

Wireless OutdoorCam™ Security Camera & Receiver



Operating Instructions

SW231-WCH / SW231-WDC SW231-WOY / SW233-W2Y SW233-W3Y / SW231-WCX SW233-W2B www.swannsecurity.com

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

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Package Contents

- Wireless OutdoorCam*
- Receiver with Antenna
- A/V Cable
- Dip Switch Tool

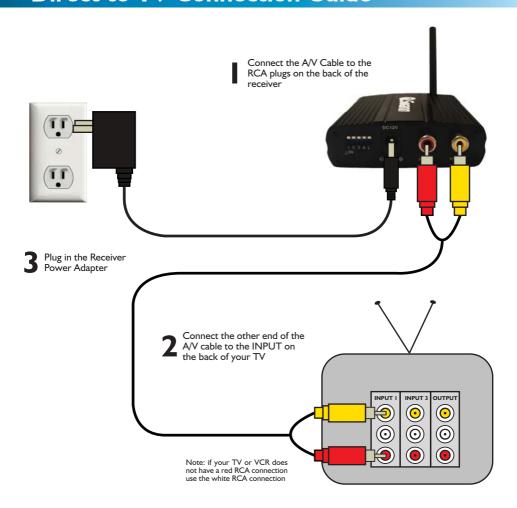
- Power Adapters
- Operating Instructions
- Security Stickers
- Mounting Hardware



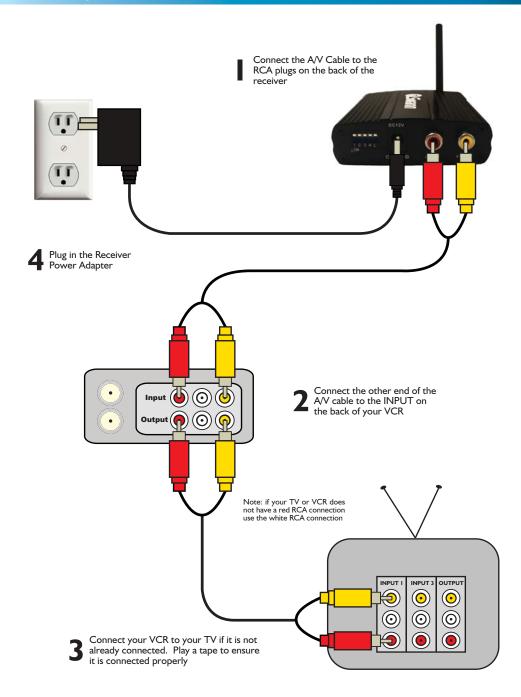


^{*}Camera color may vary by region - 1, 2 or 3 Camera Packs

Direct to TV Connection Guide



VCR / DVD Recorder Connection Guide



Viewing the Camera on a TV or VCR

Viewing the Wireless OutdoorCam connected directly to a TV

- 1. Connect the Camera and Receiver as described in **Connection Guide Direct to TV** on page 4
- 2. Plug in the Receiver and Cameras
- 3. Turn on your TV
- 4. Press the **INPUT** button on your **TV's** Remote Control until your camera / receiver appears on screen. The majority of TVs will label this button as INPUT, AV, SOURCE, AUX, TV/AV, Channel 0. If you are unable to change the input on your TV, consult the TV's instruction manual or contact your *TV's manufacturer*.

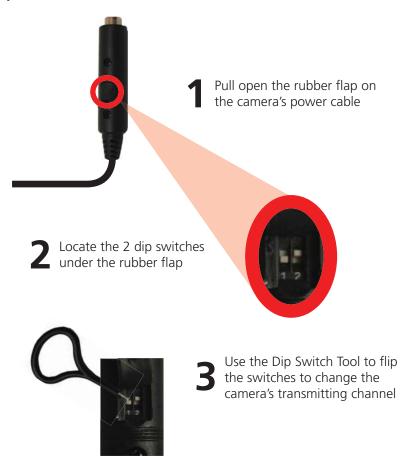
Viewing and Recording the Wireless OutdoorCam on a VCR or DVD Recorder

- Connect the camera and receiver as described in the VCR/DVD Recorder Connection Guide
- 2. Plug in the Receiver and Cameras
- 3. Turn on your TV and VCR
- 4. Play a tape to confirm your TV is on the correct channel, then press stop
- 5. Press the **INPUT** button on your **VCR's** Remote Control until your camera / receiver appears on screen. The majority of TVs will label this button as INPUT, AV, SOURCE, AUX, TV/AV, Channel 0. If you are unable to change the input on your TV, consult the TV's instruction manual or contact your *TV's manufacturer*.

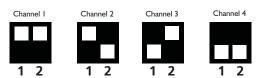
^{*}The INPUT button is sometimes labeled Input, Source, Line In, L1, L2, AUX, AVV, channel 0 etc. Consult the TV or VCR instruction manual for details about changing input channels on your device.

Setting / Changing the Camera Channel

■ The Wireless OutdoorCam operates in the 2.4GHz frequency range. It is capable of transmitting on 4 channels. Follow the steps below to set or change the frequency channel of the camera.



Set the camera channel as per the switch configuration below. Do not set multiple cameras on the same channel or interference will appear on screen



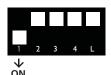
Selecting Channels on the Receiver

Turning Channels ON or OFF

The Wireless Receiver is capable of receiving up to 4 separate channels. To turn on channels move the dip switches on the receiver down to the **ON** position.

In the example below the receiver shows channel 1 is ON. No other channel will appear other than Channel 1. Cameras will only appear on channels in the ON position.

To activate channels move the channel switch down to the ON position



If switches are up, they are set to OFF and cameras will not appear on screen

Switching Between Active Channels

The front of the Wireless Receiver has 4 LEDs representing the 4 channels of the receiver. When lit, the LED will indicate which channel is currently being displayed. In the diagram below CH1 is lit up indicating Channel 1 will display on screen.

The Wireless Receiver allows you to manually switch between active channels by pushing the SET button.

Note: The Wireless Receiver will only switch between active channels that have been be set to the ON position as described above.



The Receiver has 4 lights indicating the 4 channels of the Receiver

The SET button will manually switch between active channels

Setting the Loop Mode

■ The Wireless Receiver has a built in Loop Mode that will display cycle between all active channels every few seconds.

To turn Loop Mode on, move the **'L'** or Loop switch down to the ON position. The Receiver will automatically switch between active channels every few seconds.

When the Loop switch is ON the LED indicator on the front of the Receiver will flash RED on the current active channel.



In this diagram Loop has been turned on as well as Channels I and 4. The Receiver will cycle from Channel I to Channel 4 every few seconds.

Camera Placement & Interference

- The Wireless OutdoorCam operates on 2.4GHz frequency. Some devices such as wireless routers, microwaves, cordless phones can cause interference and affect picture quality as they use the same frequency. If you are experiencing interference or poor image quality try the following steps:
 - move or orient the camera in a different location
 - adjust or aim the receiver antenna
 - 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; move 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
 - make sure all cameras are set to different camera channels
 - disconnect all other wireless devices to find out which is causing the problem and adjust your setup accordingly
 - analog wireless cameras are not recommended for use with DVR systems; if you are looking for a wireless camera solution for recording purposes see the digital wireless ADW-300 (SW233-ADW) which will not suffer from interference
 - some wireless signals may originate from nearby homes or businesses; in this case a wired camera may be necessary

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Troubleshooting Guide

Problem: I can't see the camera or receiver on my TV.

Solution: Ensure the camera and receiver are plugged in and the TV or VCR is

tuned to the correct input channel as described on Page 6.

Problem: All I can see at night is a white image.

Solution: The camera's infrared LEDs shine invisible light that reflects off surfaces such as glass causing white light. Place the camera on the other side of windows or place lens of camera flush against the window to try to improve the night vision or place the camera in a well lit area.

Problem: I keep getting interference in my home or business.

Solution: The Wireless OutdoorCam operates on the 2.4GHz frequency like many devices such as wireless routers, cordless phones, microwaves. If possible keep the cameras and receivers away from these devices.

Problem: Motion detection on my DVR keeps recording interference from my cameras.

Solution: Analog cameras such as the Wireless OutdoorCam are not recommended for use with DVRs due to potential interference from other devices. We recommend using wired cameras or the ADW-300 Digital Wireless (SW233-ADW) camera that does not suffer from interference.

Problem: The picture keeps changing from one camera to the next.

Solution: The receiver is in Loop Mode. On the receiver move the 'L' switch up to the Off position.

Problem: I only see 1 or 2 of my cameras when I press the Set button.

Solution: Channels on the receiver are turned off. Move the switches down to the ON position to activate all cameras.

Problem: When I try to power the camera with a battery the image stops transmitting after only a couple of hours.

Solution: This camera requires a constant supply of power to operate. Batteries can be used for temporary testing, placement purposes but mains power is recommended for a long term solution.

Technical Specifications

Video

Image Sensor 1/3" CMOS Video Quality 380 TV Lines

Number of Effective Pixels NTSC: 510 x 492 / PAL: 628 x 582

Electronic Shutter 1/60 - 1/15,000 NTSC / 1/50 - 1/15,000 PAL

Signal / Noise Ratio > 48dB
White Balance Automatic
Gain Control Automatic

Backlight Compensation Yes

Day/Night Mode Color during the day / Switches to B&W at night

Minimum Illumination 0 Lux (IR On)

Lens 6mm Viewing Angle 53 degrees

Night Vision

Night Vision Distance Up to 26ft / 8m

Number of infrared LEDs 11

Wireless

Digital or Analog
Max Transmission Range
Typical Range
Frequency
Transmission Channels

Analog
165ft / 50m
65ft / 20m
2.4GHz
4

General

Indoor/Outdoor Indoor or Outdoor

Operating Power DC 12V

Operating Temperature $-10^{\circ}\text{C} \sim 50^{\circ}\text{C} / -14^{\circ}\text{F} \sim 122^{\circ}\text{F}$

Body Construction Aluminum

Dimensions Camera & Stand 5.1" x 2.0" x 2.0" / 130mm x 50mm x 50mm

Weight – Camera & Stand 8.6oz / 245g

Dimensions Receiver 1.0" x 3.1" x 4.3" / 25mm x 80mm x 110mm

Weight – Receiver 6.5oz / 185g

Helpdesk / Technical Support Details

Swann Technical Support

All Countries E-mail: tech@swannsecurity.com Telephone Helpdesk

USA toll free I-800-627-2799 (Su, 2pm-10pm US PT) (M-Th, 6am-10pm US PT) (F 6am-2pm US PT)

USA Exchange & Repairs 562-777-2551 (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 (I) 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.

