

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

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

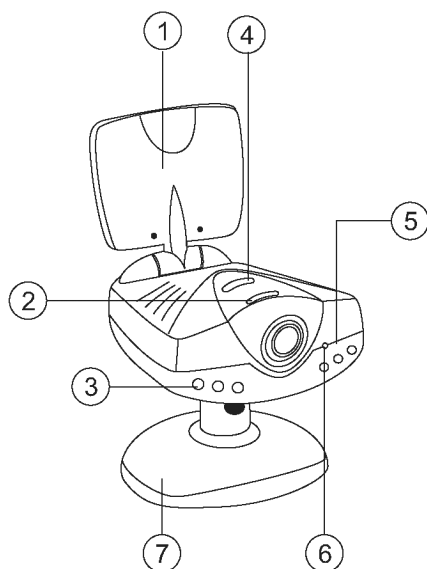
The following products should be included in the box. Please check that you have them all before installation Transmitter (Camera)

- * 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



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 "snowy" 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

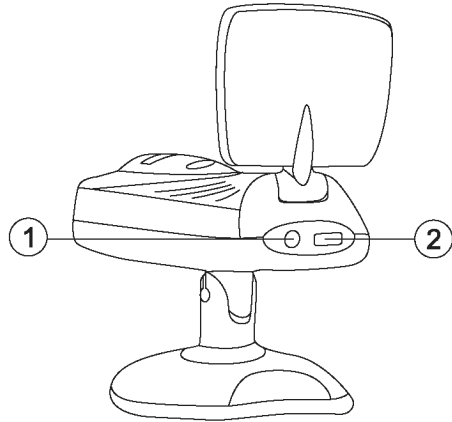
Lights up when the transmitter is "ON"

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

• **Transmitter-Rear View**



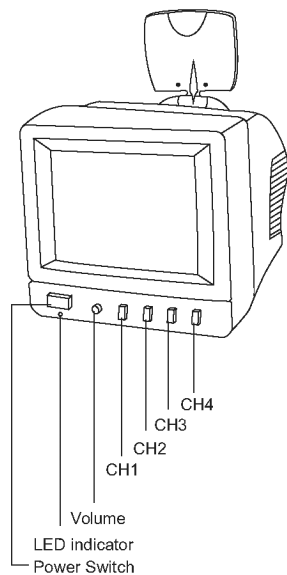
1. DO In

Power adapter jack

2. Channel 1 2 3 4

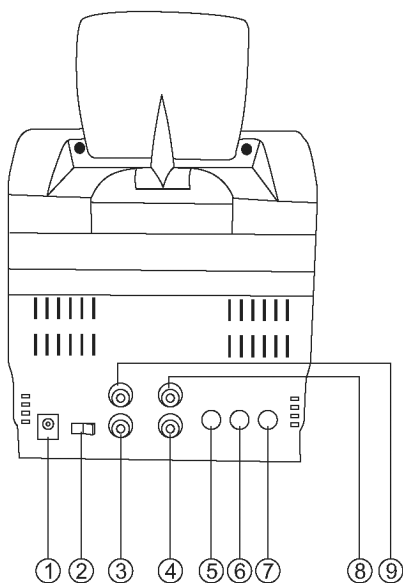
Channel Selection It is possible for the receiver to pick up sound, or display interference from other signal producing devices. To minimize this problem, four channels are available to obtain a clear picture and interference free reception. Make sure that the transmitter and receiver are set on the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

• **Receiver-Front View**



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

• **Receiver-Rear View**



① DC 13.5V Power Adapter Jack

② Wire/Wireless Selection Swith

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).

ORIENTING THE ANTENNAS FOR OPTIMUM PERFORMANCE

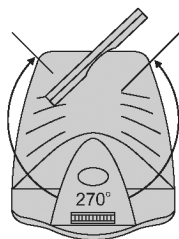
If you wish to mount the transmitter on a wall, it is better to test the system before installing it. Have one person hold the transmitter (camera) against the wall, while the other person moves the receiver (monitor) around for the best reception. Moving the camera or monitor around may improve the 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 1,2,3or4)
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".

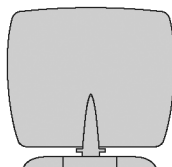
The Wireless Video Security System broadcasts its high quality audio and video signals using directional antennas which must be oriented for the best result. The 2.4 Ghz audio/video antennas have been designed to pivot, and has a limited rotation in either the clockwise or counter-clockwise direction.

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

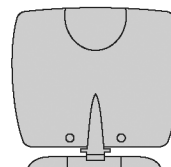
In most situations, the flat pitted face of the A/V antennas on both the transmitter and receiver should be one another.



Maximum rotation of audio/video antenna shown.



Front View



Rear View

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 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/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	<i>Is the power cord disconnected?</i> - Connect it <i>Transmitter/Receiver is not turned on.</i> - Set the On/Off switch to the On position <i>Wrong AC adapter used</i> - Use the AC adapter labeled, Output 12V for the transmitter, 13.5V for the receiver
No sound or picture	<i>The channel switches do not have the same setting</i> - set the transmitter and receiver to the same channel
Noisy sound or picture	<i>Signal interference due to the microwave oven</i> - turn off the oven or remove it from the path between the transmitter and receiver <i>Signal interference due to other signal producing devices</i> - change the channel setting on both the transmitter and receiver - identify and eliminate the source of the interference - relocate the transmitter and/or receiver <i>Out of Range</i> - relocate the transmitter and/or receiver at a closer distance <i>Improper antenna position</i> - 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	600mW
Output at 10% THD	500mW
Horizontal Pull-in	+/- 200 Hz
Horizontal Hold	+/- 400Hz
Vertical Range	50Hz
Resolution at Center	Vertical 250 lines Horizontal 300 lines
Maximum Luminance	100 cd/m ²
Scan Display Rate	90% Vertical/Horizontal
Current Consumption	1200 mA
Power Supply	DC 13.5V

• Transmitter (Camera)

TV System	Black & White EIA
Image Sensor	1/4" CMOS
Video System	PAL
Transmitter Frequency	2.4 Ghz
Maximum Range (line of sight)	300 feet
Transmitter Antenna	Directional
Transmitter Sensitivity	0 dBm FCC
Number of Effective Pixels	320X240
Scanning System	3:1 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	1m (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	12VDC