

**2.4GHZ**

# Wireless Surveillance System



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*Night Vision Bear Camera  
Handheld Video Monitor*

BEFORE OPERATING THE UNITS, PLEASE READ THIS MANUAL THOROUGHLY



## 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 followed and 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. This product is not a toy. Do not use the product for any other purpose.
5. This product is intended for personal, non-commercial, non-industrial, household use in providing video surveillance. Do not use outdoors.
6. Keep the product out of the reach of children and pets. Children do not intend this product for electrical outlet when it is not in use.
7. Keep the product away from direct sunlight, open flame or other heat sources, humidity or dusty environment.
8. 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.
9. Do not plug or unplug the product from the electrical outlet with wet hand, as a risk of electrical shock exists.
10. Do not block any ventilation openings. Install the product in accordance with the operating instructions.

11. Do not use attachments not recommended or sold by the product manufacturer, as a risk of fire, electrical shock, or serious personal injury may result.
12. Unplug the product from the electrical outlet prior to putting on or removing parts.
13. Unplug the product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners.
14. Plug the product into a standard 120V/230V AC electrical outlet.
15. Do not use this product with a voltage converter.
16. Disconnect the plug (do not pull on the Power Cord) from the electrical outlet.
17. Do not allow the Power Cord to hang (i.e., Over the edge of a table or counter) where it may be tripped over or pulled.
18. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where the cord exits the product.
19. If using an extension cord, the marked electrical rating of the cord set or extension cord should be at least as great as the electrical rating of the product.
20. Never operate this product if it has a damaged Power Cord or plug, malfunctions or is not working properly, has been dropped, or damaged. This product has no user-serviceable parts. Do not attempt to examine or repair this product yourself. Only qualified service personnel should perform any servicing.
21. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions.
  - When the power cord or plug is damaged.
  - If liquid has been spilled, or objects have fallen into the product.
  - 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 product has been dropped or damaged in any way.

# *INTRODUCTION*

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## **Overview**

The attractive Bear Camera works with a handheld LCD monitor is just as a lovely nanny taking care of your children. No complicated installation, containing a 2.4GHz hidden transmitter, without running wires throughout your infant's bedroom. It suits for the active parents while out in the garden or while moving from room to room.

## **Main Features**

### **Bear Camera ( Transmitter)**

- 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
- Antenna embedded
- Four channels selectable
- Range up to 150 feet (Open side/LOS)
- Enhancing function of IR LED Night Vision

### **Handheld Video Monitor (Receiver)**

- 1.75-inch color TFT-LCD monitor
- Design to work with four high-resolution cameras
- Operating frequency of ISM band 2.4 - 2.4835 GHz
- Built-in speaker for audio monitoring
- Low power consumption
- 2x AA rechargeable batteries (2000mAh) up to 4 hours
- Audio or Audio/Video two-mode switchable
- Four channels selectable
- Transmission range up to 300 feet (L.O.S)

# PACKAGE CONTENTS

Check all of the components shown as below are included in box before using.

1. Bear Video Camera/Transmitter (X1)
2. Handheld video monitor(Receiver) (X1)
3. Power Adaptor (X2)
4. 1.5V AA ALKALINE battery (X2)
5. Stand (X1)
6. Users Manual (X1)



Bear Video Camera



Receiver



Stand



Battery

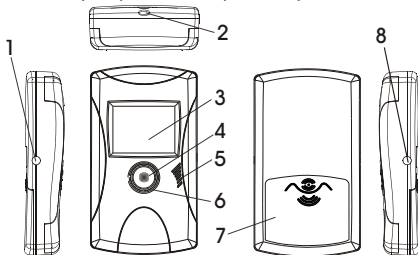


Power Adaptor

## CONTROLS

### Handheld Baby Monitor

1. DC jack
2. Strap eyelet
3. LCD monitor
4. 5-way key
5. Speaker
6. Power/Channel indicator LED
7. Battery cover
8. Earphone jack



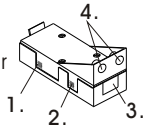
### Bear Video Camera

1. Bear Camera real eye
2. IR LED Illuminator
3. Battery room and SW board on back



### Battery room and SW board

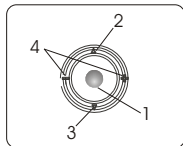
1. Channel Switch
2. Power Switch
3. Power Adaptor Jack
4. 9V Battery Connector



## ***FIVE-WAY KEY LAYOUT***

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1. Channel selection
2. Up-key (▲): Power on-off / Mute
3. Down-key (▼): Brightness / Audio only
4. Volume control (+/-)

## ***OPERATION***

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### **Bear Video Camera**

1. Power by either the Battery or DC power of the Bear video camera.
2. Position the video camera in the desired location.

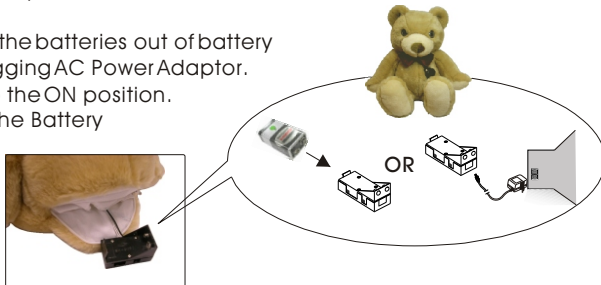
**NOTE:** The transmission range of the Bear video camera at open side up to 150ft. Real distance is depends on its operating environment. If you are receiving poor video images from the camera, try shortening the transmission range. Reposition and/or adjust the Bear video camera if video transmission is being degraded by obstructions in its operating environment.

3. Select the desired transmission channel for the Bear video camera.

**NOTE:** The Bear video camera has four different transmission channels. The Bear video camera has been set to transmit on **CH1** at the factory. Do not set and/or use more than one video camera on the same transmission channel in order to prevent signal interference and unclear picture reception.

*Continue.....*

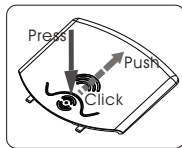
- Remove the Channel Switch rubber grommet from the Bear video camera front base. (Refer to the diagram in the "Controls" section.)
  - Use a small, blunted, pointed object to slide Channel Switch inside of the base opening, as desired (Channel 1-4)
  - Securely reattach the Channel Switch rubber grommet onto the video camera base.  
**NOTE:** Reference the "Handheld LCD Monitor" section to update the receiver channel selection.
4. Zip back of the Bear Camera and pull out of the battery zoom.
  5. Put a 9V battery into battery compartment.  
 Please use 9V ALKALINE Battery for battery source.
  6. OR connect the AC Power Adaptor into adaptor jack.  
 Then, plug the AC Power Adaptor into a standard 120V/230V AC electrical outlet.
- NOTE:** Make sure to move the batteries out of battery compartment before plugging AC Power Adaptor.
7. Slide the ON/OFF Switch to the ON position.
  8. When DV 9V Plug in Jack, the Battery power will Auto switch off.



*Continue.....*

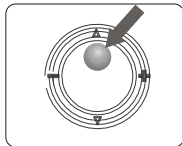
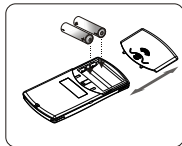


## Handheld Video Monitor



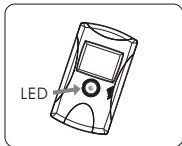
### ***Open the battery cover***

1. Press with a click and push the battery cover as the figure indication.
2. Open the battery cover on the rear of the Receiver and insert 2AA- size batteries.
3. Close the battery cover, make sure it is locked with a click.



### ***Power on/off the Receiver***

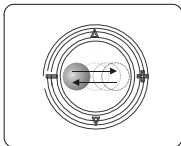
4. Push up(▲) and **HOLD** the button two seconds to power on/off Receiver.



### ***LED in green***

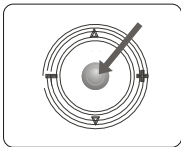
5. Check the LED around Five-way key rightly light up in green after you turn on the Receiver.

*Continue.....*



### ***Volume control***

6. Push the button left (volume down) or right (volume up) to adjust volume.



### ***Select the channel***

7. Press the button to choose Receiver's Channel the same as Transmitter. The power/channel indicator LED will flash in green to indicate channel number.

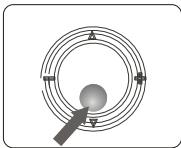
Channel I : Flash once

Channel II : Flash twice

Channel III : Flash thrice

Channel IV : Flash quartic

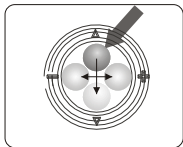
OR press and hold the channel button two seconds to scan the channel.



### ***Audio mode***

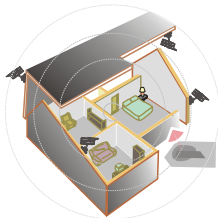
8. Push down and **HOLD** the button two seconds to switch into audio mode (Audio mode: To Turn off the LCD monitor for power-saving.)
9. Push down and **HOLD** the button two seconds again to turn back A/V mode.

*Continue.....*



### ***Mute the Receiver***

10. Push up the button to mute the Receiver.
11. Push the button up again (left, right are also available), or push down and hold a few seconds, let Receiver get back voice-mode.



12. Work with one to four 2.4GHz wireless camera for baby caring or environment security, easily watch anywhere you would like to monitor.



- A piece of "Five-way Key Memo" label attached in package. You can stick it on back of Receiver for your operation reminder.

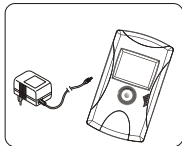
<b><i>Five-way Key Memo</i></b>	
▲ <b>Power On/Off:</b> push & HOLD	
▲ <b>Mute On/Off:</b> push	
— <b>Volume down</b>	● <b>Channel Select:</b> press
+ <b>Volume up</b>	LED flash to indicate Channel number
▼ <b>Audio only:</b> push & HOLD	
▼ <b>Audio-Video:</b> push & HOLD	
▼ <b>Brightness:</b> push	
"HOLD": Last for 2 seconds	

## CHARGING THE BATTERIES

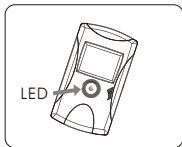
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The Receiver was made to work by power from 2XAA size batteries(1.5V) or a power adaptor. Rechargeable batteries are always chosen the level of 1.2V/2000mAh.

1. If the batteries are unable to supply enough power to Receiver. The power/channel indicator LED will flash in red till the Receiver shuts off.



2. Plug power adaptor into DC jack to charge rechargeable batteries when batteries' power is at a low level.



3. The LED around Five-way key will light up in red when the batteries are being charged.
4. Unplug the power adaptor when the LED switches off which means the batteries have been fully charged.

*Continue.....*

***Caution:***

- Using a specialized battery charger comes with the rechargeable batteries you bought to charge is always recommended.
- Before you get start first time, the rechargeable batteries have to be charged about 6 hours until the Power LED turns off.
- The Receiver can not charge the batteries when it is being used.
- Non-rechargeable batteries cannot be recharged.
- Must not mix-charged the batteries of Ni-MH and Ni-Cd at the same time.
- Always use **ALKALINE** batteries or the types of Ni-MH, Ni-Cd Rechargeable battery.
- Never mix-using the new and used batteries or different types of battery.
- Take out the batteries if you are going to shelf the Receiver for a long time.

***Caution:***

- The Receiver with residual warm is normal condition after rechargeable batteries full-charged.
- Only batteries of the same or equivalent type as recommended are to be used.
- To avoid electrical shock, do not open the Power Adaptor. The outlet of the power supply must have the same voltage as the local area.
- Do not plug or unplug the power adaptor from the electrical outlet with a wet hand.
- Disconnect the plug from the electrical outlet, do not pull on the Power Cord.
- Do not allow the Power Adaptor to be hung over the edge of a table or counter where it may be tripped over or pulled.
- 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.
- Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

# TROUBLE SHOOTING

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Please read this users manual carefully before using the Wireless Audio Product. If you still have difficulties to use the product, consult the following syndrome, which will guide you to solve most common problems.

## No picture or sound

1. Check the power supply.
  - Ensure the transmitter is properly connected and set.
  - Ensure both the transmitter and receiver power indicators illuminate.
2. Make sure the batteries have been inserted into receiver's battery compartment.
3. Make sure the batteries are full charged.
4. Check both of the Receiver and Transmitter are surely turned on.
5. Make sure the power cables are connected rightly if you use power adaptor.
6. Check if the Receiver is in the mute or audio mode.
7. Check volume level is set properly for desire.
8. Shorten the transmission range/distance between the transmitter and receiver and/or adjust the video camera.

## Unclear picture reception

1. Check to ensure the receiver channel is set properly for the desired video camera.
2. Shorten the transmission range/distance between the transmitter and receiver. Reposition and/or adjust the Bear Camera. Check 9V Battery power is running out or not.

## Unclear picture focus

1. The video camera is set at 4.9ft (1.5m) with a Free focus feature.

## Interference in the Image and Sound

1. Check if there is any interference radio frequency source near your Receiver, such as microwave oven or other 2.4GHz electronic products.
2. Make sure the range between Receiver and Transmitter is within 300 feet (L.O.S).
3. Make sure the Receiver and Transmitter are set to the same channel.

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## Important Information Required By The FCC

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.



# SPECIFICATION

## Bear Camera (Transmitter)

Item	Description	
Scanning System	2:1 Interlace	2:1 Interlace
	NTSC	PAL
Image Sensor	1/4" CMOS 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 300TV Lines	
Min. Illumination	3 LUX (F1.2)	
S/N Ratio	More than 45 dB (AGC OFF)	
Video Input	1.0 Vpp / 75 ohm composite Video Signal	
Auto Electronic Exposure	1/60 ~ 1/2000seconds	1/50 ~ 1/2000seconds
Auto White Balance	Auto	
Supply Voltage	9V	
Power Consumption	120 mA	
Operation Environment	0°C ~ +40°C	
Lens (Optional)	F3.6mm, F2.0 (Fix Board Lens)	
Audio Input	1.0Vpp/600ohm load for Mono	
Weight	620g	
Dimension (mm)	16.93 x 12.98 x 6.69 in	

## Handheld Video Monitor (Receiver)

Item	Description
Display type	TFT-LCD
Display area	1.75-inch diagonal
Resolution	280x220(61,600 pixels)
Brightness	180 nit
Display color	Full-color
Frequency	2.4GHz - 2.483GHz
Numbers of Channel	4 selectable channels
Receiver Sensitivity	-85 dBm (min.)
L.O. Stability	+/-100kHz (typ.)
Audio Output Power	0.5w
Power consumption	500mA@2.4V
Adaptor voltage	9V/300mA
Rechargeable battery	2xAA; 1.2V/2000mAh
Antenna	Inverted-F
Volume	Digital volume control
Dimensions	111(H) x 62.7(W) x 24(D)mm
Operation Environment	-10°C ~ +50°C

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

## 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.

2.4GHz  
**Wireless Surveillance**

