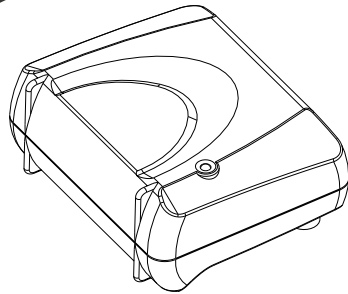
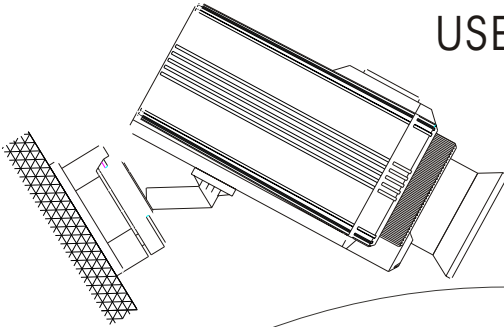


# 2.4 GHz WIRELESS SURVEILLANCE SYSTEM

USER'S MANUAL



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# GENERAL SAFETY SUMMARY



**CAUTION**  
RISK OF ELECTRONIC  
SHOCK DO NOT OPEN



**CAUTION:**  
DO NOT REMOVE THE COVER FOR REDUCING THE RISK OF ELECTRIC SHOCK.  
NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

## 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.
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 controls may result in damage and will often require extensive work by a qualified technician to restore this product to its normal operation.
  - If the products has been dropped or damaged in any way.
  - When the product exhibits a distinct change in performance - this indicates a need for service.
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.

# 1. INTRODUCTION

## Overview

The Wireless Surveillance System with CMOS/CCD Images and four channels available is just as your baby sitter, home/camp guard and company monitoring. Easy to install, unequalled quality and reliability make you have delighted and secure life.

## Features

- High Resolution Color CMOS/CCD Camera( Optional)
- 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
- 4 channels selectable
- Range up to 300 feet (L. O. S )
- Easy installation

## Applications

- Baby / Medical care monitor
- Outdoor and home surveillance system
- Building and office surveillance system

## Specifications

Model	Wireless Camera - CMOS	
Characteristic	Specification	
Scanning System	2:1 Interlace NTSC	2:1 Interlace 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 45dB (AGC OFF)	
Video Input	1.0 Vpp / 75 $\Omega$ 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	120 mA	
Operation Environment	-15 $^{\circ}$ C ~ +55 $^{\circ}$ C	
Lens (Optional)	F3.6 mm, F2.0 (Fix Board Lens)	
Audio Input	1.0Vpp / 600 $\Omega$ load for Mono	
Weight	Approximate 160g	
Size	116 Lx 45W x 52.5H (mm)	

Model	Wireless Camera - CCD	
Characteristic	Specification	
Scanning System	2:1 Interlace NTSC	2:1 Interlace PAL
Image Sensor	1/4" CCD Image Sensor	
Efficiency Pixels	512 (H) X 492 (V)	512 (H) X 582 (V)
Horizontal Scan Frequency	15750 Hz	15625 Hz
Vertical Scan Frequency	60 Hz	50 Hz
Synchronize	Internal	
Resolution	More Than 420 TV Lines	
Min. Illumination	0.3 LUX (F1.2)	
S/N Ratio	More Than 48dB (AGC OFF)	
Video Input	1.0 Vpp / 75 $\Omega$ composite Video signal	
Auto Electronic Exposure	1/60 ~ 1/10000 Sec.	1/50 ~ 1/10000 Sec.
Auto White Balance	Auto	
Supply Voltage	9V	
Power Consumption	200 mA	
Operation Environment	-15 $^{\circ}$ C ~ +55 $^{\circ}$ C	
Lens (Optional)	F3.6 mm, F2.0 (Fix Board Lens)	
Audio Input	1.0Vpp / 600 $\Omega$ load for Mono	
Weight	Approximate 160g	
Size	116 Lx 45W x 52.5H (mm)	

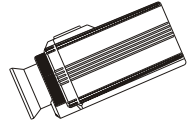
<b>Model</b>	<b>Receiver</b>
<b>Characteristic</b>	<b>Specification</b>
Frequency	2400 MHz ~ 2483 MHz
Receiver Sensitivity	-90 dBm (min.)
Channel Number	4 (2414, 2432, 2450, 2468 MHz)
L.O. Stability	±100 KHz (typ.)
Video Output Level	1Vpp / 75Ω
Audio Output Level	1Vpp / 600Ω
Supply Voltage	9V
Power Consumption	200mA (typ.)
Antenna	Embedded
Operation Environment	-15°C ~ +55°C
Dimension	83 W x 70 H 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.

## 2. PACKAGE CONTENTS

### One unit of Wireless Camera

The Wireless Camera emits Audio and Video signals over 2.4GHz radio frequency carrier.



### One unit of Receiver

The Receiver receives 2.4GHz wireless Audio and Video signals from the Wireless Camera.



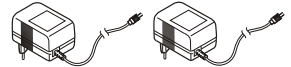
### One unit of Wall Mounting Bracket

The wall mounting bracket is used to bolster up the Wireless Camera on the wall.



### Two units of Power Adaptor

Two power adaptors supply +9V(300mA) DC power to the Wireless Camera and the Receiver.



### One unit of Tripod

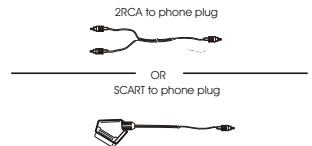
The tripod is used to bolster up the Wireless Camera.



### One unit of RCA/SCART Cable

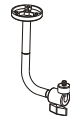
The RCA/SCART cable is used to connect the Receiver to your A/V displays.

*A/V displays: computer monitor (converted card required), powered speakers, TV monitor etc.*



### One unit of Ceiling Mounting (Optional)

The ceiling mounting bracket is used to bolster up the Wireless Camera.

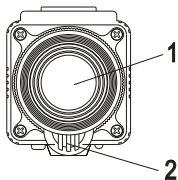


*Note: If any accessories listed above are missing, please contact the sales representative where you purchase the Wireless Surveillance System.*

# 3. CONTROLS

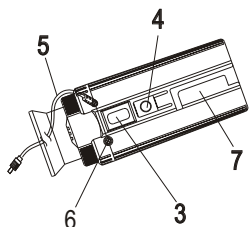
## Wireless Camera

Front



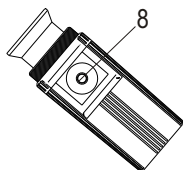
- 1. Lens
- 2. Microphone

Bottom



- 3. Channel Rubber
- 4. Tripod Screw Nut  
( Ceiling Mounting Screw Nut)
- 5. Power Cable
- 6. Power Indication LED
- 7. Wall Mounting Slide

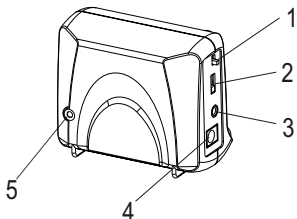
Top



- 8. Ceiling Mounting Screw Nut

## Receiver

Front & Side

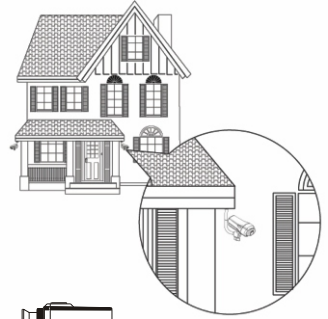


- 1. Power Switch
- 2. Channel Selector
- 3. AV Connector
- 4. Adaptor Connector
- 5. Power Indication LED

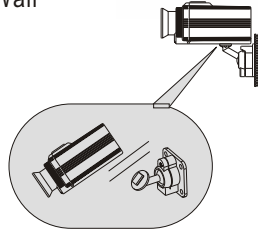
## 4. SYSTEM INSTALLATION

### Wireless Camera

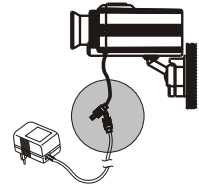
Fasten the Mounting Bracket on the wall or ceiling (must under the roof).



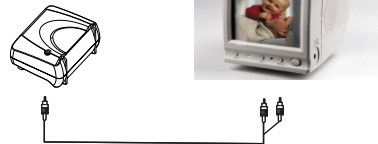
Slide the Wireless Camera into the Wall Mounting Bracket.



Connect Wireless Camera with the attached adaptor; and plug the adaptor into the power outlet.



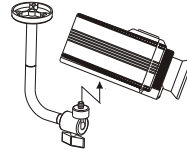
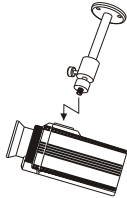
Combine the Tripod and Wireless Camera to assist parents in taking care of the baby.





Two ways to combine the Ceiling Mounting Bracket and Wireless Camera. (Ceiling Mounting Bracket is selected.)

1. Screw the ceiling mounting bracket into screw nut on top of the wireless camera.
2. Screw the ceiling mounting bracket into screw nut on bottom of the wireless camera.

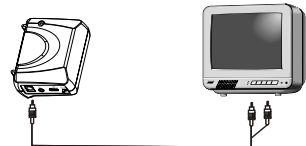


## Receiver

### Phone plug to 2RCA/SCART connecting with TV

Connect Receiver by phone plug to TV with RCA Cable.

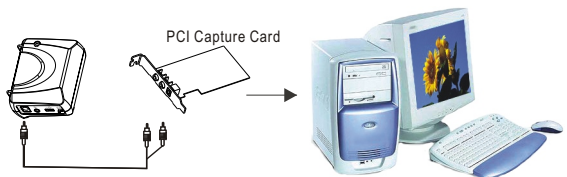
Plug Receiver into the power outlet with attached adaptor.



### Phone plug to 2RCA connecting with PC

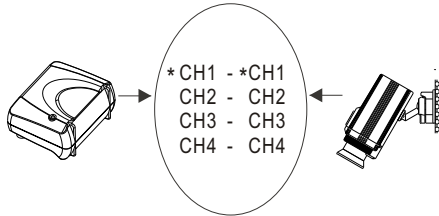
Connect Receiver by phone plug to PCI Capture Card of PC with RCA Cable.

Plug Receiver into the power outlet with attached adaptor.



## 5. OPERATION

1. Turn on the Wireless Camera and Receiver.
2. The power indication 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 setup to channel 1 originally. )



- Switch the Receiver's Channel Selector to Ch1.
  - 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 10 - How to adjust the Channel Selector of Wireless Camera.
5. Wireless Surveillance System watches wherever you want.

*Note: The operation temperature is from -15°C ~ +55°C.*

## 6. 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 CH1 to CH3.

### **No Pictures or Sound**

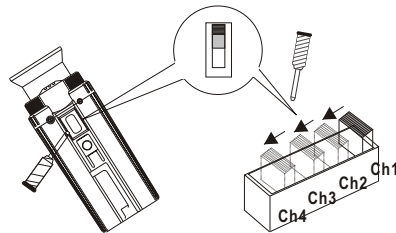
- Check the DC adaptors rightly connected.
- Power ON/OFF switch in right position.
- Check all the cables well and rightly connected.
- Check the channels of wireless camera and receiver at the same one.

### **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.

## How to adjust the Channel Selector of Wireless Camera

- Use a tool to open the channel rubber.
- Switch inside selector by the tool to adjust the channel you want to set.



**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.



2.4GHz Wireless SURVEILLANCE SYSTEM

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**Version 1.0**