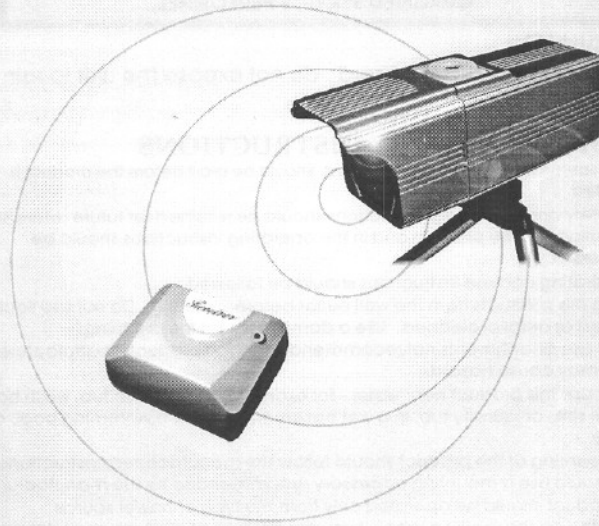


# 2.4GHz Wireless Surveillance System



## Users Manual

Before operating the units, please read this manual thoroughly.

## GENERAL SAFETY SUMMARY



### WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

### IMPORTANT SAFETY INSTRUCTIONS

1. All the safety and operating instructions should be read before the product is operated.
2. The safety and operating instructions should be retained for future reference.
3. All warnings on the product and in the operating instructions should be adhered to.
4. All operating and use instructions should be followed.
5. Unplug this products from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for the cleaning.
6. Do not use attachments not recommended by the products manufacturer if they may cause hazards.
7. Do not use this product near water - for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool; and the like.
8. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.
9. This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type or power supply to your home, consult your product dealer or local Power Company. For products intended to operate from battery power, or other sources, refer to the operating instruction.
10. Power supply cord should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, or other sources, refer to the operating instructions.

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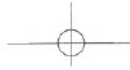
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| Wireless Camera - CMOS                                 |   |
| Receiver   |   |

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11. For added protection for this product during a lightning storm, or it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect cable system. This will prevent damage to the product due to lightning and powerline surges.
12. Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electronic shock. Never spill liquid of any kind on the product.
13. Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
14. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions.
  - When the power- supply cord or plug is damaged.
  - If liquid have been spilled, or objects have fallen into the products
  - If the product does not operate normally by following the operating instructions, adjust only those controls that are covered by the operating instructions as an improper adjustment of other control may result in damage and will often require extensive work by a qualified technician to restore this product to its normal operation.
  - When the product exhibits a distinct change in performance - this indicates a need for service.
  - If the products has been dropped or damaged in any way.
15. When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
16. Upon completion of any service or repair to this product ask the service technician to perform safety checks to determine that the product is in proper operating condition.
17. The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products including amplifiers that produce heat.





## Overview

The Wireless Surveillance System with CMOS Images and four channels available is just as you home/camp guard and company monitoring. Special design for outdoor surveillance purpose with IR LED Illuminator to enhance night vision can secure your surroundings all day long. Easy to install, unequalled quality and reliability make you have delighted and secure life.

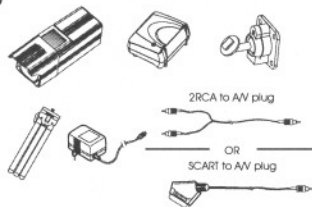
## Features

- High Resolution Color CMOS Camera
- High Performance Audio/Video Receiver
- Built-In Microphone for Audio Monitoring
- Operating frequency of ISM band 2.4 - 2.4835 GHz
- Video camera recording purpose (connected to VCR)
- Weather Proof
- Antenna embedded
- Four channels selectable
- Range up to 300 feet (L. O. S )
- Easy installation
- CMOS extra with Infrared Illuminator for night view
- Work day & night



## Package Contents

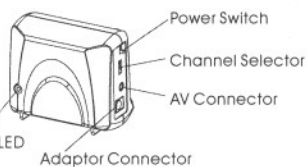
- Wireless Camera X1
- Receiver X1
- Wall Mounting Bracket X1
- Tripod X2
- Power Adaptor X1
- RCA/SCART Cable X1



*Note: If any accessories listed above are missing, please contact the sales representative where you purchase the Wireless Surveillance System.*

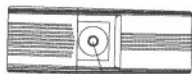
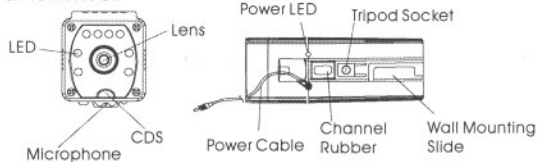
## Names of parts

### Receiver



Power Indicator LED

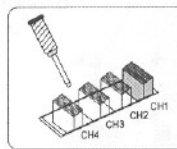
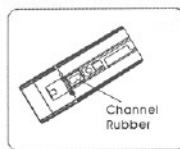
### Transmitter



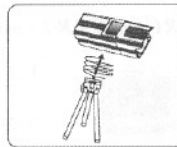
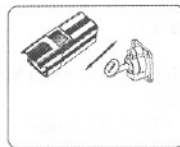
Ceiling Mounting Screw Nut

## Setting up

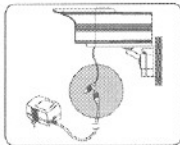
### Installing the Wireless Camera



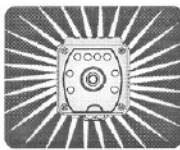
1. Use a tool to open the channel rubber.
2. Switch inside channel selector by the tool to adjust the channel you want to set up.  
(Camera initially set up at Ch1)



3. Fasten the mounting bracket on wall/ceiling or screw into tripod.

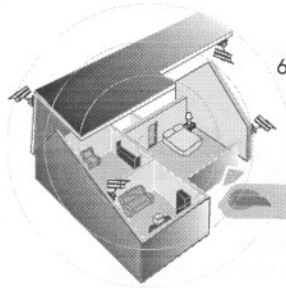


4. Connect wireless camera with attached adaptor, then plug the adaptor into power outlet.



#### **Night Vision**

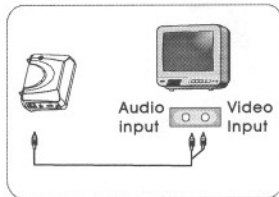
5. The wireless camera has designed in eight IR LED illuminators turned on by CDS brightness detecting to catch clear images in the unlit environment. This warm-hearted design is to assist the requests of both the night vision and power-saving.



6. Align to the object or place where you want to monitor.

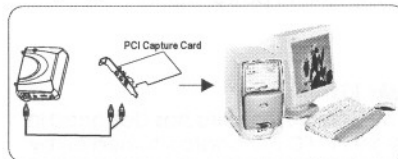
## Installing the Receiver

### *A/V plug to 2RCA/SCART connecting with TV*



1. Connect Receiver by A/V plug to TV with RCA Cable.
2. Plug Receiver into the power outlet with attached adaptor.

### *A/V plug to 2RCA connecting with PC*



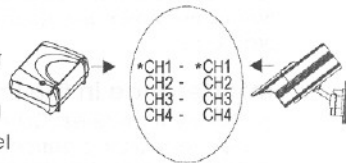
1. Connect Receiver by A/V plug to PCI Capture Card of PC with RCA Cable.
2. Plug Receiver into the power outlet with attached adaptor.



## Operation

1. Turn on the Wireless Camera and Receiver.
2. The power indicator LED on Wireless Camera and Receiver will light up.
3. Turn on A/V display.

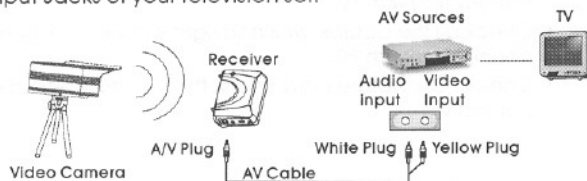
4. Check the channel of Receiver to be same as Camera.  
(Camera initially set up at CH1)



- Switch the Receiver's Channel Selector to CH 1.
  - Image will show on A/V display if the channel of Wireless Camera and Receiver is at the same one.
  - If no images or sound on A/V display, switch the Receiver's Channel Selector to CH2, 3 or 4; and check the images again.
  - If switching the channel of Wireless Camera is necessary, please refer to page 3 - Installing the Wireless Camera.
5. Wireless Surveillance System watches wherever you want.

### 6. Video Recording Setup:

- Follow the normal setup procedures for the Video Camera and Receiver.
- Insert the (yellow & white) cable plugs into the Video Input and Audio Input Jacks of your VCR properly.
- Connect another video/audio cable from your VCR to the Video Input and Audio Input Jacks of your television set.



Note: The operation temperature is from  $-10^{\circ}\text{C}$  ~  $+50^{\circ}\text{C}$ .



## Trouble Shooting


Please read this user's manual carefully before using the Wireless Surveillance System. If you still have difficulties to use the Wireless Surveillance System consult the following syndrome, which will guide you to solve most common problems.

### Interference in the Image and Sound

- Move your Wireless Camera or Receiver slowly to find a best reception position.
- Shorten the distance between your Camera and Receiver.
- Check if there is any interference radio frequency source near your Receiver source such as microwave oven or others 2.4 GHz electronic products.
- Switch channels of both Camera and Receiver to another channel; e.g. from CH 1 to CH3.



### No Pictures or Sound

- Check the DC adaptors rightly connected.
  - Power ON/OFF switch in right position.
  - Check all the cables well and rightly connected.
  - Check the channels of wireless camera and receiver at the same one.
- 

### Receiver can not work properly when connecting with PC

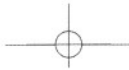
- Make sure the surveillance system work properly if connecting with TV.
- Check all the cables well and rightly connected when connecting with PC.
- Check PCI capture card and software / driver installed correctly.

## Specification

| Model                     | Wireless Camera-CMOS              |                    |
|---------------------------|-----------------------------------|--------------------|
| Characteristic            | Specification                     |                    |
| Scanning System           | 2:1 Interlace                     | 2:1 Interlace      |
|                           | NTSC                              | PAL                |
| Image Sensor              | 1/3" CMOS Image Sensor            |                    |
| Efficiency Pixels         | 510 (H) X 492 (V)                 | 628 (H) X 582 (V)  |
| Horizontal Scan Frequency | 15750 Hz                          | 15625 Hz           |
| Vertical Scan Frequency   | 60 Hz                             | 50 Hz              |
| Synchronize               | Internal                          |                    |
| Resolution                | More Than 300 TV Lines            |                    |
| Min. Illumination         | 3 LUX (F1.2)                      |                    |
| S/N Ratio                 | More Than 45 dB (AGC OFF)         |                    |
| Video Input               | 1.0Vpp/75Ω composite Video Signal |                    |
| Auto Electronic Exposure  | 1/60 ~ 1/2000 Sec.                | 1/50 ~ 1/2000 Sec. |
| Auto White Balance        | Auto                              |                    |
| Supply Voltage            | 9V                                |                    |
| Power Consumption         | 120mA                             |                    |
| Operation Environment     | -10°C ~ +50°C                     |                    |
| Lens (Optional)           | F3.6 mm, F2.0 (Fix Board Lens)    |                    |
| Audio Input               | 1.0Vpp/600Ω load for Mono         |                    |
| Weight                    | Approximate 160g                  |                    |
| Size                      | 133L x 45W x 54.5H (mm)           |                    |

| Model                 | Receiver                       |  |
|-----------------------|--------------------------------|--|
| Characteristic        | Specification                  |  |
| Frequency             | 2400 MHz ~ 2483 MHz            |  |
| Receiver Sensitivity  | -90 dBm (min.)                 |  |
| Channel Number        | 4 (2414, 2432, 2450, 2468 MHz) |  |
| L.O. Stability        | +/- 100 kHz (typ.)             |  |
| Video Output Level    | 1 Vpp / 75Ω                    |  |
| Audio Output Level    | 1 Vpp / 600Ω                   |  |
| Supply Voltage        | 9V ~ 12V                       |  |
| Power Consumption     | 200 mA (typ.)                  |  |
| Antenna               | Embedded                       |  |
| Operation Environment | -10°C ~ +50°C                  |  |
| Dimension             | 83W x 70H x 42L (mm)           |  |

To provide the latest technologies product to our customer is our responsibility; therefore, we reserve the right to change the specifications without prior notice.



Warning : Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

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.

The user manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



## ***Federal Communication Commission Interference Statement***

This equipment has been tested and found to comply with the limits for a 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 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 of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and 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.

***FCC Caution*** : To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

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.



**2.4GHz Wireless**  
**Surveillance System**