

PORTABLE DIGITAL WIRELESS MONITORING SYSTEM

INSTRUCTION MANUAL



MODEL: CMD6638 (SEW-3030)

Features

- Digital wireless technology provides excellent image quality and clarity
- Interference free, secure and private signal
- Up to 300ft 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
- Two-way audio communication
- Camera side temperature display on monitor
- Lullabies

^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 10 feet / 3 meters ^③
- Built-in microphone and speaker
- Camera can be battery operated for true portable wireless operation
- Lullabies
- Temperature detection

^③ IR illumination range of 10ft./3m under ideal conditions. Objects at or beyond this range may be partially or completely obscured, depending on the camera application.

Receiver Features

- 3.5" 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
- Baby room temperature display

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. LCD Screen – Displays video from the camera.

2. Microphone – Receives sounds from the area near the receiver and transmits sound from the receiver to the camera (only when **TALK** Button is pressed down and held).

3. SLEEP Button – When the **SLEEP** 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 you 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 8 seconds after the alarm has completed. Press A,M,Sleep button cancel sleep mode.

4. 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*.

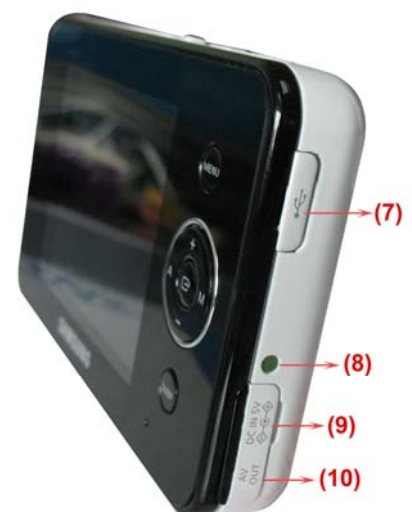
Menu Mode: Use the UP/DOWN/LEFT/RIGHT ▲▼◀▶ arrows to navigate in Menu Mode. Press the **OK** button to confirm the menu selection.

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

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

7. USB Port (Optional Use) – Connect the included USB cable to view video from the receiver on your computer. The software CD is included in the package for the operation on PC.

8. Charging Indication LED – Indicates the built-in battery is in charge when the LED is on.



9. DC 5V Power Input – Connect the included DC 5V power adaptor to power the receiver and/or charge the receiver battery (when the receiver is not in the cradle).

10. 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 on a DVD recorder/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.

11. ▶/■ Button – Press the button to start or stop the lullaby.

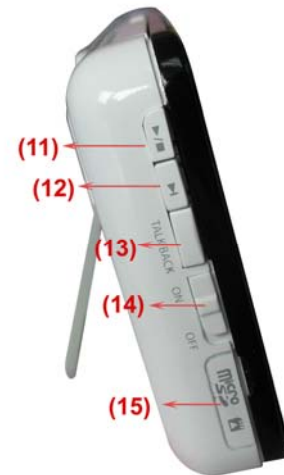
12. ▶▶ Button – Press the button to play next lullaby.

13. TALK Button – Press down and hold the button to talk back to the camera currently being displayed on the LCD screen.

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

15. SD Card Slot – Insert SD card to this SD card slot for both video and audio recording. (not available for this version)

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

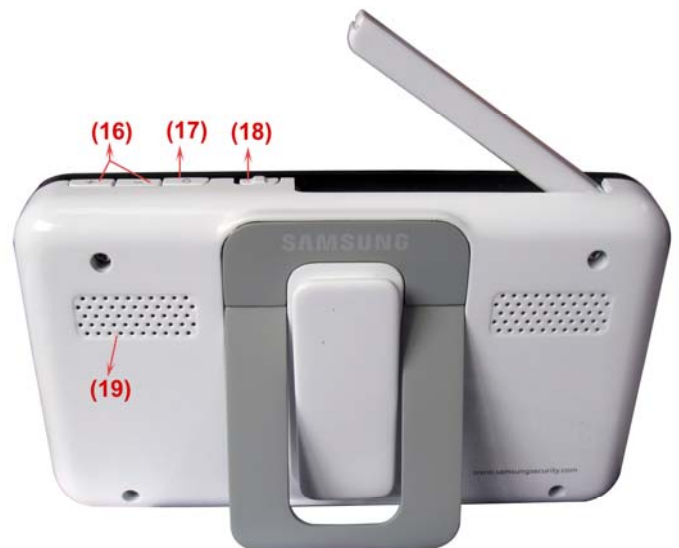


16. Alarm +/-Button – Press to increase or decrease the volume of the audio alarm.

17. Night Light Button – Press to remotely turn on/off the night light on the camera (for the camera currently being displayed on the LCD screen). When the night light is on, an indication icon will be displayed on the LCD screen.

18. 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.

19. Speaker – Produces the sound transmitted from the camera(s) *.



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 5V 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 several 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.

If you wish to view the receiver images on the computer, connect one end of the included USB cable to the receiver, and connect the other end of the cable to the USB port on the computer. (Need to install driver in the disc first).

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.

Note: Night Light is available only when the camera is paired to the receiver.

3. **Lens/IR LED Cover** – Infrared LEDs provide viewing in no/low light conditions
4. **Temperature Sensor**--- Use to make a temperature induction in the camera side
5. **Microphone** – Receives sounds for the area near the camera, and transmits sound from the camera to the receiver.

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



7. Charging Indication LED – Indicates the camera is in charge when the LED is red on

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

NOTE: The camera can also be powered using 3 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.



Side Controls

9. Sound Alarm Trigger – Adjust the sensitivity knob to set the sound alarm sensitivity. The receiver will beep to alert you when the sound is above a preset sound level. Adjust the sensitivity knob to increase or decrease the level.

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

11. Volume—Press to increase or decrease the volume of the audio alarm.

12. Camera ON and low battery indication—Turn on the camera, the LED light show green ; Low battery, the LED light is blinking.

13. Night vision sensor—Use to detect the illumination in the camera side.

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.

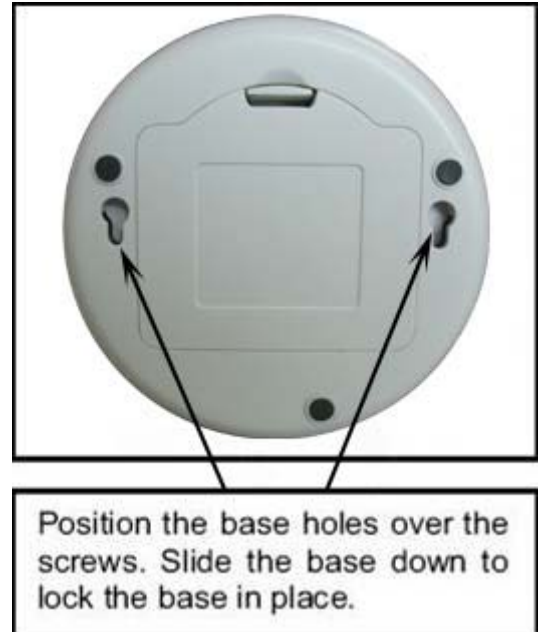
2. Mount the camera to the wall.

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.

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.



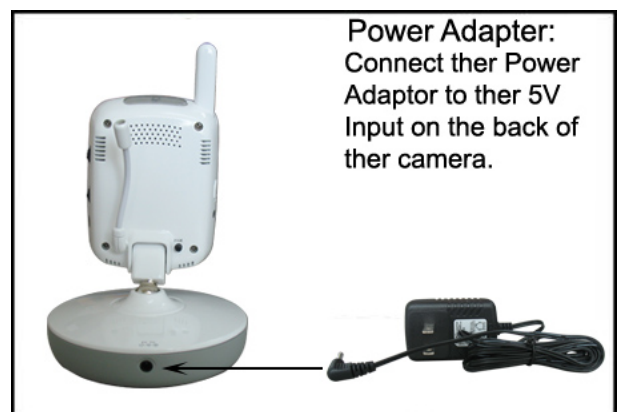
Connecting Camera Power

The camera can be powered either by using the provided power adaptor, or using batteries (requires 3 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 3 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.

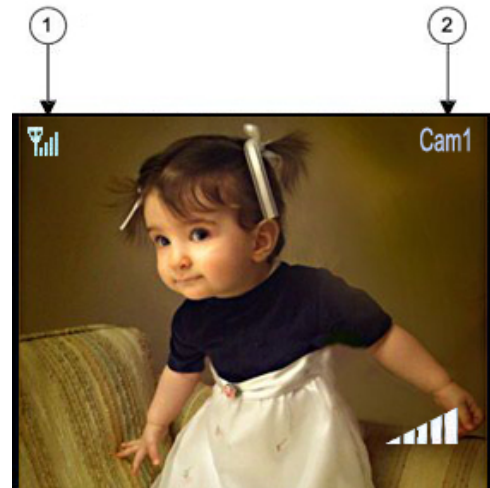


Viewing Mode

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.



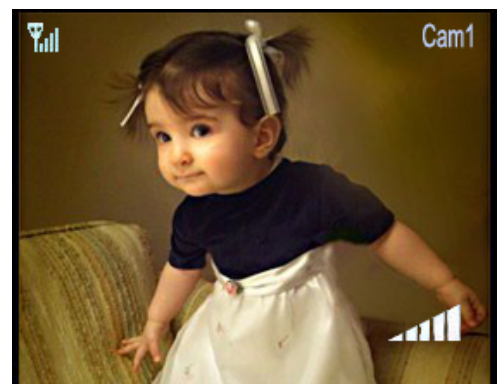
OUT OF RANGE: The "OUT OF RANGE" message means the receiver cannot access the camera. Please reposition the camera, or check the camera power.

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

2. Brightness– Adjusts the brightness of the image

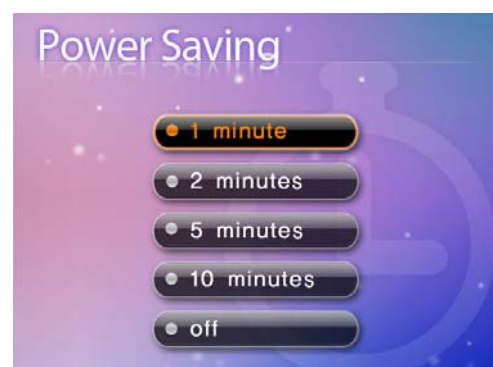
3. Zoom –Achieve large image on this function.

4. SETTING – In this submenu you can set auto mute, time alarm, select screen saver pictures, image times, trigger alert, temperature unit, temperature alert parameters, choose the TV system for A/V output, reset the receiver to factory defaults (erases all configurations) and pair between camera and monitor channel.



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 off.

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.

Brightness

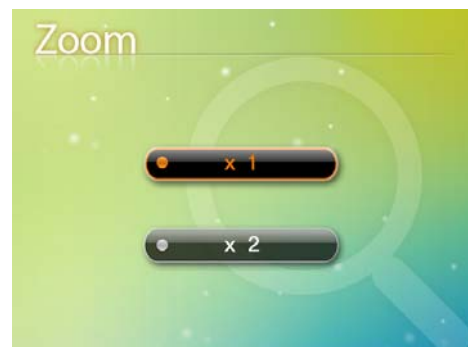
The Brightness menu is used to adjust the brightness of the image.

Use the UP and DOWN arrows to change the bar from DARKEST (bottom) to LIGHTEST (top). Press the OK button to confirm the change.



Zoom

The image can be set at original size or double size by selecting zoom x1 and zoom x 2. In double size mode, press the navigation buttons to view the parts out of the LCD screen.



Settings

The Setting Menu contains 10 submenus:

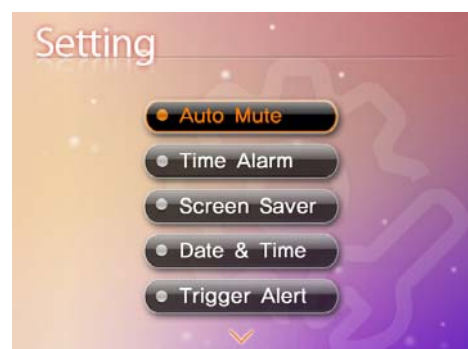
1). Auto Mute – Auto mute function is to automatically cut off the audio when there is only slight environmental noise on camera side. In the submenu you can switch on/off this function.

2).Time Alarm-Sets the time to awake you as alarm clock

3). Screen Saver – 5 pictures are stored in the system. You can select one picture to make it be shown on the LCD screen in scan mode. Or you can select Blank screen to make the LCD screen display nothing in scan mode.

4)Date& Time-sets the time value to show in the monitor screen

5)Trigger Alert- Select the alert manner while something be detected.



6) Temperature Unit—Choose the °C or °F for temperature unit

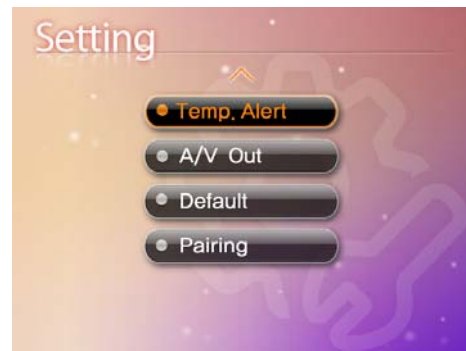
7). Temperature Alert – Sets the temperature alert range. Once the temperature on camera side is out of the range, the monitor will beep to alert you.

8). A/V Out – Chooses the TV system for A/V output.

9). Factory Reset– Choose **Yes** to reset the receiver to factory defaults. All menu settings will be reset.

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

10) Pairing– Use the pairing menu to add camera(s) to the receiver.

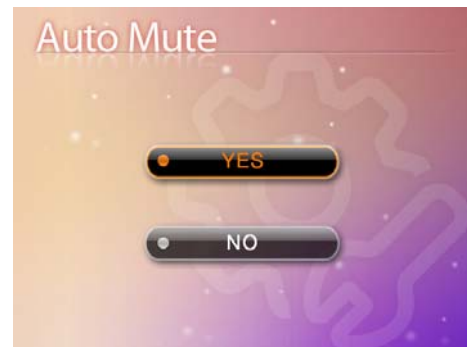


Auto mute

This function is to automatically cut off the audio when there is only slight environmental noise on camera side. Choose Yes to enable this function.

When auto mute function is enabled, the monitor audio will be cut off after 5 minutes when there is only slight environmental noise on camera side. seconds

In auto mute mode, the audio can be activated by real noise or higher sound detected on camera side. After last activation, the monitor audio will go back to off status when there is no sound trigger within 5 minutes.



Time Alarm

You can set the time value with HH,MM and select the ON or OFF to decide alarm or not.

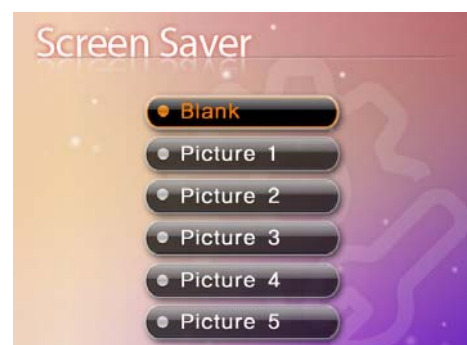
Use LEFT◀ and RIGHT ▶ arrows to select HH,MM ,then use the UP and DOWN ▼▲ arrows to set the time value. After successfully setting the time value , choose **ON** and then press the **OK** button to confirm the setting.

Selected ON, it can awake on the preset time. While choose OFF, the function will be shut down.



Screen Saver

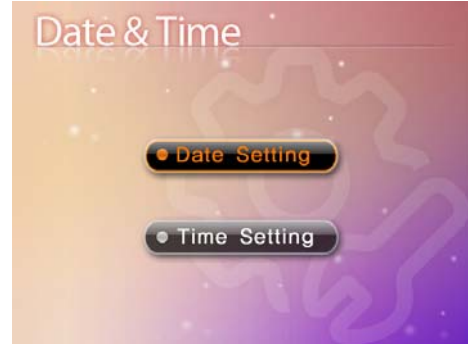
5 pictures are stored in the system. You can select one picture to make it be shown on the LCD screen in scan mode. Or you



can select **Blank screen** to make the LCD screen display nothing in scan mode.

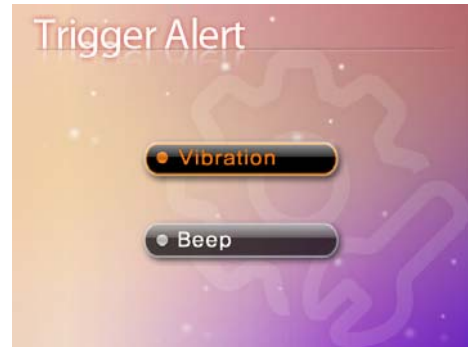
Date & Time

You can set the time value with YY MM DD HH MM to show in the monitor screen.



Trigger Alert

You can select the Vibration or Beep as the trigger alert manner while something has been detected by camera side



Temperature Unit

The °C or °F unit has exist to been selected to show the temperature in the monitor screen



Temperature Alert

The menu is to set the temperature range of audio alert. When the temperature on the camera side is out of the range, the monitor will beep to alert you.



Use LEFT ◀ and RIGHT ▶ arrows to select low temperature or high temperature, then use the UP and DOWN ▼▲ arrows to set the temperature value. After successfully setting the temperature range, choose **ON** and then press the **OK** button to confirm the setting.

Choose **OFF** to disable temperature alert function.

A/V Out

The menu is to choose the TV system and resolution when outputting the video/audio to TV, DVR/VCR or other viewing/recording devices.



Factory Reset

Choose **Yes** to reset the receiver to factory defaults – all menu settings will be reset.

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

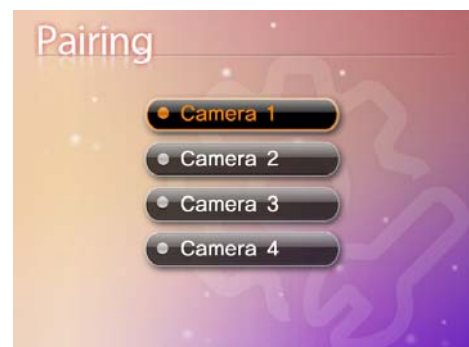


Pairing

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 it is necessary for configuring additional cameras.

Use the UP ▼ and DOWN ▲ arrows to 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 on this manual for details.

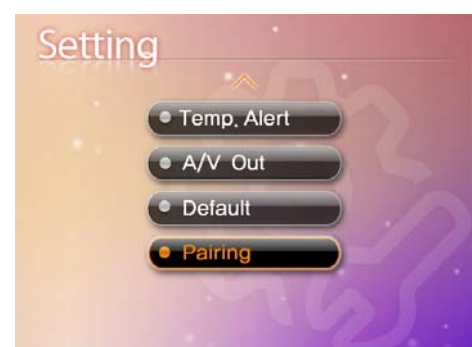


Camera Pairing

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 5V 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. 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.

6. 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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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	<p>The picture may become choppy when experiencing a lower frame rate (i.e. 10 frames per second vs. a higher 20 frames per second).</p> <ol style="list-style-type: none"> 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	<p>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.</p> <ol style="list-style-type: none"> 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~2.483.5GHz
Data Rate	2 Mbps
Receiving Sensitivity	-81dBm
Demodulation Type	GFSK with FHSS
Resolution	320 (RGB) x 240
Viewing Angle	H: 120° V: 100°
A/V Output / Resolution	VGA 640x480 / 10FPS, QVGA 320x240 / 25FPS
Power Requirement	5V DC ±5%
Power Consumption	400mA Max without charging 800mA with charging
Operating Temp Range	14°F ~ 104°F (-10° ~ 40° C)
Operating Humidity	0 ~ 85% RH

Appendix #2 - Camera Specifications

Camera(s)	
Transmit Frequency Range	2.400GHz~2.483.5GHz
Data Rate	2 Mbps
Transmitting Power	14dBm (TYP)
Modulation Type	GFSK with FHSS
Transmitting Distance	100m (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
White Balance	Auto
Lens	4.9mm / F2.8
Viewing Angle (Diagonal)	50°
Minimum Illumination	0 LUX (IR On)
IR LED / Night Vision Range	8 LEDs / 940nm 3m (with IR LED)
Power Requirement	5V 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%
Environment Rating	14°F ~ 144°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.

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.

(b) For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

NOTE: 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 or more 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.

To maintain compliance with FCC's RF exposure guidelines, this equipment should be installed and operated with minimum distance 20cm between the radiator and your body. Use only the supplied antenna.

This statement makes the operation at greater than 20cm clear. So not requires SAR Testing.