# 2.4Ghz Wireless Video Monitoring System

User Manual DXR-5

Affordable technology. No compromise on quality.







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# Welcome!

Thank you for purcahsing the Infant Optics DXR-5 Video Baby Monitor.

# Contents

Make sure you have the following:

- 1 x Monitor Unit
- 1 x Camera Unit
- 1 x Rechargeable Li-ion Battery for Monitor Unit
- 1 x Upright Mount Stand
- 1 x Hand Strap
- 2 x A/C Adapters
- 1 x User's Manual
- 1 x Safety Warning



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# Safety Instructions: WARNING

Please read this User's Manual carefully before using this product.

- · Keep the A/C adapter cords out of the reach of children.
- Do not place the baby monitor or its cords in the crib/cot or within 3 feet reach
  of the baby.
- Protect the A/C adapter cords. Make sure that they are not walked on or pinched by furniture or other items.
- Use ONLY the A/C adapters provided in this kit.
- Make sure the provided A/C adapters are consistent with the common electrical voltage of your country.
- Provide proper ventilation for the monitoring system when it is operating. Do
  not cover the Monitor Unit and Camera Unit with a towel or blanket. Do not
  place the Monitor and Camera Units in a poorly ventilated area, such as a
  drawer.
- . Do not immerse the baby monitor in water. Clean it only with a dry cloth.
- Do not use the baby monitor near water, such as a bathtub, shower, basin, sink, laundry tub.
- Do not use the monitoring system outdoors.
- Keep the baby monitor away from heat sources, such as fireplaces, radiators, stove.
- Do not attempt to open the any of the units. No user-serviceable parts insiderisk of electrical shock, fire or death.
- Only insert battery pack of the same type.
- . This product is not a toy. Do not allow children to play with it.
- This baby monitor is not a substitute for responsible adult supervision.

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# 1 Specifications

#### Features:

- Digital 2.4GHz wireless transmission of both video and audio signal.
- · Encrypted digital data transfer ensures 100% privacy.
- Adoptive Frequency Hopping (FHSS) technology which switches between different channels automatically for minimal interference.
- Transmission distance up to 800 feet in open areas. (distance reduced when obstructed with walls or ceilings)

- · Supports up to 4 Camera Units simultaneously.
- · Automatic night vision mode in dark environments.
- Power saving feature: remote sound activation (VOX) triggered by noise detected from the Camera Unit.
- · Portable Monitor Unit with on board charging capability.
- Auto-Mute Function: this unit is fitted with a feature designed to eliminate any white noise or static noise when the sound level is below 65 dB (very quiet conditions) for 10 seconds. This function can be toggled ON and OFF.

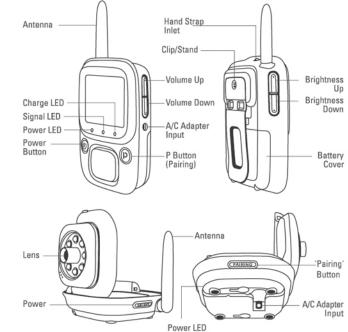
# 2 Overview

#### Monitor Unit

Display	2.4" TFT color display at 320x240 resolution
Audio	1W
Frequency	2400 – 2483 MHz (auto-tuned by FHSS)
Pairing	Supports up to 4 Camera Units simultaneously
Switches	Power
	Pairing
	Volume +/- (10 steps increment)
	Brightness +/- (6 steps increment)
LED Status Indicator	Power (green), low battery (flashing green), signal
	coverage (blue),
	poor reception (flashing blue), battery charging (red)
Activation	Manual OR voice triggered (VOX)
OSD	Brightness, volume, pairing selection
Battery	Rechargeable high performance lithium battery
A/C Power	6V 1A DC adapter
Mounting Options	Self-standing OR clip

#### Camera Unit

CMOS Sensor	1/6" VGA, 640x480
Lens	F/No 1.8, EFL 2.95mm, BFL 2.488mm
Night Vision	8x IR LED
LED	Power
Vertical Angle	$0 - 90^{\circ}$
Lateral Angle	+/- 15°
Microphone	Built-in high sensitivity gain microphone
A/C Power	6V 1A DC adapter
Mounting Options	Table top OR wall mounted OR upright-stand mounted



02

# 3 Getting Started

# Charging the Monitor Unit:

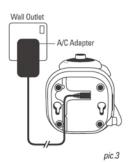
- As shown in pic.1, lift the clip located on the back of Monitor Unit, and remove the battery cover.
- Insert the Rechargeable Li-ion Battery in correct direction. Make sure the metal contact of battery is in contact with the metal plates of the battery compartment.
- 3. Replace the battery cover
- Charge the battery using the A/C adapter included. Attach the cord to the Monitor Unit as shown in pic.2. Plug the A/C adapter into the wall outlet.
- The charge LED illuminates red to indicate the Monitor Unit is charging. NOTE: Charge battery at least 3 hours for the first time to maximize battery life.

#### Camera Unit Installation

- Attach the A/C adapter to the Camera Unit as shown in pic.3. The adapter input is located on the bottom of the Camera Unit. Plug the A/C adapter into the wall outlet.
- Press 'ON/OFF' Button to power on the Camera Unit. The LED Status Indicator on the Camera Unit will show green to indicate it is powered on.
- Remove the black plastic lens cover with a REMOVE sticker (do not just remove the sticker!) and expose the glass lens on the Camera Unit.







# 4 Using the Baby Monitor

## Powering ON

1. You can use the Monitor Unit either with the A/C adapter or with the internal battery. To switch on the Monitor Unit, press the Power Button once. The Power LED will show green color indicating the Monitor Unit is on and the display will show the opening screen as shown in pic.4



pic.4

05

- Press the Power button on the Camera Unit. The power LED will illuminate green to indicate it is powered on.
- To confirm the operation of the two units, check for positive visual and audio feed on the display of the Monitor Unit.

NOTE: Do not place the Camera Unit too close to the Monitor Unit with the volume on a high setting. You may experience feedback/squealing when the two units are placed too close together.

04

## Adjusting Volume

Press the + /- VOL button on the right side of the Monitor Unit to adjust the sound volume of the speaker. Press '+' to increase the volume. Press '-' to reduce the volume. The screen shows 0 for mute mode, and 9 for loudest.

## Adjusting Screen Brightness

Press the +/- of se button located on the left side of the Monitor Unit to adjust the brightness of the display. Press '+' to increase the brightness. Press '-' to reduce the brightness. The screen shows 0 for dimmest and 5 for brightnest.

## VOX / Voice Activation Alert

This feature is not to be mistaken with the Auto-Mute Function.

VOX is a built in function of the Infant Optics DXR-5 system. When activated (turned on), the Monitor Unit enters Standby Mode when Camera Unit is in a quiet condition (below 60 dB) for 180 seconds . The Monitoring Unit will turn off to conserve energy. When sound is detected (over 65 dB), the VOX system will automatically turn the monitoring system back to ON.





Press the '+' VOL button and '+' 🔆 button simultaneously to toggle VOX on and off.

Note: On startup, the default setting has VOX disabled.

#### Auto-Mute Function

This feature is not to be mistaken with the VOX (Voice Activation Alert Power Saving Mode).

This unit is fitted with an Auto-Mute Function (White Noise Eliminator) that mutes/disables the sound when the Camera Unit detects quietness (under 65 dB) for 10 seconds. This eliminates any white noise or static noise to allow you to sleep better. The unit reactivates the audio once any noise is detected.

To toggle the Auto-Mute Function ON and OFF, press the '+' VOL button and '-' 禁 button simultaneously.

On-Screen Definition:

AUTO MUTE ON: Auto-Mute Function enabled. Audio will be silenced when the camera does not detect any significant noise for a period of 10 seconds.

AUTO MUTE OFF: Auto-Mute Function disabled. Audio will continuously stay on regardless of the sound level detected by the Camera Unit.

Note: On startup, the default setting has Auto-Mute Function enabled.

## Night Vision

The Camera Unit has 8 Infra-red LEDs to view in the dark. When the Camera Unit detects insufficient light (via light sensor) under its default AUTO mode, the system automatically turns the IR LEDs on.

Press the volume and brightness '-' key simultaneously to toggle the IR LEDs between ON, OFF, or AUTO.

# Powering OFF

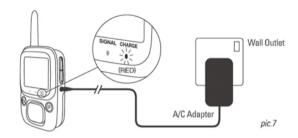
- 1. To turn the Monitor Unit off, press and hold the Power Button for 2 seconds.
- 2. To turn the Camera Unit off, press the 'ON/OFF' Button.

## LED Status Indicator Representation

Monitor Unit	
• Power	<ul><li>Green light (power on)</li><li>Flashing green light (low battery)</li><li>Off (power off)</li></ul>
• Signal	<ul> <li>Blue light (good signal coverage)</li> <li>Flashing blue light (poor signal coverage)</li> <li>Off (no signal)</li> </ul>
• Charge	<ul><li>Red light (battery charging)</li><li>Off (battery not charging)</li></ul>
Camera Unit	
• Power	• Green light (power on) • Off (power off)

# Charging the battery in Monitor Unit - Explanation

The Monitor Unit is equipped a rechargeable lithium battery for portable use. The Power LED (green) flashes to indicate the Lithium battery is at low battery level. The Charge LED flashes red to indicate charging has commenced. When the Charge LED extinguishes, it indicates that charge is complete and the battery is fully charged. You can now unplug the A/C adapter from the Monitor Unit.



## Positioning and Mounting

#### **Monitor Unit**

#### Stand

Push clip lock and move the clip down as shown in pic.8. Lift the clip and pull outwards until clip latches with an audible 'click'.

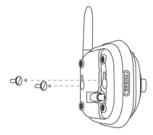


#### Camera Unit

NOTE: Place the Camera Unit in a location where the baby cannot easily reach or knock over the unit. Always keep the cord of the A/C adapter out of reach from the baby.

#### · Wall Mount

Place 2 screws on the wall at a distance of 5.5cm apart. Hook the camera unit on the screws as shown in pic.9.



pic.9

#### Flat Bed

Place the Camera Unit on a stable flat surface. Ensure the Camera Unit is placed in a location out of reach of your baby. Adjust the viewing direction as required.

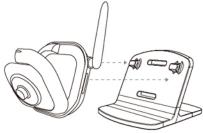


pic.10

NOTE: For best reception, adjust the antenna to the perpendicular plane relative to Monitor Unit. i.e. If you place the Camera Unit on the upper level of your house, and the Monitor Unit on the lower level, adjust the antenna of the Camera Unit flat down. If the place the Camera Unit on the same floor level of the Monitor Unit, adjust the antenna vertically upright.

#### · Upright Stand

Use this stand to allow the Camera Unit to view downwards from an elevated location. Align the Camera Unit with the pegs on the stand and secure by pushing Camera Unit down.



# Pairing Up Cameras

NOTE: The Camera Unit included with the kit has already been paired up with the Monitor Unit. If for any reason your Monitor Unit and Camera Unit are not paired up, OR you purchased additional add-on Camera Units, follow the steps below.

Note: The Infant Optics DXR-5 will support up to 4 Camera Units paired to 1 Monitor Unit at the same time.

- 1. Power off all Monitor Unit and Camera Units.
- 2. Press and hold the Pairing Button on the Monitor Unit.
- 3. Press the Power Button on the Monitor Unit simultaneously.
- 4. Release both the Pairing and Power Buttons.
- 5. You will then enter the pairing mode screen as shown below.



- 6. Press 'ON/OFF' button on your Camera Unit to power on your Camera Unit(s).
- Press the 'PAIRING' button on your Camera Unit. When the Monitor Unit has successfully been paired to the Camera Unit, the screen below appears.

Infant Optics DXR-5 Camera Pairing System
Waiting signal from CAMI \_ OK
Waiting signal from DAM2 \_
Press 'PAIRINS' of Camera Unit to pair
Press 'P' to skip and pair the next CAM ID
Press power button to abort and turn off

8. Continue the above step to pair more Camera Units. Press the Pairing Button on the Monitor Unit to skip current channel and pair a Camera Unit to the next channel

Infant Optics DXR-5 Camera Pairing System
Maiting signal from CM1 \_ OK
Maiting signal from CM2 \_ SKIP

Press 'PAIRING' of Camera Unit to pair
Press 'P' to skip and pair the next CM ID

Press power button to abort and turn off

- Press and hold Power Button for 2 seconds to exit pairing setup. Turn Monitor Unit off and then back on to activate new settings.
- After successful pairing: to cycle through different channels on the Monitor Unit, press Pairing Button.

Note: The Camera Unit and Monitor Unit should be placed around 1 foot apart during the pairing process.

Immediately after successful pairing, move the Camera Unit and Monitor Unit apart to avoid speaker feedback.

# 5 Trouble Shooting

## . No video displayed on the Monitor Unit

- Make sure both the Camera Unit and Monitor Unit are turned on. The green Power LED should illuminate.
- If green Power LED does not illuminate, connect the A/C adapter to the Monitor Unit. Try using the other A/C adpater included in the kit.
- 3. If green Power LED illuminates, but no display on the TFT display panel, remove the A/C adapter and battery from Monitor Unit. Wait 10 minutes. Plug the A/C adapter back to the Monitor Unit and retry powering on the Monitor Unit.
- Ensure that the black plastic lens cover is removed from the Camera Unit. Do not just remove the sticker. Ensure that the glass lens is exposed.

### · No video feed after opening welcome screen displays

- Ensure the green Power LED illuminates to show the Monitor Unit is powered on.
- 2. Place the Camera Unit and Monitor Unit within 1 feet apart only.
- If unsuccessful, remove all power sources from both Monitor Unit and Camera Unit and wait 10 minutes.
- If all above steps fail, performing the pairing procedure again as explained in the Pairing Up Cameras section.

## • The display screen shows "Out of signal coverage"



- 1. The Monitor Unit may be out of the signal coverage. Move the Monitor Unit closer to the Camera Unit. Reception is better in open areas, and worse in places with obstructions such as walls, ceilings/floors or electronic devices. Position the two units with minimal obstructions between them.
- Adjust the position of the antenna on the Monitor Unit as explained in the Positioning and Mounting section to improve reception.
- Other 2.4GHz or high frequency devices (e.g. WIFI, microwave oven) may interfere with the transmission of the product. Turn off these devices to improve reception.
- 4. Press the button to cycle though the 4 channels.
- Ensure your Camera Unit is switched on. This is indicated by a green light on the rear of the Camera Unit.
- 6. If all actions above fail to resolve the problem, complete the 'Pairing Up Cameras' procedure again.

#### Video problem

- Adjust the brightness level by pressing the (+/-) button until it gives a desirable image.
- 2. If the color goes off, it indicates that the Camera Unit has the Night Mode activated. The IR LEDs turn on allowing better visibility in the dark, but only provides picture in black & white.

#### • Feedback/Squealing noise coming from monitor

Your Camera Unit and Monitor Unit may be too close. Move them farther apart.
 Make sure the Monitor Unit and Camera Unit are not near televisions,
 computers, cordless/mobile phones or other electrical equipment.

Every effort has been made to ensure high standards of reliability for your baby monitor. However, if something does go wrong, please do not try to repair it yourself. Contact customer service for assistance.

#### . Battery not charging OR no charge light

 Reinsert the battery into the Monitor Unit and ensure that the metal plates are in contact with each other.

## • Interference with existing WIFI network

Problem: Your router is 'hogging' the bandwidth in the 2.4ghz frequency channel range.

Turn both devices (Monitor Unit and Camera Unit) off, and turn your router off.
 Wait 10 seconds. Consequently, turn on the DXR-5 (Monitor Unit and Camera Unit), wait 10 seconds, then turn on your router.

## . Sound (audio) cuts in and out sporadically

Problem: Auto-Mute Function is enabled.

1. Turn off the Auto-Mute Function as explained earlier in this instruction manual.

# FCC Statement:

WARNING: Modifications not authorized by the manufacturer may void user's authority to operate this device.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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 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.

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
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC Radiation Exposure Limits set forth for an uncontrolled environment. This equipment should be installed & operated between with minimum distance 20cm the radiator & your body.

# Infant Optics Products Limited Warranty

We warrant to the original user that this product shall be free from all defects in material or workmanship for one year from the date of purchase. This warranty does not apply to any product that has been subject to abuse, misuse, negligence or accident, nor does it apply to any batteries that may be supplied with the product. Defects caused by tampering, unauthorized alterations or repairs are not covered by this warranty. We may elect to replace the entire unit, at no extra cost to you, with the same model or a similar model rather than repair it.

If a defect covered by this warranty should occur, email us with a scanned copy of your original receipt and a brief explanation of the problem, failing which Infant Optics will not perform any of its obligations under this warranty. Our service representative will provide you with an address of our closest office/warehouse to where you live, together with a return authorization number.

To return the item, you must use the original packaging or the equivalent, and you must pay postage.

If you have any questions with your product, or if you need technical assistance, we recommend you to email us (over phone-call) for the quickest way to receive a response.

TOLL FREE CUSTOMER SUPPORT 1-800-291-0195

info@infantoptics.com

We will respond to all inquiries within 24 hours.

This warranty gives you specific legal rights, and you may have other legal rights that vary from state to state.

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