PORTABLE DIGITAL
WIRELESS MONITORING SYSTEM

INSTRUCTION MANUAL

MODEL: Luvion Platinum

Features

- Digital wireless technology provides excellent image quality and clarity
- Interference free, secure and private signal
- Up to 450ft wireless transmission range ①
- Listen in with exceptional sound clarity
- Safety warning feature notifies you when out of range
- System expandable up to 4 cameras ②

① Maximum open space transmission range. The actual range is dependent upon building materials and other obstructions in path of wireless signal.

② Additional cameras sold separately.

Camera Features

- VGA resolution camera
- Night vision allows for low light viewing up to 15 feet / 4.5 meters ③
- Built-in microphone
- Camera can be battery operated for true portable wireless operation

③ IR illumination range of 15ft./4.5m under ideal conditions. Objects at or beyond this range may be partially or completely obscured, depending on the camera application.

Receiver Features

- 2.4” color LCD monitor/receiver with superior image quality
- Video/Audio output for viewing on TV/Monitor or recording on VCR/DVD recorder
- Rechargeable lithium polymer battery for true portability
- Convenient receiver cradle included
- Audio level indicator and alarm

Getting Started

The system comes with the following components:

Check your package to confirm that you have received the complete system, including all components shown above.

Wireless Receiver

Front/Back Controls

1. Power/Audio Level LEDs – The green LED indicates the receiver power is ON or OFF.

The red LEDs indicate the audio levels (low to high).

2. LCD Screen – Displays video from the camera.

3. SCAN Button – When the SCAN button is pressed, the LCD screen is turned off and the system continuously scans all available cameras while the monitor is dark. The scan feature can be used for the following two reasons: (1) to prevent the user from being disturbed (i.e. when sleeping) by the bright LCD screen, or (2) to conserve battery power. If audio is detected above the preset audio trigger level on the camera(s)*, the receiver will beep and display the triggered camera. The receiver will return to scan mode about 5 seconds after the Alarm has completed. Press any button except OK button on the front panel of monitor will exit scan mode.

4. MENU Button – Press to access the receiver menu. Press the button again to exit.

5. Navigation Controls/OK Button – Use the controls in Viewing Mode and Menu Mode.

Viewing Mode: The following controls are used while watching live video from the camera:

• Press the UP/DOWN ▲▼ arrows to increase or decrease the volume.
• Press the LEFT ◄ arrow to view cameras* in automatic switching mode.
• Press the RIGHT ► arrow to manually switch between cameras*.

Menu Mode: Use the UP/DOWN/LEFT/RIGHT ▲▼◄► arrows to navigate in Menu Mode. Press the OK button to confirm the menu selection.

6. Stand – Flip the stand out to place the receiver on a flat surface (such as a table or countertop). Alternatively, place the receiver in the receiver cradle.

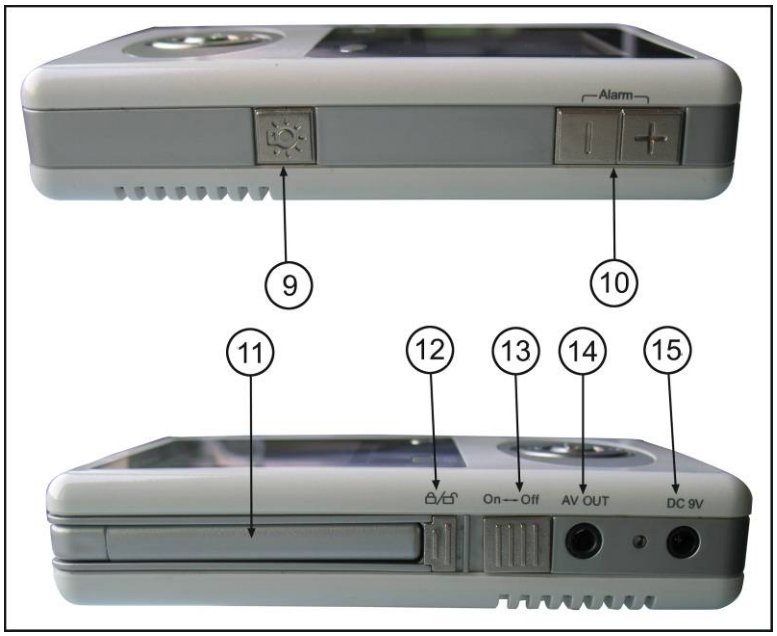
7. Pair Button – Press the Pair button when pairing the receiver with a camera (see Page 9).

8. Speaker – Produces the sound transmitted from the cameras*.

* You must have more than one camera configured on the system when using the functions that requires more than one camera.

Side Controls

9. Night Light Button – Press to remotely turn night light ON or OFF (for the camera currently being displayed on the LCD screen).



10. Alarm +/- Button – Press to increase or decrease the volume of the audio alarm.

11. Receiver Antenna – receives & sends signals from or to the cameras*.

12. Antenna Locking Switch – Slide the switch to unlocking position, the receiver antenna will pop up. Then you can adjust the antenna to vertical position for better signal reception.

13. Power Slide Switch – Slide the switch to ON or OFF position to switch on/off the receiver.

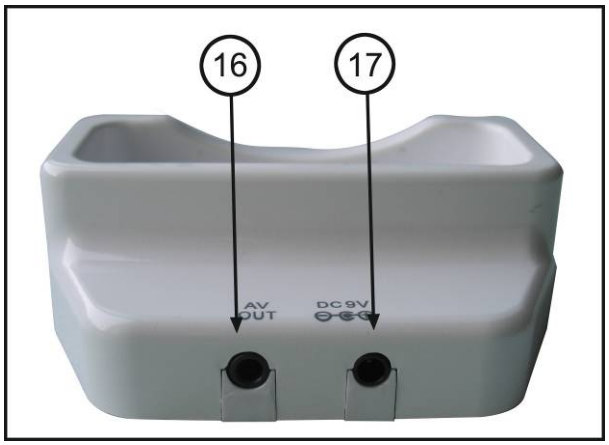
14. A/V Out Port (Optional Use) – Connect the included A/V cable to view video from the receiver on a TV or monitor, or record to a DVD recorder or VCR. Alternatively, use the A/V out port on the receiver cradle.

NOTE: Using this feature will turn off the LCD screen. The LCD screen will turn back on when the A/V cable is disconnected.

15. DC 9V Power Input – Connect the included DC 9V power adaptor to power the receiver and/or charge the receiver battery (when the receiver is not in the cradle).

Receiver Cradle Inputs

16. A/V Out Port – Connect the included A/V cable to view the receiver picture (when docked) on a TV or monitor, or record to a DVD recorder or VCR. (NOTE: The A/V output function will not work if there is no power cable connected to the cradle. Only one A/V out port should be used at a time).



17. DC 9V Power Input – Connect the DC 9V power adaptor (included) to the receiver cradle to power the receiver and/or charge the receiver (when docked).

NOTE: When the receiver is docked, and the A/V cable is connected (power cable as needs to be connected), the LCD screen on the receiver will be blacked out. The LCD screen will turn back on when the A/V cable is disconnected.

Wireless Receiver Installation

Determine if you will be using the receiver cradle, or connecting the cables directly to the receiver before installation:

1. Place the receiver cradle or receiver in a place that will have clear reception with your camera(s).

2. Plug the AC adaptor power output cable into the 9V POWER input of the cradle or receiver. Plug the power plug into a wall outlet or surge protector.

3. Leave the receiver to charge for 6 hours prior to first time use so the built-in rechargeable receiver battery is fully charged. DO NOT remove the power cable from the receiver / from the cradle during initial charge process. After initial charge, charge the receiver as required.

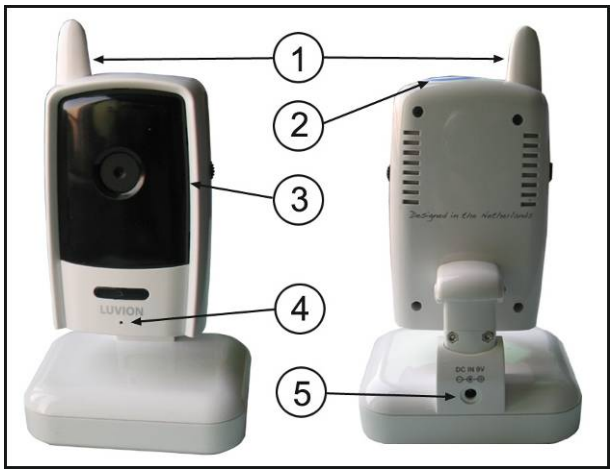
4. If you wish to view the receiver images on a larger screen, connect the included AV cable to the cradle or receiver, and connect the other end of the cable to the Video IN (Yellow) and Audio IN (White) ports on the TV, VCR or other viewing/recording device.

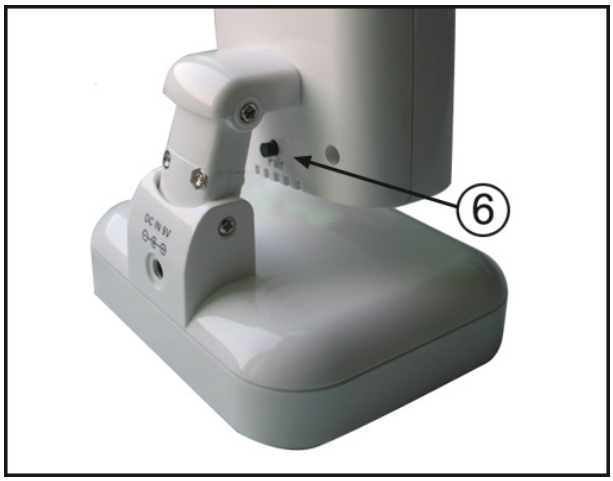
NOTE: the purpose of the AV output is for convenience only. When using with large screen TV/Monitor, the picture might be grainy as the camera limits video resolution to VGA (640x480 pixels). This is not a product defect. For best performance use with TV/Monitor PIP (Picture in Picture) function.

Check your TV/Monitor product manual to see if this feature is available on your TV/Monitor. This allows you to view TV or other video source and see video from the camera in a small window on the same screen.

Wireless Camera

Front & Back Controls





1. Camera Antenna – Sends & receives signals to or from the receiver.

2. Night Light Switch – Press to turn the night light ON or OFF. Alternatively, press the light button on the receiver to remotely turn the camera light ON or OFF.

3. Lens/IR LED Cover – Infrared LEDs provide viewing in no/low light conditions

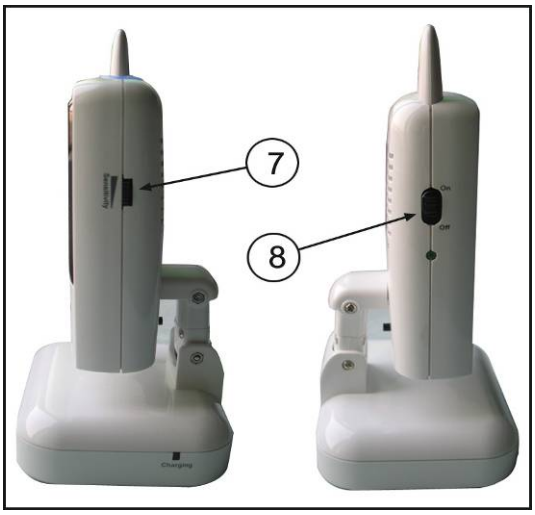
4. Microphone – Receives sounds for the area near the camera, and transmits sound from the camera to the receiver.

5. DC 9V Power – Connect the DC 9V power adaptor to the camera

NOTE: The camera can also be powered using 4 AA batteries (not included) installed in the base. If the camera is plugged in with the AC adaptor, the batteries will not be used. The batteries are intended for short term, portable camera use.

6. Pair Button – The pair button is located on the back of the camera behind the stand mount.

Side Controls



7. Sound Alarm Trigger – Adjust the trigger to set the sound alarm sensitivity. The receiver will beep to alert the user when the sound is above a preset sound level. Adjust the side wheel to increase or decrease the level.

8. Camera ON/OFF Switch – Turns the camera ON or OFF.

Camera Installation

Before you install the camera, carefully plan where and how it will be positioned, and where you will route the cable that connects the camera to the power adaptor.

Before starting permanent installation, verify its performance by observing the image on the receiver when camera is positioned in the same location/position where it will be permanently installed and the receiver is placed in the location where it will be used most of the time.

Installation Warnings

Aim the camera(s) to best optimize the viewing area: Select a location for the camera that provides a clear view of the area you want to monitor, which is free from dust, and is not in line-of-sight to a strong light source or direct sunlight.

Avoid installing the cameras where there are thick walls, or obstructions between the Cameras and the Receiver.

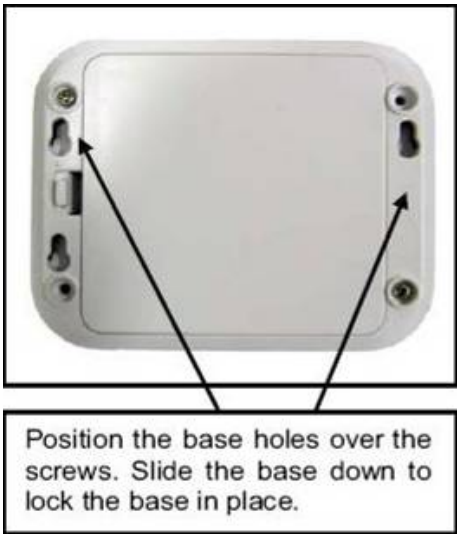
Night Vision

This camera has built-in IR LEDs, which provides the camera with the ability to view images in no/low light conditions. It is important to use the provided power adaptor (and not the batteries) when using the camera for prolonged periods in low light conditions, as the built-in IR LEDs will drain the battery more quickly than regular daytime use.

Installing the Camera

1. Carefully unpack the camera.
NOTE: If you are installing cameras that did not come with the system, please see the pairing camera section of this manual for details on installation.

2. Mount the camera to the wall.
Mark the position of the screw holes on the wall, and drill holes and insert 2 screws, then firmly attach the camera to the wall by placing the stand over the installed screws and pushing the base downwards.


Position the base holes over the screws. Slide the base down to lock the base in place.

NOTE: The camera can also be placed on a flat surface, such as a Table or Shelf, and no mounting hardware is required.

3. Adjust the viewing angle of the camera
NOTE: You can install additional cameras (maximum of 4 cameras). When adding cameras that were not included in the original box, you will need to pair up the cameras with the receiver. Refer to the camera pairing section of this manual.

Connecting Camera Power

The camera can be powered either by using the provided power adaptor, or using batteries (requires 4 AA type batteries, not included).

NOTE: Wireless cameras require a power source (either an electrical outlet or battery power) to operate. If you plan to permanently mount the camera in a location, it is recommended to use the included camera power adaptor to prevent interruptions in the image, as using battery power is intended as a temporary power solution.

Power Adaptor

Connect the power adaptor to the camera. Make sure the power adaptor is placed into a grounded outlet or surge bar to protect the camera from power fluctuations.

Battery Pack

1. Remove the battery cover off the base of the camera.

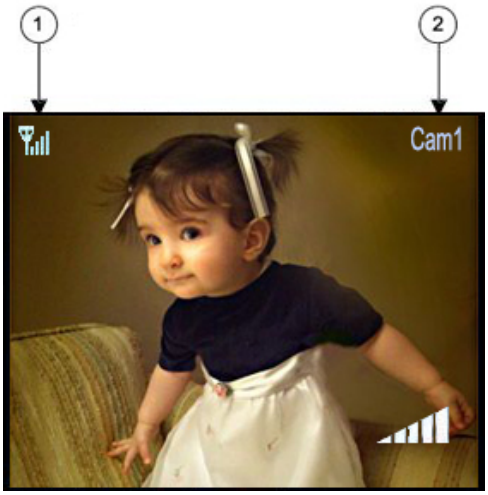
2. Insert 4 AA batteries (not included) into the Battery Pack. Make sure to correctly line up the Positive (+) and negative (-) terminals of the batteries.

3. Place the battery pack cover back on.

NOTE: If the camera is plugged in with the AC adaptor, the batteries will not be used. The batteries are intended for short term, portable camera use only.

Viewing Mode

1. Signal Indicator – The signal indicator shows the strength of the signal being received from the camera. The number of bars in the signal indicator shows the strength of the signal – One or No Bars indicates the signal is poor, and 4 bars indicate a very strong signal.



Signal Indicators:

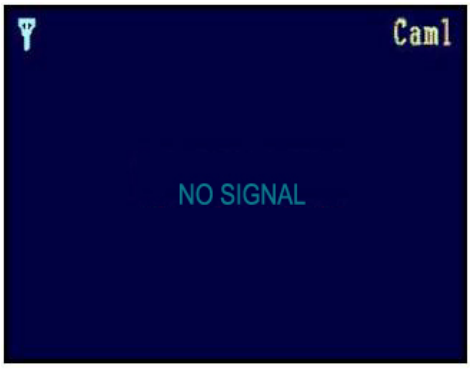
Signal Strength	Indicator	Warning
Perfect		None
Good		None
Fair		Low Signal
Low		Low Signal
No Signal		No Signal

2. Channel Indicator – Displays the current channel number. Press the RIGHT ► arrow on the receiver to switch between available cameras.
Note: To automatically switch between channels, press the LEFT ◄ arrow (AUTO).

Low Signal / No Signal Warnings

When the camera is positioned too far from the receiver, warning messages will be displayed.

LOW SIGNAL: The " LOW SIGNAL" appears when the receiver has one or two bars.
You will still get an image, however updating may be less frequent.



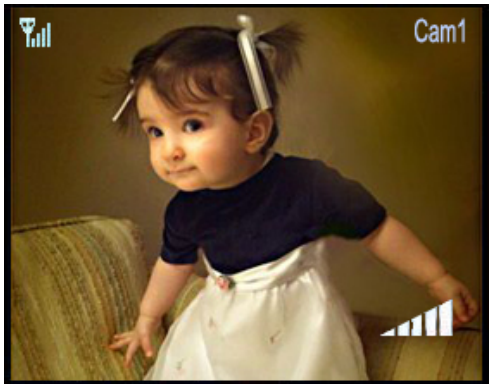
NO SIGNAL: The "NO SIGNAL" message means the receiver cannot access the camera. Please reposition the camera, or check the camera power.

Adjusting the Receiver Volume

The receiver volume can be adjusted by using the UP/DOWN▲▼ arrows when viewing a camera.

Press the DOWN▼ arrow to decrease the volume, and press the UP▲ arrow to increase the volume. When the volume is set to one bar (lowest setting), the volume is muted.

The volume adjustment icon will be displayed during volume changes, and will disappear after 10 seconds of inactivity.



Accessing Menu System

Press the MENU button on the receiver to enter MENU system. Use the navigating buttons to navigate up/down/left/right in the menu, and press the OK button to confirm a setting.

Main Menu

The Main Menu contains 4 submenus:

1. PAIRING – Use the pairing menu to add camera(s) to the receiver.

2. EV – Adjusts the exposure level of the camera.

3. POWER SAVING – Turns on the receiver power save mode (when no activity on the cameras is detected).

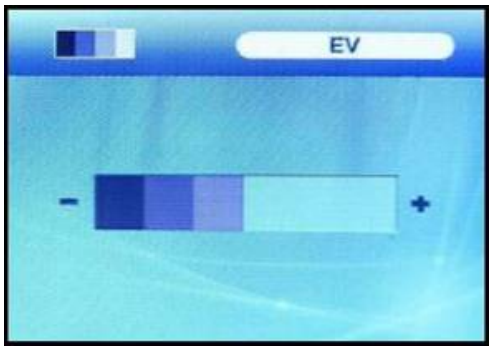
4. SETTING – Sets the AV Out options, and resets the receiver to factory defaults (erases all configurations).

Pairing Menu

The system comes with camera(s) that have already been paired. The pairing function assigns each camera to a different channel on the wireless receiver (up to 4 Cameras), and is necessary for configuring additional cameras.

Use the UP▼ and DOWN▲ arrows to navigate. Select the desired pairing channel, and press the OK button to begin the pairing process with a camera.

NOTE: It is highly recommended to pair the cameras to the receiver before permanently mounting the cameras. See the pairing section of this manual for details.

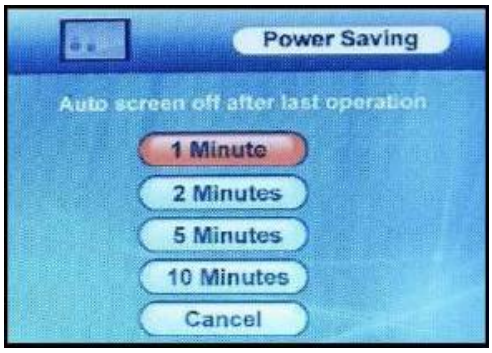


EV Menu

The EV Menu is used to adjust the exposure of the camera.

Use the LEFT◀ and RIGHT ▶ arrows to change the bar from DARKEST (left) to LIGHTEST (right). Press the OK button to accept the change.

Power Saving Menu



The Power Saving Menu is used to turn off the screen at a predetermined time, to save battery. This function can be set to 1 minute, 2 minutes, 5 minutes, 10 minutes, or disabled by selecting cancel.

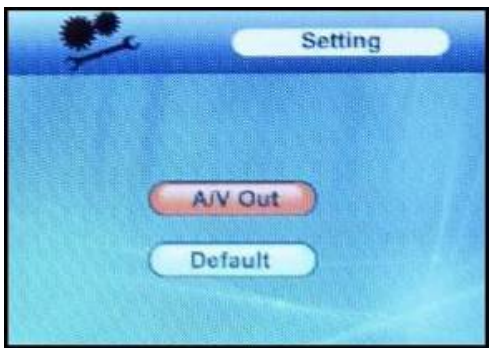
The monitor will go to black screen to save battery after the time you have set (1minute, 2 minutes, 5 minutes or 10 minutes).

It will be activated by pushing any button on the front panel of monitor or by higher sound detected by cameras.

If it is activated by pushing any button (except OK button) on front panel of monitor, the monitor will go back to black screen after the time you set if there is no sound trigger during that time.

If it is activated by higher sound (sound trigger), it will go back to black screen about 8 seconds after the last trigger.

Setting Menu



The Setting Menu contains 2 submenus:

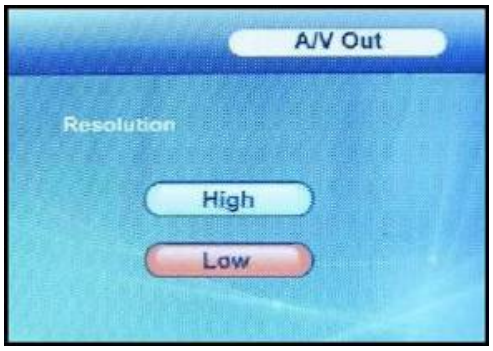
1. A/V Out – Changes the quality of the image sent to the A/V receiving device (i.e. TV or Monitor).

2. Default – Resets all menu settings to factory default.

NOTE: Resetting the receiver will not reset all camera pairing.

A/V Out Menu

The A/V Out menu option is used to adjust the resolution quality of the image sent to the viewing device (such as a TV, VCR or Monitor). Use the UP and DOWN ▼▲ arrows to select a resolution, and press OK to accept.



It is strongly recommended to use the “High” setting to ensure the best image reproduction on large screens – the default setting is “High”.

Setting Menu

The Setting option is used to reset the receiver to factory defaults – all menu settings will be reset. Use the UP and DOWN ▼▲ arrows to select YES, and press OK to accept.

NOTE: Camera pairing settings will NOT be affected by a reset. Cameras will remain paired with the receiver.

Camera Pairing

The system comes with camera(s) that have already been paired. These cameras will communicate with the receiver once powered on.

The pairing function assigns each camera to a different channel on the wireless receiver (up to 4 cameras), and is necessary for configuring additional cameras.

NOTE: It is highly recommended to pair the cameras to the receiver before permanently mounting the cameras.

1. Power on the camera by connecting the power adaptor or battery pack, and turning the switch to ON. The power LED for the camera should be ON.

2. Power on the receiver by connecting the power adaptor to the 9V Input on the side.

3. Press the MENU button on the receiver. Navigate to the Pairing menu option by pressing the ▼▲ keys to navigate. Press the OK button to open the Pairing menu.

4. Select a channel by pressing the UP and DOWN ▼▲ arrows. Press the OK button on the receiver to accept.

5. Press the Pair button located on the bottom of the receiver using a pen tip or paperclip.

6. A message will be displayed on the receiver screen.
The receiver will count down from 30~0 – you must press the Pair button on the camera during this time to successfully pair the camera.

If the button on the camera is not pressed, the receiver will return to the view screen, and no pairing will take place.

7. Press the Pair button on the back of the camera.

Once the camera has been paired, it will be immediately viewable on the receiver monitor.

Troubleshooting

If you have problems with the system, there is often a quick and simple solution. Please try the following:

Problem	Solution
No picture from a camera	1. Check all connections to the camera. Make sure the adaptor is plugged in. 2. Make sure that the cameras and receiver are both ON. 3. Make sure that the camera is in range of the receiver. 4. If using the battery adaptor, try replacing the batteries
The picture is dropping	1. Move the camera closer to the receiver. 2. Try repositioning the camera, receiver or both to improve the reception. 3. Adjust the monitor antenna to vertical position.
Audio problems	1. Ensure that the volume on the TV is on. 2. Make sure that there is sound within range of the camera microphone 3. If the unit emits a loud screeching noise (feedback), move the camera or receiver farther apart.
The picture is or has become choppy	The picture may become choppy when experiencing a lower frame rate (i.e. 10 frames per second vs. a higher 20 frames per second). 1. Try moving the camera closer to the receiver. 2. Remove obstructions between the receiver and camera. 3. Adjust the monitor antenna to vertical position.

The Picture appears to be grainy when using AV out function to view on a large screen TV/Monitor	The purpose of the AV output is for convenience only. When using with large screen TV/Monitor, the picture might be grainy as the camera limits video resolution to VGA (640x480 pixels). This is not a product defect. 1. For best performance use with TV/Monitor PIP (Picture in Picture) function. Check your TV/Monitor product manual to see if this feature is available on your TV/Monitor 2. View video on a smaller screen TV/Monitor

Appendix #1 - Receiver Specifications

Receiver	
Receiving Frequency Range	2.400GHz~2.482GHz
Data Rate	1.5 Mbps
Receiving Sensitivity	-81dBm
Demodulation Type	GFSK with FHSS
Resolution	H: 480 V: 240
Viewing Angle	H: 50° V: 50°
A/V Output / Resolution	VGA 640x320 / 15FPS, QVGA 320x240 / 30FPS
Alarm Sensitivity	80dB ±10% (1M)
Power Requirement	9V DC ±5%
Power Consumption	400mA Max without charging 800mA with charging
Operating Temp Range	14°F ~ 140°F (-10° ~ 60° C)
Operating Humidity	0 ~ 85% RH

Appendix #2 - Camera Specifications

Camera(s)	
Transmit Frequency Range	2.400GHz~2.483GHz
Data Rate	1.5 Mbps
Transmitting Power	14dBm (TYP)
Modulation Type	GFSK with FHSS
Transmitting Distance	150m (Line of Sight)
Image Sensor Type	1/4” Color CMOS Image Sensor
Effective Pixels	H: 640 V: 480
Image Processing	Motion JPEG
Image Resolution / Frame Rate	H: 640 V: 480 / 30FPS Max

AES	On 1/2000 ~ 1/20 sec
White Balance	Yes
AGC / Range	On / 0dB~24dB
Lens	4.9mm / F2.8
Viewing Angle (Diagonal)	60°
Minimum Illumination	2.5 LUX (IR Off), 0 LUX (IR On)
IR LED / Night Vision Range	8 LEDs / 840nm 5m (with IR LED)
Power Requirement	9V DC ±5%
Power Consumption	360mA MAX (with Night Light) 300mA (without Night Light)
Operating Temperature	14°F ~ 104°F (-10°C ~ 40°C)
Operating Humidity	0% ~ 85%
Environmental Rating	14°F ~ 140°F (-10° ~ 60° C)

FCC NOTE：

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.

FCC NOTE：

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.