

# Portable Color LCD Digital Baby Monitor

CMD2027 User Manual



**Congratulations,  
you are now the proud owner of this Digital Baby Monitor System.**

## Features

- Digital Wireless Technology Provides Excellent Image Quality and Clarity
- Interference Free, secure and private signal.
- Up to 300ft Wireless Transmission Range\*
- Listen in with Exceptional Sound Clarity
- Two-way Audio

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

## Receiver Features

- 2.4" Color LCD Monitor /Receiver with Superior Image Quality
- Rechargeable Lithium Polymer Battery for True Portability
- Sound trigger alarm
- Low Power indicator

## Camera Features

- Night Vision allows for low light viewing up to 15 Feet/4.5meters\*\*
- Built-in Microphone
- Camera can be battery operated for true portable wireless operation\*\*\*
- Built-in speaker to hear from monitor

\*\*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.

\*\*\*The rechargeable battery pack is optional at extra cost.

The Digital Wireless signal transmission type used in this digital unit is also known as FHSS-Frequency Hopping Spread Spectrum. This type of signal is highly resistant to deliberate jamming as it generates a channel hopping sequence using an algorithm generated by the receiver system.

## Getting Started

The system comes with the following components:



**1x Wireless Receiver**



**1x Receiver Cradle**



**1x Wireless Camera**



**1x Power Adapter for Receiver**



**1x Power Adapter for Camera**

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

# Wireless Receiver

## Front Controls

1. **Receiver Antenna**-Receives & Sends signals from or to the Camera.

2. **Power /Low Power Indicator**-The left Green LED indicates the Receiver Power is ON or OFF. The Red LED's flash to indicate the power is low.

3. **LCD Screen**-Displays video from the Camera.



4. **P/S Button**-When the P/S button is pressed, the LCD Screen is turned off. The P/S 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, the Receiver will beep and display the Camera. The receiver will return to P/S mode about 5 seconds after the Alarm has completed. Press P/S while the screen is off, or press any other key in the front panel while the screen is on will cancel this mode.

5. **Navigation Controls**-Use the controls in Viewing Mode.

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

Press the UP/DOWN buttons to Increase or Decrease the volume.

Press the LEFT/RIGHT buttons to decrease or increase the EV.

6. **Talk**-Press and hold the button in Viewing Mode to talk with the baby.

7. **Microphone**-Receives sounds for the area near the receiver, and transmits the sound from the receiver to the camera.

8. **Speaker**-Produces the sound transmitted from the Camera.

9. **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.

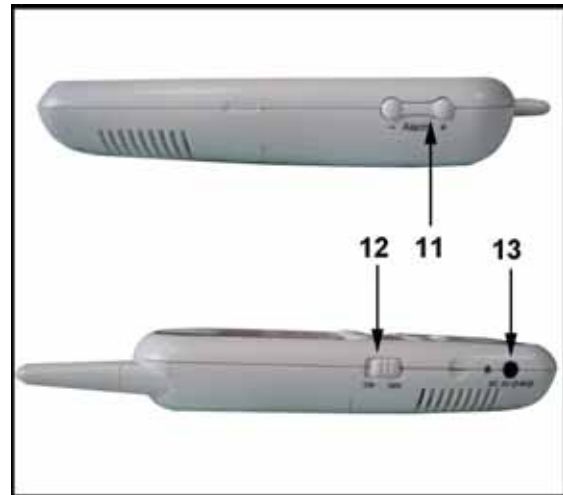
## Bottom Control

10. **Pair Button**-Press the Pair button when pairing the Receiver with a Camera.



## Side Controls

11. **Alarm +/-Button**-Press to increase or decrease the volume of the audio alarm.
12. **Power Button**-Slide to turn the Receiver ON or OFF.
13. **DC 5V Power Input**-Connect the included DC5V Power Adapter to power the receiver and/or charge the Receiver battery (When the receiver is not in the Cradle).



## Receiver Cradle Inputs

14. **DC 5V Power Input** –Connect the DC 5V Power Adapter (included) to the Receiver Cradle to power the receiver and/or charge the Receiver (when docked).



## Wireless Receiver Installation

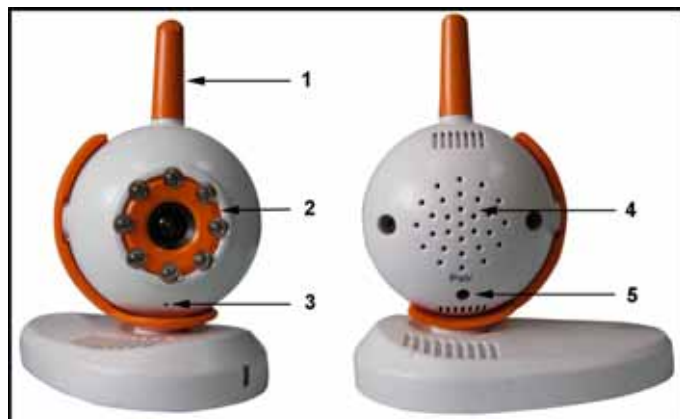
Determine if you will be using the Receiver Cradle, or connecting the cables directly to the receiver before installation:

1. Place the Receiver Cradle or Receiver in a place that will have clear reception with your camera.
2. Plug the AC adapter 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 **6hours** 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 charging process .After initial charge, charge as required.

## Camera

### Front & Back

1. **Camera Antenna**-Receives & Sends signals to or from the Receiver.
2. **Lens/IR LED**-Infrared LEDs provide viewing in no/low light conditions.



3. **Microphone**-Receives sounds for the area near the camera, and transmits sound from the Camera to the Receiver.

4. **Speaker**-Produces the sound transmitted from the receiver.

5. **PAIR Button**-The pairing button is located on the back of the camera behind the stand mount

6. **DC 9V Power**-Connect the DC 9V Power Adaptor to the Camera.

**NOTE:** The camera can also be powered by the optional rechargeable battery pack. If the camera is plugged in with the AC adapter, the battery pack will not be used. the battery pack is intended for short term, potable camera use.



## 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 places in the location where it will be used most of the time.

## Installation Warnings

Aim the Camera 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 camera where there are thick walls, or obstructions between the Camera and the Receiver.

## Night Vision

This camera has built-in IR LEDs, which provides the camera with ability to view images in no/low light conditions. It is important to use the provided power adapter (and not the battery pack) 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.

Adjust EV to get the best image while the IR LEDs is on.

## Sound Trigger

When the sound detected by the camera is above preset level\*, the monitor will be triggered to alarm. This will happen in two circumstances, 1) the monitor is in P/S mode, 2) the monitor is in MUTE\*\* mode.

\*The level is preset by manufacturer, can not be adjusted by users.

\*\*When the sound detected by camera is under a preset level(preset by manufacturer only, a very low level), the monitor will shut down the speaker so that you won't get disturbed by environmental noise. This is MUTE mode.

## Install the Camera

1. Carefully unpack the Camera.
2. Mount the camera to the wall:  
Mark the position of the screw holes on the wall.  
Drill holes and insert 2 screws.  
Firmly attach the camera to the wall by placing the stand over the installed screws and pushing the base downwards to secure.

**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.



## Connecting Camera Power

The Camera can be powered either by using the provided Power Adapter, or using rechargeable battery pack(not included).

**NOTE:** Wireless camera requires 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 adapter to prevent interruptions in the image, as using battery power is intended as a temporary power solution.

## Camera Positioning

The Camera can be placed on a flat surface, or wall mounted. The versatile stand allows for several different mounting options.

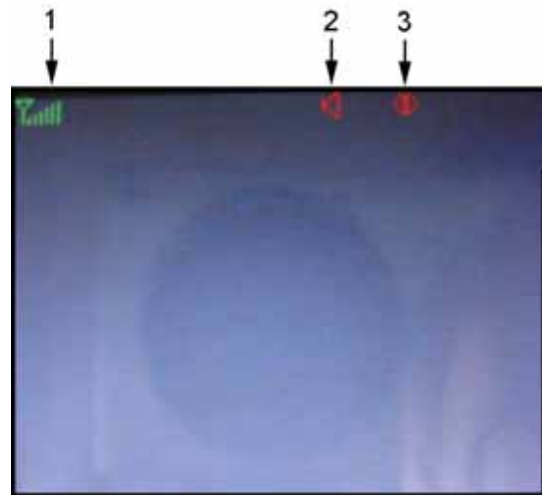


## Viewing Mode

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.

2. **Talk Indicator**-Press Talk button in viewing Mode, this indicator will show up, then you can talk.

3. **Night vision indicator**-when the Night vision of camera turns on, it will show up.



## Low Signal/No Signal Warnings

When the Camera is positioned too far from the Receiver, warning messages will be displayed:

**NO SIGNAL:** The “No Signal” message means the receiver cannot access the camera. Please reposition the camera, or check the Camera power.



## Camera Pairing

The System comes with camera that has already been paired. This camera will communicate with the receiver once powered on.

**NOTE:** It is highly recommended to pair the Camera to the Receiver before permanently mounting the Cameras.

1. Power on the Camera by connecting the Power Adapter or Battery Pack. 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. Turn on the receiver.

3. Press the PAIR button located on the bottom of the Receiver using a pen tip or paperclip.





4. 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.



5 .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 your System, there is often a quick and simple solution. Please try the following:

Problem	Solution
There is no picture from a Camera.	Check all connections to the Camera. Make sure the adapter is plugged in. Make sure that the Camera and receiver are both ON. Make sure that the camera is in range of the Receiver. If using the battery pack, try charging the pack.
The picture is dropping	Move the camera closer to the receiver. Try repositioning the camera, receiver or both to improve the reception
There are problems with the Audio	Make sure that there is sound within range of the Camera Microphone 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). Try moving the camera closer to the receiver. Remove obstructions between the Receiver and Camera.

## Specifications

<b>Receiver</b>	
Receiving Frequency Range	2.405GHz~2.470GHz
Data Rate	4 Mbps
Receiving Sensitivity	-81dBm
Demodulation Type	GFSK with FHSS
Resolution	H: 480 V: 240
Viewing Angle	H: 50° V: 50°
A/V Output / Resolution	QVGA 320x240 / 25FPS
Alarm Sensitivity	80dB ±10% (1M)
Power Requirement	5V DC ±5%
Power Consumption	400mA Max without charging, 800mA with charging
Operating Temp Range	14°F ~ 140°F / -10 ~ 60
Operating Humidity	10% ~ 85% RH
<b>Camera</b>	
Transmit Frequency Range	2.405GHz~2.470GHz
Data Rate	4 Mbps
Transmitting Power	14dBm (Max)
Modulation Type	GFSK with FHSS
Transmitting Distance	100m (Line of Sight)
Image Sensor Type	1/6" Color CMOS Image Sensor
Effective Pixels	H: 640 V: 480
Image Processing	Motion JPEG
Image Resolution / Frame Rate	QVGA / 25FPS Max.
AES	On 1/2000 ~ 1/20 sec
White Balance	Yes
AGC / Range	On / 0dB~24dB
Lens	2.9mm / F1.8
Viewing Angle (Diagonal)	61°
Minimum Illumination	2.5 LUX (IR Off), 0 LUX (IR On)
IR LED / Night Vision Range	8 LEDs / 840nm 4.5m (with IR LED)
Power Requirement	9V DC ±5%
Power Consumption	360mA MAX (IR on), 300mA (IR off)
Operating Temperature	14°F ~ 104°F / -10°C ~ 40°C
Operating Humidity	0% ~ 85%
Environmental Rating	14°F ~ 140°F / -10° ~ 60° C
Dimensions(W x D x H)	2.6" x 5.7" x 3.3" / 66mm x 145mm x 84mm

## **FCC/IC Statement**

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.**

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device."

This Class [B] digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada.