

User's Manual

900MHz Wireless CMOS Color Camera Kit
(Day/Night & Weather-proof)

MODEL: WLC-102



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EU Environmental Protection

electrical products Waste should not be disposed of with household trash. Please recycle at your local recycling facility. Check with your Local Authority or retailer for recycling advice.



INTRODUCTION

Thank you for purchasing this wireless camera kit. This product works at ISM-900MHz frequency band, which could be legally used worldwide without permission. We feel confident that you will be pleased with the quality and the features of this product.

The camera features a CMOS image sensor and a transmitting module to take in images and transmit them wirelessly.

The receiver features a receiving module to receive and output AV signals.

Notice

Notice: This product may cause interferences with other wireless equipment that operates at 900MHz ISM band. Please change the angle of receiver antenna and/or move the receiver to different locations to eliminate the interference.

Product Safety: This camera will emit electromagnetic wave, just like other wireless products. But its transmitting power is less than other wireless products, such as mobile phones. The 900MHz wireless camera meets the wireless frequency security standards and the appropriate working metrics recommended. These standards and metrics went through certification by academic institutions and represent the research results of the science workers who continuously explore and renovate the related fields. Consequently, it is our belief that our products are safe for use.

Approval Information

All our products have met the requirements for approval by the FCC or CE, and have been given the FCC or CE certification. They are hereby authorized to bear FCC or CE mark.

FCC information

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.

Changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

EU Authentication Statement

This product complies with all appropriate EU standards including Low Voltage Device Directive 73/23/EEC; EMC Directive 89/336/EEC and R&TTE Directive 1999/5/EC. It passed the required product tests administered by the appropriate authorities and is authorized to bear CE Mark.

Restrictions

DO NOT use the product to monitor activities that are part of people's private lives. We do not intend or make this product for such a purpose. Follow your federal and local laws.

DO NOT place the product too close to any medical equipment due to the following reasons:

1. Radio waves may potentially cause medical electrical equipment malfunction, resulting in accidents.
2. Radio waves may potentially affect the heart pacemaker and result in respiratory disturbances. You should place the product at least 60 feet away from the heart pacemaker.

DO NOT use the product to carry out any unlawful activities.

Maintenance

1. Make sure there is enough ventilation;
2. Do not shake or strike the product;
3. Keep it dry and dust-free and avoid direct exposure to sunlight;
4. Do not place the product near any magnetic objects;
5. Do not place the product in an area where there is a constant change of temperature or humidity;
6. Keep product away from heat sources such as an electric heater;
7. Do not use the camera near corroding chemicals;
8. Do not use the camera near water, e.g. a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool, etc.;
9. Do not use the camera in a place that is enclosed by metal. Any place that is enclosed by metal, such as an elevator or a cabin, may block the electromagnetic wave, and result in the failure to receive signals;
10. Please follow local government's environment protection policies;
11. Please unplug the power when not in use;
12. Do not disassemble or repair the camera or receiver; doing so may cause damages to the product.

If the product is used with exposed electric line or in a harmful environment, it may seriously affect its durability.

PRODUCT

Package Contents

This package comes with the following items. The following items will be found inside the box.

- ① Wireless CMOS camera × 2
- ② Wireless receiver × 1
- ③ Remote control × 1
- ④ Power adapter × 3
- ⑤ AV cable × 1
- ⑥ Mounting hardware × 2
- ⑦ User's manual × 1

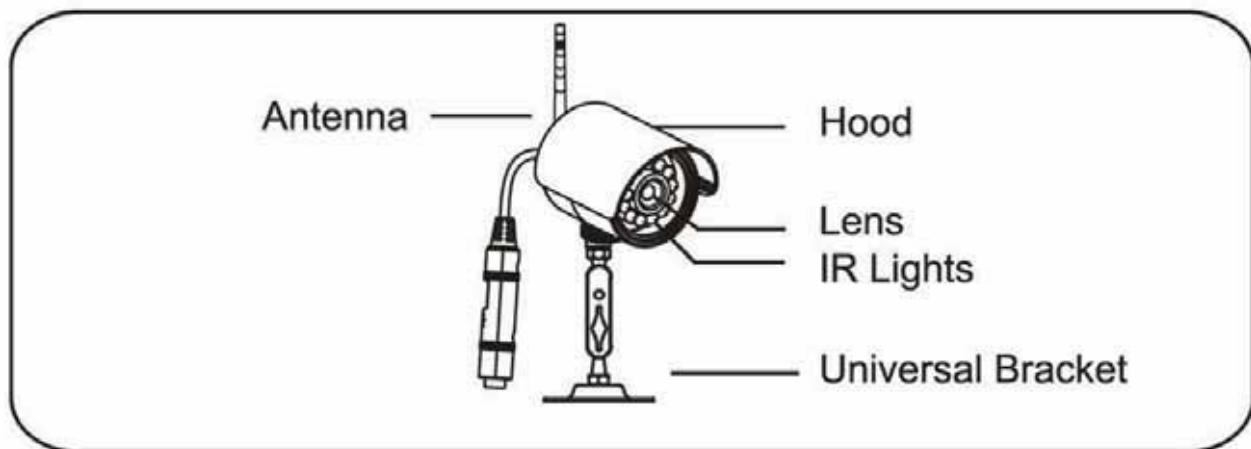


Note:

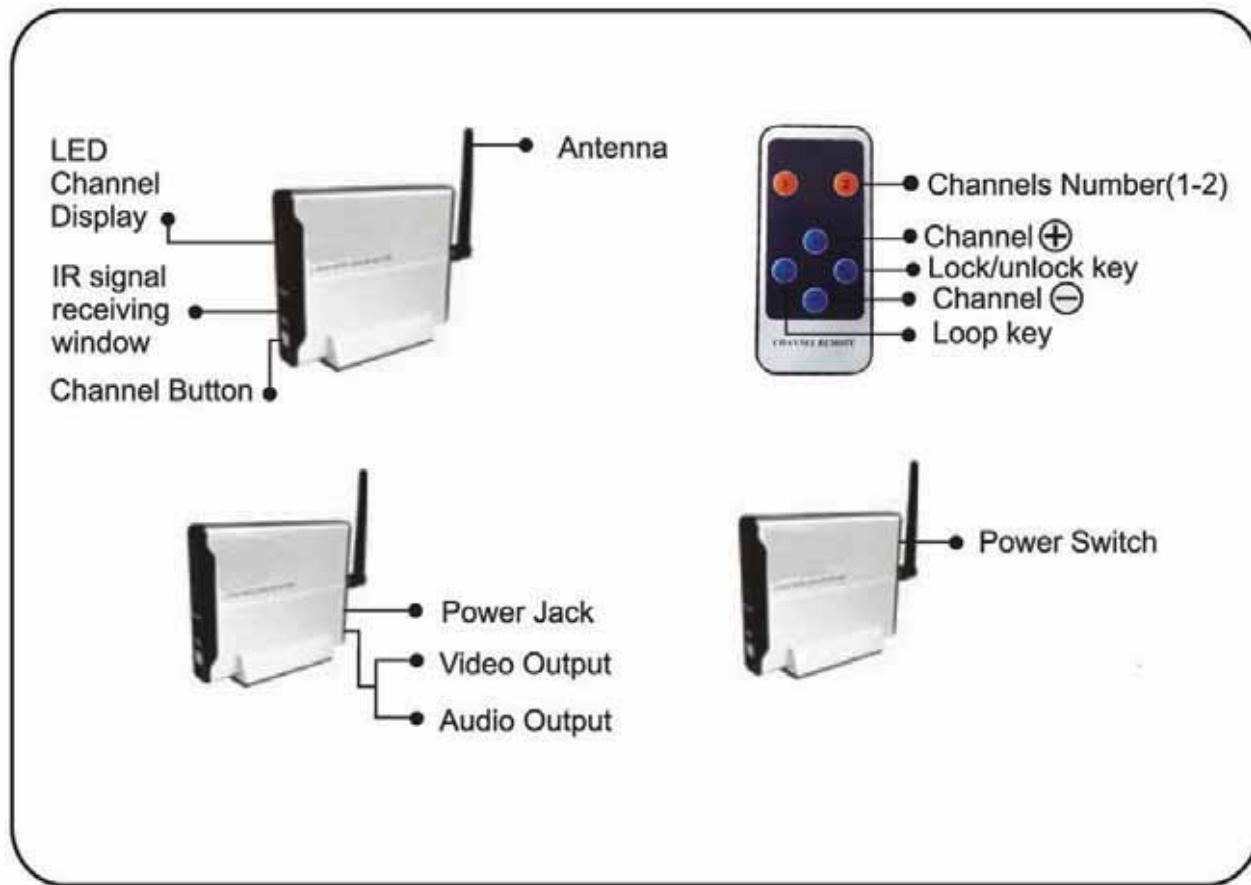
The pictures may be slightly different from the actual items.

Feature Locations

1. Camera



2. Receiver



Adapter

Our adapter conforms to the authenticated AC adapter. It should bear one of the following marks:



UL Mark

American power supply authentication



SAA Mark

Australia power supply authentication



CE Mark

European Union power supply authentication



PSE Mark

Japan power supply authentication



GS Mark

German power supply authentication



CCC Mark

China power supply authentication

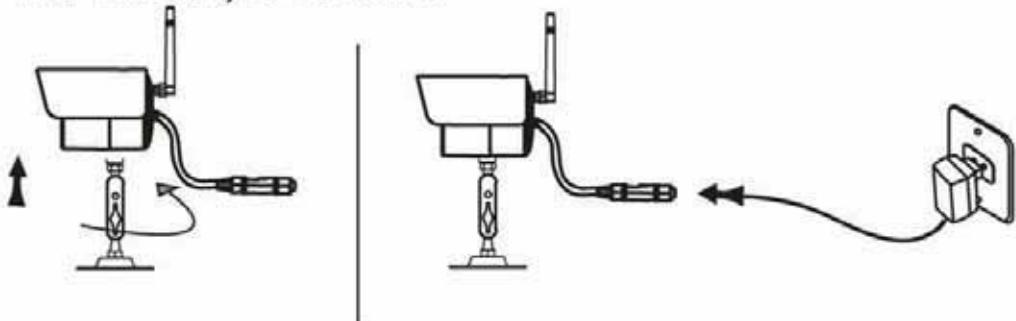
Note:

When using the power adapter, make sure the rating voltage on it is compatible with the device to avoid potential damages from incorrect usage of power supply

INSTALLATION & USAGE

Installation

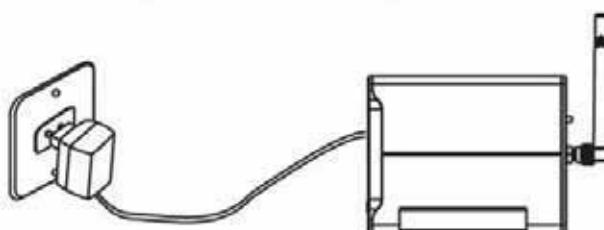
1. Install the universal bracket to camera and connect the power jack (DC 12V 500mA) to camera.



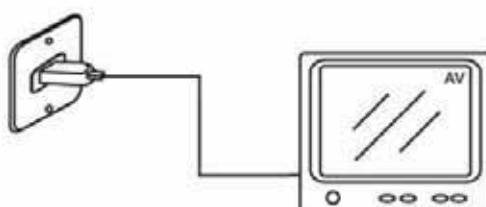
2. Connect the receiver to your TV with AV cable (yellow for video and red for audio).



3. Connect the adapter (DC 8V 300mA) to the receiver. Slide the power switch to ON position. The power indicator lights up.



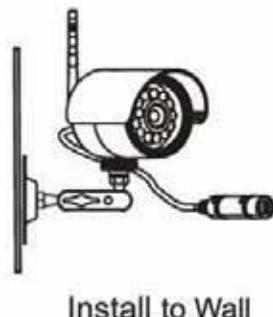
4. Power on the monitor/TV and select AV mode.



5. Mount the camera to desired location.



Desktop



Install to Wall

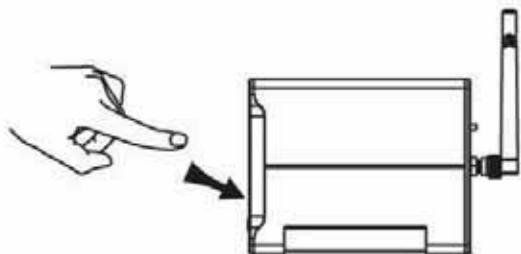


Install to Ceiling

Note:

Please refer to **Install the Camera** section on page 9~10 for more details.

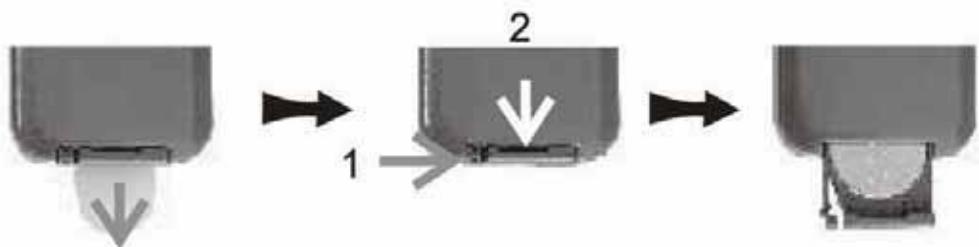
6. Set the channel of receiver same as that of camera by pressing the channel button continuously, until pictures are displayed on the monitor/TV.



7. Adjust the brightness, contrast and color of the monitor/TV and the direction of the receiver's antenna for best effect.



8. Remove the battery insulation space from the Remote Control; pull out the battery tray and then load one button cell (CR 2025) properly. You can remote control the receiver with the remoter control.

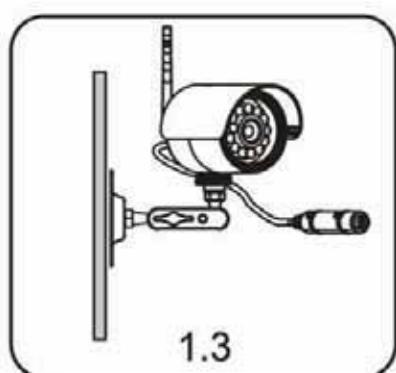
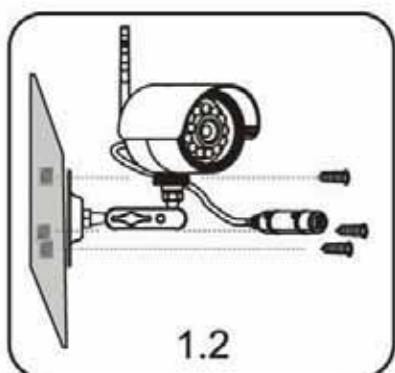
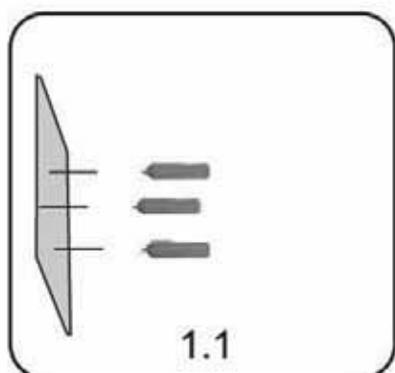


Install the Camera

Please follow the steps below if you want to Install the camera to a wall or ceiling.

1. Install to Wall

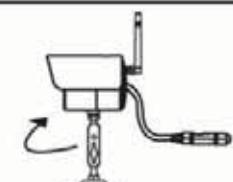
- 1.1 Drill three holes on the mounting surface in line with the holes in the universal bracket; Insert three screw anchors into the holes.
- 1.2 Align the holes on the bracket and the mounting surface, and drive three screws through the bracket into the anchors.
- 1.3 Adjust the angle of your camera.



2. Install to Ceiling

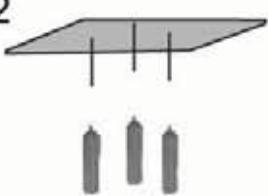
- 2.1 Detach the universal bracket from the camera and then install it to the camera top to prevent upside down pictures;
- 2.2 Drill three holes on the ceiling in line with the holes in the universal bracket; Insert three screw anchors into the holes.
- 2.3 Align the holes on the bracket and the ceiling, and drive three screws through the bracket into the anchors to fasten the camera.
- 2.4 Adjust angle of your camera for surveillance.

2.1

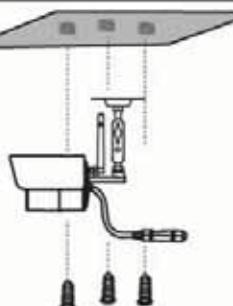


Unscrew the Bracket

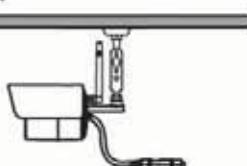
2.2



2.3



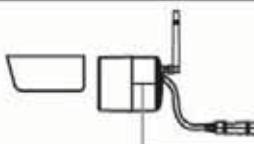
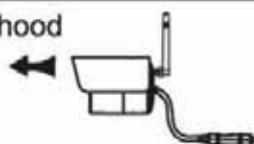
2.4



Note: The hood can be removed from and re-attached to the camera to allow for easy installation:

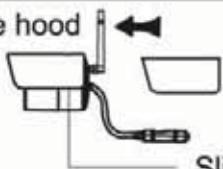
1. Slide the hood away along the groove from camera.
2. Attach the hood to the rear of the camera by putting the hood into the groove and sliding it until the holes on the hood align with the holes on the camera.

Remove the hood



Slide way

Re-attach the hood



Slide way

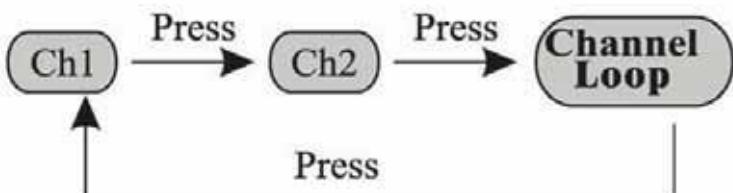
Night Vision

The built-in 27 Infra-red lights in camera provide 45ft range night vision for 24hrs surveillance. The Infra-red lights will be automatically activated at night or in dark places. The image will turn Black & White (monochrome) in a night vision setting.

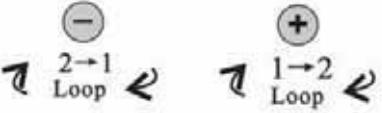


Receiver Mode Setup

Channel Button on Receiver



Infrared Remote Controller

Keys	Functions	Operation & display
1 ~ 2	Individual channel selection	One number displays in response to each press
– +	Channel decrement or increment	
1.  2. 1 ~ 2 3. 	Channel scanning for specific channels	1. Press loop key once to enable setting, “!_” flashes; 2. Press keys 1~2 to input one or two channels to be looped; 3. Press loop key again to confirm and start scanning.
1.  2. 	Channel scanning for all channels	1. Press loop key once to enable setting, “!_” flashes; 2. Press loop key again to confirm and start scanning.
	Lock or unlock other keys on the remote control	In normal mode, press once to lock, “!_” flashes; press again to unlock, “E” flashes.

Notes:

- Press ① ~ ② to select one channel.
- Double press ③ to automatically scan channels.
- To quit the channel scanning, press any key ① ~ ② or ④ ~ ⑤.
- To lock the remote control against the accidental touch or interference from other IR remote control, press ⑥ once after the setting is done, and the icon “” displays; when it is locked, other keys on the remote control will not work; to unlock it, just press ⑥ again, and the icon “” appears.

SPECIFICATIONS

Items	Value
Transmission Frequency	ISM 905MHz 924MHz
Transmission Distance	300ft (Without Block)
Operating Temperature	-10°C~+50°C /+14°F~+122°F
Storage Temperature	-20°C~+60°C /-4°F~+140°F
Storage Humidity	85%RH
Camera	Imaging Sensor
	1/4-inch CMOS
	CMOS Total Pixels
	656x406 (NTSC)
	Antenna Type
	50 ohm
	Horizontal Resolution
	420 TV Lines
	Minimum Illumination
Receiver	<2(IR OFF)/0(IR ON)LUX
	Night Vision Range
	45ft
	Transmission Power
	10mW (CE)/2mW (FCC)
	Power Supply
	DC 12V 500mA
	Consumption Current
	120mA(IR OFF) 250mA(IR ON)
Receiver	Demodulation Type
	FM
	Antenna
	50 ohm SMA
	Receiving Sensitivity
	≤ -85dBm
	Video Output Level
1Vp-p@75ohm, S/N>38dB	
Audio Output Level	
1Vp-p@600ohm	
Power Supply	
DC 8V 300mA	
Consumption Current	
250mA	

* Specifications are subject to minor change without prior notice.

TROUBLESHOOTING

If you have experienced any problem during operation, please check and try the following before presuming it is a defective product or consulting an experienced technician.

Trouble	Possible Solution	
 No image	 No sound	<ol style="list-style-type: none">1. Check the power supply.2. Make sure that both the camera and receiver are connected with power adapter and powered on.
 Snowflakes on image	 Noisy sound	<ol style="list-style-type: none">1. Check the receiver channel setting to make sure that the channel is set to the same as the camera's.2. Make sure that the receiver and camera are within range.3. Move the receiver to a different but close-by location for better reception.
 Blurry image	 Normal sound	<ol style="list-style-type: none">1. Make sure that the receiver and camera are within range and there is no barrier between the receiver and the camera.2. Move the receiver to a different but close-by location for better reception.
 No color	 Normal sound	TV (monitor) and camera does not match. (NTSC or PAL).
 Normal image	 Noisy sound	Interference with other devices nearby; Remove or turn off such devices.



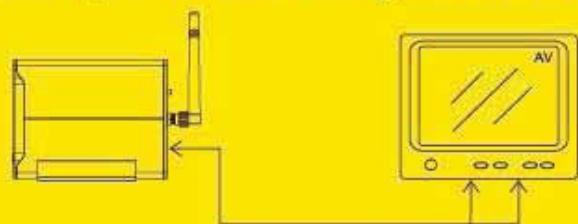
QUICK START CARD

Installation

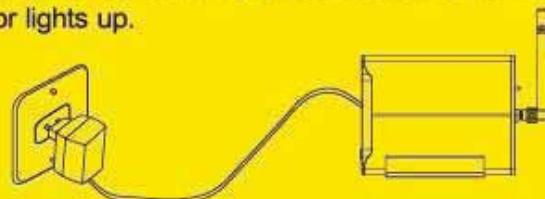
1. Install the universal bracket to camera and connect the power jack of adapter (DC 12V 500mA) to camera.



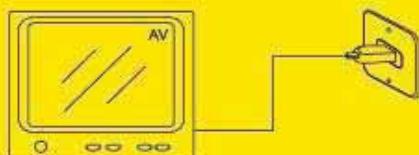
2. Connect the receiver to your TV with AV cable (yellow for video and red for audio).



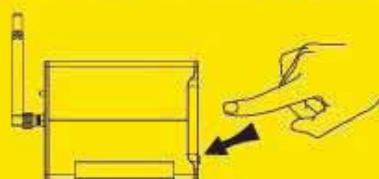
3. Connect the adapter (DC 8V 300mA) to the receiver. Slide the power switch to **ON** position. The power indicator lights up.



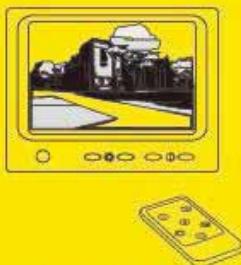
4. Power on the monitor/TV and select **AV** mode.



5. Check the camera's frequency. Press the channel button continuously to set the receiver's channel same as that of the camera. The monitor/TV receives pictures.



6. Adjust the brightness, contrast and color of the monitor/TV and the antenna's direction of the receiver for the perfect effect.

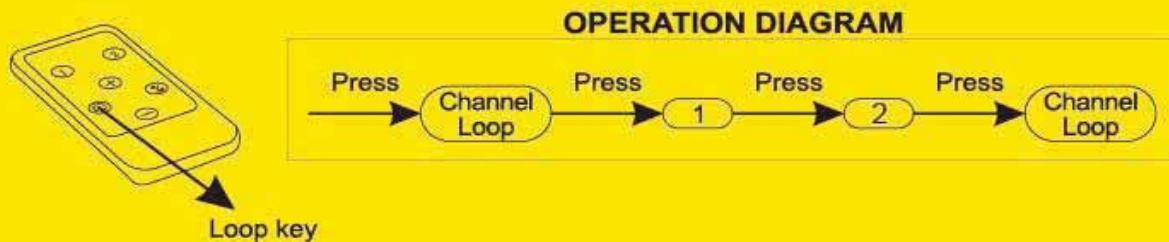


7. Setup the wireless receiver with included remote control:

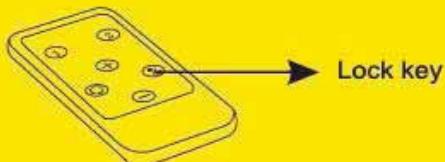
(a) Remove the insulated plastic sheet from the remote control.

(b) Press loop key (the key with three circled arrows) on the remote control, then press "1" and "2" key, press loop key again.

The receiver will be on the "loop" mode, and shows the cameras at three seconds' intervals.



8. Press the lock key (the key with a lock symbol) to lock the channels.



9. To reset the wireless receiver, just turn off the power switch and turn it on again. And go through above Step 7 to Step 8 again.

Function:

- Keep an eye on baby or elderly
- Domestic surveillance
- Small business surveillance
- Keep an eye on animals and birds without disturbing them

Note:

Check your local and state laws regarding the usage of this product; any unlawful usage will be the sole responsibility of the users. Manufacturer and the distributors will assume no responsibility or liability over any unlawful usage and conduct by the users.