

NightHawk Twin Pack™

2 Cameras & Receiver

Quality Surveillance with Night Vision & Audio for your Home or Business



- Perfect home or business monitoring kit
- Wireless 2.4GHz transmission between cameras & receiver up to 100-150ft/30-50m*
- Safeguard loved ones, protect property & deter thieves
- No batteries required

* depending on local conditions

How to Connect

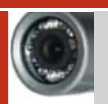
Swann cameras use an AV RCA Plug
Simply connect this into your TV to start monitoring your Swann DIY security solution



Suggested use. Picture in Picture

FAQs

- How long will a 9 volt battery last when used to power the Nighthawk Cameras?
- What is the maximum wireless transmission distance of the Swann Nighthawk Camera?
- Can other devices interfere with the Swann Nighthawk Camera?
- I only have two Nighthawk cameras but my wireless receiver is alternating through all four channels. Is there a way to block the two vacant channels?
- My Swann Nighthawk Camera worked for a few hours before the screen went black. Is it faulty?
- How far can Swann Nighthawk camera see at night?
- How far can I see during the day with the Swann Nighthawk Camera?
- Can I use my Swann Nighthawk Camera outdoors?
- Is the Swann Nighthawk Camera totally wireless?
- I have more than two wireless cameras. Can I view or record these cameras simultaneously?
- How do I connect my Swann Nighthawk Camera to a TV/VCR?
- What is 'infra-red' night vision?
- How does 'infra-red' night vision work?
- How does the Swann Nighthawk camera work?
- Can I connect my NightHawk system camera directly to my Wireless LAN Access Point since it also operates on 2.4GHz?



Night Hawk Twin Pack™ FAQs

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- Can I add extra wireless cameras to my Swann Nighthawk Camera pack?
- I want to change the channel on my NightHawk system to minimize the chance of interference from another 2.4Ghz wireless device, what are the frequencies for each channel?
- What kind of image quality can I expect from the Swann Nighthawk Camera?

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

A 9 volt battery will last for up to 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.

? 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 maximum useful range will vary but can be up to 150ft (45m), depending on local conditions.

? 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 switch-able channels will allow you to change to a channel that is further away from the transmission frequency of the interference source to minimize the potential for lines and noise on your screen/recording.

? I only have two Nighthawk cameras but my wireless receiver is alternating through all four channels. Is there a way to block the two vacant channels?

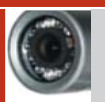
Yes, you may use the remote control from your Swann Nighthawk 2 camera pack to lock out any unused channels on your receiver. To do this you must know which two channels are being used otherwise the default setting is channels 1 and 4.

You should then do the following:

1. Press the button with arrows arranged in a circle on your remote control, an L should appear on the LED display on the front of the receiver.
2. Press the button for the first camera channel. If you have not changed the switch on the front of your Nighthawk cameras this should be button 1.
3. Press the button for the second camera channel. If you have not changed the switch on the front of your Nighthawk cameras this should be button 4. (If you have changed the camera channels use the appropriate corresponding numbers).
4. Press the button with arrows arranged in a circle on your remote, your receiver should now alternate between the two selected channels.

? 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 45 – 60 minutes. 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.



Night Hawk Twin Pack™ 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.

? 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 8¼ft / 2.5m.

? 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.

? 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 mains electricity to function over long periods of time. They should be located within 6ft (2m) of a power point for the power adaptor and plugged in to it. 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.

? I have more than two wireless cameras. Can I view or record these cameras simultaneously?

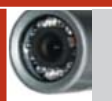
The Swann Nighthawk Camera receiver is only capable of displaying an image from one wireless camera at a time. To view or record more than one camera you must press the circular 'Loop' button at the front of the Swann Nighthawk receiver. This will make the wireless receiver automatically cycle through the active channels sequentially, and pause on each camera for about 5 seconds before repeating the sequence. If you purchased an additional receiver you could have two receivers and two cameras on separate channels which would allow you to view or record both cameras at the same time.

? 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.

? 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.



Night Hawk Twin Pack™ FAQs

? 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.

? 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.

? Can I connect my NightHawk system camera directly to my Wireless LAN Access Point since it also operates on 2.4GHz?

Although both the NightHawk system cameras and your wireless network operate in the 2.4GHz frequency range, they use a different method of communication. As an example, if someone started speaking in a foreign language to you, then you know they're speaking (ie, transmitting a signal), but you can't understand what they're saying because they're speaking in a foreign language (ie, the cameras use a method of communication that a wireless network wouldn't understand). As such, it's not possible to use your existing wireless network to view the images directly from the Night-Hawk system cameras.

? 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.

? I want to change the channel on my NightHawk system to minimize the chance of interference from another 2.4Ghz wireless device, what are the frequencies for each channel?

The NightHawk uses the following frequencies for the respective channels.

Channel 1 - 2414 MHz (2.414 GHz)

Channel 2 - 2432 MHz (2.432 GHz)

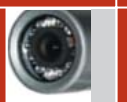
Channel 3 - 2450 MHz (2.45 GHz)

Channel 4 - 2468 MHz (2.468 GHz)

? 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. 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 weather-resistant 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.



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.

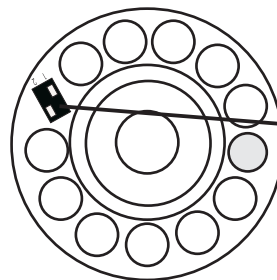
How to change the channel on your NightHawk camera

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

-  Channel 1
Both switches Right
2414MHz
-  Channel 2
Top Left & Bottom Right
2432MHz
-  Channel 3
Top Right & Bottom Left
2450MHz
-  Channel 4
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



Please note that the information contained within this document is subject to change without notification. Current at May 2007.