OWNER'S MANUAL

2.4 Ghz Wireless Video Security System with 5" B/W Monitor

Before operating the unit, please read this manual thoroughly and retain it for future reference

FCC Information

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.

CAUTION: Changes or modifications not expressly approved by Summer infant may void the users authority to operate this equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part15 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 communications, However, there is no guarantee that interference will not occur in a particular installation. If this equipment does 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
- Consult the dealer or an experienced radio / TV technician for help.

TABLE OF CONTENTS

Important Safety Precautions..... 4

System Contents..... 5

Description of Controls & Operation..... 6
- Transmitter (Camera)..... 6
- Receiver (Monitor)..... 9

Setting up your Wireless Video Security System..... 11

Orienting the Antennas for Optimum Performance..... 12

How does it work?..... 13
- Auto-Sequence Function..... 13
- Monitor to A/V Function..... 13

Trouble Shooting..... 14

Specifications..... 15

Warranty..... 17

WARNING

WARNING

To reduce the risk of fire or electric shock hazard. Do not expose this unit to rain or moisture
Do not insert any metallic object through the ventilation grills.

CAUTION

Caution: Risk of Electric Shock

Caution: To reduce the risk of electric shock do not remove the cover or protective casing. For parts refer to a qualified service professional

Explanation of Graphical Symbols

This symbol is intended to alert the user when there is uninsulated " dangerous voltage" within the products enclosure that may be of sufficient magnitude to constitute a risk of an electric shock

This symbol is intended to alert the user when there is important operating and maintenance instructions in the literature accompanying this unit.

IMPORTANT SAFETY PRECAUTIONS

Congratulations on purchasing the 2.4GHz Wireless Video Security System. Before operating your Video Security System please read all the safety and operating instructions completely, and retain for future reference.

- To prevent entanglement, never place the transmitter in a crib or playpen
- Do not place the transmitter on any surface or wall where the transmitter or its AC cord may be within reach of a child or baby
- Never use the transmitter or receiver near water. For example, near a bathtub, washbowl, laundry tub, kitchen sink or in a wet basement, etc
- Disconnect the AC adapters from the wall outlets when the system is not in use.
- Position the transmitter, receiver and AC adapters to allow for adequate ventilation
- Keep the transmitter out of direct sunlight
- To prevent overheating, keep the transmitter, receiver and AC adapters away from heat sources, such as radiators, heat registers, stoves, or other appliances (including amplifiers) which produce heat.
- Use only the adapters provided. Use of any others may damage the transmitter and/or receiver
- Plug into an electrical outlet with standard household power
- Changes or modifications not approved by Home Sentinel® could void the user's authority to operate the equipment
- Remember that you are using public airwaves when you use the Wireless Video Security System, and that audio and video may broadcast to other 2.4GHz receiving devices. Conversations in a room near a transmitter may broadcast. To protect the privacy of your home, always turn the transmitter off when not in use.

SYSTEM CONTENTS

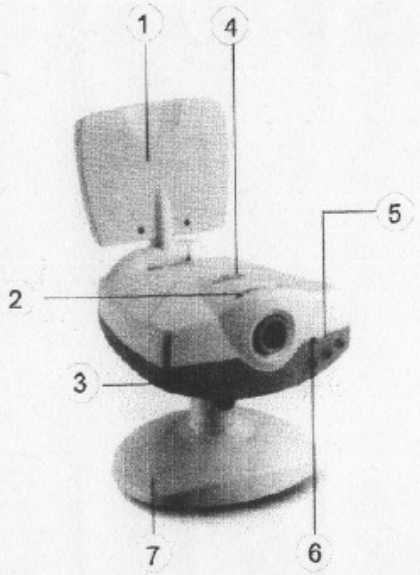
The following products should be included in the box. Please check that you have them all before installation

Transmitter (Camera)
Receiver (5" B/W Monitor)
12V AC adapter (for transmitter)
13.5V AC adapter (for receiver)
Wall Mount Bracket (for transmitter)

Warning: The two DC adapters that are included with the Wireless Security System are not interchangeable. Please use the adapter labeled, "**Output: 12V AC " for the transmitter (Camera)**, and the adapter labeled, " **Output: 13.5V AC" for the receiver (Monitor).**

DESCRIPTION OF CONTROLS & OPERATION

Transmitter - Front View

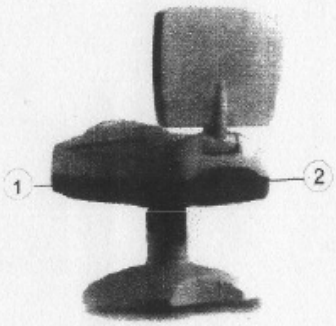


DESCRIPTION OF CONTROLS & OPERATION

1. **Antenna**
   Antenna does not rotate more than 270 degrees
2. **Adjustable Camera Lens**
   For focus adjustment
3. **Night Vision LED's**
   The automatic night vision LED's allow the transmitter (camera) to see a distance of up to 3 feet in the dark
   Note: The video image displayed on the receiver may be "snowny" when the transmitter is operating in darkness or very low levels of light
4. **Power Switch**
   Push on/off
5. **Microphone**
   For clear audio pick-up
6. **LED Indicator**
   Lights up when the transmitter is "ON"
7. **Moveable Base**
   The transmitter can be mounted on a wall using the wall mount bracket. It can be easily removed from the wall mount bracket for placement on a flat surface, such as a table top, dresser or shelf.
   Note: The bracket does not rotate freely 360 degrees

DESCRIPTION OF CONTROLS & OPERATION

Transmitter - Rear View

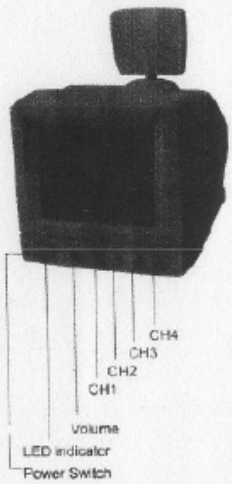


1. **DC In**
   Power adapter jack

2. **Channel 1 2 3 4**
   Channel Selection: It is possible for the receiver to pick up sound, or display interference from other signal producing devices. To minimize this problem, four channels are available to obtain a clear picture and interference free reception. Make sure that the transmitter and receiver are set on the same channel

DESCRIPTION OF CONTROLS & OPERATION

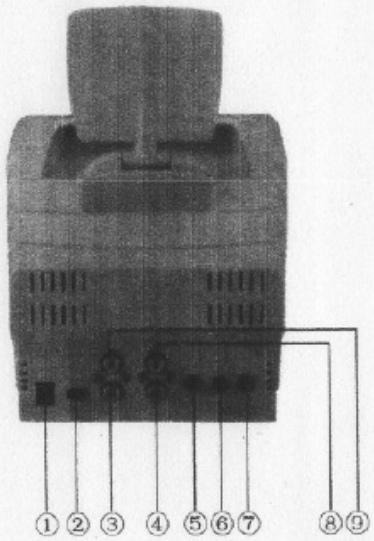
Receiver - Front View



Channel Selection: It is possible for the receiver to pick up sound, or display interference from other signal producing devices. To minimize this problem, four channels are available to obtain a clear picture and interference free reception. Make sure that the transmitter and receiver are set on the same channel

DESCRIPTION OF CONTROLS & OPERATION

Receiver - Rear View



① DC 13.5V Power Adapter Jack
② Wire/Wireless Selection Switch
③ Audio Input Jack
④ Audio Output Jack
⑤ V-Hold Control
⑥ Contrast Control
⑦ Brightness Control
⑧ Video Output Jack
⑨ Video Input Jack

Please Note: For a hardwired connection, switch the selector switch to "wire" and obtain a camera that has audio/video RCA outputs. This camera will connect to the audio/video RCA inputs on the back of the Monitor (Receiver).

SETTING UP YOUR WIRELESS VIDEO SECURITY SYSTEM

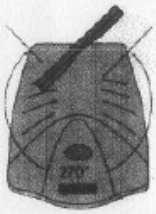
If you wish to mount the transmitter on a wall, it is better to test the system before installing it. Have one person hold the transmitter (camera) against the wall, while the other person moves the receiver (monitor) around for the best reception. Moving the camera or monitor around may improve the reception. If there is still some interference, please check the Trouble Shooting guide on Pg.14. The following steps show you how to set up the Wireless Video Security System:

1. Make sure the transmitter and receiver are set to the same channel (CH 1, 2,3 or 4)
2. Plug the 12V AC adapter cord in to the AC adapter socket on the back of the transmitter (camera)
3. Plug the AC adapter into a standard wall outlet
4. Set the On/Off switch on the top of the transmitter (camera) to the On position. The power indicator will light
5. Adjust the angle and focus of the camera lens for the best view. Point the microphone pick-up towards the intended area
6. Position the antenna so that it points straight up.
7. Plug the 13.5V AC adapter cord into the AC adapter socket on the back of the receiver
8. Plug the AC adapter into a standard wall outlet. Turn the receiver (monitor) on.
9. Adjust the volume switch to a comfortable level
10. Adjust the video image using the V-hold (Vertical Hold), Contrast and Brightness Control
11. Locate and orient the antennas on both the transmitter and receiver according to the section, " Orienting The Antennas for Optimum Performance".

ORIENTING THE ANTENNAS FOR OPTIMUM PERFORMANCE

The Wireless Video Security System broadcasts its high quality audio and video signals using directional antennas which must be oriented for the best result. The 2.4 Ghz audio/video antennas have been designed to pivot, and has a limited rotation in either the clockwise or counter-clockwise direction.

Warning: Rotating the antennas beyond the specified range will result in permanent damage to both the antennas and the mechanical stopper. The antenna does not rotate more than 270 degrees



Maximum rotation of audio/video antenna shown.

Front View

Rear View

In most situations, the flat pitted face of the A/V antennas on both the transmitter and receiver should be facing one another.

HOW DOES IT WORK ?

Auto-Sequence Function
With the Wireless Video Security system the user can monitor a series of rooms for maximum supervision at home or at the office.
Please Note: *If multiple cameras are used, signal interference may occur where there may be no reception at all. A one camera operation is recommended for maximum reception*

CH 1~4 Channel Switch: Setting up the Automatic Channel Sequence Function
Select the channel switch down to activate that particular camera, and up to deactivate it.

Monitor to A/V Function
The Wireless Video Security receiver unit has audio/video outputs which can be used to transfer the picture and sound from the monitor to a TV or VCR. Connect the outputs from the monitor to the A/V input on a TV set for a large screen display, or connect the A/V outputs from the receiver to the A/V inputs on a VCR for recording.

Please note: If you connect the Video Security receiver (monitor) to a TV or VCR you must program these units by selecting a Line In , Line 1 (L1), AUX (Auxiliary), or Video 1, etc, for viewing on your TV or recording on a VCR. Consult the owner's manual for your TV or VCR if you are unsure of how to make this selection

Connecting a Hard-wired Camera
The Wireless Video Security System receiver (monitor) can receive the picture and sound from a wired camera equipped with standard RCA audio/video jacks. Connect the RCA audio/video jacks from the camera to the audio/video inputs on the monitor. The unit can display the picture and sound when the wire/wireless switch is set to the "wire" position.

TROUBLE SHOOTING

Before calling service, check the following points for possible misuse

Symptom	Solution
No power is supplied to the transmitter or receiver	■ Is the power cord disconnected? - Connect it ■ Transmitter/Receiver is not turned on. - Set the On/Off switch to the On position. ■ Wrong AC adapter used - Use the AC adapter labeled, Output 12V for the transmitter,13.5V for the receiver
No sound or picture	■ The channel switches do not have the same setting - set the transmitter and receiver to the same channel
Noisy sound or picture	■ Signal interference due to the microwave oven - turn off the oven or remove it from the path between the transmitter and receiver ■ Signal interference due to other signal producing devices - change the channel setting on both the transmitter and receiver - identify and eliminate the source of the interference - relocate the transmitter and/or receiver ■ Out of Range - relocate the transmitter and/or receiver at a closer distance ■ Improper antenna position - adjust transmitter/receiver antenna orientation

SPECIFICATIONS

■ **Receiver (Monitor)**

Picture Tube	5" CRT Black & White Diagonal Screen
Video System	NTSC
Receiver Frequency	2.4 Ghz
Maximum Range (line of sight)	300 feet
Receiver Antenna	Directional
Receiver Sensitivity	-25 ~ -90 dBm
Maximum Audio Output	600 mW
Output at 10% THD	500 mW
Horizontal Pull-in	+/- 200 Hz
Horizontal Hold	+/- 400 Hz
Vertical Range	6 Hz
Resolution at Center	Vertical 250 lines Horizontal 300 lines
Maximum Luminance	100 cd/m2
Scan Display Rate	90% Vertical/Horizontal
Current Consumption	1100 mA
Power Supply	DC 13.5V

SPECIFICATIONS

- **Transmitter (Camera)**

TV system	Black & White EIA
Image Sensor	1/4" CMOS
Video System	NTSC
Transmitter Frequency	2.4 Ghz
Maximum Range (line of sight)	300 feet
Transmitter Antenna	Directional
Transmitter Sensitivity	0 dBm FCC
Number of Effective Pixels	320 x 240
Scanning System	2:1 Interlace
Resolution	240 TV lines (Horizontal)
Auto Exposure	1/60 - 1/6000 seconds
Camera application	Camera rated for indoor use only
Night Vision Effective Distance	1 m (3 feet)
Minimum illumination	2 lux
Microphone Sensitivity	1 - 2 meters
Auxiliary Input	1 video & 1 audio
Number of channels	4
Current Consumption	300 mA
Power Supply	12V DC