

# Night Hawk™

## Security Camera

with Night Vision

Infra-red  
Night Vision



- 380 TV Lines for clear image resolution
- 12-15ft (4-5m) infra-red night vision
- 100-150ft (30-50m)\* range with RCA AV connector
- Weather resistant sunshield for indoors & outdoors
- Top selling home & office wireless video camera

### How to Connect

#### Swann cameras use an AV RCA Plug

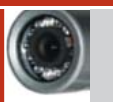
Simply connect this into your TV to start monitoring your Swann DIY security solution



Suggested use. Picture in Picture

## ? FAQs

- What kind of image quality can I expect from the Swann Nighthawk Camera?
- How does the Swann Nighthawk camera work?
- My Swann Nighthawk Camera worked for a few hours before the screen went black. Is it faulty?
- Is the Swann Nighthawk Camera totally wireless?
- What is the maximum wireless transmission distance of the Swann Nighthawk Camera?
- Can I add extra wireless cameras to my Swann Nighthawk Camera pack?
- Can other devices interfere with the Swann Nighthawk Camera?
- How do I connect my Swann Nighthawk Camera to a TV/VCR?
- Can I use my Swann Nighthawk Camera outdoors?
- How far can I see during the day with the Swann Nighthawk Camera?
- I have more than one wireless camera. Can I view or record these cameras simultaneously?
- What is 'infra-red' night vision?
- How does 'infra-red' night vision work?
- How far can Swann Nighthawk camera see at night?
- Can I connect an NightHawk System to a Swann DVR?
- Can I connect an NightHawk System to any TV or VCR?
- How long will a 9 volt battery last when used to power the Nighthawk Camera?



# Night Hawk™ FAQs

## ? What kind of image quality can I expect from the Swann Nighthawk Camera?

The Swann Nighthawk Camera has a 1/3" color CMOS image sensor and a resolution of 380 TV Lines or 628 x 582(PAL), 510 x 492(NTSC).

CMOS stands for Complimentary Metal Oxide Semiconductor. CMOS sensors are medium quality sensors that are commonly used in digital cameras and many low-powered image devices such as USB webcams. CMOS sensors usually don't handle variations in light conditions as well as CCD image sensors and are less sensitive so are not as powerful in low light conditions.

The Swann Nighthawk Camera is wireless for video transmission so you may occasionally see lines or hear static on the screen. If this disturbance is excessive try the following to improve the picture quality:

- Look for other wireless devices such as cordless phones and wireless LAN's that operate in the same area and could potentially interfere with your camera. If possible, try switching these devices off to identify whether the picture quality of your Nighthawk Camera improves.
- Since walls and other physical barriers may generate some interference, position your Swann Nighthawk Camera as close to the receiver as possible.
- If you are using less than four cameras with your wireless receiver, try setting the switch at the front of the camera to a different channel. You may do this by removing the weatherproof cap from the front of the camera and changing the configuration of the switch located at the left side of the lens. Sometimes you will receive better picture clarity when the camera is transmitting at a different frequency. Adjust your receiver to the new channel accordingly.
- Connect your camera to the AC power adapter rather than the 9V battery. As power is drained from the battery you will notice a decline in the image quality of your Swann Nighthawk Camera.

## ? How does the Swann Nighthawk camera work?

Wireless video transmission is made possible with the use of video transmitters and receivers. The Swann Nighthawk camera comes with a built-in video transmitter and a separate video receiver. The video signal is sent wirelessly through a specific radio frequency (2.4GHz) to the receiver which is connected directly to a TV, monitor or VCR using an RCA AV cable.

## ? My Swann Nighthawk Camera worked for a few hours before the screen went black. Is it faulty?

The Swann Nighthawk Camera is packaged with a 9v battery and an 8v power adapter. If you decide to connect the camera to the supplied battery it will make the camera kit totally wireless but you will notice that the video quality will deteriorate as the battery is drained within 3 – 6 hours. If the screen does go black and you have the camera connected to a battery, plug it into the 8V AC power adapter to determine if it is an issue with the camera or the battery.

## ? Is the Swann Nighthawk Camera totally wireless?

The Swann Nighthawk Camera is wireless for video transmission. Both the wireless camera and their receiver should be powered by electricity to function over long periods of time. They should be located within 6ft (2m) of a power source and plugged in. A Swann wireless receiver uses an RCA AV cable to transfer the video signal received from a Swann wireless camera to your TV, monitor or VCR with AV connections, so must be located near your TV, monitor or VCR.

## ? What is the maximum wireless transmission distance of the Swann Nighthawk Camera?

Due to the many variables in building construction and other causes of interference, the useful range can vary but is usually around 150ft (45m), depending on local conditions.



# Night Hawk™ FAQs

## ? Can I add extra wireless cameras to my Swann Nighthawk Camera pack?

Yes, the Swann Nighthawk Camera can be set to any of 4 channels the receiver is capable of using but you will not be able to view two wireless cameras on the same frequency or channel at the same time. Each additional camera must be set to a different channel on your receiver.

Swann recommend a maximum of 3 wireless cameras for optimum reception quality but 4 cameras can be set up successfully with careful camera placement.

## ? Can other devices interfere with the Swann Nighthawk Camera?

Yes, some common causes of interference are Wireless LAN equipment, cordless 2.4GHz telephones and microwave ovens (while they are actually cooking). Using the Swann Nighthawk Camera which has 4 switchable channels will allow you to change to a channel that is further away from the interference source to minimize the potential for lines and noise on your screen/recording.

## ? How do I connect my Swann Nighthawk Camera to a TV/VCR?

The Swann Nighthawk Camera receiver comes with an AV cable which plugs into the Video 'in' and Audio 'in' connectors on your TV or VCR. These plugs are commonly referred to as 'RCA plugs' and are similar to the connectors used by game consoles and DVD players. If you plug your Swann Nighthawk Camera's receiver into your VCR so that you can record the footage, you will need to select the AV channel on your VCR and then the channel on your TV that you normally use to watch video movies from your VCR. If you plug your Swann wireless receiver directly into your TV, you can view the images on the appropriate AV channel, but you will not be able to record.

## ? Can I use my Swann Nighthawk Camera outdoors?

The Swann Nighthawk camera has an enclosed metal case and weather resistant cap to make it suitable for outdoor applications. Weather resistant cameras are able to be used in the outdoors if shielded from direct sun, rain, temperatures, snow and wind. Camera power supplies must never be left exposed.

## ? How far can I see during the day with the Swann Nighthawk Camera?

In daylight it is most useful to measure the optical range of the camera in terms of Distance to Subject (DTS). DTS is a measurement of the ideal distance to view a subject from a camera viewing a 6ft/1.8m tall person from head to toe on a standard television. This assumes the camera is viewing from 3ft/0.9m off the ground.

The DTS for the Swann Nighthawk Camera is 2.5m.

## ? I have more than one wireless camera. Can I view or record these cameras simultaneously?

The Swann Nighthawk Camera receiver is only capable of displaying an image from one wireless camera at a time. To view or record more than one camera you must set the switch at the back of the receiver to 'Loop'. This will make the wireless receiver automatically cycle through the 4 channels sequentially, and linger on each for about 5 seconds before repeating the sequence.

## ? What is 'infra-red' night vision?

Infra-red night vision allows cameras to 'see in the dark'. It is the method of using IR LEDs (Infra-red Light Emitting Diodes) as illumination for a camera with a sensor that can 'see' infra-red light. Infra-red light provides the illumination needed to capture clear images in total darkness or low-light conditions.

## ? How does 'infra-red' night vision work?

Infra-red light is a part of the light spectrum that is not visible to the human eye. When there is insufficient visible light to see an object a Swann Nighthawk camera automatically activates its IR mode and sees the light from the IR LEDs using its IR image sensor. The resulting image is displayed as a black & white picture on your screen.



# Night Hawk™ FAQs

## ? How far can Swann Nighthawk camera see at night?

The Infra-red LEDs can project IR light that is invisible to the human eye but can be seen by the Swann Nighthawk Camera to a distance of 16ft/5m. With a small amount of ambient light, such as street lighting and house lighting, the distance can be extended by a small distance.

## ? Can I connect an NightHawk System to a Swann DVR?

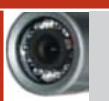
The NightHawk System uses RCA plugs which will not plug directly into the DVR's RCA video in sockets, but the Swann DVRs come with an RCA to BNC adaptor to make sure that you will be able to connect the receiver directly to a Swann DVR without having to purchase additional cables or connectors. Please note that due to the nature of wireless signals and the potential for interference to cause false motion triggers, wireless cameras are not as well suited to operating on DVR systems as wired cameras are.

## ? Can I connect an NightHawk System to any TV or VCR?

Most TVs and VCRs made in the last 10 years have AV inputs which are what the NightHawk receiver needs to connect to. The NightHawk System's receiver has an AV cable with RCA plugs that will connect directly to the TV or VCR's AV input. The AV inputs are the same sockets that you connect some DVD players and Game consoles to. Once you have the NightHawk System plugged in you need to select the appropriate AV channel on your TV or VCR to see the images on the TV. There are a number of ways to select the AV channel and they vary from one manufacturer to the next, but some methods of selecting the AV channel with the remote are: press the AV button until the correct AV input is selected (some TVs have 3 or more), press L1 or L2, press the Input Select button until the correct input is selected or in some cases you press the button that is marked with a small screen that has an arrow pointing into the centre of it. Consult the manual of the TV or VCR for more information if you are unsure how to select the appropriate AV input. If you have the camera connected to your VCR so you can record the images you will need to switch your TV to the same channel you use to watch movie tapes on the VCR to see the images from the camera.

## ? How long will a 9 volt battery last when used to power the Nighthawk Camera?

A 9 volt battery will last for approximately one hour depending on the quality of the battery and whether the night vision feature is active or inactive. The battery snap adaptor is supplied to assist with the initial setup and locating of the camera and is not intended to power the camera for sustained use.



## Avoiding Interference! with your Swann NightHawk Camera

From time to time cameras that use 2.4GHz transmission may experience some interference from household devices such as cordless telephone, wireless internet connections, microwave ovens and baby monitors. There is a solution!

Swann's Night Hawk range of security cameras come with 4 switchable frequency channel settings to avoid interference.

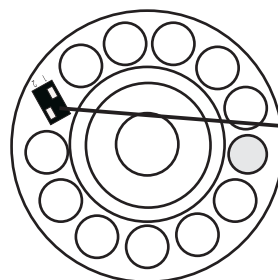
### How to change the channel on your NightHawk camera

Unscrew the front of the camera case to gain access to the channel switch. To change the frequency/channel on the receiver, press the SEL button on top of the receiver to cycle through the channels. You can also switch the Loop/Normal switch to Loop, which will allow the receiver to switch through all four channels automatically. The lit LED indicates which channel is currently selected.

Front view of Switch Block (note the numbers 1 & 2 indicate the left side of the switch)

By changing these switch settings, the frequency that the camera transmits on changes. Once you have set the channel on the camera, select the same channel on the receiver. If you experience interference try a different channel.

**Note:**  
**Do not set two cameras to the same channel or they will interfere with each others signal.**



#### Channel & Frequency settings

1 2		<b>Channel 1</b> Both switches Right 2414MHz
1 2		<b>Channel 2</b> Top Left & Bottom Right 2432MHz
1 2		<b>Channel 3</b> Top Right & Bottom Left 2450MHz
1 2		<b>Channel 4</b> Both switches Left 2468MHz

### Main Camera Features & Benefits

- Quality color surveillance suitable for home, office and retail security
- DIY - no cable installation required
- Professional quality images
- I I Infra-red LEDs for night vision
- Included receiver is easily connected to a DVR, VCR, TV or PC (With Capture Card)



#### RS Codes:

NightHawk: 49-1059

NightHawk without Receiver: 49-1057

NightHawk Twin Pack: 49-107