

# **RedAlert™**

## **Single Channel Security Monitoring Kit**



## **Operating Instructions**

# Before You Begin

## ■ **FCC Verification:**

**NOTE:** 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

## ■ **IMPORTANT NOTE: 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.

- **WARNING:** Modifications not approved by the party responsible for compliance could void user's authority to operate the equipment.

## ■ **IMPORTANT SAFETY INSTRUCTIONS:**

- Make sure product is fixed correctly and stable if fastened in place
- Do not operate if wires and terminals are exposed

## ■ **WARNING: IMPORTANT INFORMATION ABOUT CORRECT USE OF POWER ADAPTOR**

The correct orientation for the enclosed power adaptor is a vertical or floor mount position. Orienting the power adaptor in any other way will jeopardize the performance of the unit and/or create a high risk of malfunction and damage to surrounding environment.

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## Package Contents

### ■ INCLUDED:

- RedAlert Receiver/Recorder
- Antenna
- Instruction Manual
- DVR Power Supply (5V)
- Video In Cable
- Video Out Cable
- Theft Deterrent Stickers x 4



### ■ OPTIONALLY INCLUDED:

- Wireless Camera
- Wired PNP-50™ Camera
- Camera Power Supply (12V)
- SD Card



# Overview

Congratulations on your purchase of the *RedAlert*! This single channel video recorder is a terrific value for money security solution, as well as being easy to install, use and transport from location to location. Practically fitting into the palm of your hand is a neat feature as well!

Before we get into the nitty-gritty of learning how to install, configure and use the *RedAlert*, let's just take a moment to discuss its features, strengths and limitations, so you can get the most out of your *RedAlert*.

## How it Works

The *RedAlert* will record video or still images directly to an SD card, and it can be configured to do this whenever it detects motion in the view of its camera.

It is an ideal monitoring solution for guarding specific security vulnerabilities around the home or small office. Some suggested applications include monitoring the front or back door, a main hallway, or a courtyard or balcony. If there is a single, specific location that you wish to safeguard, the *RedAlert* is the perfect solution.

By correctly configuring the motion detection settings, and using a 1GB – 2GB SD card (available separately) you can get the *RedAlert* to function autonomously for up to months at a time!

### A few key points to remember:

- **The *RedAlert* can use SD cards up to 2GB in capacity.** It will not work with larger SD cards, as these conform to the SDHC standard, which is incompatible with the *RedAlert*. This is not much of a limitation, really. A 2GB SD card will record over 3, 500 ten second videos, or more than 60, 000 still images.
- **The *RedAlert* can monitor a maximum of two cameras at once (one of which must be wired, the other one wireless) but can record only one.** Savvy users might have already noticed that the *RedAlert* has four wireless channels – the *RedAlert* is not recommended for multiple wireless cameras! See page 11 for more information about why we've included multiple camera channels.
- Though it is remarkably efficient hardware for its size and cost, the *RedAlert* is a miniature, self contained, entry-level video recording unit. It will (unfortunately) not operate like the mythical technology shown on television shows like *CSI* or *24* (we really wanted it to, but it turns out that sort of technology costs millions of dollars and doesn't really work that well in real life, anyway). Bear this in mind when placing your camera(s): **the closer the camera is to the action you want to capture, the more detail you're going to get.** For example, if you want to capture a vehicle registration tag, you'll have to have the camera within about a dozen feet (about 4 meters) from the vehicle to capture the required detail.
- **The *RedAlert* is a single channel recorder.** It will only record one video/image at a time. It can display two cameras at once, but, due to the limitations of the speed at which it can process images and write them to an SD card, it can only record one channel at a time.
- If you're using your *RedAlert* with a wireless camera, be sure to read the section on page 11 on interference and how you can avoid it when you configure your system.

# Layout of the *RedAlert*



**Channel 1, 2, 3, 4 LEDs:** Displays which wireless channel the *RedAlert* is configured to receive. This is in no way automated, and the *RedAlert* will only receive images from one wireless camera at a time. To change the channel that the *RedAlert* is monitoring, press the SET button.

**SET:** Changes the wireless channel that the *RedAlert* will monitor. This is the only way to change the wireless channel – there is no function to cycle automatically, as the *RedAlert* was, simply, not designed for use with multiple wireless cameras.

**MODE:** Switches between RECORDING MODE and PLAYBACK MODE.

**SNAP:** Commands the *RedAlert* to capture a still image or video immediately, using the current recording mode and quality settings.

**DISP (Display):** Changes the viewing mode from wired to wireless camera, or vice versa.

**MENU:** Opens the MAIN MENU. The functions of the MAIN MENU are covered in much more detail later in this manual (the whole second half, actually!).

**ARROWS:** Used to navigate when in the MENU, and as SHORTCUT buttons at other times.

**OK:** Used to select items whilst in the MENU.

**SD CARD SLOT:** Where you put the SD cards you want to record to. The *RedAlert* can record to SD cards up to 2GB in capacity. Be sure that the *write protection tab* on the SD card is set to off.

# About the *Wired PNP-50*



Your *RedAlert* may have come with the wired *PNP-50TM*. If so, read on to learn about your camera and how best to install it!

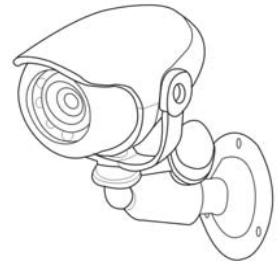
The *PNP-50TM* captures color images during the day, and switches to black & white at night. It can see up to 16ft (5m) in the dark using its built-in infrared LEDs.

Of course, if your *RedAlert* did not come with the *PNP-50TM*, and you don't have a wired camera attached to the *RedAlert* already, there's no reason you can't purchase one and add it to your security system. The *PNP-50TM* makes a great partner to the *RedAlert* - and it's stylish!

## Installing the *Wired PNP-50*

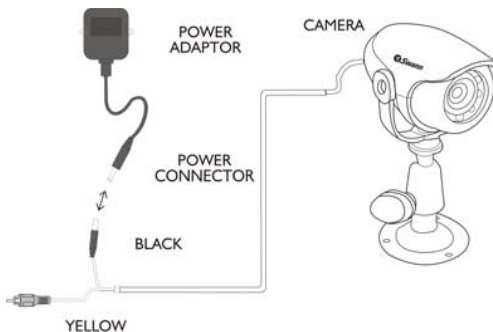
### 1. Select the position for your camera

It's a great idea to plug the YELLOW RCA connector into a TV and hook the BLACK connector up to the power supply whilst deciding your cameras position, as you can see exactly what the camera sees as you experiment.



### 2. Attach the camera

Use the screw holes on the base, and use appropriate type of screw for the surface you're mounting the camera on. Be sure to mount the camera so that the lens is upright - otherwise your images will be upside down! If attaching the camera to the ceiling or mounting it high on a wall, align the lens upright (as shown above).



### 3. Attach the power supply (12V)

The power attaches to the BLACK connector. The YELLOW connector attaches to the VIDEO IN lead on the *RedAlert*.

**Note:** The *PNP-50* is for indoor use only, and is not weather resistant. Moisture, dust and fluctuations in temperature will cause undesirable results.

# About the *Wireless Camera*

Your RedAlert may have come with the *Wireless Camera*. If so, you'll want to read this section on how to install and use the *Camera*. Also, see the section on page 11 on how to get the best results from it.

The *Camera* is a weather resistant, analog wireless camera. It captures color images by day and black & white at night using its built-in infrared LEDs.

**Remember:** the *Wireless Camera* needs to be connected to power via the supplied power adaptor. The term 'wireless' refers to there being no cable between the *Camera* and the *RedAlert*.



## Installing *Wireless Camera*

### 1. Select the position for your camera

You can attach the camera to power and, if the *RedAlert* has already been attached to a TV, check both the camera's view and the level of interference at the same time (see page 11 for more information on wireless interference).

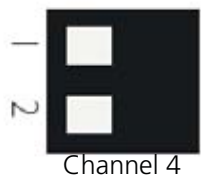
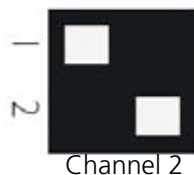
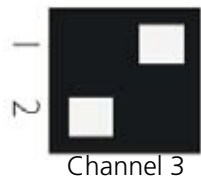
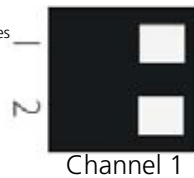
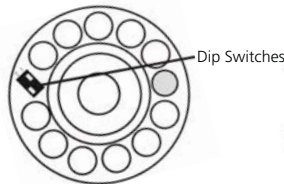
### 2. Mount the camera

Use an appropriate screw type for the surface you're mounting the camera to. Make sure the lens is upright relative to your subject - you can tell easily as the antenna should be relatively upright.

### 3. Connect the camera to power via the supplied power adaptor

### 4. Set the camera's channel

The *Wireless Camera* can transmit its images on one of four channels. To set the channel:



1. Unscrew the front of the camera case.
2. Locate the 2 dip switches near the lens - they are located
3. Using a toothpick or similar, flip the dip switches to the desired configuration, as listed.

# Connecting Power and Cameras

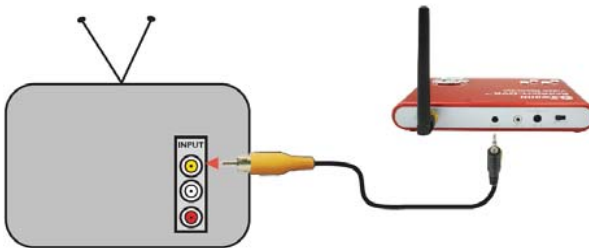


The *RedAlert* is capable of receiving images from one wired camera and one wireless camera at a time (though it can **not** record both simultaneously).

## To attach a camera:

1. Plug the camera into power using the supplied power adaptor (12V).
2. If your camera is the wired *PNP-50*, connect the *Video In* cable to the AV input on the back of the RedAlert. Attach the RCA connector from the *PNP-50* to the RCA connector on the Video In cable.
3. If your camera is the *Wireless Camera*, set the camera channel as appropriate. See the camera's manual for details on how to do this. Using the SET button, select the camera channel on the *RedAlert*.

# Attaching the RedAlert to a Television



To connect the *RedAlert* to a television:

1. Be sure you've already connected the *RedAlert* to power using the supplied power adaptor (5V).
2. Using the supplied RCA video out cable, attach the AV OUT on the back of the RedAlert to an AV INPUT on the back of your television.

**Tips and Tricks:** Be sure to plug the RCA connector into a VIDEO INPUT on the back of your TV (or front, if your TV has them there). The video input (as opposed to audio) is usually color-coded yellow. Also, watch out for VIDEO OUTPUTS, which many TVs come with.



# Motion Detection

If the *RedAlert* recorded everything it saw all the time, you'd wind up with hundreds of images (or hours of video) where nothing is happening! That's not very useful for anyone, as it would fill up the SD card too fast, and leave you searching through hundreds (or more) files to try and find the incident you are after!

Thus, to save storage space – not to mention your time and sanity – the *RedAlert* is designed to record short videos (10 seconds in length) or take a series of still images whenever something happens in view of the camera. We call this MOTION DETECTION.

To turn MOTION DETECTION ON or OFF:

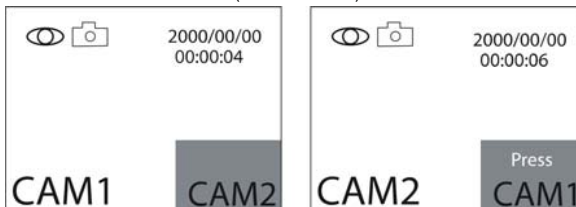
1. Press MENU.
2. Use LEFT and RIGHT to navigate to the MOTION DETECTION icon.
3. Press OK to toggle MOTION DETECTION to ON or OFF, depending on your preference.
4. The MOTION DETECTION icon will be displayed in the top left of the screen whilst enabled.



# Viewing Live Images

By default, the *RedAlert* will boot up straight into LIVE VIEWING MODE. The DISP button will cycle between displaying a WIRED and a WIRELESS camera connected to the *RedAlert*.

The *RedAlert* is capable of displaying images from two cameras at a time. To achieve this, one of the cameras must be wired, the other wireless. As the picture from one camera is displayed in miniature within the other camera's picture, this is referred to as Picture In Picture mode (PIP MODE) .



1. Press DISP once to switch between the WIRED and WIRELESS camera.
2. Press DISP again to activate PIP MODE.
3. Press DISP a third time if you wish to swap the positions of the main and miniature images.
4. Note that whilst the *RedAlert* can display two images at once, **it can only record one at a time.**

# Capture Format

The *RedAlert* can record in one of two formats: it can either record still images (in JPEG format) or 10 second video recordings (as AVI files).

## To change the CAPTURE FORMAT:

1. Press MENU, and using the LEFT/RIGHT buttons, navigate to CAPTURE FORMAT.
2. Press OK to toggle between PHOTO (still image) and AVI (video) formats.
3. Press MENU again to exit, saving your changes.



## About these file types:

JPEG (often just JPG) is a very standard compression format, retaining most perceivable detail in an image, whilst vastly reducing file size. It is the most common type of compression used for images distributed via the Internet. The high compression ratio allows many hundreds of images to be stored on the supplied SD card. Any recent computer of any type will be able to read .JPG files. (The name JPEG comes from the Joint Photographic Experts Group who developed the standard.)

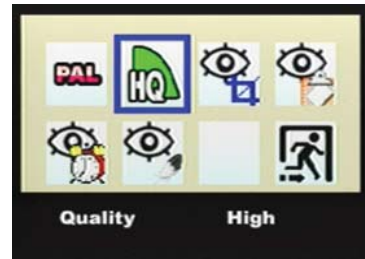
AVI is a popular video format, which is highly compatible with most computers and computer-like devices (such as recent mobile phones and even video game consoles). AVI is an acronym for Audio Video Interleave, and has been a popular video 'container' for many years. The term 'container' means that it is a type of file which holds video data, rather than specifying exactly what kind of video data it should hold.

# Quality Settings

The *RedAlert* has selectable quality settings. You can record images/video in HIGH QUALITY or LOW QUALITY.

HIGH QUALITY is delivers the maximum quality the *RedAlert* is capable of producing, and is useful for situations where details in your images are desirable. HIGH QUALITY images/videos take up more space on your SD card than LOW QUALITY.

LOW QUALITY conserves space on your SD card at the expense of image quality. The upside of LOW QUALITY is that you can store many more images/videos on your SD card – though these recordings will not look as clear as those recorded in HIGH QUALITY.



To change your QUALITY setting:

1. Press MENU, and using the LEFT/RIGHT buttons, navigate to QUALITY.
2. Press OK to toggle between LOW QUALITY and HIGH QUALITY.
3. Press MENU to exit, saving your changes.

# Wireless Cameras and Interference

If the image coming from your wireless *Camera* is distorted, you've probably discovered the bane of analog wireless technologies: **interference**. To help you get as much out of your *RedAlert* system as it's capable of delivering, here's a brief rundown of what interference is, and how you can try to minimise it.

The *Wireless Camera* transmits its images on a radio frequency of 2.4GHz. This is way over the range of the average radio, but there are some (in fact, many) devices out there that transmit data on this frequency.

Things such as wireless computer networks, cordless phones, baby monitors, car alarms and *Bluetooth* enabled devices communicate at and around a frequency of 2.4GHz. Other devices, such as microwaves, create radio "noise" at this frequency as well.

Placing your cameras or *RedAlert* near these devices, or having any of these devices in between your cameras and receiver, can cause interference and affect picture quality. This happens because the signals are so similar, that they get mixed up with one another, and your receiver will have trouble figuring out which is which.

If you want to visualize how interference occurs, imagine playing two games of football simultaneously on only one field. The players will continually collide with one another, and occasionally forget which ball is which! Naturally, when two games are played at the same time on the same field, both games suffer, take longer to play and neither team will score as often as they should.

This is exactly what happens when two wireless devices used too close together!

To discover what might be causing your interference, we suggest disconnecting all other wireless devices one at a time to find out which one is causing the problem, and adjusting your setup accordingly.

Bear in mind that a wireless device from nearby homes or businesses could be the culprit, and other than asking neighbors politely to turn it off, there's little that can be done about this problem.

## **If you are experiencing interference or poor image quality try the following steps:**

- Try moving the camera to a different location, or, if it really is exactly where you want it, changing the orientation of the antenna on the camera and the *RedAlert*.
- Adjust or aim the receiver antenna - a single inch can make all the difference.
- Limit the number of walls, floors between the camera and receiver as this can dramatically alter picture quality.
- Dense materials such as concrete or metal will impede the wireless signal; try moving the camera and/or receiver away from dense materials.
- If possible, keep the camera and receiver away from or move conflicting devices such as wireless routers, microwaves, cordless phones.

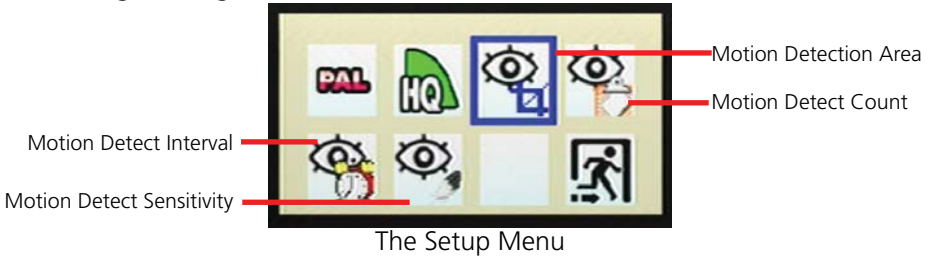
### **Some environments are simply not suitable for analog wireless systems.**

If this is the case in your environment, consider changing to a wired system or to a digital wireless system, as these are not subject to interference in the same way as analog wireless systems.

# Advanced Motion Detection Settings

Say you're monitoring your yard, and right next to the gate you want to watch there's a tree blowing in the wind, which constantly triggers the motion detection. Perhaps your watching a hallway, and your pet cat continually sets off the motion detection, and you only want to record humans. What can you do?

You can fine tune your ADVANCED MOTION DETECTION SETTINGS to only trigger the RedAlert to record when it should! There are several settings you can configure, and we'll go through them one at a time...



## Motion Detection Area

You can define only part of the cameras view to trigger the MOTION DETECTION.

1. Press MENU, and use the LEFT/RIGHT buttons to navigate to the SETUP SUBMENU. Press OK.
2. In the SETUP SUBMENU, use LEFT/RIGHT to select MOTION DETECT AREA (M), and press OK.
3. Choose the size of the area that you would like to detect motion by using the LEFT/RIGHT buttons. When you're satisfied, press OK.
4. Now, you can place the motion detection area in whichever part of the image you want by using the UP/DOWN/LEFT/RIGHT buttons. When you've placed it in the appropriate place, press OK.

## Motion Detect Count

When the RedAlert is in STILL IMAGE MODE, you can select how many images it captures when triggered by a motion event. You can select between 1, 3 and 5 images captured per event.

1. Press MENU, and use the LEFT/RIGHT buttons to navigate to the SETUP SUBMENU. Press OK.
2. In the SETUP SUBMENU, highlight MOTION DETECT COUNT.
3. Press OK to toggle the value between 1, 3 or 5.

## Motion Detect Interval

You can tell the *RedAlert* how long to pause after detecting a motion event before it will be triggered by motion to record again.

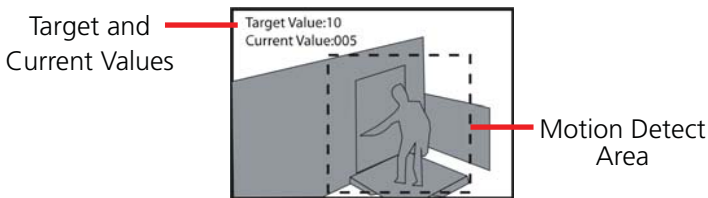
1. Press MENU, and use the LEFT/RIGHT buttons to navigate to the SETUP SUBMENU. Press OK.
2. In the SETUP SUBMENU, highlight MOTION DETECT INTERVAL.
3. Press OK to toggle the value between 1, 3 or 5.

# Advanced Motion Detection Settings

## Motion Detect Sensitivity

The *RedAlert's* MOTION DETECTION threshold can be configured. This means that you can choose exactly how much motion the *RedAlert* needs to detect before it will start capturing images. This is a setting that should be defined carefully, as if the setting is too low insignificant events (such as a passing bird or a minor interference event) may trigger the *RedAlert* to record. If the setting is too high, the *RedAlert* might not record when you really need it to!

The best way to configure the MOTION DETECT SENSITIVITY is to have an assistant to play the part of pretend security risk. This way we can observe how the *RedAlert* reacts to your unique environmental conditions, and configure it to deliver the best result.



### To set the MOTION DETECT SENSITIVITY optimally:

1. In the SETUP SUBMENU, use LEFT/RIGHT to navigate to MOTION DETECT SENSITIVITY. Press OK.
2. This will take you to the MOTION DETECT SENSITIVITY setup screen. You'll see the area of the screen you've configured to be sensitive to motion, and two values: the TARGET VALUE, and the CURRENT VALUE.
3. When the CURRENT VALUE exceeds the TARGET VALUE, the *RedAlert* will be triggered to record an image/video.
4. With the help of your able assistant, we need to determine the correct value for the TARGET VALUE. Have your assistant play the part of the security risk, and slowly walk through the area covered by the *RedAlert*.
5. Whilst they do this, watch the CURRENT VALUE. It will fluctuate up and down, but what we're looking for is the level it seems to average at.
6. Set the TARGET VALUE to a level determined by watching the CURRENT VALUE.
7. Once it's set, test it by having your assistant repeat their performance, and checking to see if a motion event is triggered (the *RedAlert* will tell you on the screen when this happens).
8. If the *RedAlert* is not triggered when it should be, lower the TARGET VALUE. Alternately, if the *RedAlert* captures images when nothing is happening, raise the TARGET VALUE.
9. When you've configured the system to your satisfaction, exit the MOTION DETECT SENSITIVITY screen by pressing OK.

# Playing Back Images and Videos

There are two ways to view images and videos captured by the RedAlert. One way is to view them through the RedAlert (and the TV that the *RedAlert* is connected to) and the other is to simply take the SD card out of the *RedAlert*, and insert it into an SD card reader attached to your computer.

## To Playback images/videos using the *RedAlert*:

1. Whilst in the live monitoring screen, press MODE to change to PLAYBACK MODE.
2. Whilst in PLAYBACK MODE, use the LEFT/RIGHT buttons to cycle between images in the current dated folder.
3. To play a video, select it and press the DOWN arrow to begin playback.

## To Change Folders:

Whilst in PLAYBACK MODE, press DISP to bring up a list of folders.

Use the UP/DOWN arrows to select the dated folder you wish to see, and press OK to select.

Note: Some dates might have multiple folders.

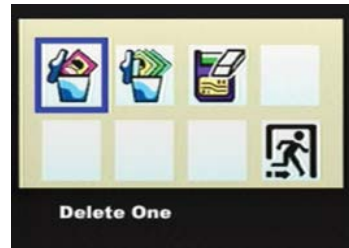


## To DELETE unwanted images/videos:

Whilst in PLAYBACK MODE, select the image/video that you wish to delete.

Press MENU to open the PLAYBACK MENU. The PLAYBACK MENU has the following options:

- **Delete One:** Deletes the selected image.
- **Delete All:** Deletes all stored images.
- **Format:** Deletes all information from the RedAlert, and repairs the file structure of the SD card.



When you select one of these options, you will be asked to confirm your choice. Highlight the **GREEN TICK** to proceed, or highlight the **RED 'X'** to cancel your choice.

# Accessing Images/Videos via a Computer

One of the most convenient aspects of recording to an SD card is that, if you have an SD card reader for your computer, you can simply pop the SD card into it and open the *RedAlert's* images/videos directly.

## **To playback, copy and delete images using a computer:**

1. Place the SD card into your computer via an internal or external card reader.
2. Open the SD card in your computer's file browser. You'll see a folder dedicated to each day that the *RedAlert* was operating.
3. All recorded images and videos are stored as separate files numbered in chronological order of when they were captured.
4. You can cut and paste the *RedAlert's* images/videos in the same manner as any other file.
5. To delete files, drag them to the Trash/Recycle Bin (depending on your operating system) or highlight them and press your computer's delete key. A popup box will ask you to confirm.
6. Most current systems will have no problem opening the file types that the *RedAlert* creates. If you encounter problems, update your video player or image viewing software.

If you're having trouble playing back the videos created by the *RedAlert*, consider downloading VLC Media Player. There are versions of VLC available for Windows, Mac OS and just about every other operating system you can imagine.

It is available free online, at <http://www.videolan.org/vlc/>

# Troubleshooting

**Problem:** I can only record images/video from one camera!

**Solution:** The *RedAlert* can only record one camera at a time. While it is possible to monitor two cameras at once (one wired, one wireless) it is not possible to record both at once. If using PIP (Picture in Picture) MODE, the *RedAlert* will record images/video from the primary selected camera only.

**Problem:** The *RedAlert* will only pick up one of my wireless cameras.

**Solution:** Whilst the *RedAlert* can be tuned to four wireless channels, it can only monitor one of them at a time. There is no automatic switching function: if you want to change the wireless channel that the *RedAlert* is monitoring, you need to do this manually by pressing the SET button. For this reason, we do not recommend using multiple wireless cameras with the *RedAlert*.

**Problem:** The picture quality is poor when I use a wireless camera, or so distorted as to not qualify as a picture.

**Solution:** Your camera's signal is probably suffering from signal blockage or interference. Try realigning the antennas (sometimes an inch can make all the difference) or moving the *RedAlert* itself. You may need to try moving the camera, as well. If this does not help, you may need to shut down other wireless equipment operating nearby to the *RedAlert*. Check page 11 for more information on interference, and how it might be overcome.

**Problem:** There seems to be a red haze in picture.

**Solution:** This is most likely caused by a strong light source (such as the sun) shining directly into the lens of the camera. This is simple to remedy: face your camera away from light sources, or use a lens hood for the camera to stop light entering the lens directly.

**Problem:** The foreground is too dark, whilst the background is too bright.

**Solution:** The *RedAlert* uses automatic exposure adjustment to keep the majority of the image correctly lit up, without you having to adjust anything. However, this means that if what you want to see is in shadow when there's something else in full sun in frame, the shadowy areas might black-out altogether. The best solution is to make sure that the majority of the camera's view (particularly the centre) is taken up with the lighting conditions you want to see detail in. The automatic exposure will do the rest!

**Problem:** All I see at night is black!

**Solution:** Whilst both the cameras that optionally come with the *RedAlert* have limited night vision, it is just that: limited. The cameras use infrared LEDs to "see" in the dark (infrared is a type of light that human eyes cannot see) the range is limited to approximately 16ft/5m. If there is nothing within that range, the cameras will see nothing! Also, darkly colored objects (such as a black car) may not reflect enough infrared light for the camera to see them clearly. The best solution is to simply move the camera closer to what you want to see.



# Troubleshooting

**Problem:** The camera is looking out a window, and at night all I can see is white!

**Solution:** The camera uses infrared LEDs to see at night. However, infrared light will reflect off a glass surface, and bounce-back into the lens of the camera, washing out the image. It is not possible to use an infrared night vision camera to look out of a window. If you want to see outside, the camera has to be outside as well. Note that the *PNP-50* is recommended for indoor use only.

**Problem:** The *RedAlert* is not capturing pictures/videos when it should, or it captures pictures/videos too often!

**Solution:** Your ADVANCED MOTION DETECT SETTINGS need adjusting. Basically, you can define how the *RedAlert* will look for motion, and how much motion it must detect before it initiates recording. Follow the steps on pages 12 and 13 to configure the motion detection settings. If you're using a wireless camera and the *RedAlert* is capturing pictures/video too often, it might be the case that there is enough interference in the video signal to count as motion. Follow the steps listed on page 11 to try to reduce the interference in your system.

**Problem:** All I see is a blank screen.

**Solution:** Check the connections between the *RedAlert* and your TV - in particular, check which RCA connection on the TV has the VIDEO OUT cable attached to it. Many TVs have A/V INPUT channels and A/V OUTPUT channels. Plugging the VIDEO OUT cable into an A/V OUTPUT will produce undesired results.

**Problem:** The *RedAlert* isn't showing images from my camera.

**Solution:** The *RedAlert* might be monitoring the wrong input. Press the DISP button. If this does not work, and the camera is wireless, change the wireless channel of the *RedAlert* by pressing the SET button. If this does not locate the camera, check that the camera is supplied with power. If a wired camera, check the connections to the *RedAlert*. Finally, be sure that the camera can see an image: if the camera sees only black (see other Troubleshooting tips) it might appear that the *RedAlert* is not getting a signal at all.

**Problem:** I can't find right channel for the *RedAlert* on my television.

**Solution:** This can be a little tricky. First, make sure you've got the *RedAlert* plugged into an INPUT on the television. The plug should be color coded yellow, the same as the connector from the *RedAlert*. If this is the case, look for a button on the TV or remote called *AV*, *TV/AV*, *AUX*, *Auxiliary*, *Channel 0*, *Video*, *DVD* or something similar. Some TVs have multiple AV channels. If in doubt, speak with the manufacturer of your TV - they'll know what plugs connect to which channel. If all else fails, try using a different TV. (Please, don't call and ask us about this one - we don't know what your TV looks like, nor how to make it do anything useful!)

## Placing your Security Stickers

One of the most effective aspects of having a security system is the deterring of would be thieves or intruders. Many potential threats will think twice when they see that your home is protected by one of the most respected names in security systems.

To this end, we've included a few **Swann Security Stickers** in your box. They'll let any potential problem know before it happens that you're already on to them! To get the best results, we suggest placing the stickers somewhere very obvious, a couple of suggestions being:

1. On your front windows
2. On your side windows
3. Near entrance points, such as doors and gates
4. Next to an obvious camera
5. On the front counter

## Cable Placement

If you are installing the *PNP-50TM* cables directly into your walls or ceiling, beware of placing them too close to electrical cabling. AC power operates at a certain frequency (50 or 60 hertz, depending on your locale) and this frequency generates a rather intense electromagnetic field. Running cables too close to a AC cable will cause noticeable distortion of your images.

## Extending Cable Length

It may be the case that you want to connect a camera farther away from the monitor than the supplied cables allow. Whilst it is possible to do this, please consider the following:

1. The longer the cable running from the camera to the RedAlert is, the more signal loss will occur during image transit. Signal loss will show up first as fuzziness in the image, followed by image noise and finally static (like that on an un-tuned television screen).
2. Signal loss becomes a real problem when dealing with longer cables than those supplied. If you want to use a cable longer than 50m/150ft, be sure that it is a shielded cable.
3. Joining cables together is, generally, not recommended. Whilst it is possible to do this, it usually causes more signal loss than using a longer cable. Of course, if you are a few feet short with the supplied cable, and just happen to have your own cables lying around, there's no harm in trying cables joined together and seeing what results you get. We do, however, recommend purchasing a longer cable.

# Technical Specifications

## **RedAlert**

### **Video**

Video Format	NTSC or PAL
Video Inputs	1 Composite Input
Video Outputs	1 Composite Output
Display Resolution	640 x 480
Display Frame Rate	NTSC: 30fps PAL: 25fps

### **Audio**

Audio Input	1
Audio Output	1

### **Recording**

Compression Format	Video: MPEG Photo: JPEG
Recording Resolution	Video: 320 x 240 Photo: 640 x 480
Recording Frame Rate	NTSC: 15fps PAL: 15fps
Recording Modes	Manual / Motion
Multiplex Operation	Simplex
HDD Interface/Memory	SD Card
Hard Drive Support	Up to 2GB SD

### **General**

Operating Power	DC 5V
Dimensions	5.25" x 3.33" x 0.75" 133mm x 85mm x 20mm
Weight	5.25oz / 148g
Backup Method	SD Card

## **PNP-50™**

### **Video**

Image Sensor	1/3" CMOS
Video Quality	400 TV Lines
Number of Effective Pixels	NTSC: 510 x 492 PAL: 628 x 582
Minimum Illumination	0 Lux (IR on)
Day / Night Mode	Color during day / switches to B&W at night
White Balance	Automatic
Signal / Noise Ratio	> 50dB
Electronic Shutter	1/60 - 1/15,000 NTSC 1/50 - 1/15,000 PAL
Gain Control	Automatic
Backlight Compensation	Yes
Wide Dynamic Range	No
Lens	4mm
Viewing Angle	90 degrees

### **Audio**

### **No**

### **Night Vision**

Night Vision Distance	Up to 16ft / 5m
IR Cut Filter	No
Number of Infra-Red LEDs	8
Infra-Red Wavelength	850nm
Infra-Red LED Life	10,000 hours

### **General**

Indoor / Outdoor	Indoor
Operating Power	DC 12V
Operating Temperature	32°F ~ 113°F 0°C ~ 45°C
Body Construction	Heavy Duty Plastic
Dimensions - Camera & Stand	4.25" x 2.75" x 1.75" 108mm x 69mm x 44mm
Weight - Camera & Stand	4.23oz / 125g
Cable Length	60ft / 18m

## **Wireless Camera**

### **Video**

Image Sensor	1/3" CMOS
Video Quality	330 TV Lines
Minimum Illumination	0 Lux (IR on)
Day/Night Mode	Color during day / switches to B&W at night
White Balance	Automatic
Signal / Noise Ratio	> 48dB
Electronic Shutter	1/60 - 1/15,000 NTSC 1/50 - 1/15,000 PAL
Gain Control	Automatic
Backlight Compensation	Yes
Wide Dynamic Range	No
Lens	6mm
Viewing Angle	48 degrees

### **Audio**

Microphone	Yes
Audio Range	9ft / 3m

Night Vision	
Night Vision Distance	Up to 16ft / 5m
IR Cut Filter	No
Number of Infra-Red LEDs	10
Infra-Red Wavelength	850nm
Infra-Red LED Life	10,000 hours

### **General**

Operating Power	DC 12V
Operating Temperature	0°C ~ 50°C 32°F ~ 122°F
Body Construction	Aluminum
Dimensions - Camera & Stand	5.1" x 2.0" x 2.0" 130mm x 50mm x 50mm
Weight - Camera & Stand	4.8oz / 136g

### **Wireless**

Digital or Analog	Analog
Max. Transmission Range	Up to 165ft / 50m
Typical Range	65ft / 20m
Frequency	2.4 GHz
Transmission Channels	4
Battery Power Option	No

# Helpdesk / Technical Support Details

## Swann Technical Support

All Countries E-mail: [tech@swannsecurity.com](mailto:tech@swannsecurity.com)

Telephone Helpdesk

USA toll free

1-800-627-2799

(Su, 2pm-10pm US PT)

(M-Th, 6am-10pm US PT)

(F 6am-2pm US PT)

USA Exchange & Repairs

1-800-627-2799 (Option 1)

(M-F, 9am-5pm US PT)

AUSTRALIA toll free

1300 138 324

(M 9am-5pm AUS ET)

(Tu-F 1am-5pm AUS ET)

(Sa 1am-9am AUS ET)

NEW ZEALAND toll free

0800 479 266

INTERNATIONAL

+61 3 8412 4610

See <http://www.worldtimeserver.com> for information on time zones and the current time in Melbourne, Australia compared to your local time.

## Warranty Information

Swann Communications USA Inc.

12636 Clark Street

Santa Fe Springs CA 90670

USA

Swann Communications PTY. LTD.

Building 4, 650 Church Street,

Richmond, Victoria 3121

Australia

Swann Communications warrants this product against defects in workmanship and material for a period of one (1) year from it's 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 labour 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 centres. 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 the 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.



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