

2.4 GHz Wireless Surveillance System

49-2534

OWNER'S MANUAL — Please read before using this equipment.

CONTENTS

Important Safety Precautions	2
Installing The Batteries	2
In the Camera	3
In the Monitor	4
Installation	4
Desk Mounting the Camera	5
Wall Mounting the Camera	5
Setting Up Your System	5
Setting Up the Camera	5
Setting Up the Monitor	5
Audio Output.....	6
Video Output.....	6
Orienting Antennas for Optimal Performance	7
Setting the Auto-Switching Sequence	8
Monitor to A/V function	8
Night Vision	8
Troubleshooting	9
The FCC Wants You To Know	9
Care	10
Service and Repair	10
Specifications	11

Auto-Focus Lens — focuses image automatically without manual adjustment.

CMOS Sensor — provides superior resolution even in low-light conditions.

Built-in 8 LED Lighting — enhances low light viewing at two meters distance.

Built-In One-Way Microphone and Speaker — lets you hear your baby or individuals near the camera.

Long Distance Monitoring — transmits up to 300 feet clear-line-of-sight.

Portable and Easy To Install — lets you take or install the system virtually anywhere.

Screen On/Off Switch — lets you turn off the screen for audio monitoring only.

Thank you for purchasing the RadioShack 2.4 GHz Wireless Surveillance System. This system adds safety and security to your home or business. It can be used as a component of an audio/video observation system, or expanded by adding up to three additional wireless cameras. The audio/video jacks let you connect to a VCR for recording purposes. In your home, you can observe your baby's room, backyard, or patio area at night or in minimal lighting. In your business, monitor low-light store-rooms, warehouses, entry/exit-ways, or a reception area from one central location.

! IMPORTANT !

If an icon appears at the end of a paragraph, go to the box on that page with the corresponding icon for pertinent information.

- | | |
|---|---|
|  — Warning |  — Important |
|  — Caution |  — Note |



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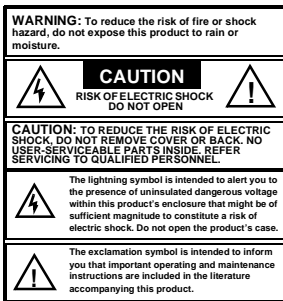
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PACKAGE CONTENTS

Please check that you have these components before installation.

- A camera with built-in transmitter
- A monitor with built-in receiver
- A 9V AC adapter (for camera only)
- A larger 13.5V AC adapter (for monitor only)



WARNING

Two AC adapters are included with the Wireless Surveillance System. The AC adapters can not be interchanged. Use the adapter labeled **OUTPUT: 9V DC** for the camera. Use the larger adapter labeled **OUTPUT: 13.5V DC** for the monitor.

NOTE

When the baby monitor's sound weakens or the picture becomes unsteady while operating with batteries, replace the batteries.

IMPORTANT SAFETY PRECAUTIONS

Before setting up or operating your system, please read all these safety and operating instructions completely. Retain instructions for future reference.

To avoid entanglement, never place the camera in a crib or playpen.

Do not place or mount the camera on any surface or wall where the camera and its AC adapter cord are within the reach of a baby or other children.

Never use the camera or monitor near water. For example, do not use near a bathtub, washbowl, laundry tub, kitchen sink, aquarium, or in a wet basement.

Disconnect the AC adapters from wall outlets during long periods of non-use.

Position the camera, monitor and AC adapters to allow adequate ventilation.

Keep the camera out of direct sunlight.

To prevent overheating, keep the camera, monitor and AC adapters away from heat sources such as radiators, heat registers, stoves or other appliances (including amplifiers) which produce heat.

Use only the AC adapters provided. Use of any others may damage the camera and/or monitor. ⚠

Plug into an electrical outlet with standard household power (120 volt AC outlet).

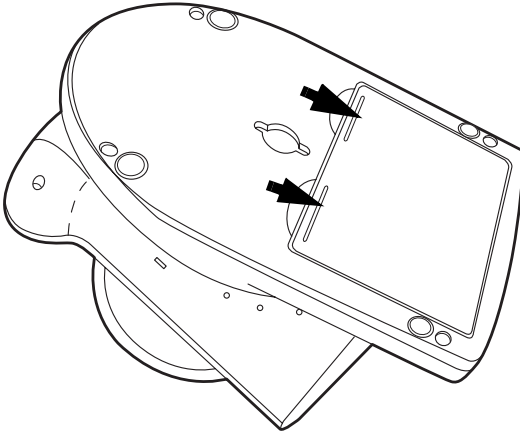
Changes or modifications not approved by RadioShack void the manufacturer's warranty and could void user's authority to operate the equipment.

INSTALLING THE BATTERIES

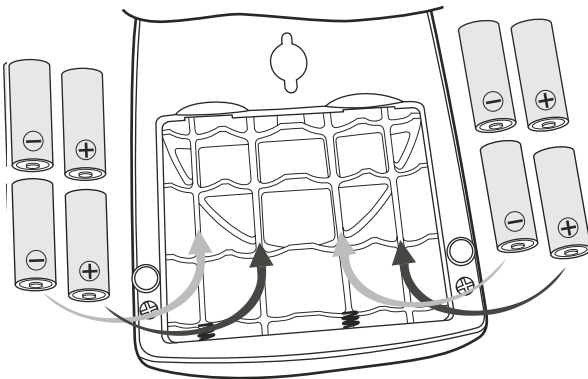
Both camera and monitor are battery powered so they can work during a power failure. To activate the battery power, you must disconnect the AC adapters from both the camera and monitor. For optimum performance, we recommend alkaline batteries (available at your local RadioShack store). The battery power lasts eight hours for the camera and 2.5 hours for the monitor. ✓

IN THE CAMERA

1. Turn the camera upside-down.
2. Use your thumbs to press the top of the battery compartment cover in the direction indicated by the arrows to lift off the cover.



3. Install eight AA batteries (not supplied) according to the battery polarities marked inside of the battery compartment.



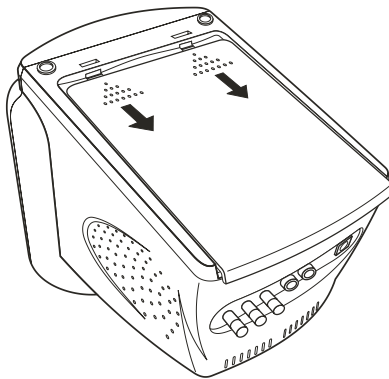
4. Replace the battery compartment cover.

CAUTION

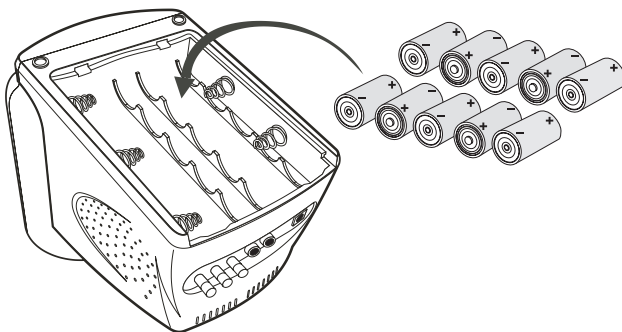
- Use only fresh batteries of the required size and recommended type.
- Do not mix old and new batteries, different types of batteries (standard, alkaline, or rechargeable), or rechargeable batteries of different capacities.
- If you do not plan to use the system with batteries for an extended period, remove the batteries. Batteries can leak chemicals that can destroy electronic parts.

IN THE MONITOR

1. Turn the monitor upside-down.
2. Use your thumbs to press the dotted area on the battery compartment cover in the direction illustrated to open the cover.



3. Install 10 C cell batteries (not supplied) according to the battery polarities marked inside the compartment.



4. Replace the battery compartment cover. ⚠

⚠ WARNING ⚠

Dispose of old batteries promptly and properly. Do not burn or bury them.

INSTALLATION

Select a location for the camera that provides a clear view of the area you want to monitor, and that is free from dust. The location should not be in line-of-sight with a strong light source or in direct sunlight.

Have a person hold the camera against the wall at the selected mounting area, while another person moves the monitor to various locations throughout the house to check reception. If interference or other problems develop, refer to

“Troubleshooting” on Page 9. You may need to select a different location in the room for mounting the camera.

DESK MOUNTING THE CAMERA

You can place the camera on a desk or any level surface. Select a location that is near an AC outlet and within the reach of the AC adapter cord. ☑

WALL MOUNTING THE CAMERA

1. Test the reception of the video monitor before installing.
2. Drive a screw (not supplied) on the wall. Let the head extend 5 mm ($3/16$ inch) from the wall.
3. Hang the camera and make sure it is securely mounted.
4. Adjust the camera to the best viewing angle.

SETTING UP YOUR SYSTEM

Set the camera and monitor to the same channel (1, 2, 3 or 4) using the **CHANNEL 1 2 3 4** dip switches on the back of the camera and the **CH. 1 2 3 4 5** dip switches on the back of the monitor.!

SETTING UP THE CAMERA

It is possible for the monitor to pick up sounds or display interference from other signal producing devices. To minimize such potential problems, four channels are available for use. Make sure that the camera and monitor are set to the same channel.

1. Plug the small AC adapter cord into the **9V DC** socket on the back of the camera.
2. Plug the AC adapter into a standard wall outlet.
3. Slide the **ON/OFF/NIGHT** switch on the rear of the camera to **ON**. The power indicator lights.
4. Position the camera antenna so its curved side points to the monitor antenna's curved side.

SETTING UP THE MONITOR

It is possible for the monitor to pick-up sounds or picture interference from other signal producing devices. To minimize this potential problem, experiment setting the

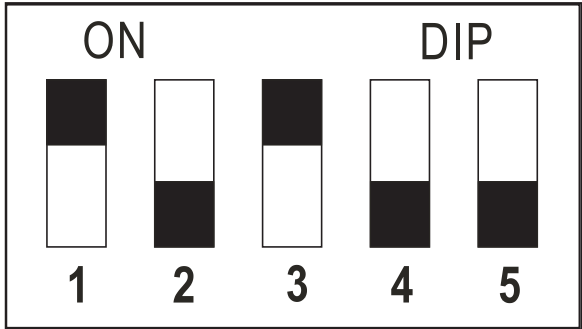


The camera bracket does not freely rotate a full 360 degrees.

! IMPORTANT !

Sound and video may be broadcast to other 2.4 GHz receiving devices. Conversations, even from rooms near the camera, may be broadcast. To protect the privacy of your home, always turn the camera off when not in use.

CH. 1 2 3 4 5 dip switches in different positions and use the setting which produces the best sound and picture. Make sure that the camera and monitor are set to the same channel.



Dip switches 1 to 4 are for channel selection. Switch 5 lets you set up the auto-sequence timer for four cameras on four different channels to monitor a series of rooms for maximum supervision of the house (or office).

NOTE

Your Wireless Surveillance System is factory preset at channel 1 for one camera use.

1. Plug the large AC adapter cord into the **DC 13.5V** jack on rear left of the monitor.
2. Plug the AC adapter into a standard wall outlet.
3. Rotate the monitor's **VOL ON/OFF** clockwise to turn on the monitor and adjust volume to a comfortable listening level.
4. Adjust the video image using **V-HOLD** (Vertical Hold), **CONT** (Contrast) and **BRIGHT** (Brightness) on the rear right of the monitor.
5. Locate and orient the antennas on both the camera and monitor according to "Orienting Antennas for Optimal Performance" on Page 7.

Audio Output

To transfer the monitor's sound to a TV or to a VCR for recording purposes, connect the monitor's **AUDIO OUTPUT** to a TV's or VCR's audio input.

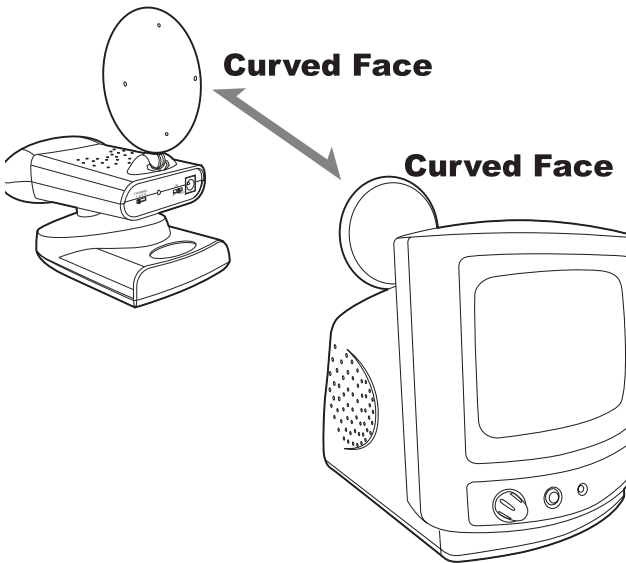
Video Output

Connect the monitor's **VIDEO OUTPUT** to a TV's or VCR's video input for a large screen display, or to record transmissions.

ORIENTING ANTENNAS FOR OPTIMAL PERFORMANCE

This system broadcasts its high-quality audio and video using directional antennas, which must be oriented in certain configurations for best results. The 2.4 GHz antennas have been designed to pivot and have limited rotation in either clockwise or counterclockwise directions. ⚠

In most situations, the curved side of the antennas on both the camera and monitor should face toward one another. Since all rooms are different, for optimal reception, additional slight pivots or rotations might be necessary. If the camera and monitor are less than 10 feet (3 meters) apart, keep the antennas flat in their casings.



⚠ WARNING ⚠

Rotating the antennas beyond the point where resistance is felt will result in permanent damage to both antennas and the mechanical stop. The antennas do not freely rotate a full 360 degrees.

SETTING THE AUTO-SWITCHING SEQUENCE

You can install up to four cameras on four different channels to monitor a series of rooms for maximum supervision of the house (or office). The monitor can automatically switch between the four cameras. To activate the auto-switch function, you must set the dip-switches.

Dip Switch	On	Off
1	Channel 1 enabled	Channel 1 disabled
2	Channel 2 enabled	Channel 2 disabled
3	Channel 3 enabled	Channel 3 disabled
4	Channel 4 enabled	Channel 4 disabled
5	Eight second interval in display rotation	Four second interval in display rotation

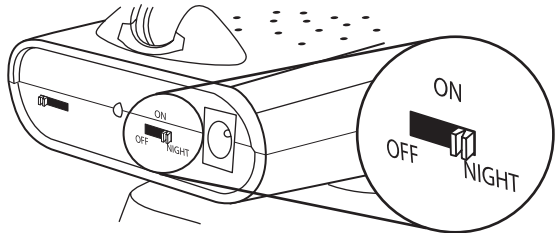
To cancel the auto-switch sequence and lock on one channel, set the dip-switch for the channel you want to receive to ON. Slide the others to OFF.

MONITOR TO A/V FUNCTION

The system's monitor unit has audio/video outputs to transfer the picture and sound from the monitor screen to a TV for a large screen display. Connect the monitor's **AUDIO/VIDEO OUTPUT** to a TV's A/V input, or to a VCR to record transmissions. You can find a full selection of A/V cable and connectors at your local RadioShack store.

NIGHT VISION

The camera has eight high-intensity LEDs (Light Emitting Diodes) for picking up clear images in dark locations.



NOTE

The video image displayed on the monitor may appear "snowy" when the camera is operating in darkness or very low levels of light.

To turn on the night vision function, slide the **ON/OFF/NIGHT** to **NIGHT**.

TROUBLESHOOTING

Symptoms	Check Points
No power is supplied to the camera or monitor	Is the power cord disconnected? Connect it.
	The wrong AC adapter was used. Use the AC adapter labeled OUTPUT: 9V with the camera, 13.5V with the monitor.
	Camera/Monitor is not turned on. Set the power switch to the "ON" position.
No sound or picture. Noisy sound or picture.	Channel switches are not on the same setting. Set the camera and the monitor to same channel.
	Signal interference due to microwave oven. Turn off the oven or remove it from path between camera and monitor.
	Signal interference due to other signal producing devices. Change the channel setting on both the camera and the monitor. Identify and eliminate the source of interference. Relocate the camera and/or monitor.
	Out of range. Relocate the camera and/or monitor within the 300 feet range.
	Improper antenna position. Adjust camera/monitor antenna orientation.

THE FCC WANTS YOU TO KNOW

Your camera and monitor might cause interference on other radio/TV devices even when they are operating properly. To determine whether your camera or monitor is causing the interference, turn them both off. If the interference goes away, your surveillance system is causing it. Try to eliminate the interference by:

- Moving your camera or monitor away from the other device.
- Connecting your camera or monitor to an outlet that is on a different electrical circuit from the other device.
- Contacting your local RadioShack store for help.

If you cannot eliminate the interference, the FCC requires that you stop using your system.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CARE

Keep the camera and monitor dry; if they get wet, wipe them dry immediately. Use and store the camera and monitor only in normal temperature environments. Handle them carefully; do not drop them. Keep the camera and monitor away from dust and dirt, and wipe them with a damp cloth occasionally to keep them looking new.

SERVICE AND REPAIR

If your camera or monitor is not performing as it should, take it to your local RadioShack store for assistance. Modifying or tampering with the camera's or monitor's internal components can cause a malfunction and might invalidate their warranty and void your FCC authorization to operate them.

SPECIFICATIONS

Monitor

Screen Size:	5.5 Inches
Receiver Frequency:	2.4 GHz – 2.4835 GHz
Max. Range (clear line of sight):	300 feet (92 meters)
Antenna:	Directional Circular-Polarized Antenna
AV Modulation/Demodulation Method:	FM
Sound Output:	.800 mW Maximum
Operating Temperature:	32°F – 104°F (0° C – 40° C)
Channel:	4 Selectable Channels
Power Supply:	DC 13.5V
Dimensions (HWD):	8 11/16 x 6 1/8 x 7 1/4 Inches (22 x 15.5 x 18.5 cm, with antenna erected)
Weight:	63.8 Oz (1.8 kg)

Camera

Transmitter Frequency:	2.4 GHz – 2.4835 GHz
Max. Range (clear line of sight):	300 feet (92 Meters)
Antenna:	Directional Circular-Polarized Antenna
Lens:	f3.6 mm, F2.0
Picture Color:	Black and White
AV Modulation/Demodulation Method:	FM
Image Sensor:	1/4 Inch CMOS Image Sensor
Indoor/Outdoor:	Indoor only
Microphone Sensitivity:	2 – 3 meters
Number of Channels:	4
Operating Temperature:	32°F – 104°F (0° C – 40° C)
Power Supply:	DC 9 V
Dimensions (HWD):	6 11/16 x 3 15/16 x 5 1/2 Inches (17 x 10 x 14 cm, with antenna erected)
Weight:	11.3 Oz (320 g)

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.

Limited Ninety-Day Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for ninety (90) days from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

RadioShack Customer Relations, 200 Taylor Street, 6th Floor, Fort Worth, TX 76102

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