS, you do have the ability to change them.

- Click “Default” to revert to default settings.
- Click “Apply” to save settings.

Mode: There are two ways your NVR can connect to your home network, wired or Wi-Fi. If your NVR is connected to your router using an Ethernet cable, leave this on Wired. For Wi-Fi connection instructions, see [page 9](#).

DHCP (Dynamic Host Configuration Protocol): Your router will automatically assign an IP address to each device connected to your network. This is enabled by default and is the recommended method of connection.

If you are disabling DHCP, the following five options can be changed (this is for advanced users only):

IP Address: Each device on your network must have a unique IP address. A typical address might be “192.168.1.24” or something similar.

Subnet Mask: This allows the flow of network traffic between hosts to be segregated based on a network configuration. A typical address might be

“255.255.255.0” or something similar.

Gateway: This allows your NVR to connect to the internet. This is typically the same IP address as your router.

DNS (Domain Name System)1/2: Input the DNS settings for your internet service provider.

Mode Frequently Asked Questions

AP mode, Mesh mode, which one do I choose?

By default, all the cameras will connect to your NVR using AP mode. Changing the mode is entirely dependant on where the cameras are mounted and the signal strength to your NVR. Please try the following:

1. Start with one camera. Move the camera to the location that it will be mounted.
2. In Live View mode, look at the camera's signal strength. If it has two or more bars consistently, leave the camera in AP mode.
3. If the signal strength is at one bar or it's changing from one bar to two bars, you have a couple of options:
 - If your NVR is connected to your router using the supplied Ethernet cable, you have the option of changing the wireless channel that the cameras communicate on to avoid signal interference. See [page 12](#) on how to do this.
 - Change the camera's mode from AP to Mesh. This will connect the camera to your Wi-Fi network independent of your NVR, thus giving you flexibility on where the camera will be mounted. See [page 10](#) on how to do this.

Aim to have a consistent signal strength of two or more bars, regardless of which mode the cameras are connected to your NVR. This ensures that your NVR records all events detected by the cameras.

I'm having issues with my Wi-Fi network. Will this affect the cameras?

Cameras running in AP mode won't be affected. Cameras running in Mesh mode will be. If the cameras fail to display in Live View mode, this would indicate that they have disconnected from your Wi-Fi network. It also applies to your NVR if it's connected to your network via Wi-Fi mode (see [page 10](#)).

It could be due to interference with surrounding Wi-Fi devices, or your Wi-Fi access point may be at fault.

I've tried connecting the camera to Mesh mode, but it fails to appear in Live View mode. What can I do?

This is most likely because the password entered to connect to your Wi-Fi access point is incorrect. Change the mode back to "AP", click "Apply", then repair the camera to your NVR (see [page 93](#)) and try again.

Do I need to connect my NVR to my Wi-Fi network to use Mesh mode?

Yes, you do. You can connect your NVR using Wired mode with the supplied Ethernet cable (see [page 14](#)). Or Wi-Fi mode if your NVR is in a different location from your router or Wi-Fi access point (see [page 10](#)).

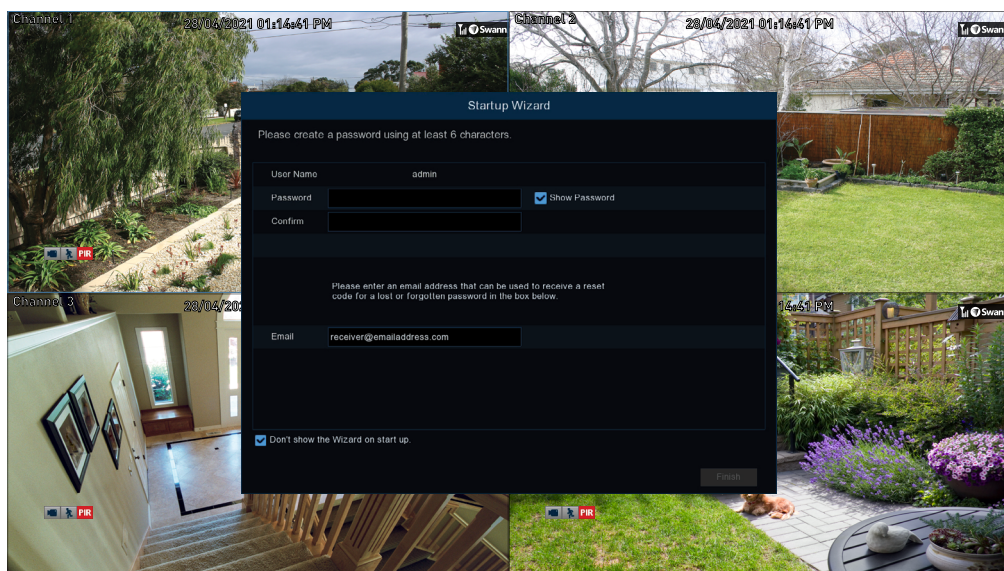
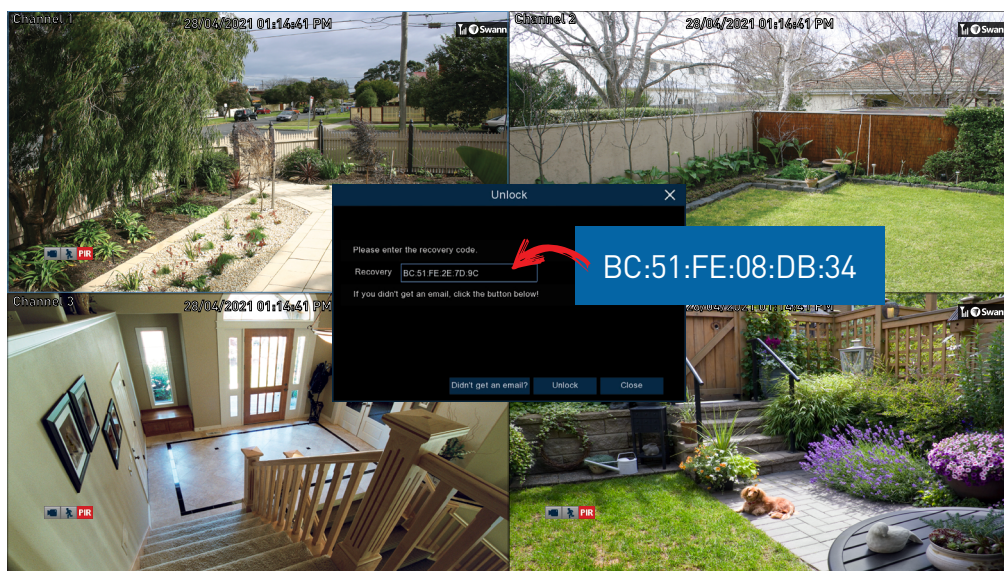
I have a large house, and I use a Wi-Fi repeater to increase the coverage of my Wi-Fi. Can I connect the cameras to this?

The cameras can connect to your Wi-Fi repeater in Mesh mode. When scanning for your Wi-Fi access point, the repeater can also be selected (see [page 10](#)).

I have an Orbi, Google Nest, Eero, or other Mesh-type Wi-Fi. Can I connect my cameras to this?


The cameras can connect to your Mesh system in the same way as they connect to any Wi-Fi network or Wi-Fi repeater. Just choose the Wi-Fi network from the list after you scan (see [page 10](#)).

Password Reset



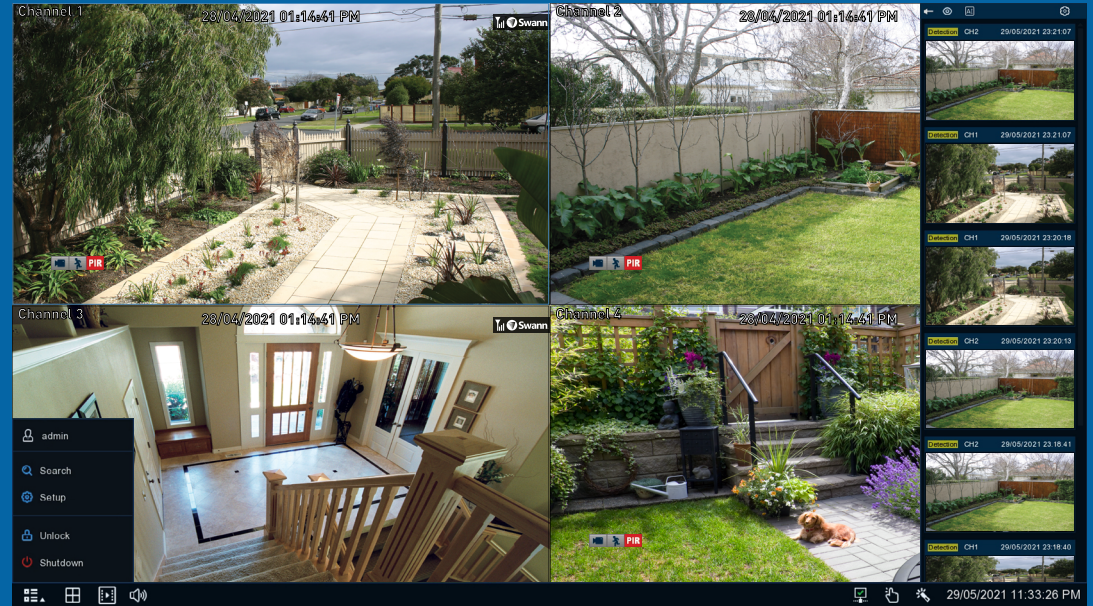
There are two methods available to reset your DVR's password - using the MAC address of your NVR sent to your email or by pressing and holding down your NVR's reset button. Please try the first method first -

1. Right-click the mouse on the Live View screen to display the Menu Bar, click the "Start" button (bottom left on the Menu Bar) then click "Setup".
2. At the password login screen click "Forgot Password" then click "Yes".
3. After a short moment, you will receive a password reset request email containing your NVR's MAC address. If it is not in your inbox, check your junk or spam folder (if you don't receive the email, see the warning message below).
4. Input the MAC address (known as the password recovery code) including the colons (see left example) then click "Unlock".
5. A message will appear on-screen stating that your password has been reset. Click "OK" to continue.
6. Enter a new password. The password has to be a minimum of six characters and can contain a mixture of numbers and letters. Use a password that you are familiar with, but is not easily known to others.
7. Write down your password in the space provided below for safe keeping.
8. Click "Finish" to continue. A message will appear on-screen. Click "OK" to close.

 If you're not receiving an email to reset your password, your NVR has a reset button to do a factory reset. Just be aware, for security and privacy reasons to stop malicious access, restoring your NVR will reset all saved changes to the settings available, **and** the storage device will be formatted as well, removing any saved events (see page 92 - [Restoring your NVR](#)).

Live View

Live View is the default display mode for your NVR. Each camera connected will be displayed on-screen. You can check the status or operation of your NVR and cameras using the icons and Menu Bar on the Live View screen. Right-click the mouse to access the Menu Bar.



Live View Mode

Live View mode is the default display for your NVR. Each camera connected will be displayed (multiple view modes available). You can check the operation of your NVR by using the status icons on the Live View screen. The date and time as well as the name for each camera are also displayed.

The screenshot shows a multi-camera live view interface. It features four main camera channels: Channel 1 (outdoor garden), Channel 2 (outdoor lawn), Channel 3 (indoor hallway), and Channel 4 (outdoor garden with a dog). A vertical Event Notification Panel on the right shows a list of detection events with timestamps. A blue callout box points to a signal strength icon in the top right of Channel 1, stating 'Indicates the camera's wireless signal strength.' Red lines and numbers 1-7 point to various UI elements: 1 (Menu Bar), 2 (Main Menu), 3 (Camera Toolbar), 4 (Status Icons), 5 (Event Notification Panel), 6 (Camera Toolbar), and 7 (Event Notification Panel).

Camera Name

Status Icons

Camera Toolbar

Main Menu

Menu Bar

Event Notification Panel

Indicates the camera's wireless signal strength.



Double-click a live video channel to view full-screen.



Click & drag a live video channel to reposition it.

Right-click the mouse in Live View mode to display the Menu Bar (see [page 19](#) for information).

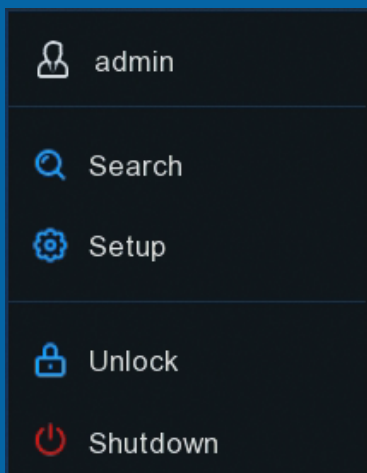
The Camera Toolbar provides access to instant playback, image settings, and other functions (see [page 19](#) for information).

Live View Controls

Menu Bar

1. Click to reveal additional functions available (see dialogue box below).
2. When viewing a single camera, click this to revert to four camera view.
3. Click to access the Search menu. From here you can play previously recorded videos.
4. Click to change the volume or to mute (click the speaker icon to mute).
5. This icon indicates that your NVR is connected to your home network either using the supplied Ethernet cable or via Wi-Fi.

Main Menu



Search: Click to search and play recorded videos, view snapshots, and access system log files.

Setup: Click to access the Main Menu.

Unlock: Click to unlock your NVR. If the Menu Timeouts function is disabled, click to lock your NVR to prevent access.

Shutdown: Click to shutdown, reboot, or logout of your NVR. Always shutdown your NVR when disconnecting the power.

6. Click to enter Manual Record mode. When enabled this will bypass the current recording schedule.

7. Click this to enter the Startup Wizard.

Camera Toolbar



To access the camera toolbar, left-click a camera to display.

1. Click to start a manual recording (will turn red indicating that it is recording). Click again to stop.

2. Click to take a snapshot.

3. Click to playback the last recording saved (recording must be saved in the last five minutes).

4. Click to enter Zoom mode.

5. Click to adjust image settings.

6. When viewing a single camera,

click to change from Mainstream resolution to Substream resolution. Click again to change (this is dependant on the camera's signal strength).

7. Click to enable the camera's siren and spotlight.

8. Click to add a Tag when recording. Tagging allows you to record information within the video.

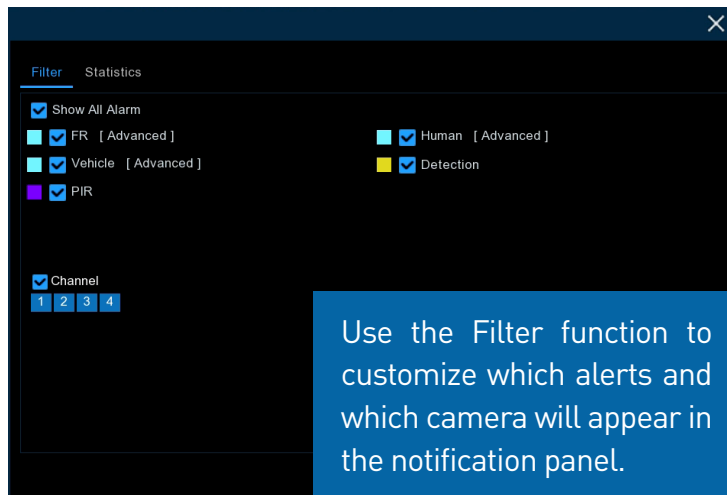
9. Mouse over to reveal analytic statistics information if enabled (NWX800 camera only).

Live View Controls



The Event Notification Panel displays a thumbnail of an event that has occurred via motion detection or if one or more of the analytic tools have been enabled. Events are color-coded according to the event type. Use the mouse scroll wheel to scroll up and down (place the mouse cursor over the notification panel first). Click the play button next to or over the thumbnail to play the event.

1. Click to display the notification panel at all times.
2. Click to hide the notification panel.
3. Click to reveal analytic statistics information.
4. Click to reveal the Filter and Statistics functions (Filter function shown below).



Status Icons



This indicates that the camera is being recorded (either manually or by motion).



This indicates that your NVR is detecting motion from the camera.



This indicates that the camera has detected one or more infrared objects (see [page 33](#)).



This indicates that an event has occurred via one of the analytic functions (the NVR is recording).



This indicates that an event has occurred via one of the analytic functions (the NVR isn't recording).



This indicates that your NVR fails to detect a storage device.



This indicates that the channel doesn't have a camera paired or has lost the feed from its camera.

Live View Digital Zoom Mode



1. To enter Zoom mode, left-click a camera in Live View mode then click the “Zoom” button on the Camera Toolbar (as shown on the left).

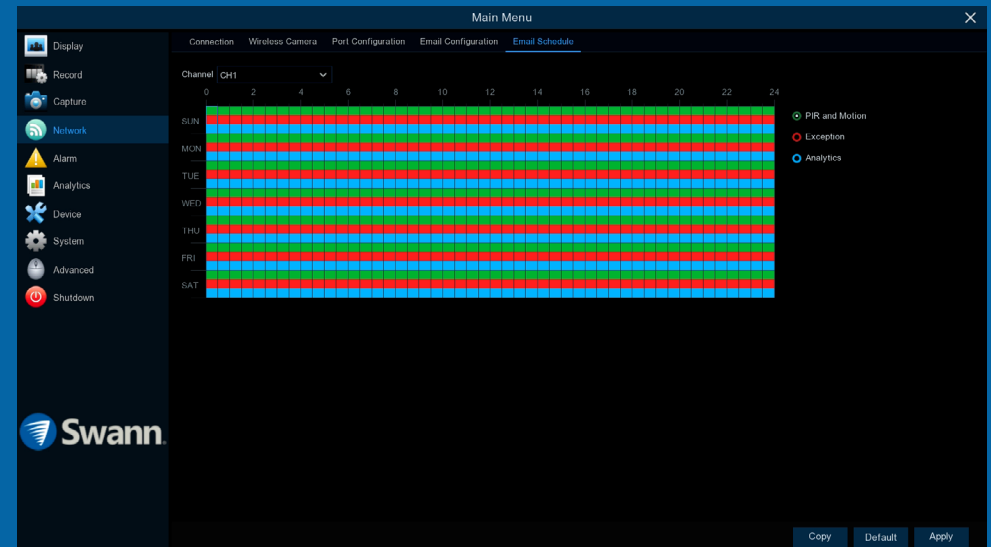
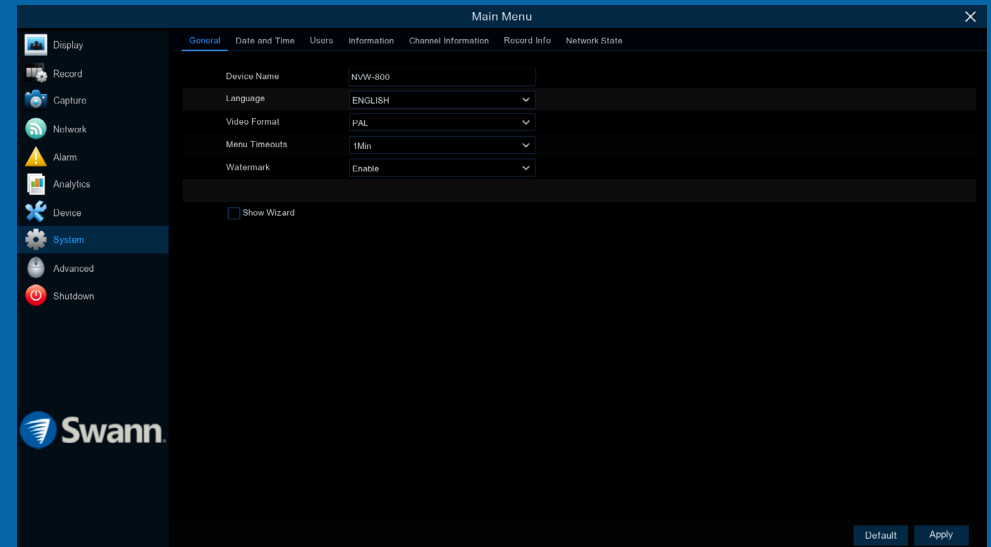
2. To zoom, move the mouse to the area or object that you want to zoom to then use the scroll wheel on the mouse to zoom in or out. When zoomed in, click and hold the rectangle (as shown bottom right of the screen) to scroll around the image. Right-click to exit.

Double-click the mouse to view multiple cameras.



Main Menu

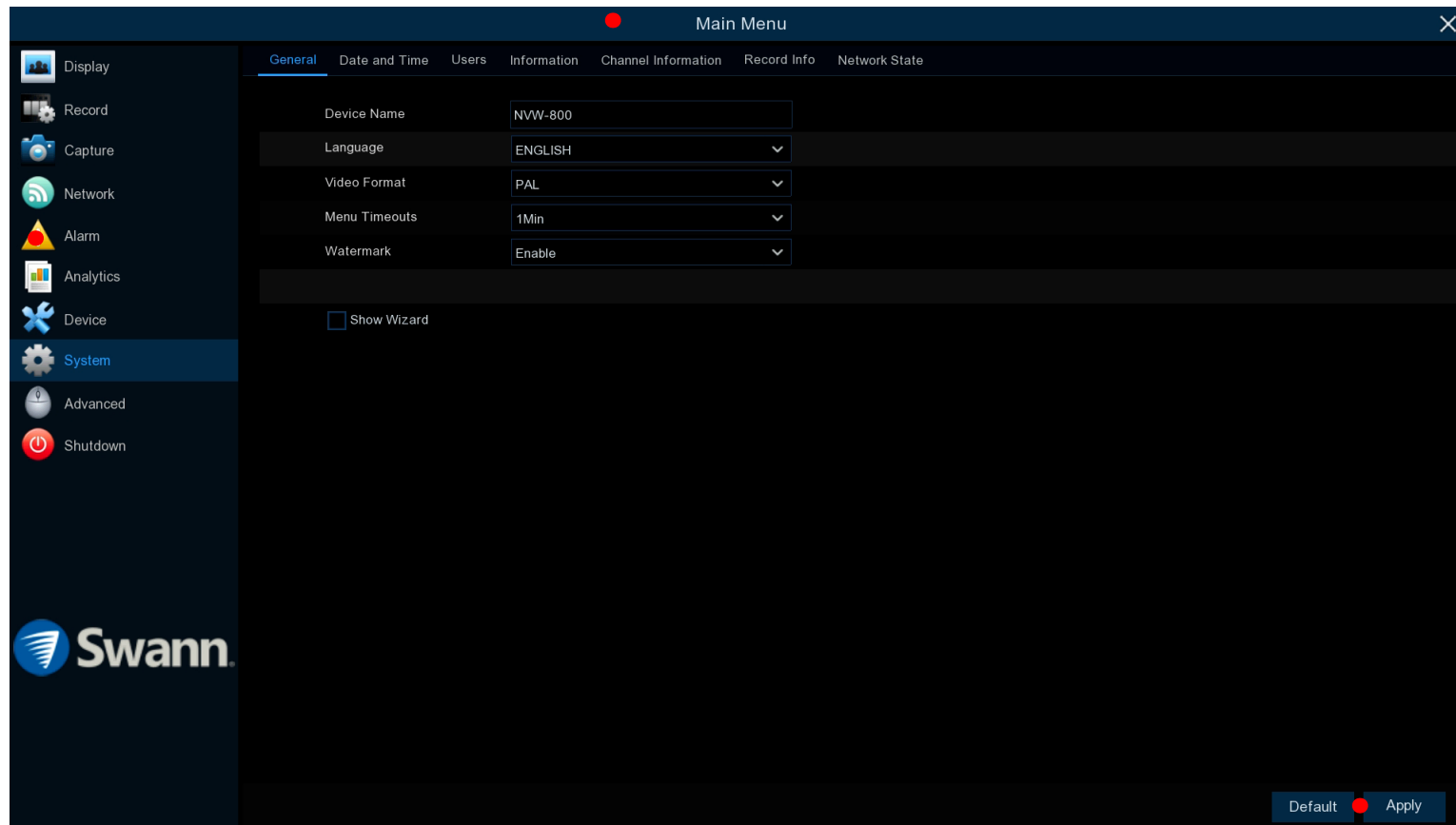
The Main Menu is where you control the various actions and options that are available on your NVR. Functions such as Privacy Mask can be enabled to obscure all or part of your image, and the option to change the default motion detection area. You can also enable Cloud Storage to copy snapshots and video to the cloud when events occur. To maintain system integrity, a firmware upgrade can be performed when available.



Menu Layout

The various functions and options available, are categorized on the left-hand side of the Menu.

Clicking each category will reveal several tabs or sub-categories that can be changed from their default setting.



To exit or access the previous menu, right-click the mouse.

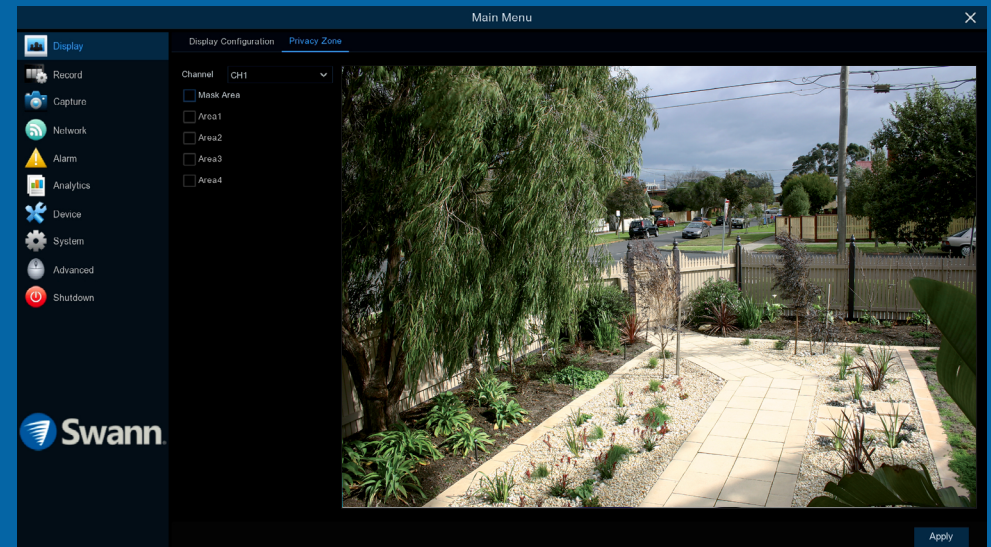


Save changes that have been made or restore default settings.

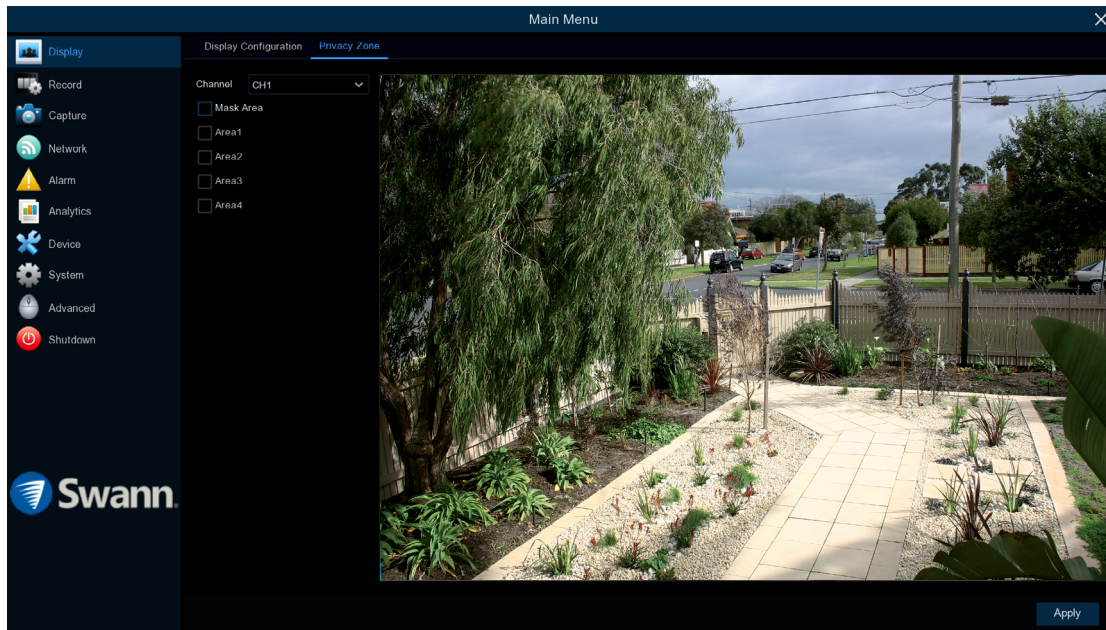


Camera Configuration

The camera configuration options are available in the Display, Record, and Alarm menus accessible from the Main Menu. Your NVR has controls for detecting motion, allowing you to define specific areas to alert you to a potential threat in and around your home. You can create one or more zones for privacy and setting a schedule for the camera's sensor warning light. Controls are also available to enable the built-in microphone and to change the frame rate that your NVR will record.



Display: Privacy Zone



This function can be used to obscure all or part of your image for privacy (up to four privacy masks can be created per camera). You can also use this to minimize false triggers when motion is detected. Areas obscured by a mask won't be shown live or recorded.

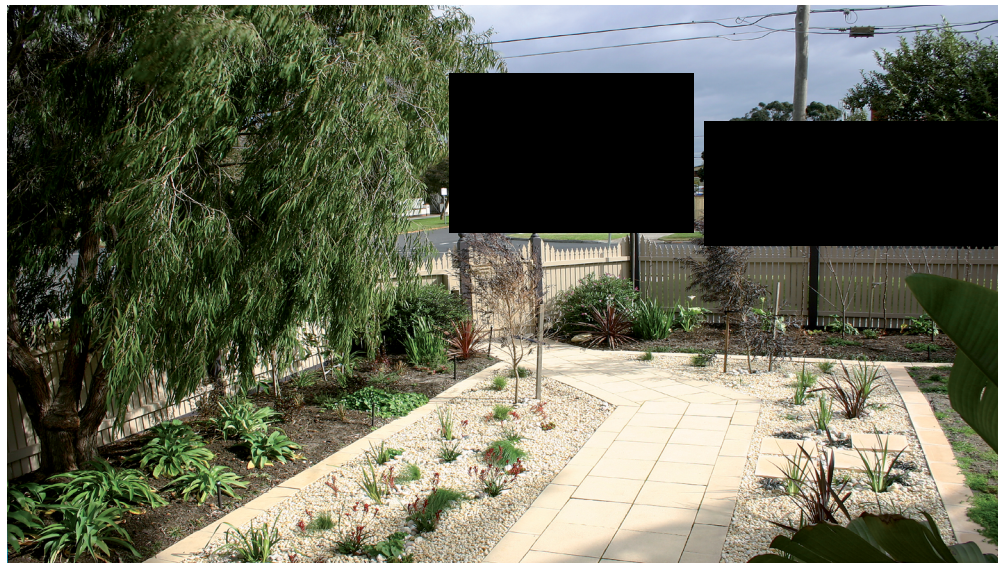
Channel: Select a camera that you would like to edit.

Mask Area: To create a mask, click the checkbox to enable it.

Area 1 to 4: Click the checkbox on the number of privacy masks that you want to enable. Up to four privacy masks can be enabled per camera.

Depending on the number of privacy masks enabled, one or more masks will appear in the Live View windows (see page 26 - [Enabling a Privacy Mask](#)).

Enabling a Privacy Mask



1. Depending on the number of masks that you want to enable, each mask will be numbered. To reposition the mask, click and hold the mask number then move the mask to the desired location.

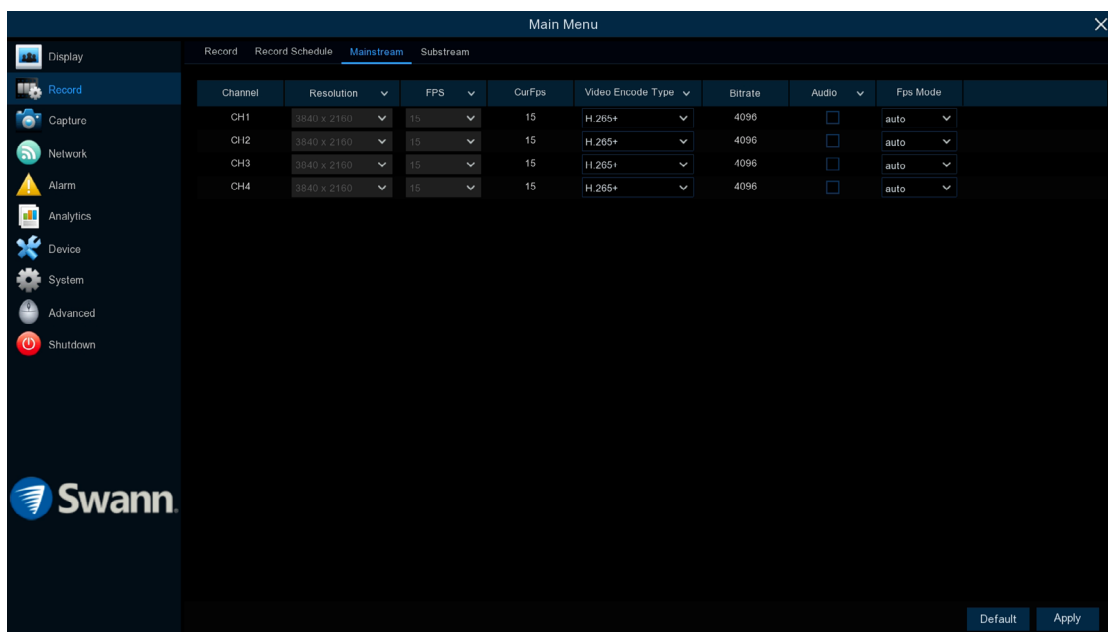
2. To resize the mask, click and hold the bottom right corner of the mask then resize to the desired size. You can reposition and resize each mask to overlap each other.

In the example provided on the left, two masks have been enabled to block out cars and pedestrians adjacent to the front yard of the house. This will minimize false triggers and block movement that is not relevant to entry via the front entrance.

3. When finished, click “Apply” to save. Areas obscured by a mask won’t be shown live or recorded (see below left).

To remove a mask, uncheck the checkbox next to the relevant area then click “Apply” to save.

Record: Mainstream



- Click "Default" to revert to default settings.
- Click "Apply" to save settings.

The resolution and frames per second are automatically set to match the signal strength of the connection between the camera and your NVR.

Video Encode Type: Your NVR utilizes three codecs to record video. The default codec is H.265+. This will compress the information more efficiently and provide the best video quality for a given bandwidth between each camera and your NVR. This setting allows your NVR to automatically adjust the video so that the connection and quality are consistent and reliable. This also applies to H.265. The other codec is H.264. This isn't recommended as it will impact on the reliability of the connection between each camera and your NVR due to the higher bandwidth required.

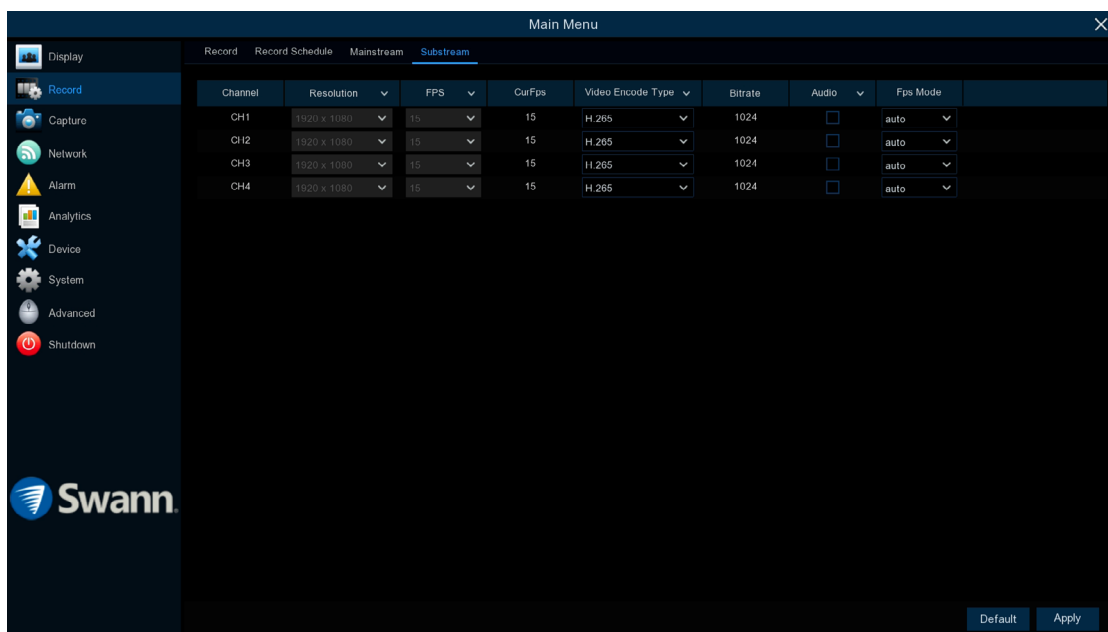
Audio: Click the checkbox to record audio using the camera's built-in microphone, otherwise leave it unchecked.

Fps Mode: The number of frames per second (fps) that your NVR will record. By default, the fps is set to auto but, you do have the option of changing this if you're having difficulties streaming video to your computer or mobile device. Click the drop-down menu and select "manual" then select a lower fps. Lowering the fps will also change the bitrate (the amount of data used to record and stream video). A lower bitrate will decrease the amount of data traffic required and possibly work better with low Wi-Fi signals. A higher bitrate may cause the connection to your NVR to be unreliable.



When streaming live video, the overall quality is dependent on your internet connection, the settings used here, and the camera's signal strength. Wi-Fi signal strength is also a crucial element to remember when streaming multiple cameras at the same time.

Record: Substream



At this stage of the Swann Security app development, the H.265+ codec isn't supported and may change in future updates. For now, leave the Video Encode Type on H.265.

- Click "Default" to revert to default settings.
- Click "Apply" to save settings.

The resolution and frames per second are automatically set to match the signal strength of the connection between the camera and your NVR.

Video Encode Type: Your NVR utilizes three codecs to record video. The default codec is H.265. This will compress the information more efficiently and provide the best video quality for a given bandwidth between each camera and your NVR. This setting allows your NVR to automatically adjust the video so that the connection and quality are consistent and reliable. This also applies to H.265+. The other codec is H.264. This isn't recommended as it will impact on the reliability of the connection between each camera and your NVR due to the higher bandwidth required.

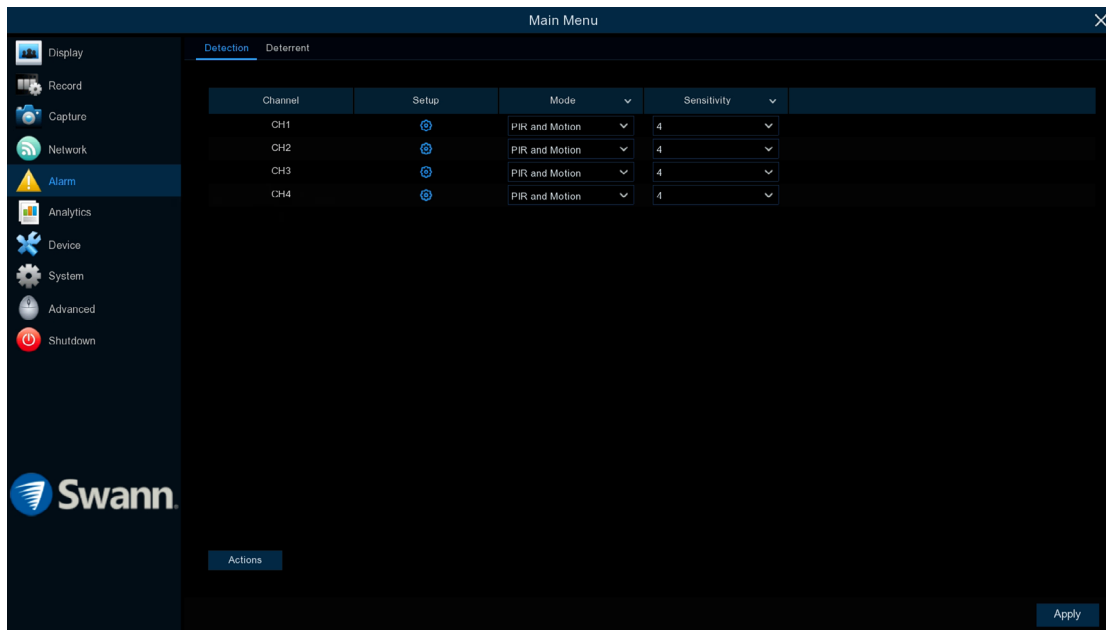
Audio: Click the checkbox to record audio using the camera's built-in microphone, otherwise leave it unchecked.

Fps Mode: The number of frames per second (fps) that your NVR will record. By default, the fps is set to auto but, you do have the option of changing this if you're having difficulties streaming video to your computer or mobile device. Click the drop-down menu and select "manual" then select a lower fps. Lowering the fps will also change the bitrate (the amount of data used to record and stream video). A lower bitrate will decrease the amount of data traffic required and possibly work better with low Wi-Fi signals. A higher bitrate may cause the connection to your NVR to be unreliable.



When streaming live video, the overall quality is dependent on your internet connection, the settings used here, and the camera's signal strength. Wi-Fi signal strength is also a crucial element to remember when streaming multiple cameras at the same time.

Alarm: Detection



When motion has been detected by one or more cameras, your NVR will alert you to a potential threat at your home. It does this by sending push-notifications via the Swann Security app and/or an email alert with an attached image from the camera to use as a reference (if this option is enabled).

→ Click “Apply” to save settings.

Setup: Click the button to change the default motion detection area. The entire view of the camera is enabled for motion detection, however, you can select certain areas if you wish (see page 31 - [Motion Detection Setup](#)).

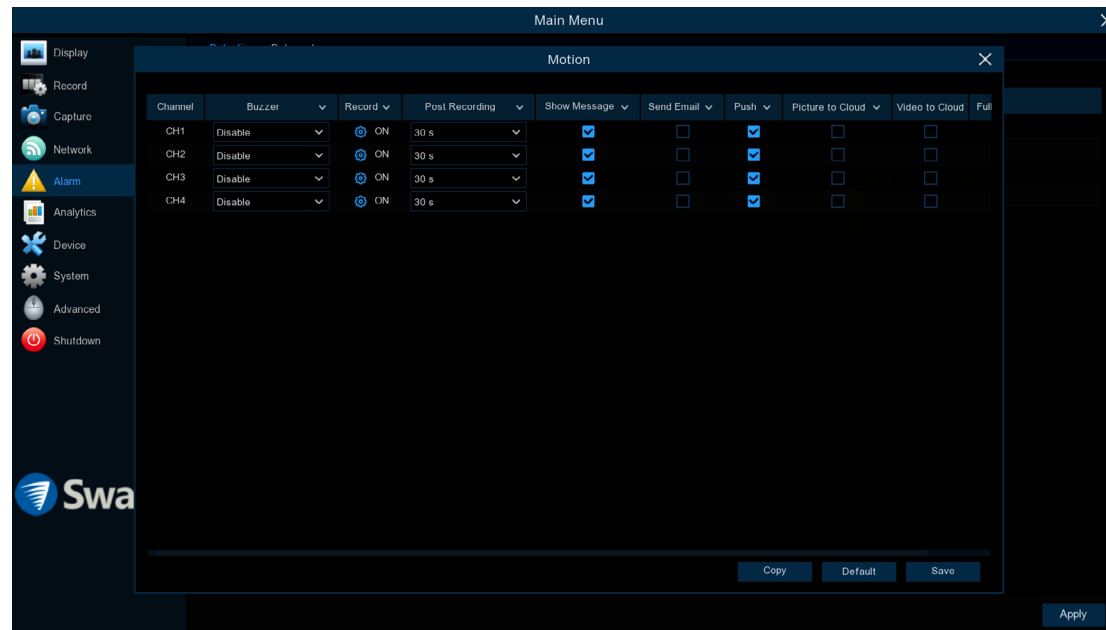
Mode: By default, your NVR will record motion only if one or more objects have been detected by the camera **and** the camera’s built-in PIR sensor. This provides more accurate motion detection by reducing false triggers due to wind, leaves falling, and rain (see page 33 - [Thermal-Sensing Tips](#)). The use of “Motion” only isn’t recommended as it sends you unnecessary motion notifications and will consume storage space at a very high rate.

Sensitivity: This option allows you to change the sensitivity level. The higher the number, the more sensitive your NVR will be when detecting motion. For most instances, the default selection will be suitable, however, it’s recom-

mended to conduct a test to see if the sensitivity level is correct for the camera’s location (see page 32 - [Motion Detection Tips](#)).

Actions: Click the button to change options for alarm notifications, alerts, and more (see page 30 - [Alarm: Detection - Actions](#)).

Alarm: Detection - Actions



Buzzer: When motion has been detected, you can enable the NVR's buzzer to alert you for a predetermined amount of time. Click the drop-down menu to select a time.

Record (Record Channel): This option instructs your NVR to trigger additional cameras to start recording when motion has been detected. Click the checkbox to select all cameras or click on the individual camera number that you want to trigger for recording.

Post Recording: This option instructs your NVR to record for a set period of time after an event has occurred. For most instances, the default selection will be suitable, however, you can change this if you wish.

Show Message: When motion has been detected, the motion icon will appear on-screen. Click the checkbox if you want to disable this.

Send Email: Click the checkbox to enable your NVR to send an email alert when motion has been detected.

Push: Push-notifications are automatically sent via the Swann Security app. Click the checkbox if you want to disable this.

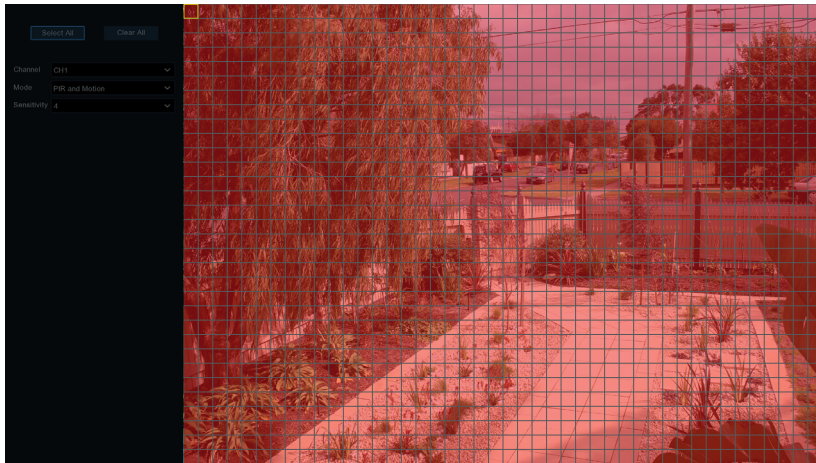
Picture to Cloud: Click the checkbox to copy snapshots to the cloud via Dropbox.

Video to Cloud: Click the checkbox to copy videos to the cloud via Dropbox (a maximum of two cameras can be selected to copy video to the cloud).

Full Screen (slide to the right to view): Click the checkbox to view the camera full-screen in Live View mode when motion has been detected.

Click the "Save" button then click "OK". Right-click the mouse to exit.

Motion Detection Setup

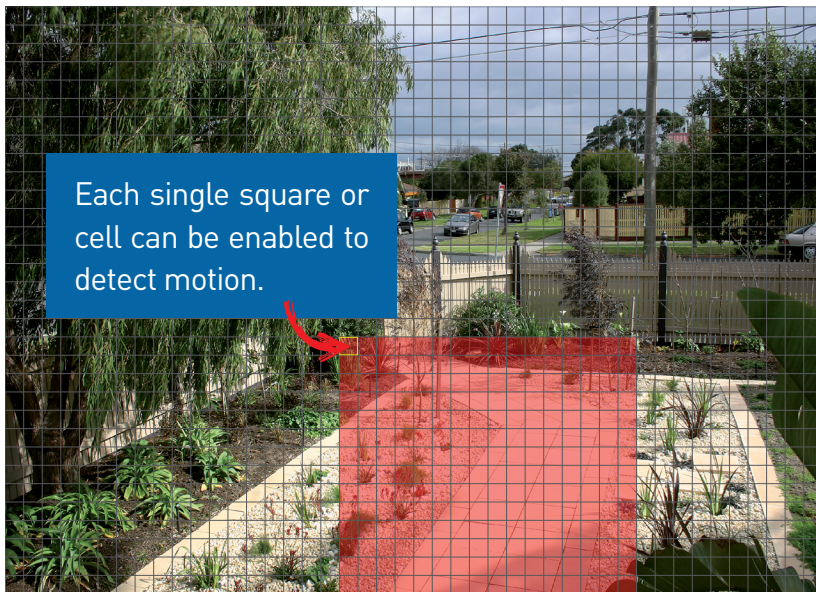


1. Click “Clear All” to delete the default motion detection area.
2. To create a new motion detection area, press and hold the left mouse button to select the cell or square that you want to start at, then click and drag to select the area that you want to create. Release the mouse to finish.
3. Multiple areas can be created. Each cell or square can be enabled to detect motion. The same action also applies to delete an area that has been created.

In the example provided, a motion detection area has been created for the front yard but excludes objects such as trees as well as cars and pedestrians adjacent to the front yard of the house. Anyone who walks along the path via the front entrance and approaches the front door will be detected.

Movement outside of the motion detection areas will not be detected so will not trigger recordings or event notifications.

4. Adjust the sensitivity if required then right-click the mouse to exit.
5. Click “Apply” to save changes made.



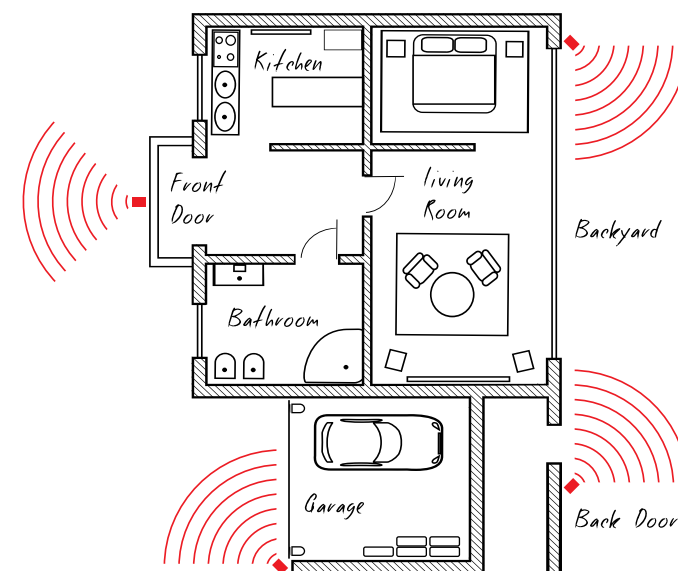
Motion Detection Tips

Placement of the cameras

1. Place cameras so they are facing areas where people have to walk through to approach your home regardless of where they are headed. A good idea is to place a camera overlooking your front door to capture an image of anyone approaching it for later reference. This is great if you have parcels delivered to your door or if the potential burglar knocks or rings the doorbell to see if anyone is home.
2. Walk around your house and assess where intruders are most likely to approach to enter, and what path they would take. Most burglars enter the home through a front or back door, so it's advisable to place the cameras near those areas so that you get the best amount of detail of anyone who approaches.
3. When installing cameras outside, it's important to keep your front and backyard as well-lit as possible for ideal night vision and the ability to detect motion. It's common for intruders to enter a home through an unlocked garage or by using a garage door opener in an unlocked car located in the driveway. Positioning your cameras to overlook cars in the driveway and similar locations can be very useful.

Avoiding False Triggers

1. A tree, shrub, or foliage that is blown by the wind - angle the camera so wind-blown objects are out of the camera's view or use the camera motion detection area settings to exclude these areas from detection.
2. People moving along sidewalks or streets that are close to your home, aim your cameras and use the motion detection area settings to ensure only legitimate threats are triggering events.
3. Vehicles moving in the background - angle the camera to avoid movement in the background or use the motion detection area settings to stop detection of cars in the street.
4. Movement or light reflected off smooth surfaces such as glass - adjust the sensitivity level and/or avoid pointing the camera directly at glass surfaces.
5. Windows will also reflect infrared if the cameras are looking through them.

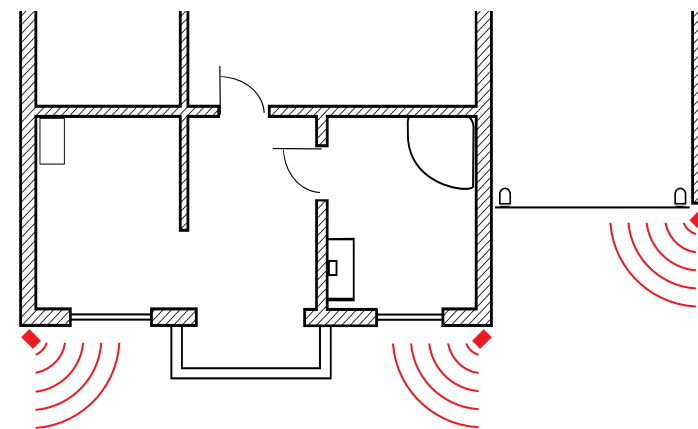


As illustrated above, place your cameras close to the front door, back door, garage entrance, and overlooking the backyard. This will give you the greatest possible coverage to the entrances and exits of your residence.

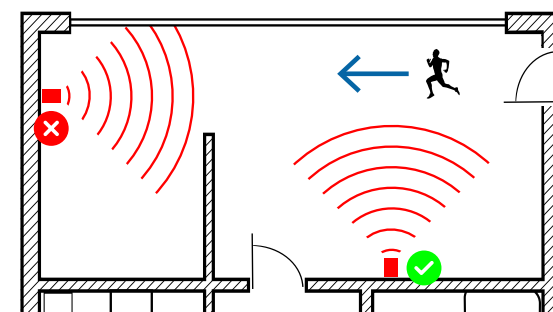
Thermal-Sensing Tips

Your cameras have a built-in PIR (passive infrared motion detector) sensor. This means they can sense the movement of infrared objects including people, cars, and animals. The advantage over cameras that don't have a PIR sensor, is they're resistant to false triggers from changes in the image.

- PIR sensors work best when an intruder walks parallel or is passing across their "field of view" as opposed to walking directly at them. For example, in a hallway or path around the house, you tend to walk parallel to the walls, not directly toward them. Position your cameras so that anyone approaching your home will cross the camera's view and trigger an event.
- For a recording to occur, the PIR must sense an infrared object moving in front of it **and** the camera's image sensor must detect movement in the image. If either of these triggers has not occurred, no video will be recorded.
- When the PIR is triggered, the PIR icon (red box) will flash on-screen. If PIR and motion are triggered, the "running man" icon will be shown on-screen indicating that an event has occurred and that a recording is happening.
- The PIR can detect objects outside of the camera's field of view, so not everything that triggers the sensor will be visible on your camera.
- The PIR can reliably detect movement up to 26ft/8m, movement beyond this range may or may not be detected.
- Be aware that sudden changes in temperature of paths, roads, for example, can cause some minor false alerts to occur when there is also movement in the image such as trees and shadows.
- If some false triggering is occurring, use the motion area setup to remove moving objects from being detected, and to further refine your alerts (see page 31 - [Motion Detection Setup](#)).
- When used indoors, keep the cameras away from heating vents, heaters, and other heat sources as they can trigger the PIR. However, if there is no movement in the image, a false alert is unlikely.
- As the PIR must sense an infrared object moving in front of it, the camera's image sensor will not detect movement when the camera is pointing at a window. In other words, it cannot see through glass.

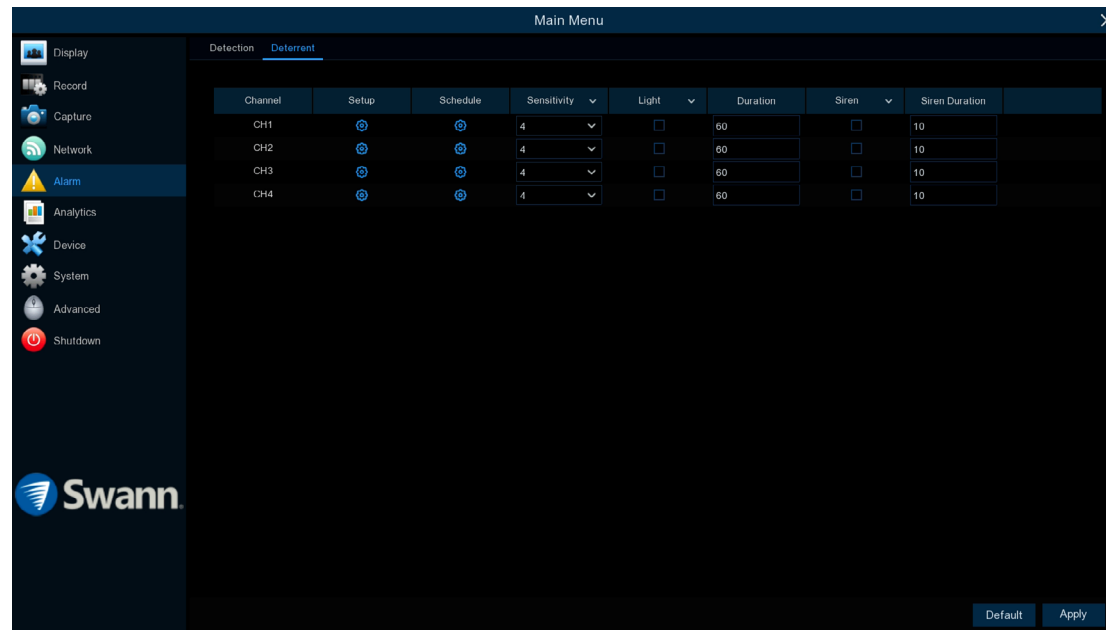


When installing cameras outside, mount them where intruders are most likely to enter (front & back doors, garage entrance). Angle the cameras so the intruder walks parallel to the sensor.



PIR sensors work best when an intruder walks parallel or is passing across their "field of view" as opposed to walking directly at them.

Alarm: Deterrent



Setup: Click the button to change the default spotlight detection area. The entire view of the camera is enabled, however, you can select certain areas if you wish (see page 35 - [Deterrent Setup](#)).

Schedule: Click the button to change the default spotlight schedule (see page 36 - [Deterrent Schedule](#)).

Sensitivity: This option allows you to change how sensitive the spotlight will be when your NVR has detected motion. This is independent of the camera's sensitivity for detecting motion. As an example, you may want to record movement that is happening in the background but you don't want the spotlight and or the siren to be triggered until one or more objects gets closer to the camera. For this scenario, you would adjust the sensitivity to 1 or 2.

Light: Click the checkbox to enable the camera's spotlight.

Duration: This lets you change the length of time the spotlight will remain lit when motion has been detected. Adjust accordingly.

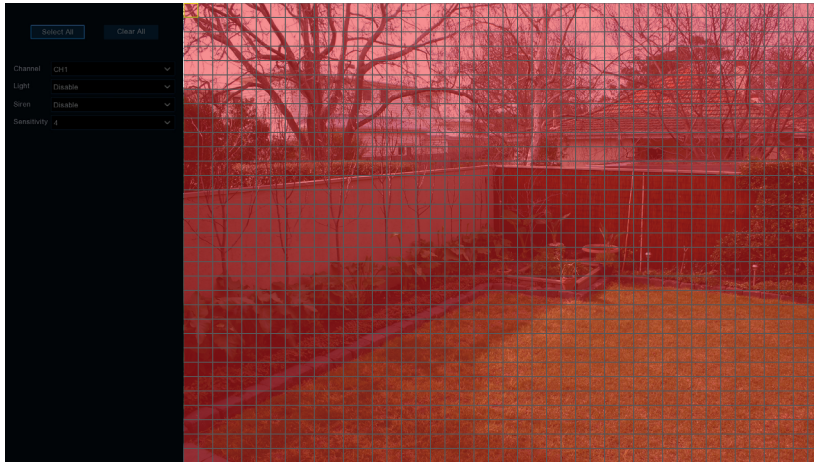
Siren: The camera's siren is disabled by default. If the siren is required, click the drop-down menu to enable it (this function is only available if your camera has a built-in siren). A warning message will appear on-screen. Click "OK" to continue.

Siren Duration: This lets you change the length of time the siren will remain turned on when motion has been detected. Adjust accordingly.



Regarding the cameras' light and siren, they are triggered when your NVR detects motion by the camera and the camera's PIR built-in sensor. They can also be triggered via the Swann Security app.

Deterrent Setup



1. Click “Clear All” to delete the default spotlight detection area.
2. To create a new spotlight detection area, press and hold the left mouse button to select the cell or square that you want to start at, then click and drag to select the area that you want to create. Release the mouse to finish.

3. Multiple areas can be created. Each square can be enabled to trigger the spotlight. The same action also applies to delete an area that has been created.

In the example provided, a spotlight detection area has been created for the backyard and will trigger the spotlight when one or more objects get closer to the rear of the house.

Movement outside of the spotlight detection area will not trigger the spotlight.

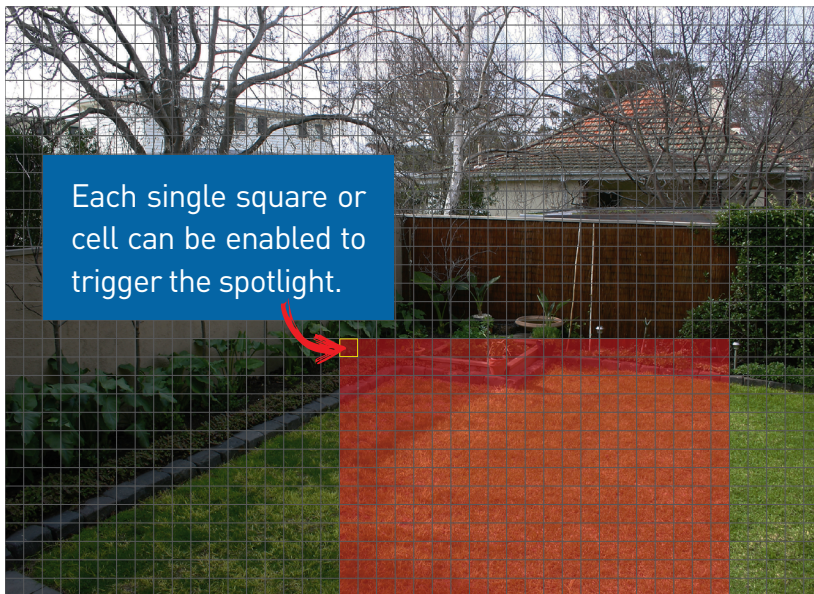
Light: Click the drop-down menu to enable the camera’s spotlight.

Siren: Click the drop-down menu to enable the camera’s siren. A warning message will appear on-screen. Click “OK” to continue.

Sensitivity: Click the drop-down menu to adjust the sensitivity if needed.

4. Right-click the mouse to exit.

5. Click “Apply” to save changes made.



Deterrent Schedule

The screenshot displays the 'Main Menu' window for the Swann alarm system, specifically the 'Deterrent' configuration page. The interface is divided into a sidebar and a main content area.

Sidebar (Left): Contains navigation icons for Display, Record, Capture, Network, Alarm (highlighted), Analytics, Device, System, Advanced, and Shutdown. The Swann logo is at the bottom.

Main Content Area:

- Table:** A table with columns: Channel, Setup, Schedule, Sensitivity, Light, Duration, Siren, and Siren Duration. It lists two channels, CH1 and CH2.
- Schedule Grid:** A calendar grid titled 'Schedule' showing days of the week (SUN to SAT) and hours (0 to 24). Blue squares indicate active periods. The grid shows activity from 00:00 to 06:30 and from 18:30 to 24:00 on all days.
- Buttons:** 'Default', 'Save', and 'Close' buttons are located below the grid. 'Default' and 'Apply' buttons are at the bottom right of the window.


By default, the spotlight and siren will not trigger between 06:30 a.m. and 04:30 p.m., however, you can change this according to your needs.

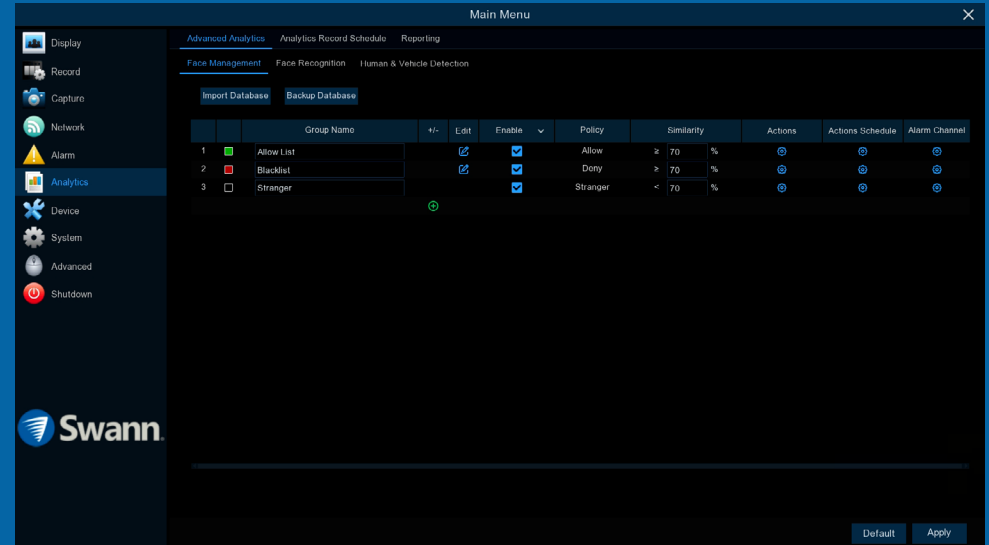
Each square represents 30 minutes. Using the mouse, click on a particular square to change or click and drag the mouse over the squares corresponding to your desired period.

Click "Save" to save changes made. Right-click the mouse to exit.

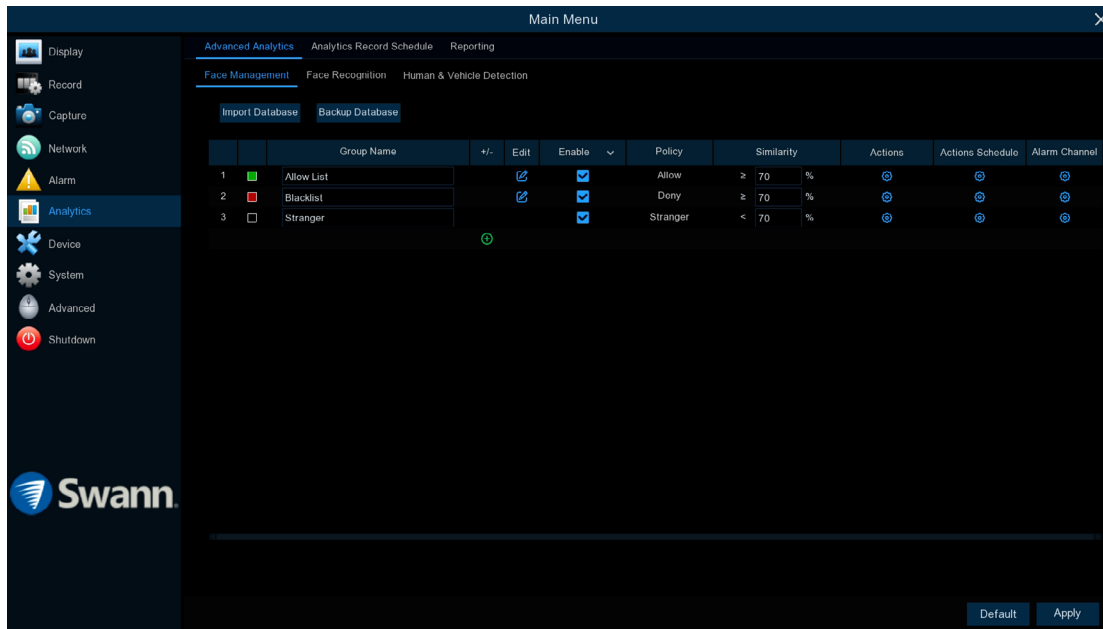
Analytics (NVW800 camera only)

Analytics provides you with much greater control over how your NVR detects motion. Different face profiles can be created to configure an allow or blacklist group. If a face in the blacklist is detected, your NVR can alert you by sending an email, an alert on your mobile device, and saving a picture to the cloud. You can also enable human & vehicle detection which can be especially helpful if people are loitering or if a car is parked where it shouldn't be.

 Only one analytic function (Face Recognition or Human & Vehicle Detection) can be applied to a single channel.



Advanced Analytics: Face Management



Use the Face Management function to create and manage face profiles in the Allow List and Blacklist groups, configure face matching similarity threshold, and customize group actions that will be taken when Face Recognition events are detected in the areas being monitored.

- Click “Default” to revert to default settings.
- Click “Apply” to save settings.

Import Database: Restore the backup of the Allow List & Blacklist settings and face profiles from a USB flash drive. Please note, this will overwrite the existing settings and face profiles.

Backup Database: Save the Allow List & Blacklist settings (Enable, Similarity, Actions, etc.) and face profiles to a USB flash drive.

Group Name: The name of the group. By default, there are three preset groups - Allow List, Blacklist, and Stranger. Unrecognized faces will initially be classified as Strangers. You can change the default group name by clicking in the field and typing a new name.

+/-: Click the green button to add a custom face group.

Edit: Click the icon to manage the Allow List & Blacklist face profiles. You can search for faces in the database and create face profiles for people as well

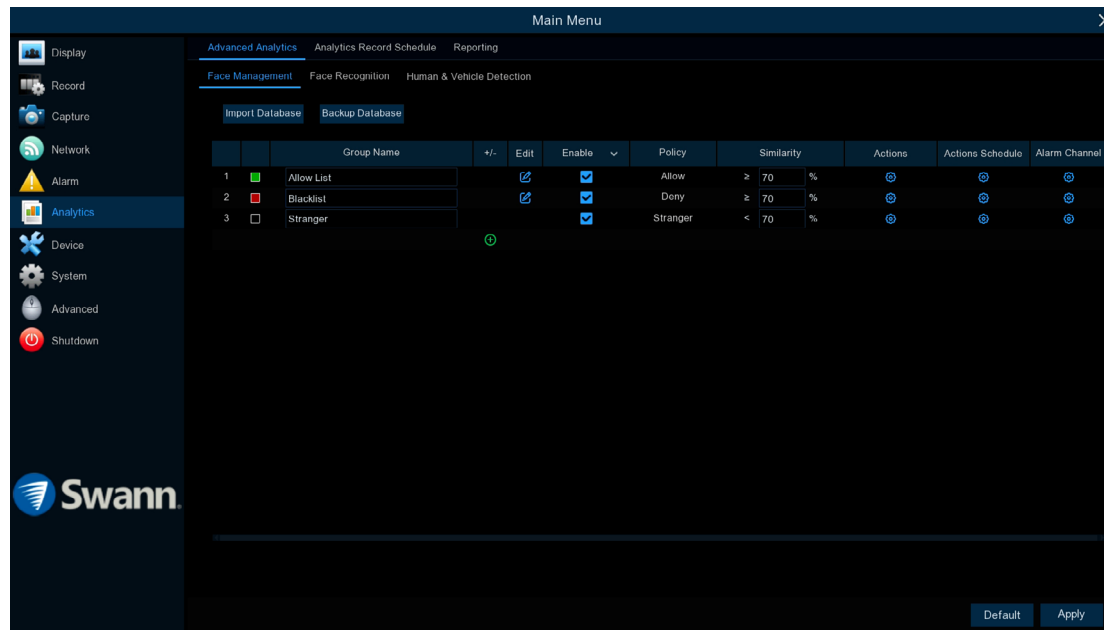
as add multiple face images to existing profiles to improve face recognition accuracy (see page 44 - [Creating Face Profiles](#)).

Enable: If the checkbox isn't enabled, no actions specified for the group such as alarm notifications, will be performed by your NVR.

Policy: This setting is non-configurable for the three preset face groups. If a custom group has been created, you can set the policy of your custom group to one of the following - Allow, Deny or Advance.

(continued on next page)

Advanced Analytics: Face Management



Similarity: Set how closely, in percentage terms, the detected face must match a face profile in the group to be considered a recognized match. The default threshold is 70%. A higher similarity % will result in fewer false recognition results but may miss some valid faces, such as if the angle is incorrect, or the person is wearing a hat or face covering, etc.

Actions: Click the button to specify the group actions to be taken by your NVR when a facial recognition event has occurred. You have options to save images of the detected face, enable event notifications, and more (see page 40 - [Advanced Analytics: Face Management - Actions](#)).

Actions Schedule: Click the button to edit the schedule of when actions specified for the group will take effect.

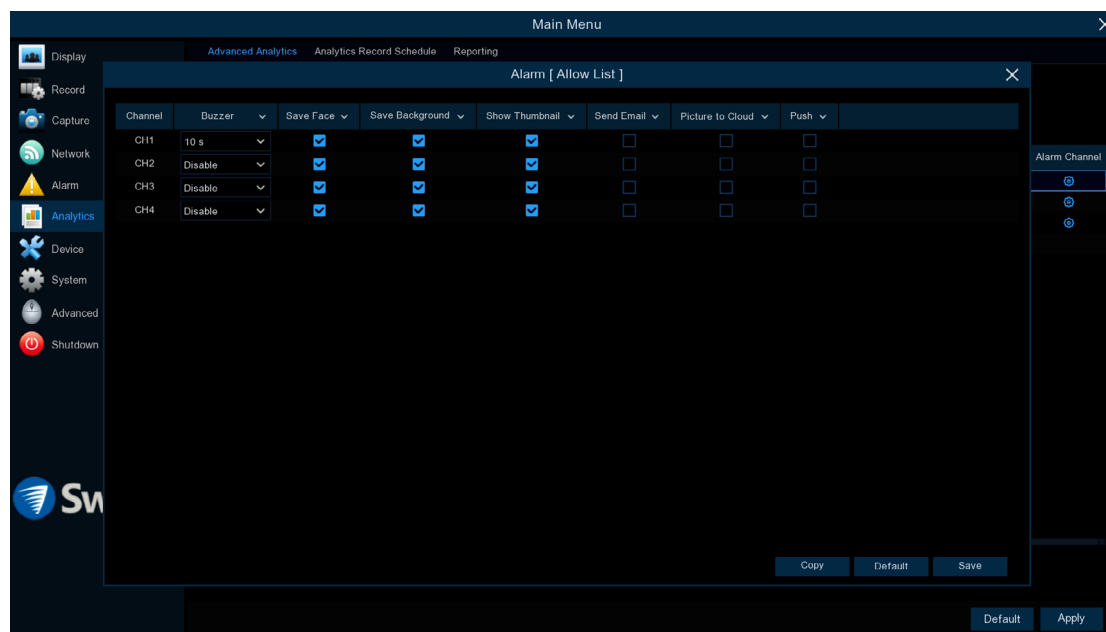
Alarm Channel: By default, all channels will be triggered to record when

motion has been detected however you can change this if required.



Make sure the “Enable” checkbox for the “Stranger” group remains ticked. This allows your NVR to save the images of every single face detected, including those that do not match any existing face profiles, to the database. You can use these face images later to create or improve face profiles in the Allow List & Blacklist groups.

Advanced Analytics: Face Management - Actions



Buzzer: When a facial recognition event has been detected, you can enable the NVR's buzzer to alert you for a predetermined amount of time. Click the drop-down menu to select a time.

Save Face: Whether the snapshot of the recognized face will be saved to the face database on your NVR. Leave this option enabled so more facial images can be added to profiles later to improve face recognition accuracy.

Save Background: Whether the snapshot of the background will be saved together with the face image. Leave this option enabled so that when performing an advanced face search (Search > Advanced), you can right-click the face image and select "Detail Information" to view a snapshot of the background.

Show Thumbnail: Whether to generate a facial recognition event notification that includes a snapshot of the recognized face via the Analytics Notifica-

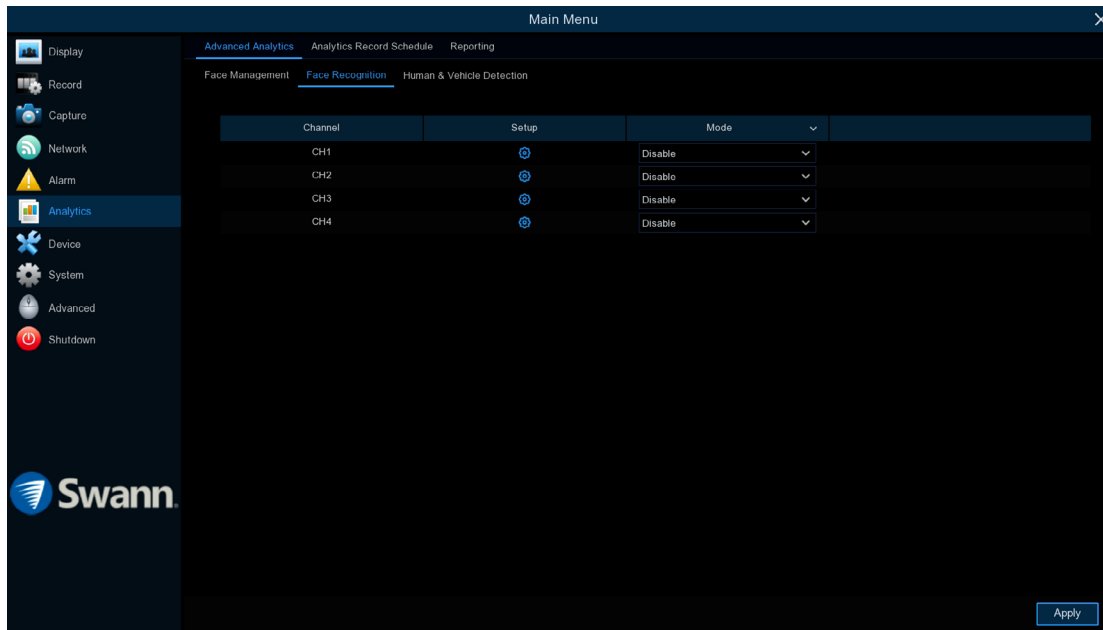
tion Panel in Live View mode. Disabling this option will stop facial recognition events from appearing in the Analytics Notification Panel.

Send Email: An email alert will be sent when motion has been detected. Click the checkbox if you want to disable this.

Picture to Cloud: Click the checkbox to copy snapshots to the cloud via Dropbox (see page 79 - [Device: Cloud Storage](#)).

Push: Click the checkbox to receive push notifications via the Swann Security app (a push notification is a message that pops up on your mobile device). Click the "Save" button then click "OK". Right-click the mouse to exit.

Advanced Analytics: Face Recognition



→ Click “Apply” to save settings.

Setup: Click the “Setup” button to change the default video analytic settings such as the minimum pixel size for facial recognition and the detection area (see page 42 - [Face Recognition Settings](#)).

Mode: Two choices are available. Select “FR” to enable facial recognition and to record an event whenever the camera detects a face in the designated detection area. Select “FR+PIR” to enable facial recognition and to record an event whenever the camera detects a face in the designated detection area, as well as detecting movement with the camera’s built-in PIR sensor.



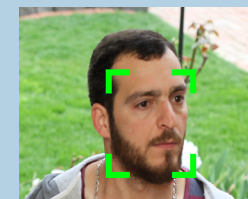
When facial recognition is enabled on the camera, Human & Vehicle Detection will be disabled, and vice-versa. It’s not possible to activate both functions on the camera at the same time.

Face Recognition Settings



The green outlined box with a yellow square represents the [Min Pixel](#) value specified. This means a face in the detection area must be at least the size of this box (relative to the view) to trigger an event. Click and drag the yellow square to adjust the size of the box and its value. Click anywhere within the box and drag the viewing area to measure and check face sizes.

When the camera recognizes a face, a green tracking frame surrounding the face appears. These green tracking frames can be seen in Live View mode (when viewing a single camera) and FD event playback.



Snap Mode: Select how snapshots containing a recognized face will be captured. This can affect the number of facial recognition notifications that you will receive, three options are available:

Realtime Mode: The camera tracks and captures the face of someone entering and leaving the facial detection area. You'll get two notifications in the Analytics Notification Panel - once when the face is first detected and again as the face leaves the facial detection area. This is useful if you want to continuously monitor someone's presence in an area and get alerts in real-time.

Optimal Mode: A single, best snapshot of the face is captured.

Interval Mode: You can specify the number of snapshots to take and the time interval between snapshots.

Apply Mode: There are two options available:

Frontal View: The facial recognition engine is optimized to scan for faces approaching the camera straight-on.

Multi Angle: The facial recognition engine is optimized to scan for faces approaching the camera from different angles.

Min Pixel: The minimum face size in pixels. The smaller the number of pixels, the more faces the camera can recognize. The default value is 64. If the camera is recognizing too many unwanted distant faces, try increasing the minimum pixel value to train the camera to look for larger faces that are typically at a closer distance.

Face Enhance: If for some reason your NVR isn't detecting faces consistently, click the drop-down menu to enable.

(continued on next page)

Face Recognition Settings



Sensitivity: Adjust the sensitivity level of the detection area. The higher the number, the more sensitive it will be when detecting faces.

Detection Mode: In Static Mode, all objects in the camera's field of view will be analyzed. In Motion Mode, only moving objects will be analyzed.

Rule Kind: Leave the default selection.

Detection Range: The entire view of the camera is enabled for facial recognition detection. Select Customize to change the default detection area (see above right for instructions).

Save: Click this to save any changes made then click "OK" to continue.

Right-click to exit.

Customizing the Detection Range

1. Detection Range: Select Customize in the drop-down menu.

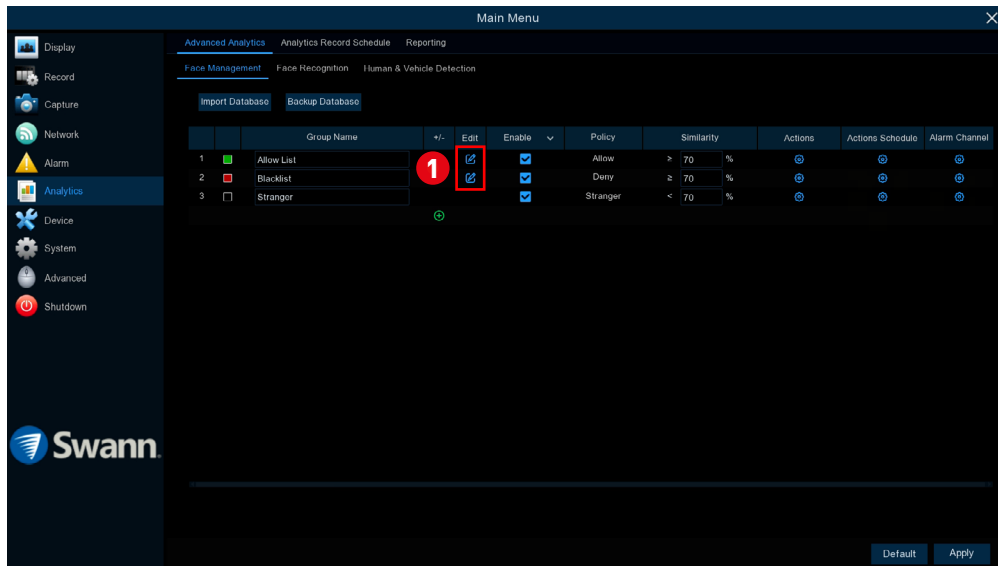
2. Click and drag any red square (sizing handle) in the corners of the rectangle to shape and customize the facial detection area. You can resize the rectangle to any shape or size to exclude the area in which facial recognition isn't needed. See below for an example.



3. When finished, click the "Save" button.

Right-click to exit.

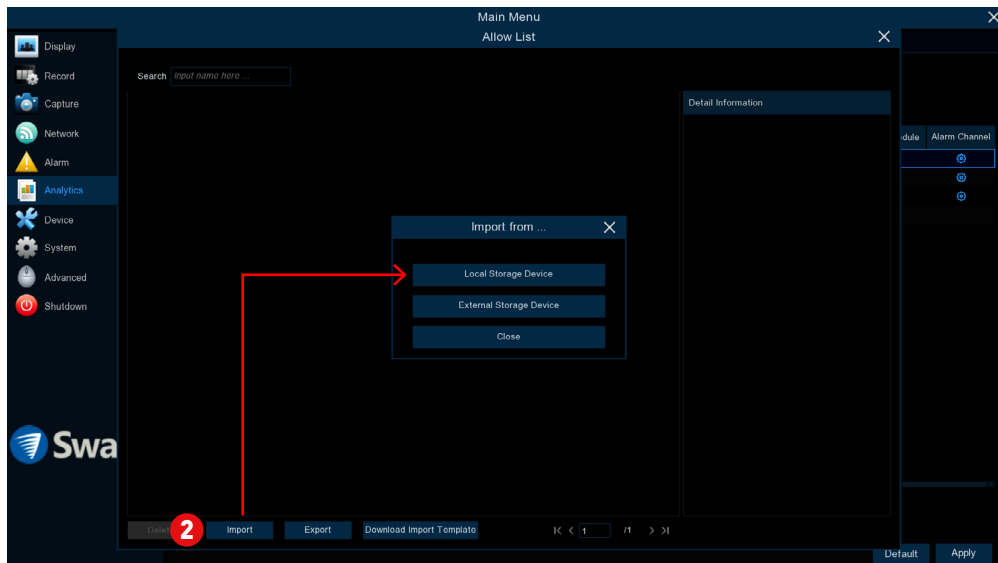
Creating Face Profiles



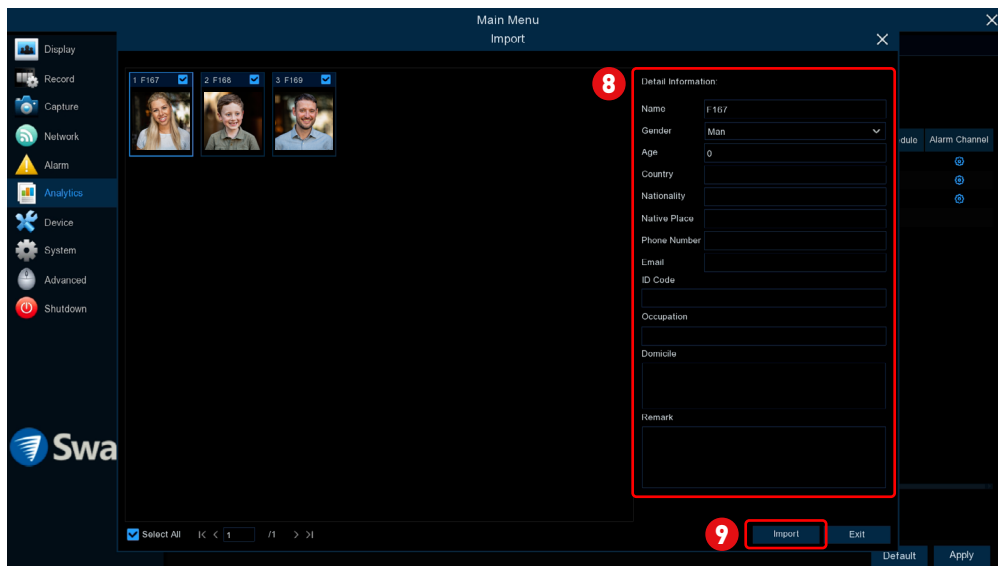
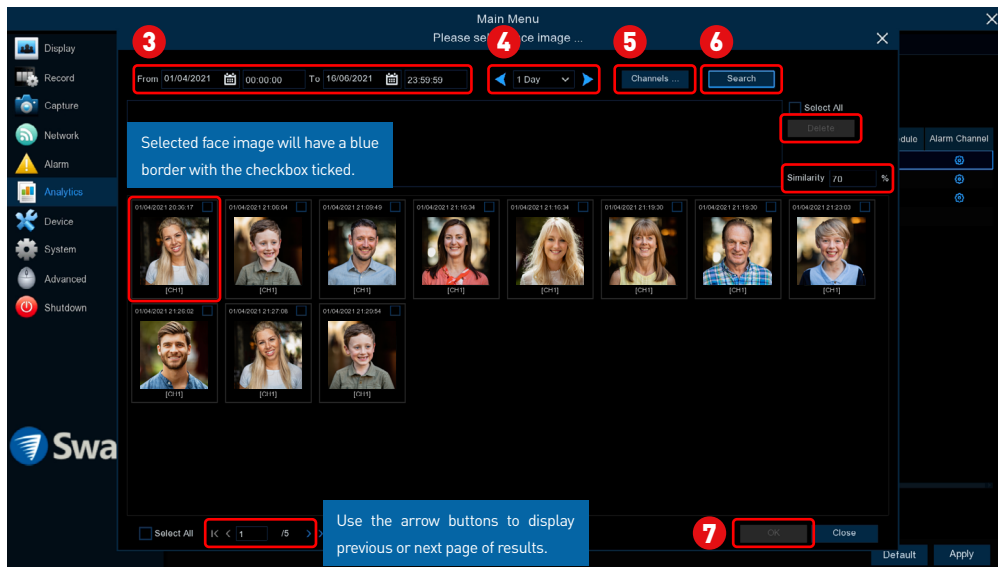
1. Click the “Edit” button of the Allow List or Blacklist group that you would like to create face profiles for.

2. From the Group window, click the “Import” button then click the “Local Storage Device” button to browse the database of face images that have been captured and stored on your NVR. If necessary, you can also browse face images that were previously exported to an external storage device by clicking “External Storage Device”.

(continued on next page)



Creating Face Profiles



3. Use the calendar to specify the date range.

4. Use the arrow buttons to quickly display face images from the previous or next day.

5. Channels: Select from one or all cameras that you would like to search on.

6. Search: Click this to perform a search based on the criteria specified.

Delete: Delete selected face image when performing a search based on similarity percentage (%).

Similarity: Face similarity threshold (%). If you have selected a face image, you can click the “Search” button to search for faces with a similarity greater than that specified here.

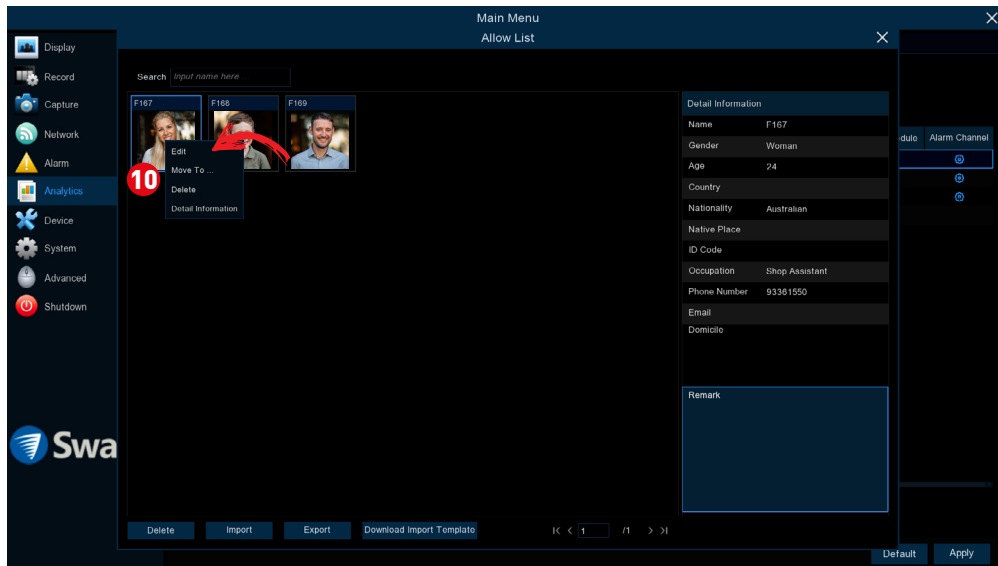
7. Once you’ve selected one or more face images, click the “OK” button.

8. Select a face image then enter their identification details such as the person’s name and age. By default, each face image is given a face ID as its name.

9. When finished, click this button. The face profile is now created and assigned to the group.

(continued on next page)

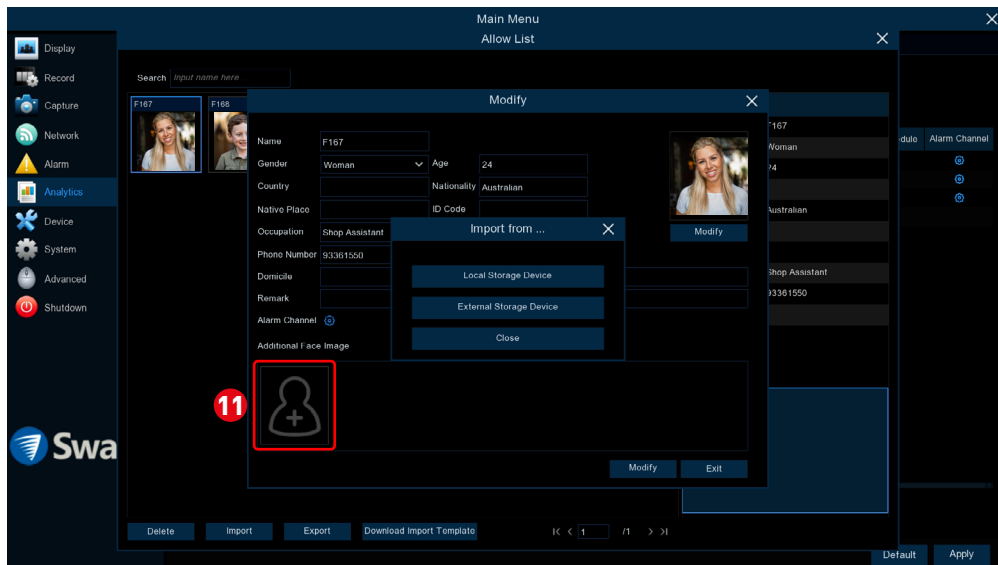
Creating Face Profiles



You can add multiple face images to each face profile. This trains the facial recognition engine to detect the person from various angles and different facial expressions.

In Face Management, click the “Edit” button for the group that you want to edit. Face images assigned to the group will be displayed.

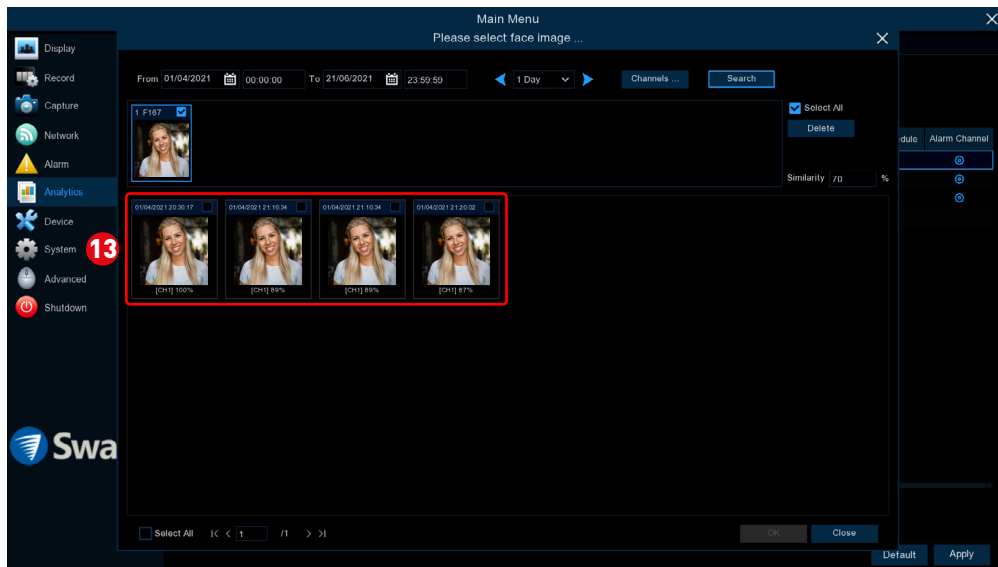
10. Right-click an image then click “Edit”.



11. Click the + icon then click the “Local Storage Device” button to browse the database of face images that have been captured and stored on your NVR.

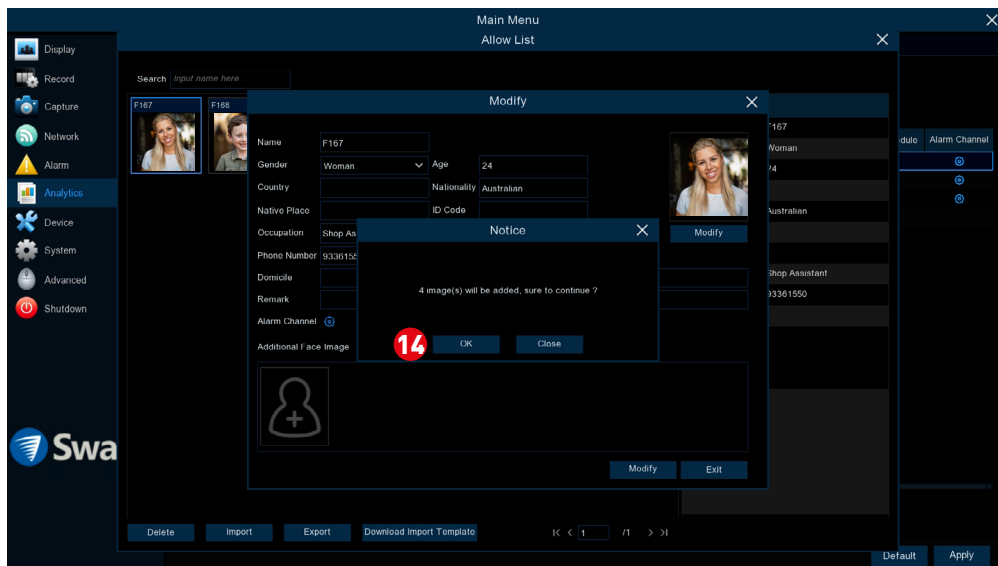
(continued on next page)

Creating Face Profiles



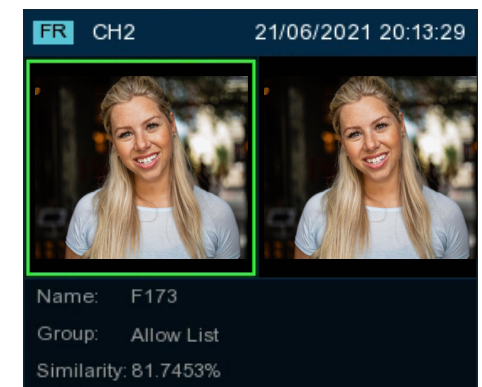
12. Commence another search as per steps 3 to 6. To display more results, change the date range and similarity threshold (%).

13. Click the checkbox of each image that you want to add, then click the "OK" button.



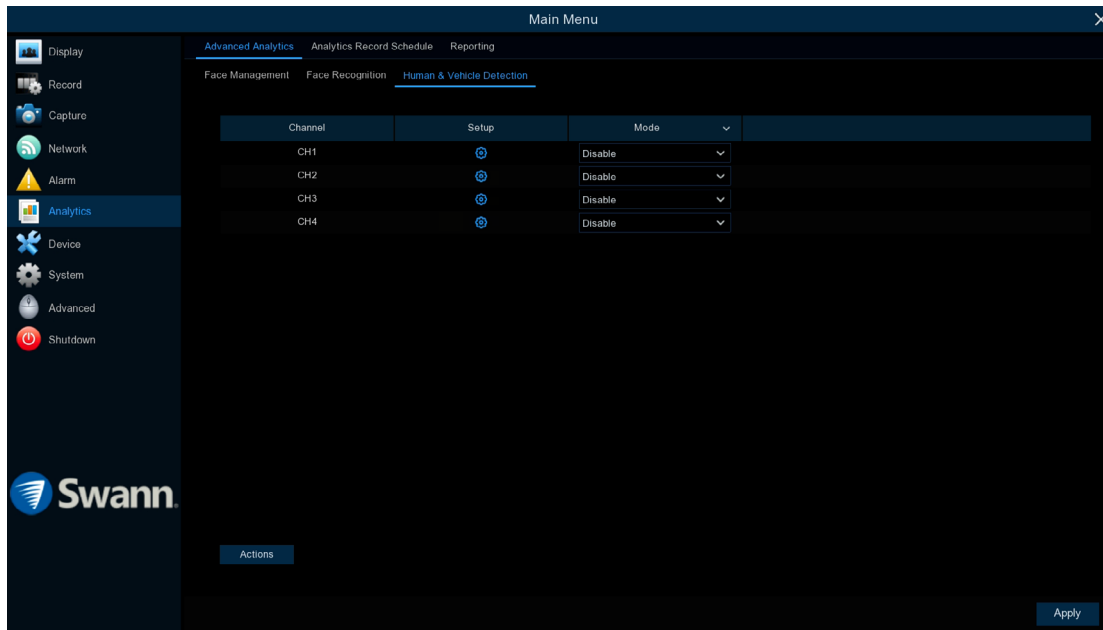
14. Click the "OK" button to confirm the number of images that will be added. Click the "Exit" button then right-click to close.

Your NVR will alert you via the Analytics Notification Panel when a facial recognition event has occurred. Each notification will contain a snapshot of the matching face with a green border. Double-click the notification to play the facial recognition event.



Each group notification is color-coded:
Green > Allow List, Red > Blacklist
Black > Stranger

Advanced Analytics: Human & Vehicle Detection



→ Click “Apply” to save settings.

Setup: Click the “Setup” button to change the default video analytic settings such as the minimum pixel size for human & vehicle detection and the detection area (see page 49 - [Human & Vehicle Detection Settings](#)).

Mode: Two choices are available. Select “HD&VD” to enable human & vehicle detection and to record an event whenever the camera detects a human and/or a vehicle in the designated detection area. Select “HD&VD+PIR” to enable human & vehicle detection and to record an event whenever the camera detects a human and/or a vehicle in the designated detection area, as well as detecting movement with the camera’s built-in PIR sensor.



When human & vehicle detection is enabled on the camera, facial recognition will be disabled, and vice-versa. It’s not possible to activate both functions on the camera at the same time.

Human & Vehicle Detection Settings



The green outlined box with a yellow square represents the [Min Pixel](#) value specified. This means an object in the detection area must be at least the size of this box (relative to the view) to trigger an event. Click and drag the yellow square to adjust the size of the box and its value. Click anywhere within the box and drag the viewing area to measure and check object sizes.

When the camera recognizes an object, a green tracking frame surrounding the object appears. These green tracking frames can be seen in Live View mode (when viewing a single camera) and HD&VD event playback.



Snap Mode: Select how snapshots containing a human and/or a vehicle will be captured. This can affect the number of object recognition notifications that you will receive:

Realtime Mode: The camera tracks and captures a human and/or a vehicle entering and leaving the detection area. You'll be notified in the Analytics Notification Panel in real-time.

Interval Mode: You can specify the number of snapshots to take and the time interval between snapshots.

Min Pixel: The minimum human and/or vehicle size in pixels. The smaller the number of pixels, the more objects the camera can recognize. The default value is 64. If the camera is recognizing too many unwanted objects, try increasing the minimum pixel value to train the camera to look for objects that

are typically at a closer distance.

Sensitivity: Adjust the sensitivity level of the detection area. The higher the number, the more sensitive it will be when detecting objects.

Detection Type: By default, a human and/or a vehicle will be detected. If you want to detect humans only, uncheck Vehicle and vice versa.

Detection Mode: In Static Mode, all objects in the camera's field of view will be analyzed. In Motion Mode, only moving objects will be analyzed.

Detection Range: The entire view of the camera is enabled for human and/or vehicle detection. Select Customize to change the default detection area (see next page for instructions).

(continued on next page)

Human & Vehicle Detection Settings



Save: Click this to save any changes made then click “OK” to continue.

Right-click to exit.

Customizing the Detection Range

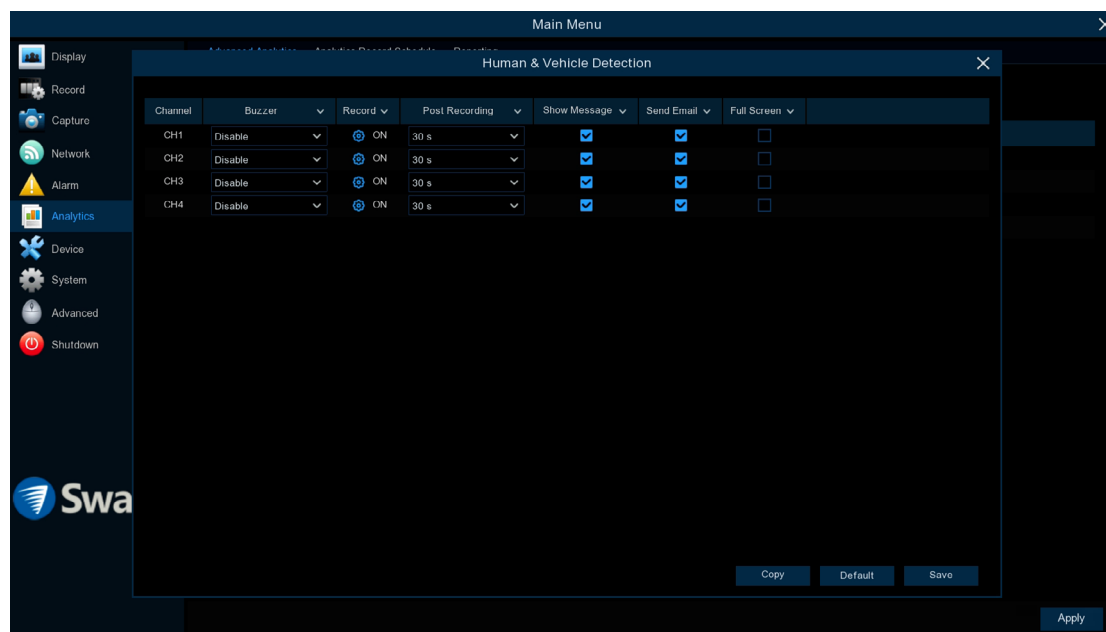
- 1. Detection Range:** Select Customize in the drop-down menu.
- 2.** Click and drag any red square (sizing handle) in the corners of the rectangle to shape and customize the object detection area. You can resize the rectangle to any shape or size to exclude the area in which human and/or vehicle detection isn't needed. See below for an example.



- 3.** When finished, click the “Save” button.

Right-click to exit.

Advanced Analytics: Human & Vehicle Detection - Actions



Buzzer: When a facial recognition event has been detected, you can enable the NVR's buzzer to alert you for a predetermined amount of time. Click the drop-down menu to select a time.

Record (Record Channel): This option instructs your NVR to trigger additional cameras to start recording when motion has been detected. Click the checkbox to select all cameras or click on the individual camera number that you want to trigger for recording.

Post Recording: This option instructs your NVR to record for a set period of time after an event has occurred. For most instances, the default selection will be suitable, however, you can change this if you wish.

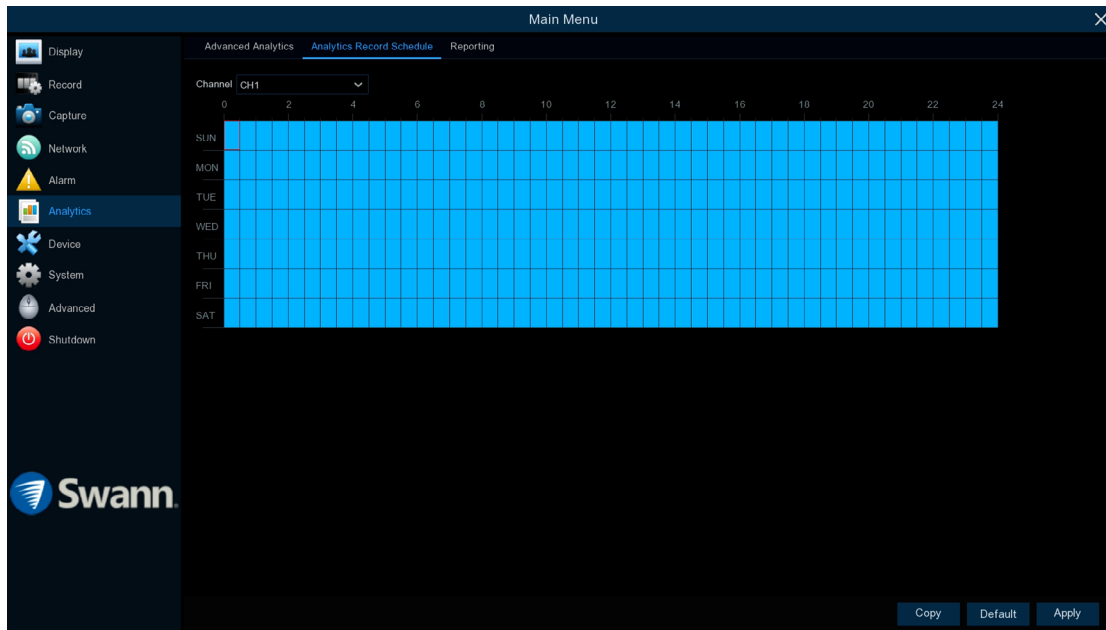
Show Message: When motion has been detected, the motion icon will appear on-screen. Click the checkbox if you want to disable this.

Send Email: An email alert will be sent when motion has been detected. Click the checkbox if you want to disable this.

Full Screen: Click the checkbox to view the camera full-screen in Live View mode when motion has been detected.

Click the "Save" button then click "OK". Right-click the mouse to exit.

Analytics Record Schedule



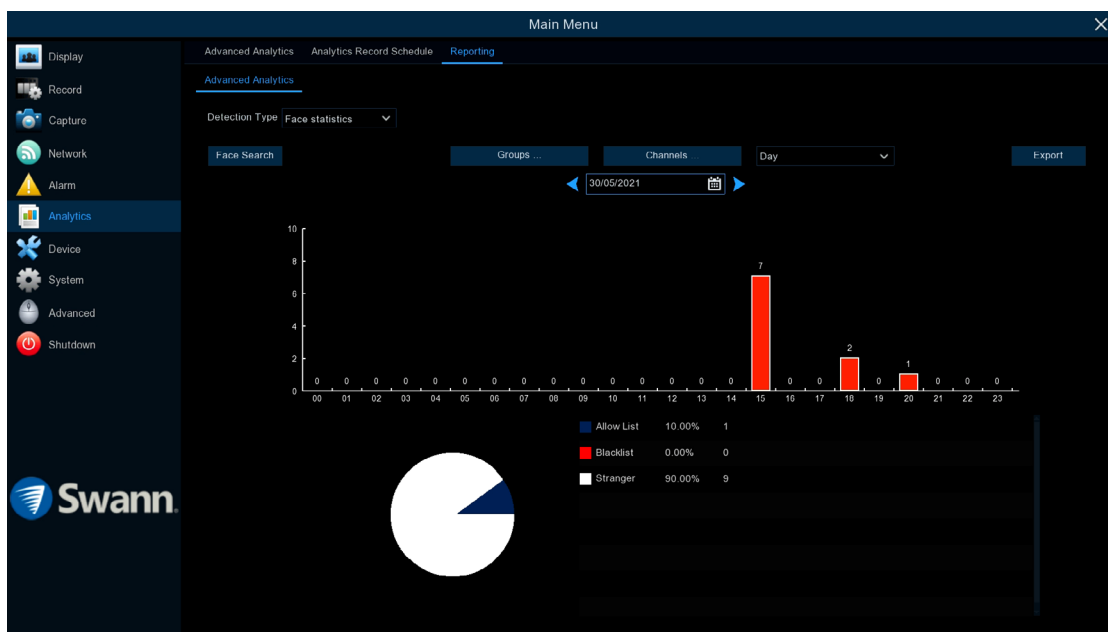
To record events that are detected using basic and advanced analytics, an analytics recording schedule must be created for cameras that have the basic and advanced analytics enabled. Each camera can have a different recording schedule if needed.

- Use the “Copy” function to apply all settings to the other cameras connected.
- Click “Default” to revert to default settings.
- Click “Apply” to save settings.

Channel: Select a camera that you would like to edit.

Each square represents 30 minutes. Using the mouse, click on a particular square to change or click and drag the mouse over the squares corresponding to your desired period. The same action can also be applied if a recording schedule is not required (on one or more sections that have been enabled).

Reporting: Advanced Analytics - Face Statistics



Your NVR can retrieve and present statistical data relating to the detection of faces when the Face Recognition video analytic is enabled on the camera. The bar chart displays the number of faces that were detected during a particular period while the pie chart displays the percentage share and frequency of detected faces belonging to each group.

Face Search: Click to display the [Search > AI](#) window where you can browse for all occurrences of facial recognition events, compare faces, and playback of recordings.

Groups: Select the groups from which the face recognition data is obtained. By default, all groups have been selected.

Channels: Select the channels from which the face recognition data is obtained. By default, all channels have been selected.

Day/Week/Month/Quarter/Year: Click the drop-down menu to select the period from which the face recognition data is obtained.

Calendar: Change the start date of the selected period.

Export: Export the facial recognition data for the selected period to a USB

flash drive. The file will be saved as a *.CSV file. You can open the file in Excel (or similar software) to further analyze the data.

Reporting: Advanced Analytics - Human & Vehicle



Your NVR can retrieve and present statistical data relating to the detection of objects when the Human & Vehicle video analytic is enabled on the camera. The bar chart displays the number of humans and/or vehicles that were detected during a particular time.

Detection Type: Click the drop-down menu and select “Human & Vehicle”.

Human & Vehicle Search: Click to display the [Search > AI](#) window where you can browse for all occurrences of human and/or vehicle recognition events, and playback of recordings.

Analytics: By default, both human and vehicle statistics are selected. Click the drop-down menu to change.

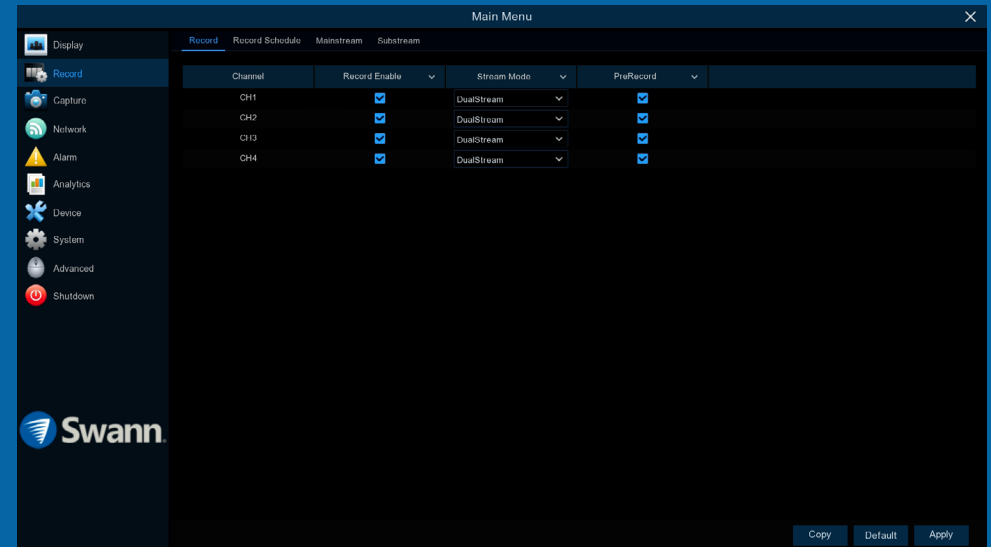
Channels: Select the channels from which the object recognition data is obtained. By default, all channels have been selected.

Day/Week/Month/Quarter/Year: Click the drop-down menu to select the period from which the object recognition data is obtained.

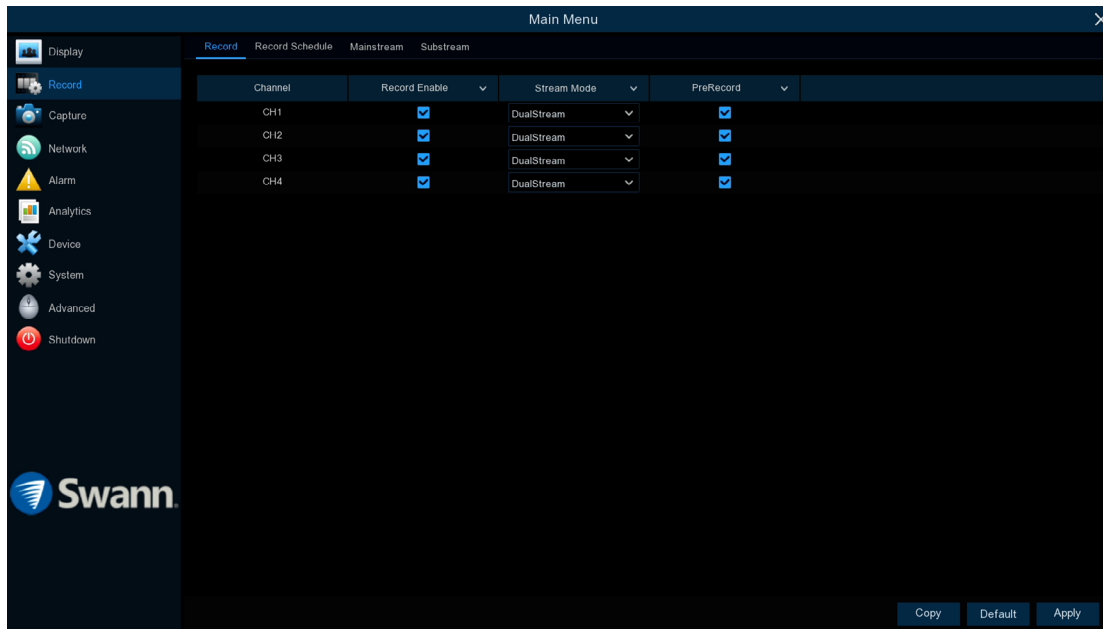
Calendar: Change the start date of the selected period.

Recording Configuration

The recording configuration options are available in the Record and Capture menus that are accessible from the Main Menu. From here you can access and change the default recording schedule (presented as a 24 hour 7 days a week grid and is color-coded) for each camera connected. You can also enable and set a schedule for your NVR to take a snapshot each time an event occurs.



Record: Record



- Use the “Copy” function to apply all settings to the other cameras paired.
- Click “Default” to revert to default settings.
- Click “Apply” to save settings.

Record Enable: When disabled, your NVR will detect motion but it will not record (manual record is also disabled).

Stream Mode: By default, your NVR will record both Mainstream and Substream video (known as DualStream). Mainstream (high quality) video is utilized for playback when using your NVR directly. Substream (reduced quality) video is utilized for remote playback on your mobile device. Please note, if the camera’s signal is low, only Substream recordings will be available.

PreRecord: Allows your NVR to record for several seconds before an event occurs. It’s recommended to leave this enabled.

Record: Schedule



By default, a 24-hour 7 days a week Detection schedule has been enabled for each camera connected. The schedule can be changed to suit your needs and each camera can have a different schedule if needed. The schedule is color-coded to represent the event type.

- Use the “Copy” function to apply all settings to the other cameras paired.
- Click “Default” to revert to default settings.
- Click “Apply” to save settings.

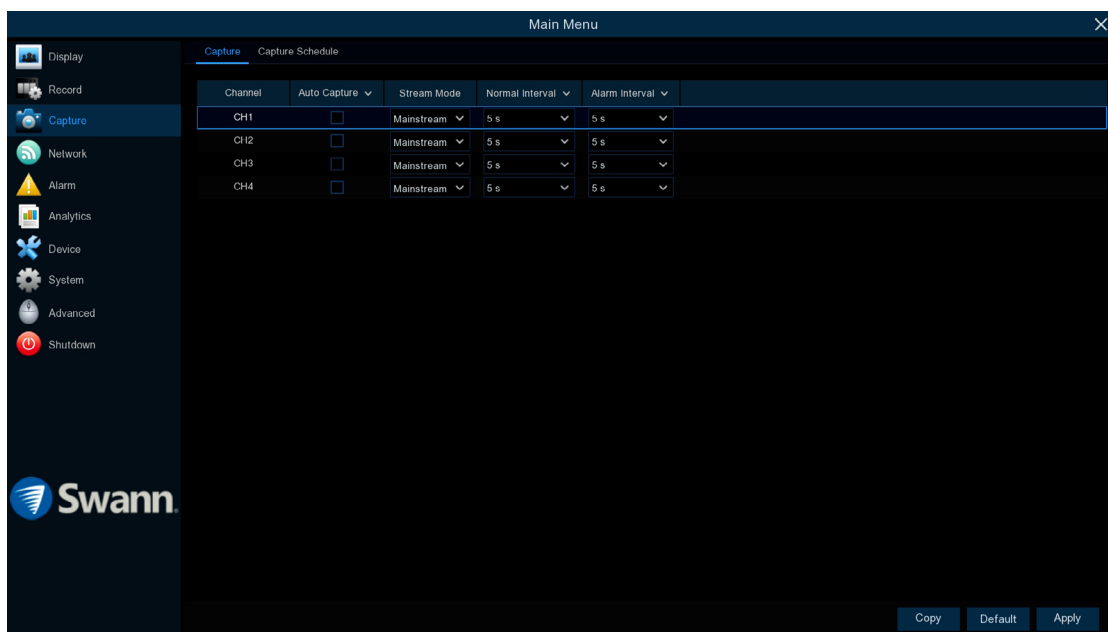
Channel: Select a camera that you would like to edit.

Normal: Your NVR will constantly record for a set time (this option isn’t available when recording to a MicroSD card).

Detection: Your NVR will only record when motion has been detected from one or more cameras.

Each square represents 30 minutes. Using the mouse, select the desired recording mode then click on a particular square to change or click and drag the mouse over the squares corresponding to your desired period. The same action can also be applied if Normal or Detection recording is not required (on one or more sections that have recording enabled).

Capture: Capture



As an added feature, you can enable and set a schedule for your NVR to take a snapshot each time an event occurs. This is particularly useful for finding motion events quickly and can also be used for different purposes such as time-lapse photography.

- Use the “Copy” function to apply all settings to the other cameras paired.
- Click “Default” to revert to default settings.
- Click “Apply” to save settings.

Auto Capture: When enabled, your NVR will save a snapshot to your NVR’s storage device each time an event occurs.

Stream Mode: Leave the default selection (Mainstream).

Normal Interval: The length of time that must elapse before a snapshot is taken. For example, when setting a Normal capture schedule, a snapshot will be taken every 5 seconds using the default selection. Adjust accordingly.

Alarm Interval: When setting a Detection capture schedule, a snapshot will be taken each time motion has been detected according to the interval selected. Adjust accordingly.

As this is an added feature, a capture schedule is not enabled by default. To enable this (see page 59 – [Capture: Schedule](#)).

To search, play and copy snapshots to a USB flash drive (see page 66 – [Search: QuickShot](#)).

Capture: Schedule



Like the analytic recording schedule, a capture schedule must be created so your NVR can take snapshots when an event has occurred or if you want to take snapshots using a time interval (every 5 seconds for example).

- Use the “Copy” function to apply all settings to the other cameras paired.
- Click “Default” to revert to default settings.
- Click “Apply” to save settings.

Channel: Select a camera that you would like to edit.

Normal: A snapshot will be taken according to the normal interval setting selected (every 5 seconds for example).

Detection: A snapshot will be taken each time motion has been detected according to the alarm interval selected.

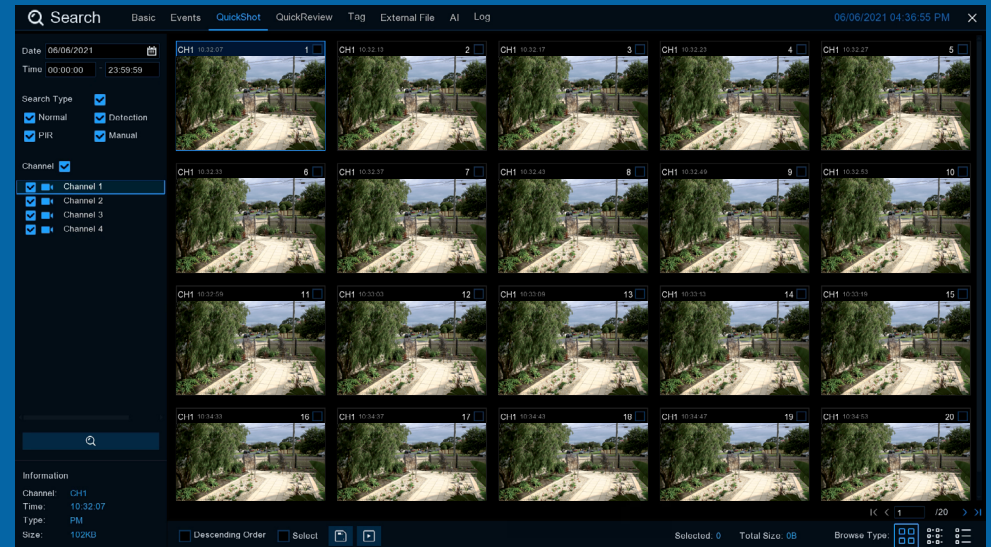
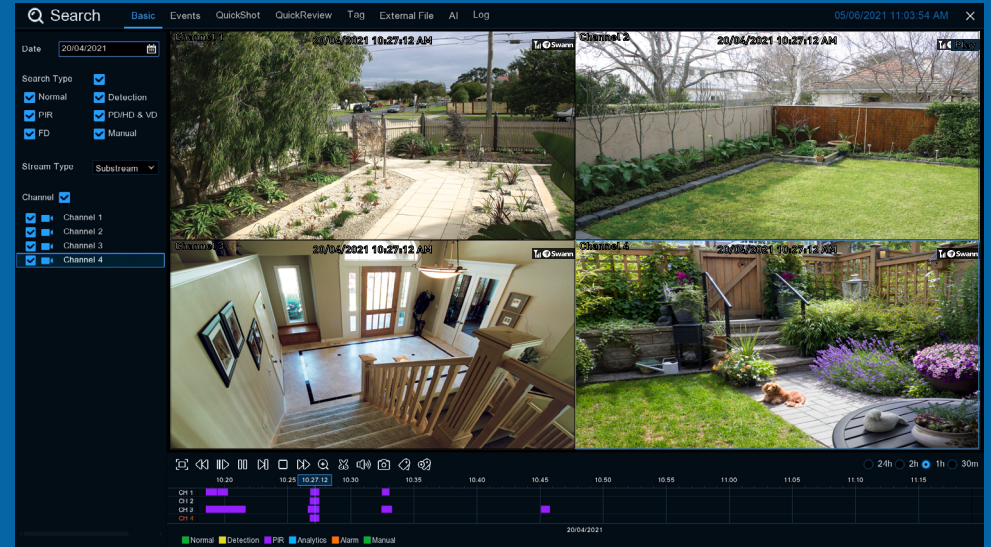
Each square represents 30 minutes. Using the mouse, select the desired capture mode then click on a particular square to change or click and drag the mouse over the squares corresponding to your desired period. The same action can also be applied if Normal or Detection capture mode is not required (on one or more sections that have been enabled).

Event Playback & Backup

Search allows you to play recorded videos and snapshots saved to your NVR's storage device. You can play video that matches your recording schedule, analytic events, and more. The Backup function allows you to save wanted events to a USB flash drive.



The camera's signal strength determines the stream type that your NVR will record. If the camera's signal strength is low, Mainstream recordings may not have occurred. Don't be alarmed as your NVR will always record events in Substream. This is why Substream is the default stream type when searching events for playback.



Search: Basic

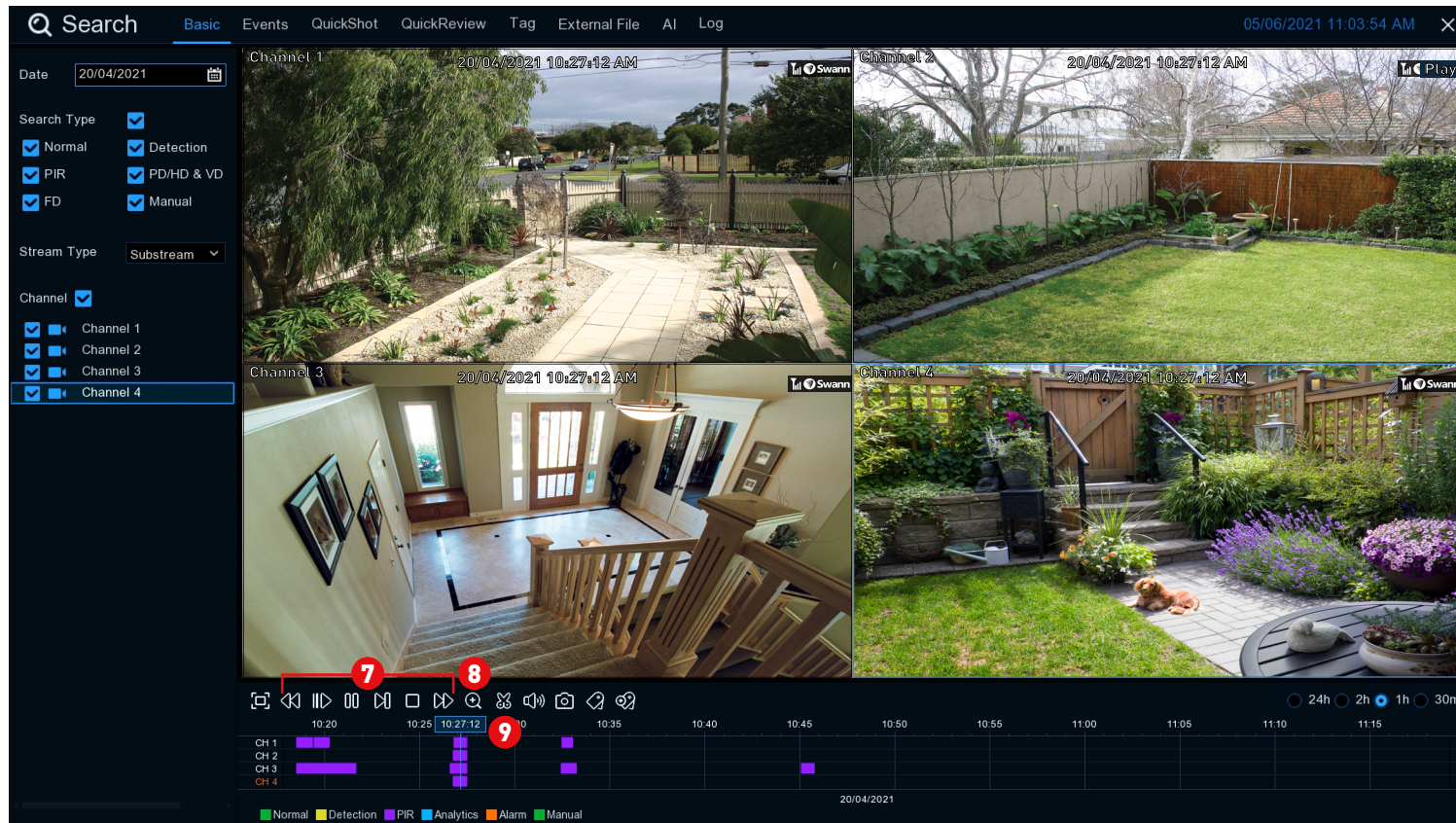
The screenshot displays the 'Search: Basic' interface. On the left, a sidebar contains search filters: 1. Date: 20/04/2021 (with a calendar icon). 2. Search Type: Normal, PIR, FD, Detection, PD/HD & VD, Manual. 3. Stream Type: Substream. 4. Channel: Channel 1, Channel 2, Channel 3, Channel 4. The main area shows four video channels: Channel 1 (outdoor path), Channel 2 (lawn), Channel 3 (indoor stairs), and Channel 4 (garden). A timeline at the bottom shows event markers for each channel. A blue callout box with a red arrow points to the timeline, containing the text: 'Pause playback, click and hold the time above the timeline then drag left or right to the desired time.'

- 1 Click the calendar icon to select a date that you want to search on. A red underline on a date indicates there are recordings on those particular dates.
- 2 This is the event type that you can search for. You can leave all event types enabled if you want to search for all, or you can select specific event types. Adjust accordingly.
- 3 Substream is the default stream for playback. When selecting Main-stream, only one camera can be selected for playback.

- 4 Select a camera to display for playback. A blue camera indicates which cameras match your search criteria.
- 5 Click this to hide the playback interface so you can maximize your viewing area (watch full-screen). Right-click to restore.
- 6 Recordings that match your search criteria will be displayed here.

(continued on next page)

Search: Basic

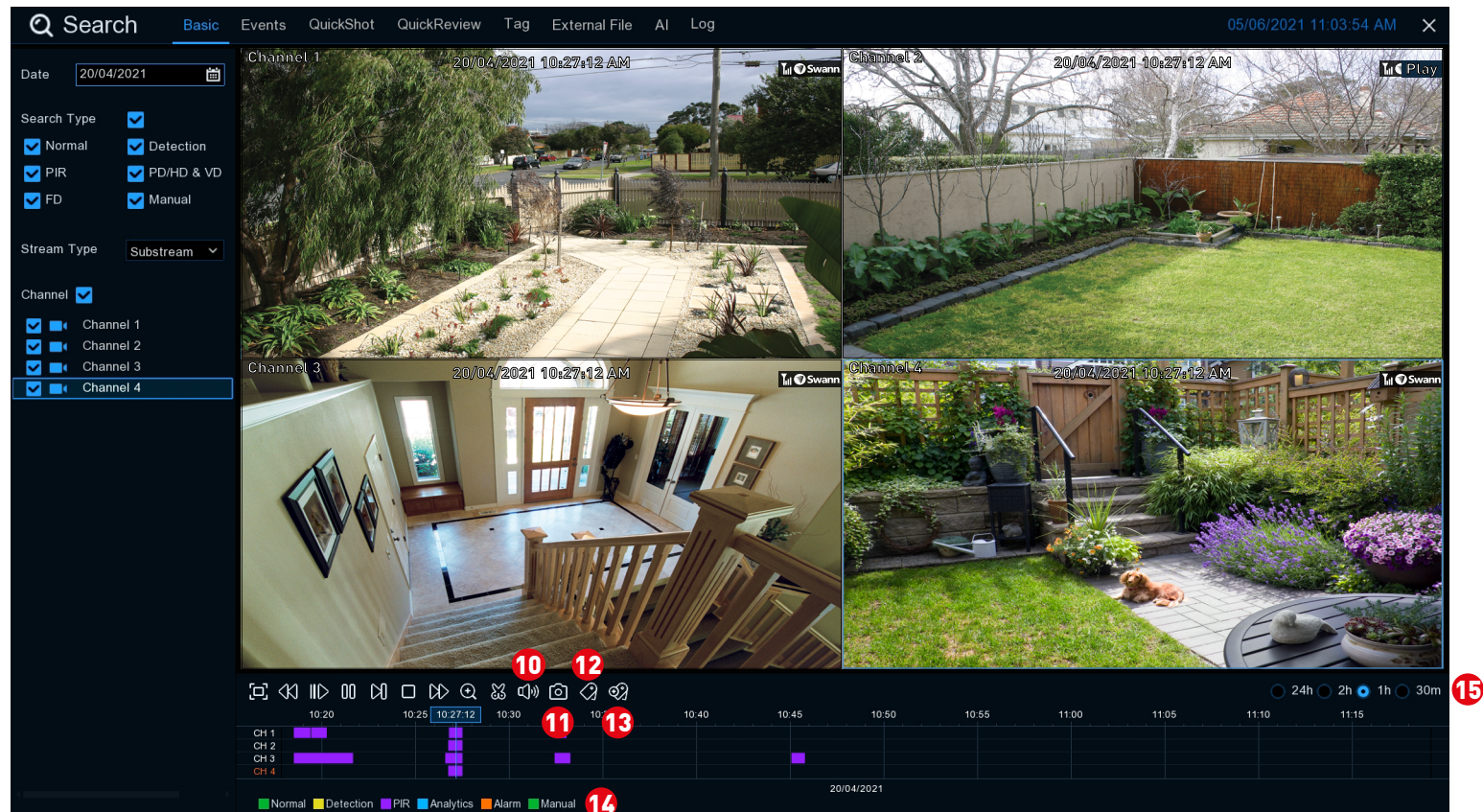


- 7** From left to right, these are your reverse, slow motion, play/pause, frame advance, stop and fast forward controls. Subsequent presses of the reverse, slow motion, and fast forward buttons will increase the speed of each action.
- 8** Select a camera, click this button then use the scroll button on the mouse to zoom. Use the picture-in-picture screen to select a different area to view. Right-click to exit.
- 9** This button allows you to edit the video by setting a mark in and mark

out points which you can then copy to a USB flash drive. Click on a camera to select it then press this button. You will see two white triangles on the timeline. Move them left or right on the section of the video that you want to edit. Click the disk icon (Back-up) to save. For the backup type, leave the default selection (mp4) for wider playback compatibility on your computer. Insert a USB flash drive to your NVR then click "Save". Click "OK" to save then click "Close" when finished.

(continued on next page)

Search: Basic



10 Click this button to mute or unmute the audio.

11 This button allows you to save a snapshot to a USB flash drive. Click on a camera to select it then press this button.

12 Tagging allows you to record information such as a person or object within the video. Click on a camera to select, pause the video when you see a person or object to be tagged then press this button (multiple tags can be created).

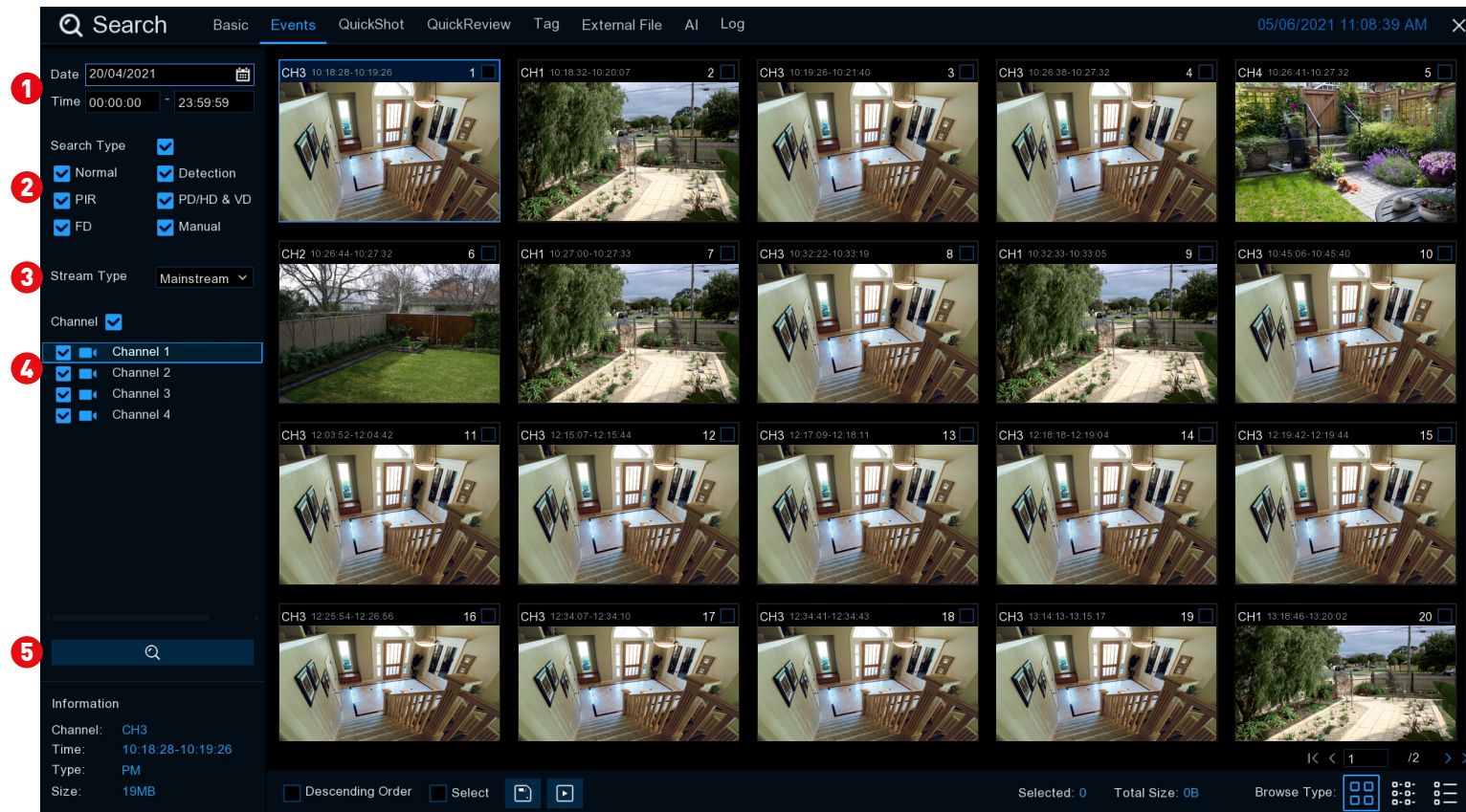
13 As above but you can choose your tag name.

14 Indicates the video type on the timeline.

15 This represents the visible time. Click on a different period to zoom in for precise event selection or to zoom out.

To search for tags (see page 69 - [Search: Tag](#)).

Search: Events (copy events to a USB flash drive)



Use this function to search, play and copy events to a USB flash drive.

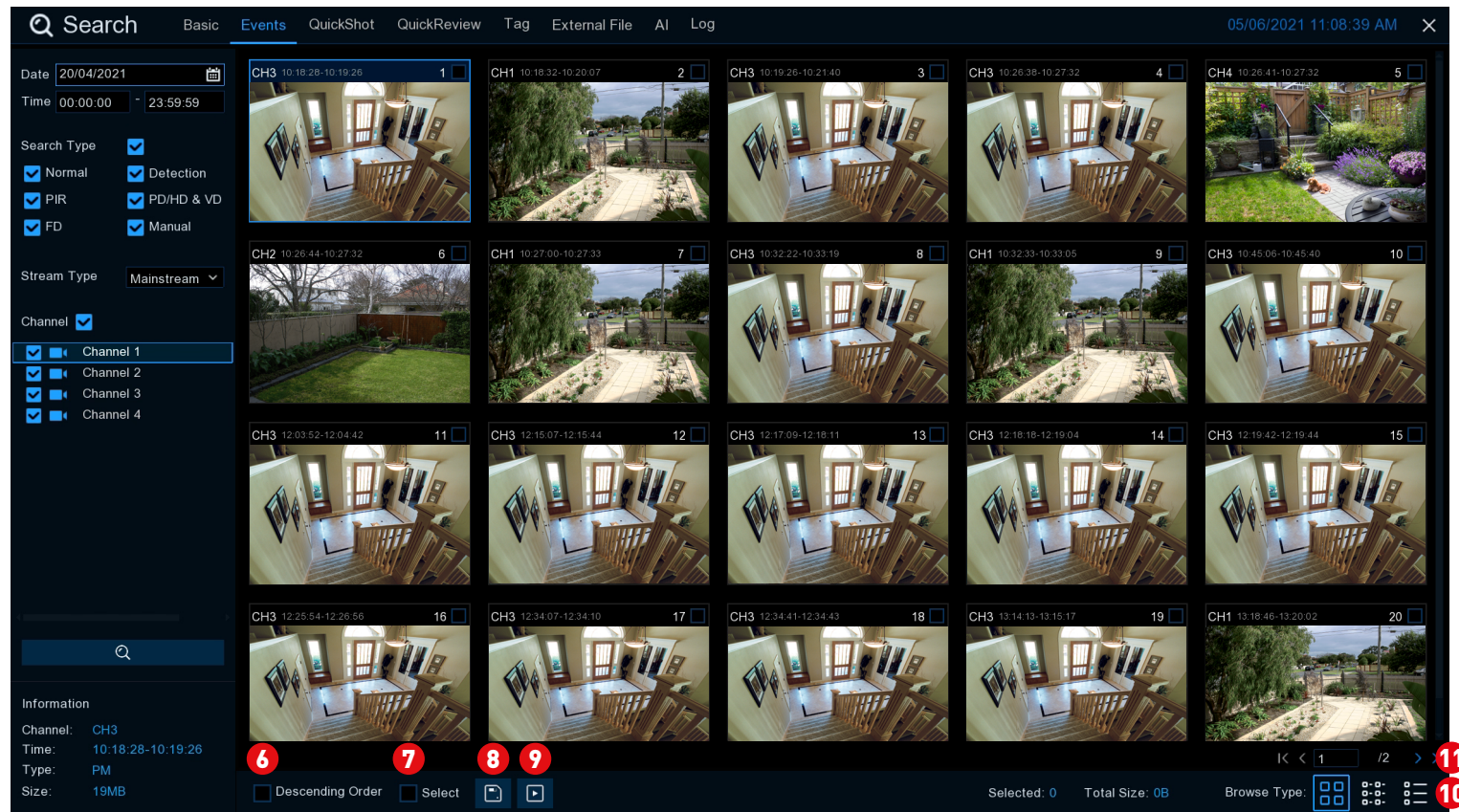
- 1** Click the calendar icon to select a date that you want to search on. A red underline on a date indicates there are recordings on those particular dates. For time, you can search over 24 hours or you can use the keypad to enter a specific start and end time.
- 2** This is the event type that you can search for. Adjust accordingly.
- 3** Select either Mainstream or Substream to search for (Mainstream will

play video at the camera's native recording resolution).

- 4** Select from one or all cameras that you would like to search on. A blue camera indicates which cameras match your search criteria.
- 5** Click this button to commence a search. You will see a thumbnail of each event that matches your search criteria. Click the checkbox above each thumbnail to select it.

(continued on next page)

Search: Events (copy events to a USB flash drive)



6 Click the checkbox to view the events in descending order.

7 Click the checkbox to select all events.

8 When one or more events have been selected, click this button to copy to a USB flash drive. For the backup type, leave the default selection (mp4) for wider playback compatibility on your computer. Insert a USB flash drive to your NVR then click “Save”. Click “OK” to save then click “Close” when finished.

9 Click this button to play a selected event. Right-click to exit.

10 Click these to change how the events are displayed. The default view is Thumbnail but you can change it to List or Detail.

11 Click these to navigate to a different page available. Use the keypad to navigate to a specific page.

Search: QuickShot (copy snapshots to a USB flash drive)

Click these to change how the events are displayed. The default view is Thumbnail but you can change it to List or Detail.

Use this function to search, play and copy snapshots to a USB flash drive.

- 1 Click the calendar icon to select a date that you want to search on. A red underline on a date indicates there are recordings on those particular dates. For time, you can search over 24 hours or you can use the keypad to enter a specific start and end time.
- 2 This is the event type that you can search for. Adjust accordingly.
- 3 Select from one or all cameras that you would like to search on.

- 4 Click this to commence a search. You will see a snapshot of each event that matches your search criteria.
- 5 Click the checkbox to view snapshots in descending order.
- 6 Click the checkbox to select all snapshots.
- 7 Select a snapshot then click this button to copy it to a USB flash drive.
- 8 Click this to play a slideshow (see page 67 - [Playing a Slideshow](#)).

Playing a Slideshow

Search Basic Events QuickShot QuickReview Tag External File AI Log 06/06/2021 02:36:16 PM

Channel	Type	Time
1	CH1	PM 11:09:43
2	CH1	PM 11:09:47
3	CH1	PM 11:09:53
4	CH1	PM 11:09:57
5	CH1	PM 11:10:02
6	CH1	PM 11:10:08
7	CH1	PM 11:10:12
8	CH1	PM 11:10:18
9	CH1	PM 11:10:22
10	CH1	PM 11:10:29
11	CH1	PM 11:11:03
12	CH1	PM 11:11:09
13	CH1	PM 11:11:13
14	CH1	PM 11:11:19
15	CH1	PM 11:11:23
16	CH1	PM 11:11:29
17	CH1	PM 11:11:33
18	CH1	PM 11:11:39
19	CH1	PM 11:11:43
20	CH1	PM 11:11:49
21	CH1	PM 11:11:55

Selected: 0
Total Size: 0B

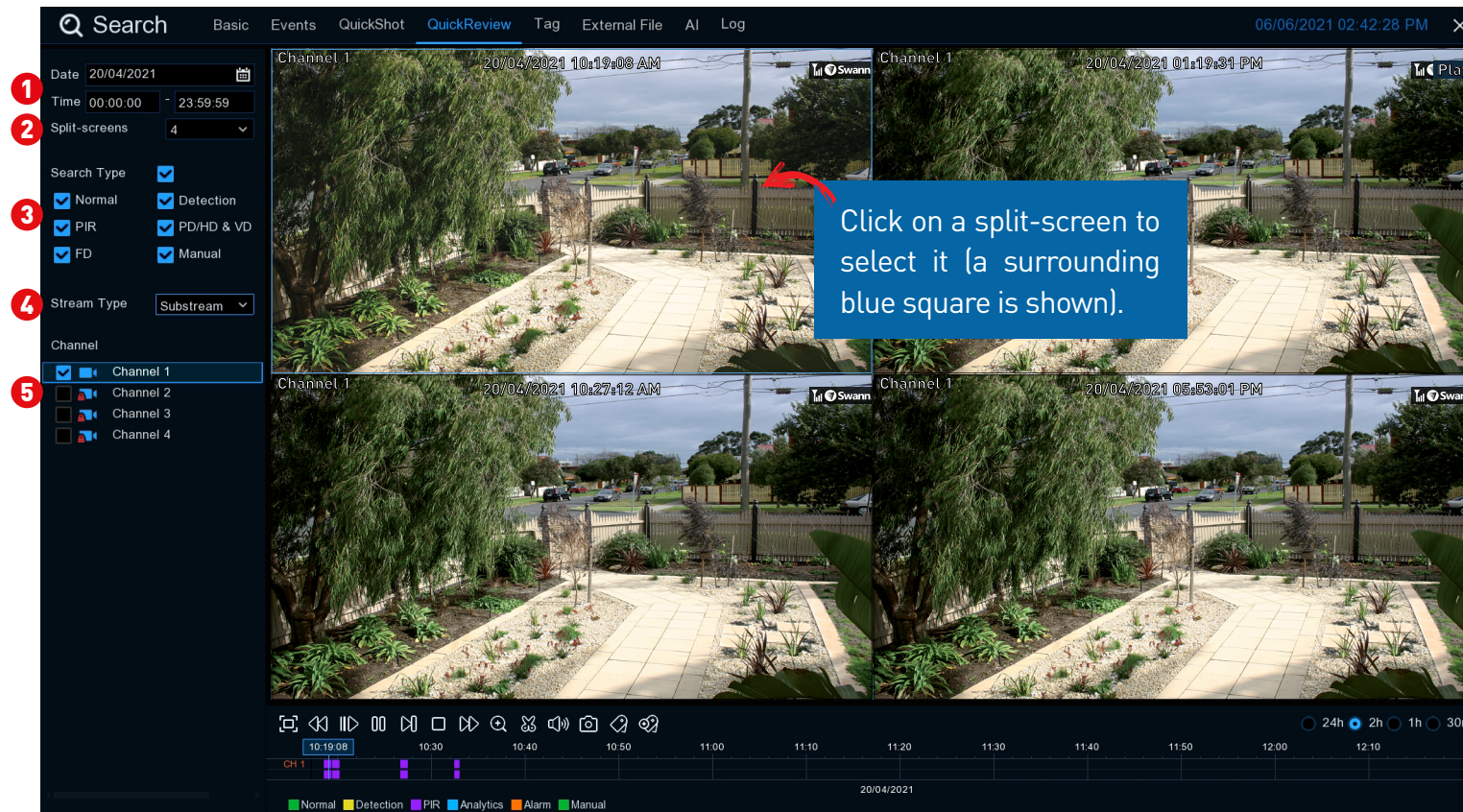
Information
Channel: CH1
Time: 11:10:22
Type: PM
Size: 105KB

Click the checkbox on a snapshot that you want to save to a USB flash drive.

1 2 3 4 5 6 7

- 1 Select a snapshot then click this button to copy it to a USB flash drive.
- 2 Click this to go back to the previous screen.
- 3 Click this to display the previous group of snapshots.
- 4 Click this to pause or play a slideshow.
- 5 Click this to display the next group of snapshots.
- 6 Click this to view a single snapshot at a time.
- 7 Click this to view four snapshots at a time.

Search: QuickReview



QuickReview allows you to play multiple normal recordings and motion events simultaneously from a single channel. With normal and event recordings, the video is divided evenly depending on the split-screen mode that has been selected. For example, if the video is an hour long and you have selected Split-screens x 2, each split-screen will play for 30 minutes.

1 Click the calendar icon to select a date that you want to search on. A red underline on a date indicates there are recordings on those particular dates. For time, you can search over 24 hours or a specific start and end time.

- 2 Click the drop-down menu to select the preferred split-screen mode.
- 3 This is the event type that you can search for. Adjust accordingly.
- 4 Select either Mainstream or Substream to search for (Mainstream is limited to a maximum of two playback recordings).
- 5 Select the camera that you would like to search on.

See [page 61](#) for an explanation of the controls on the timeline.

Search: Tag

Search Basic Events QuickShot QuickReview Tag External File AI Log 08/06/2021 01:26:57 PM

Start Time 20/04/2021 00:00:00
End Time 20/04/2021 23:59:59
Keyword
Channel Channel 1 Channel 2 Channel 3 Channel 4

	Tag Name	Channel	Date	Time	Playback	Edit	Delete
1	Tag	CH3	20/04/2021	10:18:42			
2	Tag	CH1	20/04/2021	10:18:46			
3	Tag	CH4	20/04/2021	10:26:52			
4	Tag	CH3	20/04/2021	10:26:56			
5	Tag	CH2	20/04/2021	10:26:58			
6	Tag	CH3	20/04/2021	10:32:32			
7	Tag	CH3	20/04/2021	13:18:57			
8	Tag	CH4	20/04/2021	13:19:01			
9	Tag	CH2	20/04/2021	13:19:14			
10	Tag	CH3	20/04/2021	13:19:24			

Search 1 / 1

- 1 Click the calendar icon to select a date that you want to search on. For time, you can search over 24 hours or you can use the keypad to enter a specific start and end time.
- 2 If you have created one or more customized tags, click this to input the tag name (tag names are case sensitive).
- 3 Select the camera that you would like to search on.
- 4 Click this button to commence a search. Tags matching your search cri-

teria will be displayed.

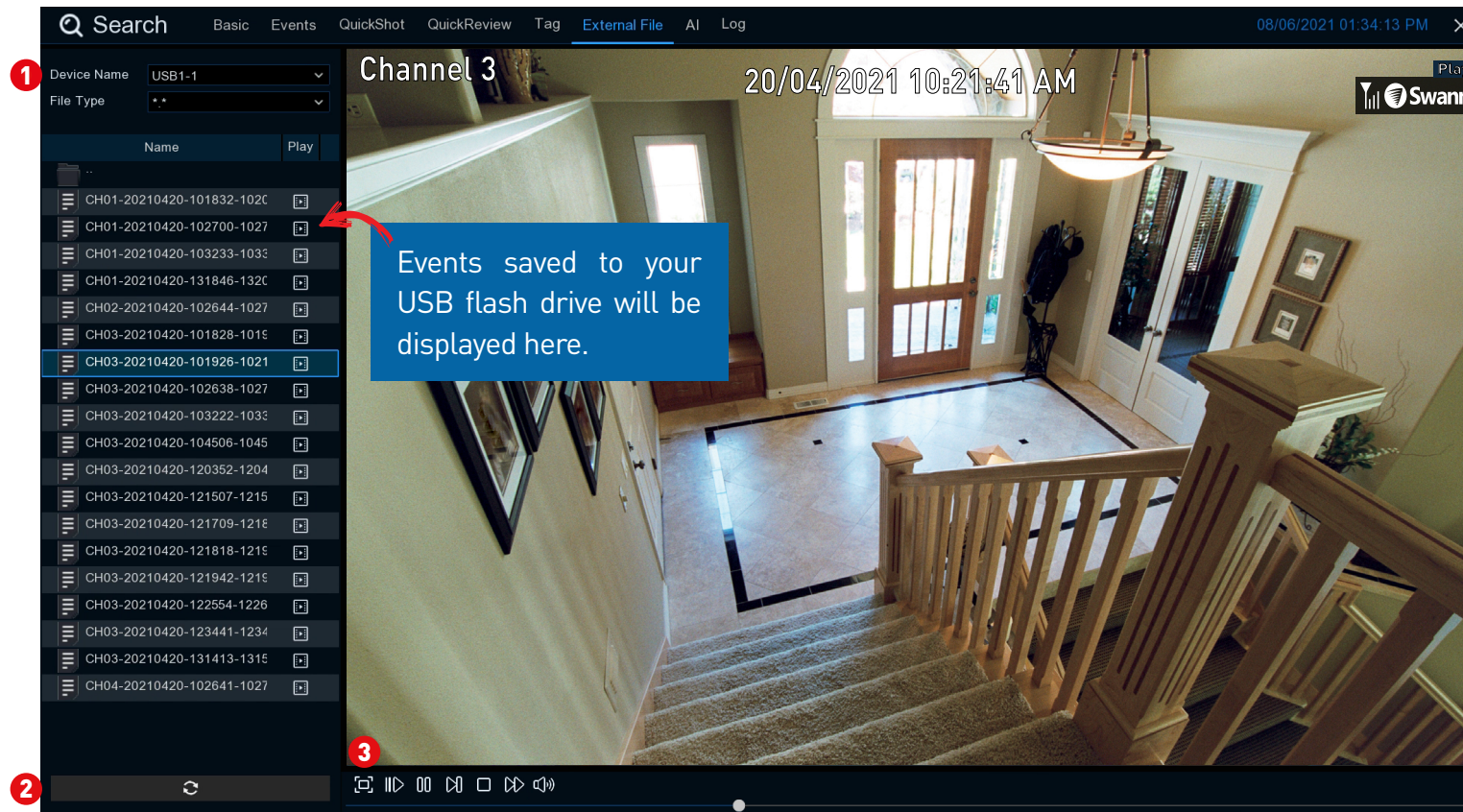
- 5 Select an event then click this to play or double-click an event to play.

Edit: Click this to edit the tag name.

Delete: Click this to delete the tag.

See [page 61](#) for an explanation of the controls on the timeline.

Search: External File



Use this function to play events that you have copied to a USB flash drive.

1 If multiple USB flash drives are connected, click the drop-down menu to select the drive that you want to read from.

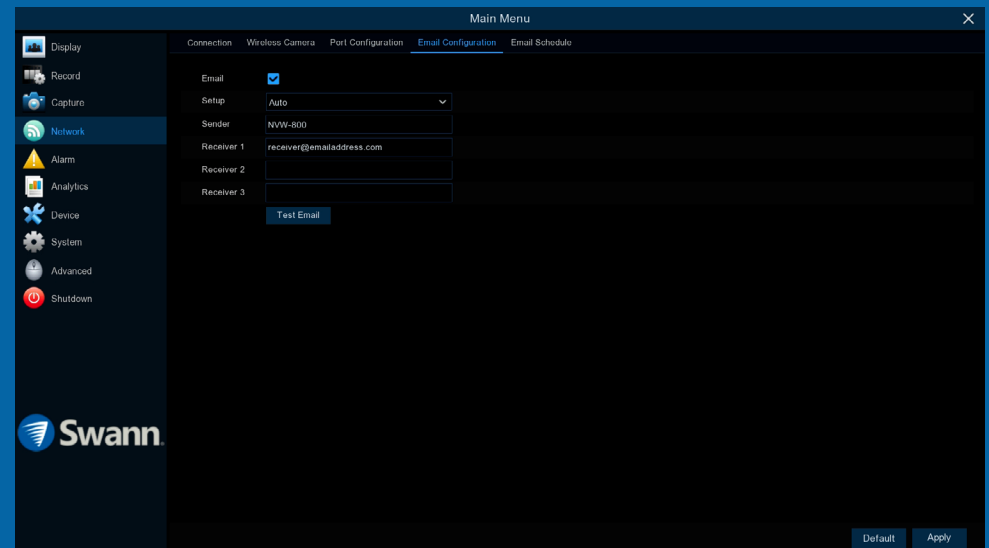
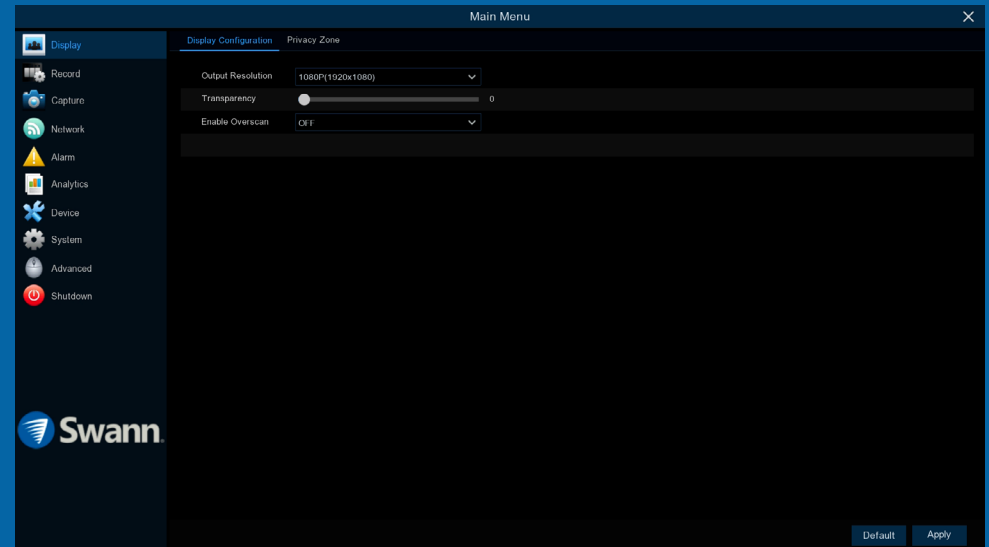
2 Click this button to refresh the USB flash drive.

Double-click an event to play.

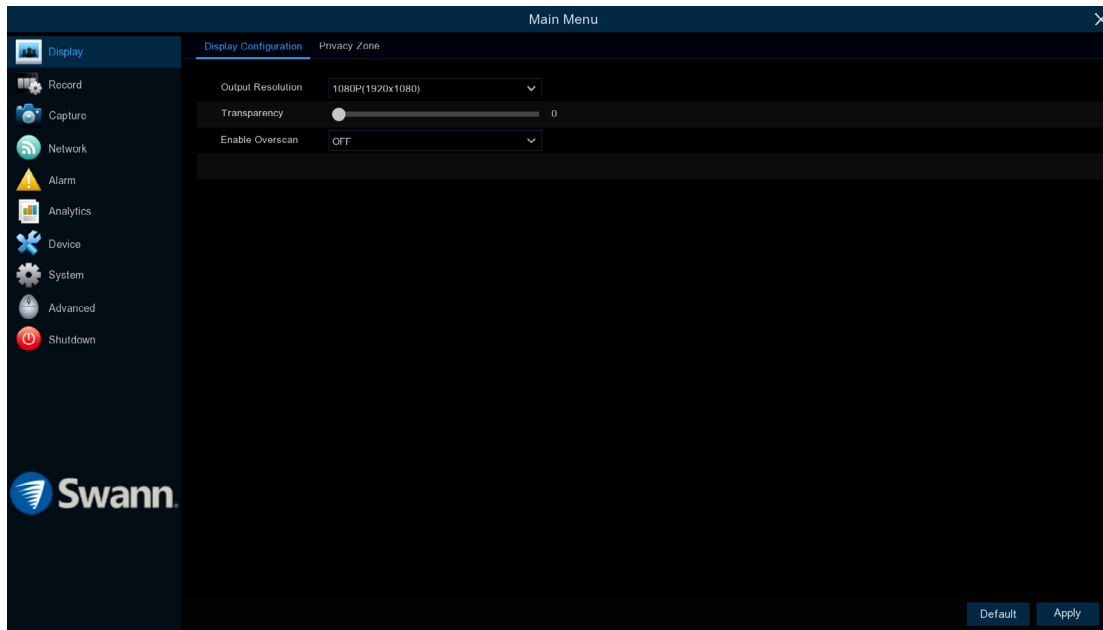
3 Click this to hide the playback interface so you can maximize your viewing area. Right-click to restore.

System Configuration

The options available give you complete control over how your NVR is configured and how it operates. Some of the options such as display resolution, time zone, email configuration, Daylight Saving, and password creation are configured during the Startup Wizard. For experienced network users, your NVR provides options that can be configured to suit your particular requirements. You can also perform a firmware upgrade when available.



Display: Display Configuration



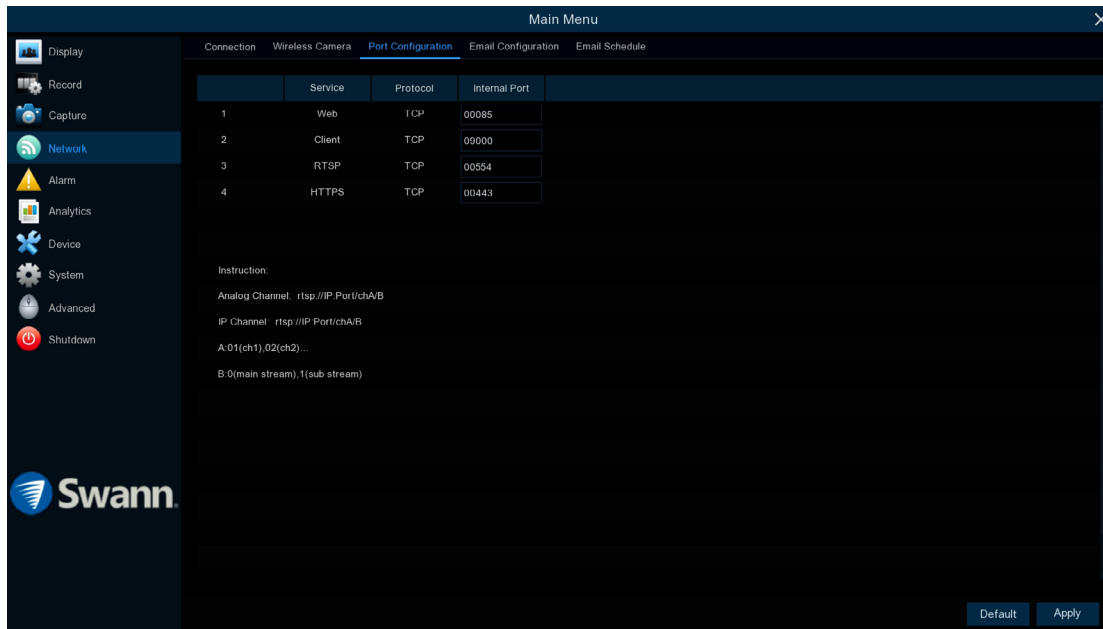
- Click “Default” to revert to default settings.
- Click “Apply” to save settings.

Output Resolution: Select a display resolution that is suitable for your TV.

Transparency: Click and hold the slider left or right to change how transparent the Menu Bar and Main Menu will appear on-screen. Adjust accordingly.

Enable Overscan: This is mainly used on older television sets to display the entire viewable area correctly on-screen. It does this by cutting off the edges of the picture. This is not required for modern Plasma and LCD TVs as the image is digitally processed to display the correct aspect ratio.

Network: Port Configuration & RTSP



- Click “Default” to revert to default settings.
- Click “Apply” to save settings.

The cog symbol (top right) indicates functions that are suitable for experienced users and/or some networking knowledge is required.

In most circumstances, there is no need to change the settings here. The following is for advanced users only.

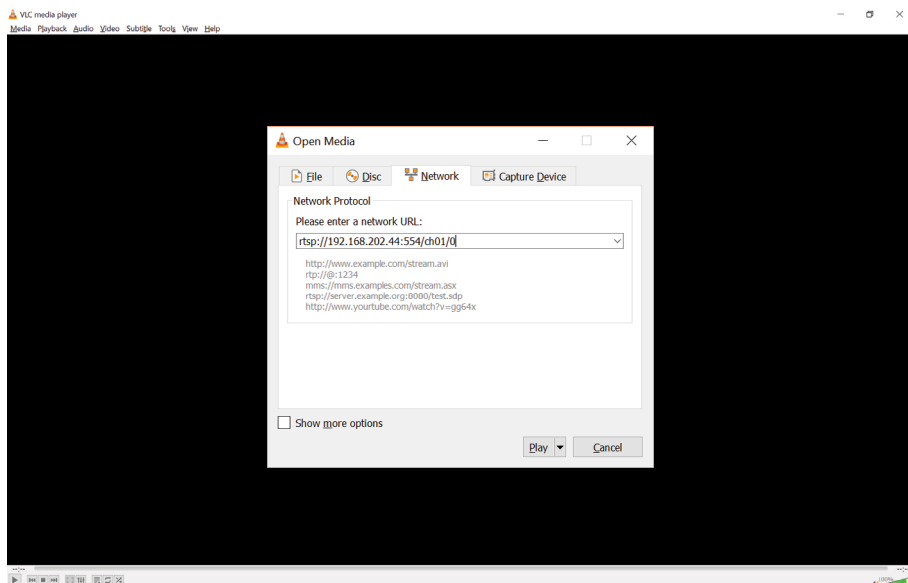
Web: This port is used to log into your NVR via your network or remotely. The default port number (85) is seldom used by other devices, however, if you have another device using this port, you may need to change it. An alternative port number to use is 90.

Client: This is the internal port that your NVR will use to send information through. This particular port number (9000) is not used by many devices, however, if you have another NVR-like device, you may need to change it

RTSP: This port can be used to stream a camera’s live view image to your computer, using video streaming software such as VLC media player (see page 74 - [Using RTSP](#) for more information).

HTTPS: The same as HTTP Port but with an additional layer of security. The default port number (443) is seldom used by other devices.

Using RTSP



The following instructions are for the VLC media player software (you can download a free copy from www.videolan.org). After download, double click the file then follow the on-screen instructions for installation.

1. On your computer, load the VLC media player software. Click “Media” then click “Open Network Stream” (as shown on the left).

2. Enter the IP address of your NVR (on your NVR click “Network” in the Main Menu to display the IP address) into VLC. The following is an example of what you need to enter - `rtsp://192.168.202.44:554/ch01/0`.

rtsp://192.168.202.44: This is the IP address of your NVR.

554: This is the RTSP port of your NVR.

ch01: This represents channel 1. To display channel 2 enter ch02, etc.

0: This represents Mainstream. For Substream enter 1 instead.

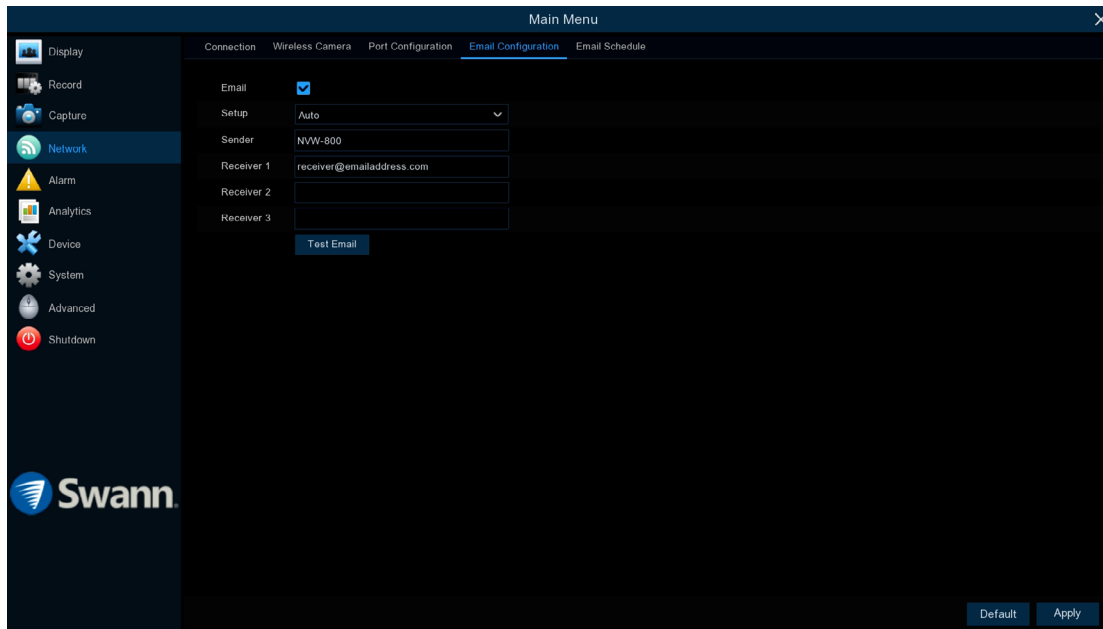
3. Click “Play” then enter the user name and password. You will now see a live view image from the camera.



A direct connection can only be done to your NVR and not to the cameras. Also, be aware this may place an additional load on the connection which may affect the recording function.



Network: Email Configuration



Why is an email address required? Inputting an email address is a requirement in the Start-up Wizard. This is so your NVR can send you a password reset request if you have forgotten your password. Both Gmail and Outlook are supported. You can also use the email from your service provider, providing you know the settings to be used. Alerts can also be sent to your email.

- Click “Default” to revert to default settings.
- Click “Apply” to save settings.

Email: Click the checkbox to enable you to receive email alerts (you will still receive a password reset request if this is disabled).

Setup: Leave this on the default setting when using a Gmail or Outlook email address or click the drop-down menu and select “Manual” if you would like to use the email from your service provider.

Sender: Input a sender name or leave the name displayed.

Receiver 1/2/3: Input the email address(es) to send email alerts to.

Test Email: Click to verify the email/s you entered is/are correct.

When selecting “Manual”, you will see the following options:

Encryption: Leave this on “Auto” to ensure your NVR will always use the correct encryption for your email provider.

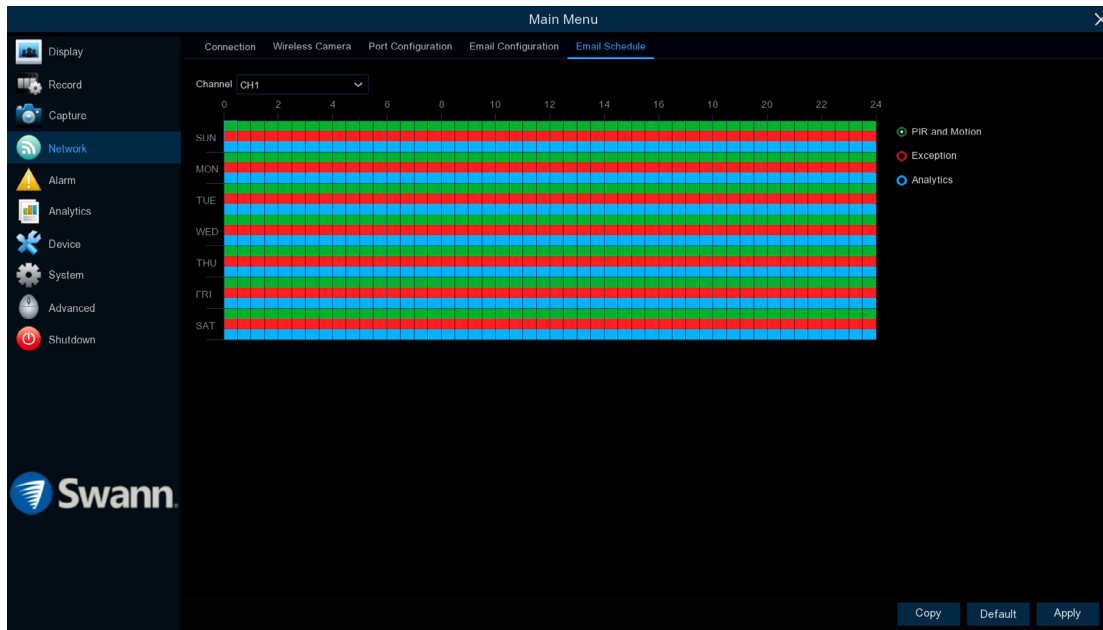
SMTP Port: Enter the port number, for example, 00587.

SMTP Server: Enter the email server, for example, mail.iinet.net.au.

User Name: Input the email user name for your account.

Password: Input the email password for your account. Click the “Show Password” checkbox to show or hide your password.

Network: Email Schedule



- Use the “Copy” function to apply all settings to the other cameras connected.
- Click “Default” to revert to default settings.
- Click “Apply” to save settings.

Channel: Select a camera that you would like to edit.

PIR & Motion: If email alerts have been enabled for motion detection, you can change the schedule on when your NVR can send those alerts. For example, you may only want to receive alerts during the day but not in the evening. A different schedule can be created for each camera.

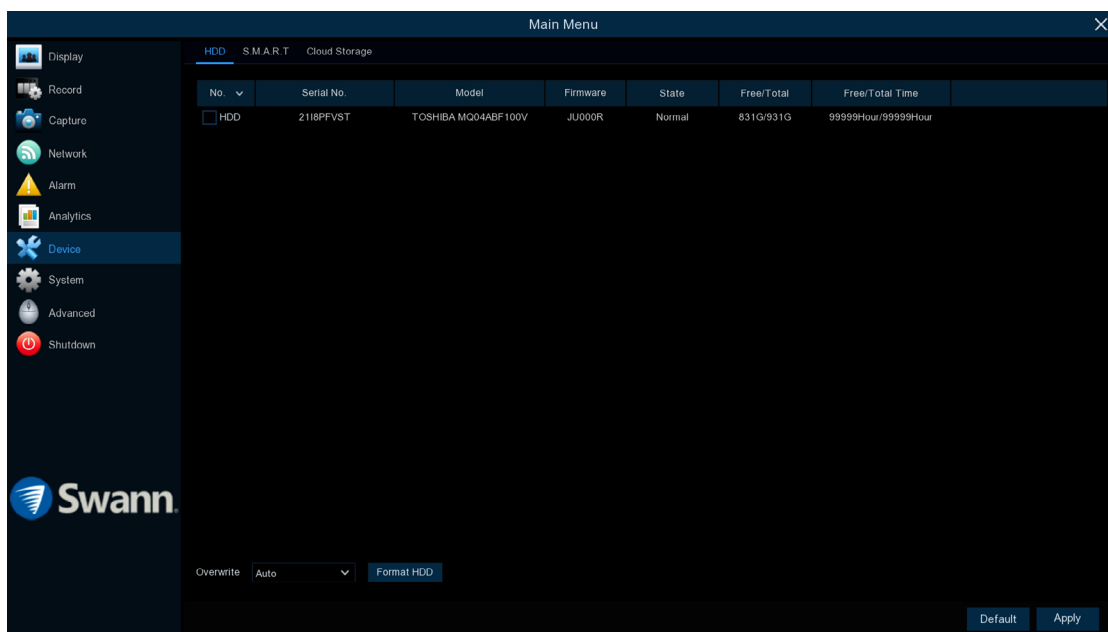
Exception: There are three event types that your NVR will detect as an exception - no space left on the storage device, a storage device error, and if one or more channels has lost the feed from its camera (see page 84 - [Advanced: Events](#)). It's recommended to leave the default schedule in place in case there is an exception that you need to be alerted to.

Analytics: If any of the analytic functions have been enabled, an email alert will automatically be sent when motion has been detected. A different sched-

ule can be created for each camera.

Each square represents 30 minutes. Using the mouse, click on a particular square to change or click and drag the mouse over the squares corresponding to your desired period.

Device: HDD



This function gives you the option of formatting your NVR's storage device, and it will be listed here for selection (if a new storage device has been installed, you need to format it before it can be used). You can also connect a USB flash drive or hard drive to the NVR's storage port to increase the storage capacity.

- Click "Default" to revert to default settings.
- Click "Apply" to save settings.

Overwrite: This instructs your NVR to overwrite the oldest video files as the storage device becomes full. You also have the option of disabling this or selecting the amount of days events are kept before they are overwritten. It's recommended to leave the default selection as this prevents your NVR from running out of storage space (events won't be saved if storage isn't available).


Format HDD: Click the checkbox to select the storage device then click this button to format. You have three options to select from:

1. Format the entire hard disk. All data will be erased: As stated, all data including events, log files, and analytic information will be erased.

2. Only format the record partition. All record data will be erased: Only data such as events, snapshots, and log files will be erased. All analytic information will be kept.

3. Only format the general partition. All AI related data may be erased: Only analytic information will be erased. Events, snapshots, and log files will be kept on the storage device.

Select the relevant option then click "OK". Input your password then click "Authenticate". A message will appear noting the data that will be erased. Click "OK" to continue.

 From time to time, we recommend that you format the storage device. This ensures that your NVR maintains system integrity. Connect a USB flash drive to copy events that you want to save. Remember, formatting the storage device erases all your recordings.

Device: S.M.A.R.T

ID	Attribute Name	Status	Flags	Value	Worst	Threshold	Raw Value
0x1	Raw Read Error Rate	OK	b	100	100	50	0
0x2	Throughput Performance	OK	5	100	100	50	0
0x3	Spin Up Time	OK	27	100	100	1	1216
0x4	Start Stop Count	OK	32	100	100	0	28
0x5	Reallocated Sector Ct	OK	33	100	100	50	0
0x7	Seek Error Rate	OK	b	100	100	50	0
0x8	Seek Time Performance	OK	5	100	100	50	0
0x9	Power On Hours	OK	32	99	99	0	623
0xa	Spin Retry Count	OK	33	100	100	30	0
0xc	Power Cycle Count	OK	32	100	100	0	28
0xbf	G Sense Error Rate	OK	32	100	100	0	0
0xc0	Power-Off Retract Count	OK	32	100	100	0	23
0xc1	Load Cycle Count	OK	32	100	100	0	211
0xc2	Temperature Celsius	OK	22	100	100	0	33 (Min/Max 11/46)
0xc4	Reallocated Event Count	OK	32	100	100	0	0
0xc5	Current Pending Sector	OK	32	100	100	0	0
0xc6	Offline Uncorrectable	OK	30	100	100	0	0

This function can be used to display technical information on the hard drive (if one is installed) inside your NVR. You can also perform a test (there are three types available) to evaluate and detect potential drive errors.

Self-check Type: There are three types available:

Short: This test verifies major components of the hard drive such as read/write heads, electronics, and internal memory.

Long: This is a longer test that verifies the above as well as performing a surface scan to reveal problematic areas (if any) and forces bad sector relocation.

Conveyance: This is a very quick test that verifies the mechanical parts of the hard drive are working.

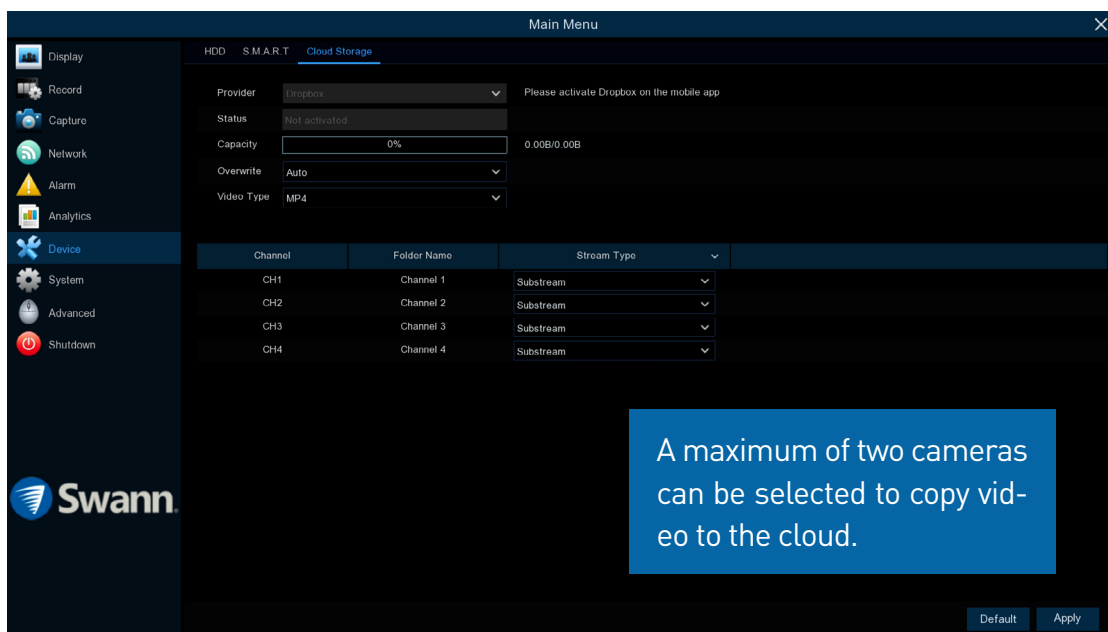
When performing a test, your NVR will continue to work as normal.

In most circumstances, the information here will not be needed for general use of your NVR, however, one of our Swann Helpdesk & Technical Support

staff may ask you to access this if you call for assistance.

Right-click the mouse to exit.

Device: Cloud Storage



Your NVR can copy snapshots and video recordings to the cloud via Dropbox™. Dropbox™ is a service that allows you to store and share snapshots and video recordings and always have them on hand when needed.

- Click “Default” to revert to default settings.
- Click “Apply” to save settings.

A maximum of two cameras can be selected to copy video to the cloud.

Before activation, we recommend that you create a Dropbox account first. Go to www.dropbox.com, input your name, email address, and password, agree to the terms & conditions then click or tap the sign up button. If you already have a Dropbox account you can skip this step.

Provider: Dropbox is the sole file hosting service and cannot be changed. To activate the cloud function, please use the Swann Security app.

Status: This will change to Activated when active.

Capacity: When activated, this will display how much free space you have on your Dropbox account.

Overwrite: The default setting will overwrite the oldest files first. Click the drop-down menu if you would like to select a particular time instead.

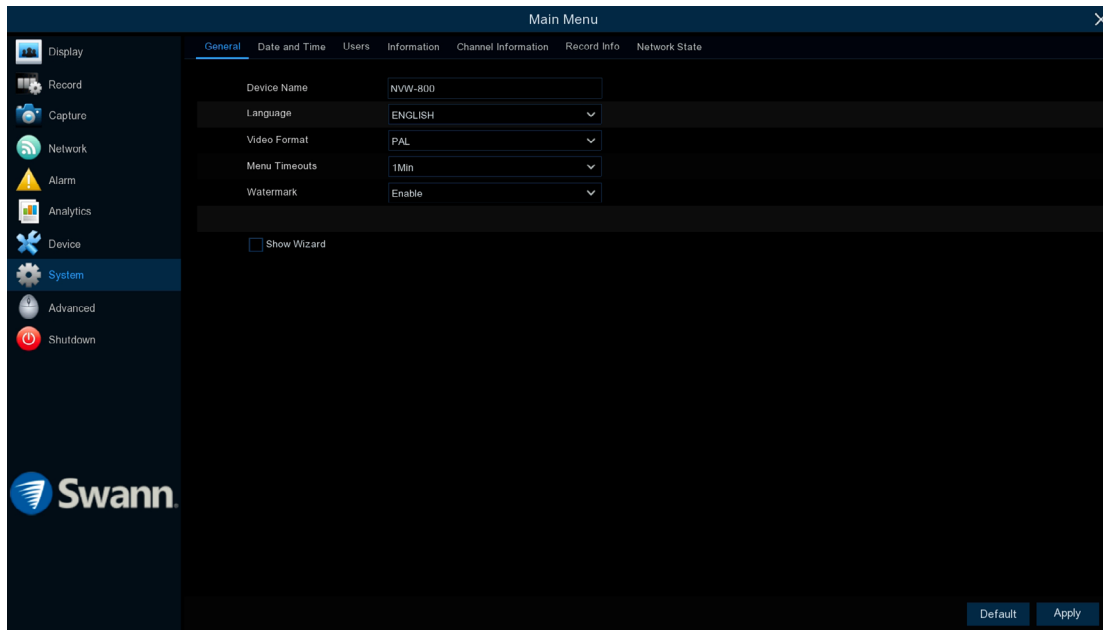
Video Type: Leave the default selection for wider playback compatibility.

Stream Type: Click the drop-down menu to select Substream (reduced quality) or Mainstream (high quality) video to be copied to the cloud.

To activate the cloud function:

1. In the Swann Security app, tap the “Menu” button (top left).
2. Tap “Dropbox”. A message will appear. Tap “Authorize”.
3. Input your login email address and password then tap “Sign in”.
4. Tap “Allow” then tap your NVR shown. A blue tick will appear next to your NVR. Tap “Done” to exit.
5. With the cloud function enabled, you need to instruct your NVR to send alerts to the cloud (see page 30 - [Alarm: Detection - Actions](#)).

System: General



- Click “Default” to revert to default settings.
- Click “Apply” to save settings.

Device Name: Click the dialogue box to rename your NVR (if required).

Language: Select a language you would like the system menus to be displayed in. Multiple languages are available.

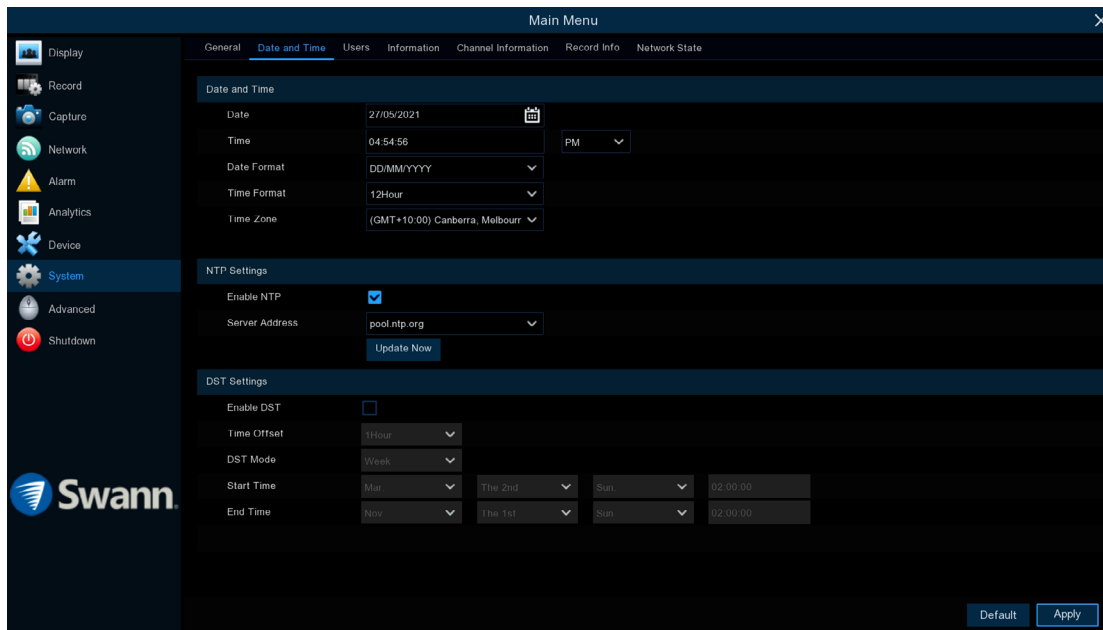
Video Format: Select the correct video standard for your country. USA and Canada are NTSC. UK, Australia, and New Zealand are PAL.

Menu Timeouts: Click the drop-down menu to select the time your NVR will exit the Main Menu when idle. You can also disable this by selecting “OFF” (password protection will be temporarily disabled).

Watermark: By default, the Swann logo is overlaid as a watermark for each camera connected. If this isn't required, click the drop-down menu to disable it.

Show Wizard: Click the checkbox if you would like to display the Startup Wizard each time you turn on or reboot your NVR.

System: Date and Time



- Click “Default” to revert to default settings.
- Click “Apply” to save settings.

Date and Time

If the date, time and, time zone are incorrect, click the relevant dialogue boxes and drop-down menus to change.

NTP Settings

The NTP (Network Time Protocol) function gives your NVR the ability to automatically sync its clock with a time server. This ensures that the date and time are accurate and ensures correct time stamping when events occur.

1. Click the “Update Now” button to automatically synchronize your NVR’s internal clock with the time server instantly.
2. A message will appear on-screen stating that the time has been successfully updated. Click “OK” to continue.

DST Settings

Enable DST: If Daylight Saving applies to your time zone or region, click the drop-down menu to enable it.

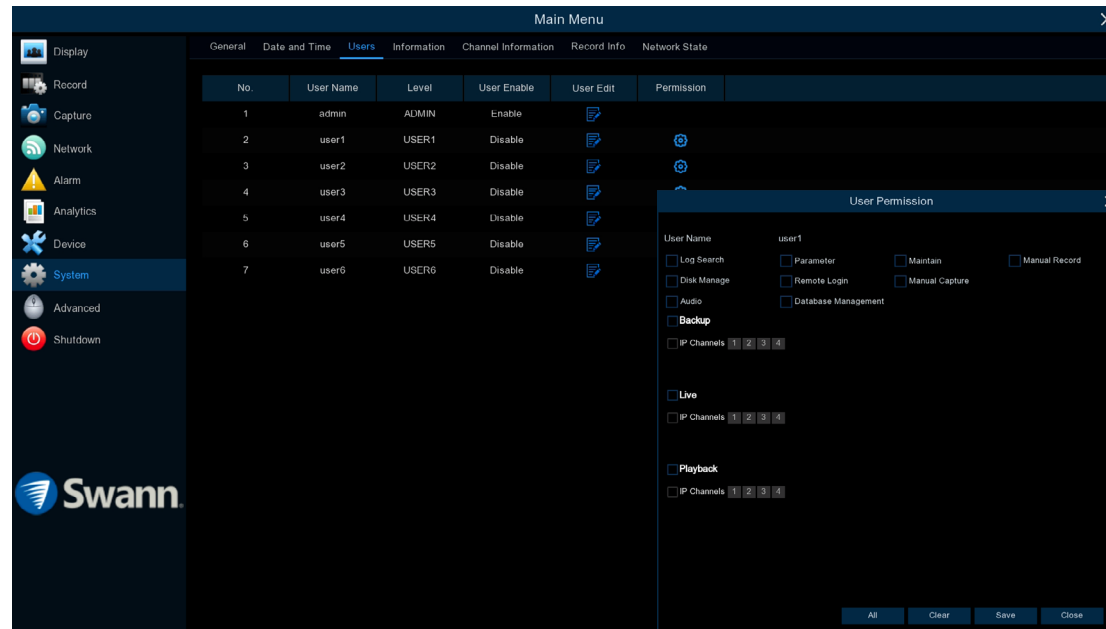
Time Offset: Select the amount of time that Daylight Saving has increased by in your time zone. This refers to the difference in minutes, between Coordinated Universal Time (UTC) and the local time.

DST Mode: You can select how Daylight Saving starts and ends:

Week: Select the month, a particular day, and time when Daylight Saving starts and ends. For example, 2 a.m. on the first Sunday of a particular month.

Date: Select the start date (click the calendar icon), end date, and time when Daylight Saving starts and ends.

System: Users



To change your NVR's password, click the "Edit" button. The password has to be a minimum of six characters and can contain a mixture of numbers and letters. Enter your new password again to confirm.

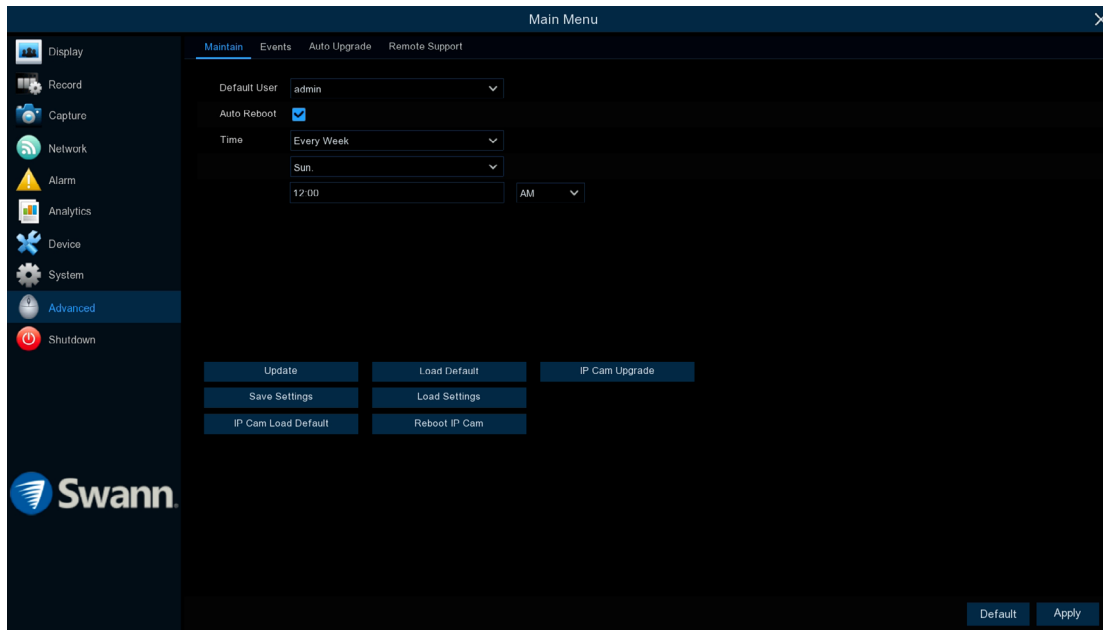
Additional user accounts can also be enabled:

1. Select "user1" then click the "Edit" button.
2. Click the drop-down menu to enable.
3. Enter a user name and password.
4. Click the "Save" button, enter the admin password then click "OK" to confirm.

To change permissions, click the "Permission" button then select which options you would like to enable (see inset above). Click the "All" button to select

all options. Click the "Save" button then click "OK" to confirm.

Advanced: Maintain



- Click “Default” to revert to default settings.
- Click “Apply” to save settings.

Default User: Admin is the default user account. If multiple user accounts have been created, click the drop-down menu to turn this off.

Auto Reboot: It is recommended to leave this enabled, as it maintains the operational integrity of your NVR.

Time: Choose an appropriate day and time to reboot your NVR.

Update: Click this button to update the firmware from a USB flash drive. Select the firmware file then “OK” to confirm. When the firmware update has been completed, your NVR will reboot automatically.

Save Settings: Click this button to export a configuration file containing all the settings that you have customized.

IP Cam Load Default: Click this button to restore factory default settings for

each camera.

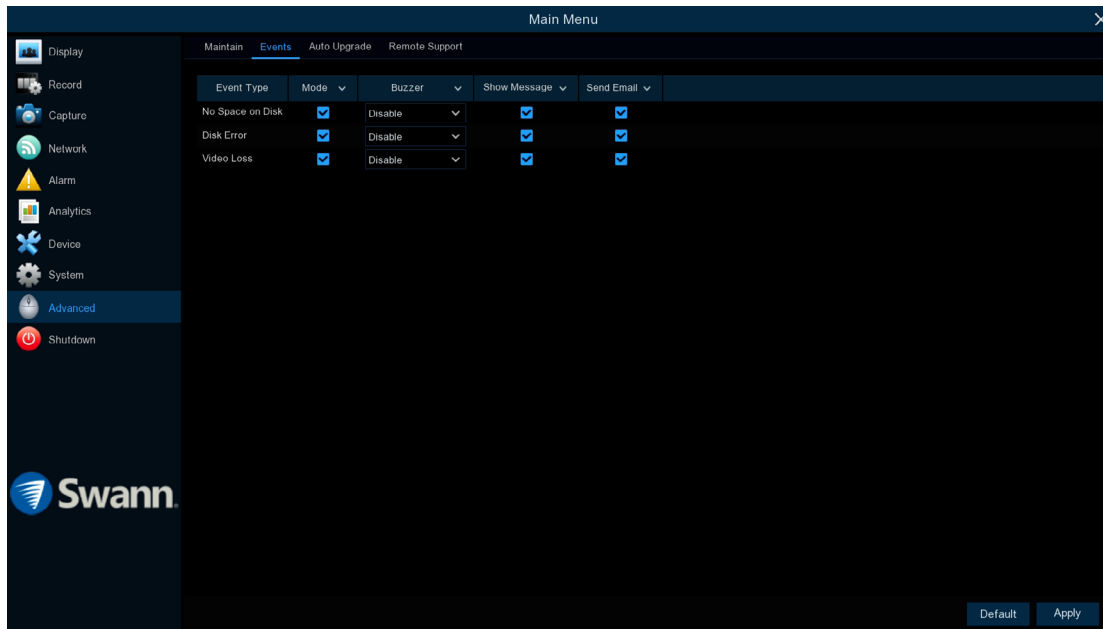
Load Default: Click this button to restore factory default settings. Click “All” then click “Save”. Your NVR will reboot and the Startup Wizard will appear on-screen.

Load Settings: Click this button to import a configuration file containing all the settings that you have customized.

Reboot IP Cam: Click this button to reboot each camera. Rebooting may be recommended if cameras running in Mesh mode have low signal strength. This will allow it to establish a new connection to your Wi-Fi network.

IP Cam Upgrade: Click this button to update the cameras’ firmware from a USB flash drive. Go to support.swann.com to check for available updates.

Advanced: Events



Whenever there is an event or if your NVR displays unusual behavior, you can be alerted in multiple ways such as receiving an email, displaying a message on-screen, receiving an alert in the Swann Security app, and activating its internal buzzer. There are three event types that your NVR will detect as an exception.

- Click “Default” to revert to default settings.
- Click “Apply” to save settings.

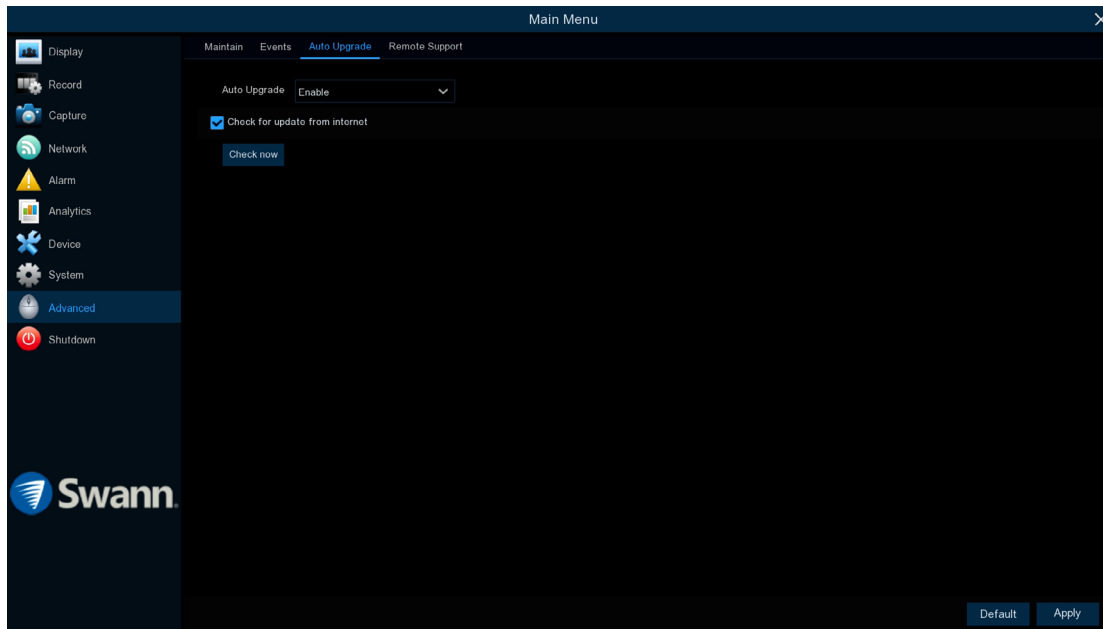
Enable: Click the checkbox if you would like to disable alerts for the event available.

Buzzer: Click the drop-down menu and select the time for the internal buzzer to activate for the event available.

Show Message: Click the checkbox if you like to disable the on-screen message for the event available.

Send Email: Click the checkbox if you would like to disable email alerts for the event available.

Advanced: Auto Upgrade



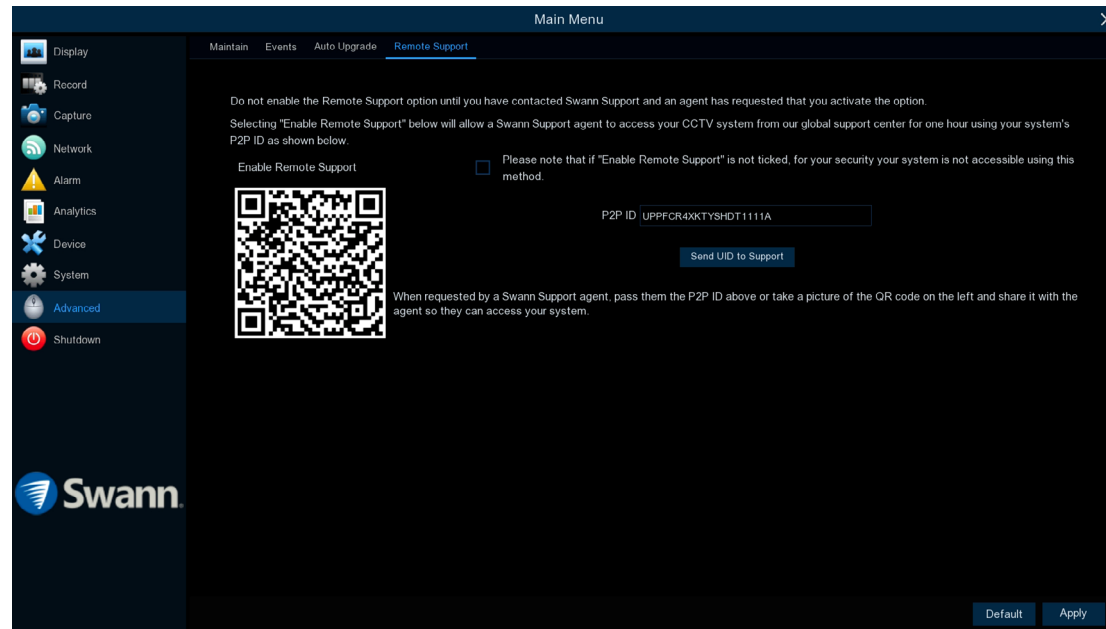
- Click "Default" to revert to default settings.
- Click "Apply" to save settings.

Auto Upgrade: By default, your NVR will automatically check and alert you if new firmware is available for download. Click the drop-down menu if you would like to disable this feature.

Check for update from internet: By default, your NVR will automatically check and alert you if new firmware is available for download. Click the checkbox if you would like to disable this feature.

Check now: Click this button to check if new firmware is available. If new firmware is available, follow the on-screen instructions.

Advanced: Remote Support



If you call for assistance, the Remote Support function can be used by our Swann Helpdesk & Technical Support staff, to remotely connect to your NVR. This will assist them in diagnosing any issues that you may be having. This function is not used in the day-to-day operation of your NVR.

System Status

The various status tabs give you an overview of the various settings and options that have been selected for your NVR to function. Each action that your NVR performs as well as events detected are logged, which you can search and view. If you call our helpdesk for assistance, our staff may ask you to access these tabs to assist them in solving any technical issues that you may be having.

Main Menu

General Date and Time Users Information Channel Information Record Info Network State

Device Name NWW-800
Device Type NWW-800
Hardware Version DM-416
Software Version V8.1.0-20210618
Wireless Version 1.2.3.3
IE Client Version V2.1.0.204
Video Format PAL
HDD Volume 931G
IP Address 192.168.0.195
Web 85
Client 9000
MAC Address BC:51:FE:2E:7D:8C
Wireless MAC 00-8C-8B-32-87-ED
P2P ID UPPFCR6XKTYSHDT1111A
Agent Cloud Link Status Connected

Swann

Main Menu

General Date and Time Users Information Channel Information Record Info Network State

Channel	Alias	State	Mainstream	Substream	PIR Detection	Privacy Zone
CH1	Channel 1	On-line	3840x2160, 3Fps, 704Kbps	1920x1080, 14Fps, 856Kbps	Support	Support
CH2	Channel 2	On-line	3840x2160, 3Fps, 704Kbps	1920x1080, 15Fps, 1024Kbps	Support	Support
CH3	Channel 3	On-line	3840x2160, 3Fps, 704Kbps	1920x1080, 8Fps, 288Kbps	Support	Support
CH4	Channel 4	On-line	3840x2160, 14Fps, 3.5Mbps	1920x1080, 15Fps, 1024Kbps	Support	Support

Swann

System: Information

Property	Value
Device Name	NVW-800
Device Type	NVW-800
Hardware Version	DM-416
Software Version	V8.1.0-20210618
Wireless Version	1.2.3.3
IE Client Version	V2.1.0.204
Video Format	PAL
HDD Volume	331G
IP Address	192.168.0.195
Web	85
Client	9000
MAC Address	BC:51:FE:2E:7D:9C
Wireless MAC	00-8C-88-32-87-EB
P2P ID	UPPPCR4XK1YSHD11111A
Agent Cloud Link Status	Connected

You can scan the QR code to pair your NVR in the Swann Security app.

This tab displays technical information about your NVR as well as your device ID (P2P ID) and QR code. If you call our helpdesk for assistance, our staff may ask you to access this tab to assist them in solving any technical issues that you may be having.

MAC Address: You can use this as a recovery password if you have forgotten your current password.

If you call our helpdesk for assistance, our staff may ask you to access this tab to assist them in solving any technical issues that you may be having.

Write down your MAC Address: _____

Agent Cloud Link Status: Indicates if your NVR is connected to the Swann Security cloud system.

System: Channel Information & Record Info

Channel	Alias	State	Mainstream	Substream	PIR Detection	Privacy Zone
CH1	Channel 1	On-line	3840x2160, 3Fps, 704Kbps	1920x1080, 14Fps, 896Kbps	Support	Support
CH2	Channel 2	On-line	3840x2160, 3Fps, 704Kbps	1920x1080, 15Fps, 1024Kbps	Support	Support
CH3	Channel 3	On-line	3840x2160, 3Fps, 704Kbps	1920x1080, 8Fps, 288Kbps	Support	Support
CH4	Channel 4	On-line	3840x2160, 14Fps, 3.5Mbps	1920x1080, 15Fps, 1024Kbps	Support	Support

Displays the Mainstream, Substream, and the recording settings used for each camera connected (for Record Info, the settings will only be shown when one or more cameras are recording).

If you call our helpdesk for assistance, our staff may ask you to access this tab to assist them in solving any technical issues that you may be having.

Right-click the mouse to exit.

Channel	Record State	Record Enable	Stream Type	FPS	Bitrate	Resolution
CH1	ON	Enable	DualStream	3Fps 8Fps	704Kbps 288Kbps	3840x2160 1920x1080
CH2	ON	Enable	DualStream	14Fps 14Fps	3.5Mbps 896Kbps	3840x2160 1920x1080
CH3	ON	Enable	DualStream	15Fps 15Fps	4Mbps 1024Kbps	3840x2160 1920x1080
CH4	ON	Enable	DualStream	8Fps 15Fps	1.093Mbps 1024Kbps	3840x2160 1920x1080

System: Network State



Displays the network settings used by your NVR.

If you call our helpdesk for assistance, our staff may ask you to access this tab to assist them in solving any technical issues that you may be having.

Right-click the mouse to exit.

Search: Log

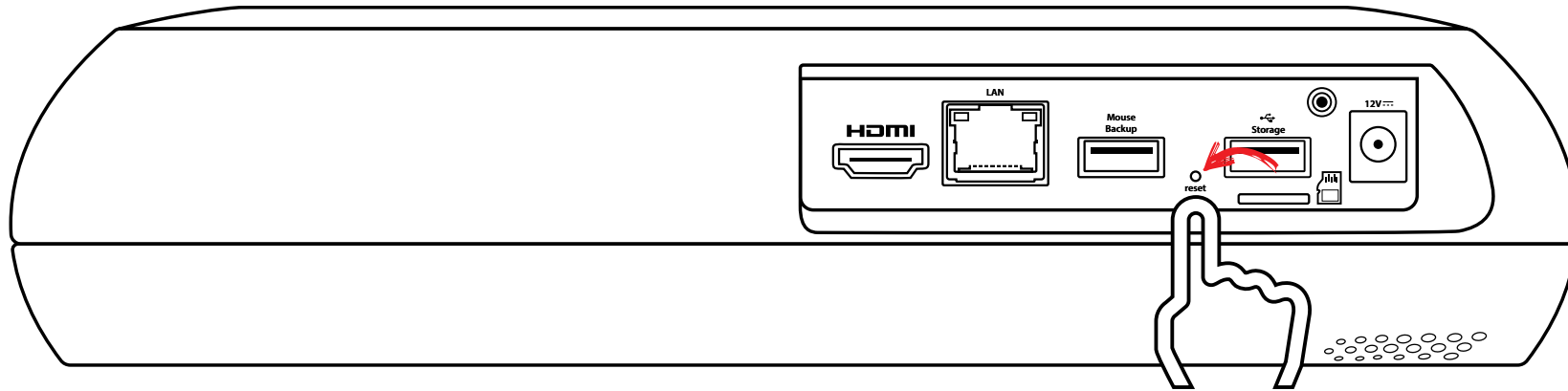
The screenshot shows the 'Search' window in an NVR interface. The window title is 'Search' and the date is '28/05/2021 12:09:07 AM'. The interface includes a search filter panel on the left and a main table of log entries. Red numbered callouts (1-4) point to specific UI elements: 1 points to the 'Start Time' and 'End Time' fields; 2 points to the 'Log Type' dropdown menu; 3 points to the search button at the bottom left; 4 points to the 'Backup' button at the bottom right.

Channel	Type	TIME	CON	RECORD	Playback
	Account	25/05/2021 10:23:49	admin Login		
	System	25/05/2021 10:23:49	System Startup		
CH4	Alarm	25/05/2021 10:28:29	Motion Start	Yes	☐
CH4	Alarm	25/05/2021 10:29:14	Motion End	Yes	☐
CH4	Alarm	25/05/2021 10:31:41	Motion Start	Yes	☐
CH4	Alarm	25/05/2021 10:32:07	Motion End	Yes	☐
CH4	Alarm	25/05/2021 10:32:32	Motion Start	Yes	☐
CH2	Alarm	25/05/2021 10:32:33	Motion Start	Yes	☐
CH1	Alarm	25/05/2021 10:32:51	Motion Start	Yes	☐
CH2	Alarm	25/05/2021 10:33:09	Motion End	Yes	☐
CH4	Alarm	25/05/2021 10:33:14	Motion End	Yes	☐
CH1	Alarm	25/05/2021 10:33:28	FD Start	Yes	☐
CH1	Alarm	25/05/2021 10:33:53	FD End	Yes	☐
CH2	Alarm	25/05/2021 10:34:01	Motion Start	Yes	☐
CH4	Alarm	25/05/2021 10:34:03	Motion Start	Yes	☐
CH1	Face Detection	[25/05/2021] 10:33:26 - 10:34:17	John [Allow List]	Yes	☐
CH1	Alarm	25/05/2021 10:34:19	FD Start	Yes	☐
CH1	Alarm	25/05/2021 10:34:52	FD End	Yes	☐
CH2	Alarm	25/05/2021 10:35:14	Motion End	Yes	☐
CH4	Alarm	25/05/2021 10:35:19	Motion End	Yes	☐
CH1	Alarm	25/05/2021 10:35:41	Motion End	Yes	☐
CH1	Face Detection	[25/05/2021] 10:34:46 - 10:34:46	John [Allow List]	Yes	☐
CH1	Alarm	25/05/2021 11:02:57	Motion Start	Yes	☐
CH1	Alarm	25/05/2021 11:03:27	Motion End	Yes	☐
CH1	Alarm	25/05/2021 11:03:31	Motion Start	Yes	☐
CH1	Alarm	25/05/2021 11:05:07	Motion End	Yes	☐
	Account	25/05/2021 11:08:29	admin Login		
	System	25/05/2021 11:08:30	System Startup		
CH1	Alarm	25/05/2021 11:43:50	Motion Start	Yes	☐
CH1	Alarm	25/05/2021 11:45:40	Motion End	Yes	☐

Each action that your NVR performs as well as events detected are logged. These log files can be searched, viewed, and copied to a USB flash drive for safekeeping.

- 1 Start/End Time:** Click the calendar icon to select the month, year, and date that you would like to search on. Click the dialogue box to enter a specific start and end time.
- 2 Log Type:** Leave the default selection or click the drop-down menu to select a specific action that you would like to search for.
- 3 Search:** Click this to display a list of log files that match your search criteria. Double-click a file to display information about that log.
- 4 Backup:** Insert a USB flash drive into your NVR then click this to copy the log files that match your search criteria. You have the choice of formatting the flash drive or creating a new folder if required. Click "OK" to save then click "OK" again to close.

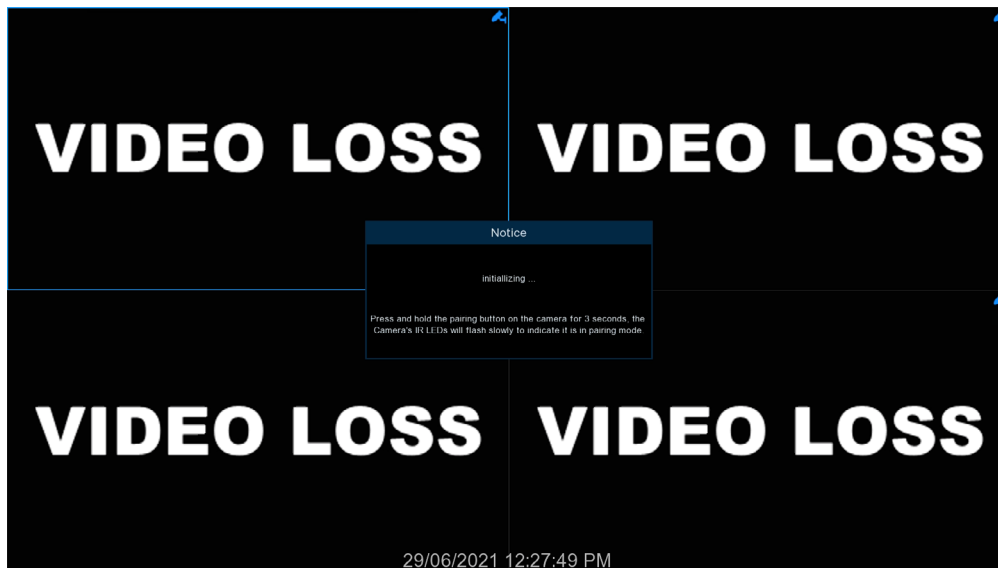
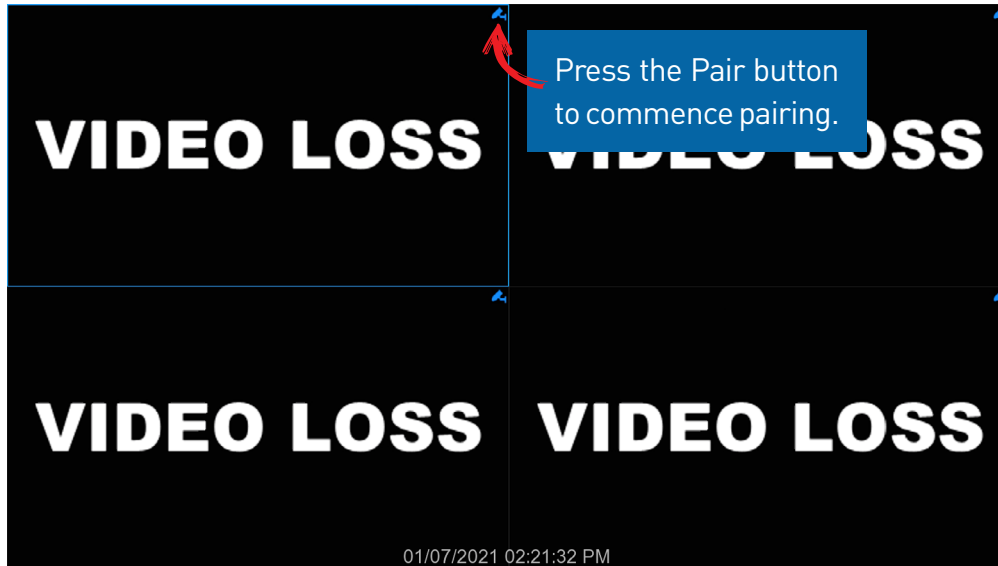
Restoring your NVR



Warning: For security and privacy reasons to stop malicious access, restoring your NVR will reset all saved changes to the settings available and the storage device will be formatted as well, removing any saved events.

1. Using a paper-clip or pin, carefully insert this into the port marked “reset”. Press and hold until you hear four beeps, then release.
2. After a short moment, a message will appear on-screen, and your NVR will reboot. After booting, the Startup Wizard will appear on-screen. Follow the instructions in the blue-colored quick start guide included with your NVR to complete.
3. After completing the Startup Wizard, you’re now ready to pair each camera to your NVR (see page 93 - [Camera Pairing](#)).

Camera Pairing



After restoring your NVR, all cameras previously paired will need to be re-paired.

1. In Live View mode, click a channel that you want to pair the camera to.
2. Press the blue Pair button to commence pairing. A message will appear stating that you need to press the pair button on the camera (as shown on the bottom left).
3. Remove the cap covering the pair button. Press and hold the pair button for 3 seconds, then release. The pairing will commence, and the camera's IR LEDs will start flashing.
4. After a short moment, the camera will pair, and you will see the camera's image on-screen. If the camera fails to pair, repeat the above instructions and try again.
5. Pair the other cameras to each channel available.

Help & Resources

Visit Swann Support Center at support.swann.com. You can register your product for dedicated customer support, download guides, find answers to commonly asked questions, and more.



Product Registration



Customer Support



Product Manuals



Frequently Asked Questions



Support Community



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