

English

User's Manual

2.4GHz Color Wireless Camera Kit
Night Vision
MODEL:501LA



Please read this manual carefully and thoroughly before any attempt to install and operate this product and retain it for your future reference.

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EU Environmental Protection

Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.



INTRODUCTION

Thank you for purchase this wireless camera kit. This product works at ISM-2.4GHz frequency band, which could be legally used worldwide without permission. We feel confident that you will be pleased with the quality and features of this product.

The camera builds in one CMOS image sensor and one transmitting module transmits the captured image wirelessly.

Notice

Notice: This product may cause interferences with other wireless equipment that operates at 2.4GHz ISM band. Please turn off one of the equipments to eliminate the interference.

Product Assurance: This camera will emit electromagnetic wave, just like other wireless products, however, its transmitting power is less than other wireless products such as mobile phones. The 2.4GHz wireless camera meets wireless frequency security standards and recommended indexes while working. These standards and indexes are certificated by academic organization and represent the cogitative research of the scientific workers who continuously explore and annotate the involved fields. So we believe that our products are safe for customers.

Approval Information

All our products meet the requirements of approval FCC or CE, and obtained the FCC or CE certification. They are authorized to bear FCC or CE mark.

FCC

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 the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the 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
- (2) this device must accept any interference received, including interference that may cause undesired operation changes and modification not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commissions rules.

CE

This product complies with standards including **Low Voltage Device Directive 73/23/EEC**; **EMC Directive 89/336/EEC** and **R&TTE Directive 1999/5/EC**. It passed the subject tests by the authority concerned and is authorized to bear **CE** mark.

Restrictions

1. DO NOT use this product to violate one's privacy. Monitoring one's activities without consent is illegal and this product is not designed and manufactured for such purpose;
2. DO NOT put this product near any medical equipment. Radio waves might potentially cause breakdown of electrical medical equipment. So this product should be placed at least 1 feet away from any heart pacemaker. Radio waves might potentially influence heart pacemaker and lead to respiratory disturbance;
3. DO NOT use this product for any illegal activities. We will not be responsible for any consequences of illegal acts committed by the user.

Maintenance

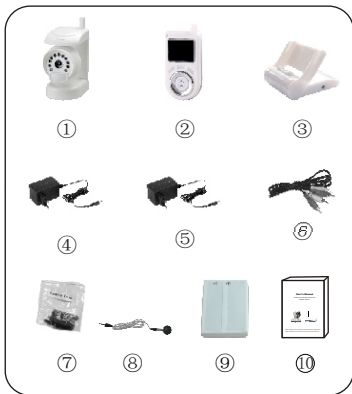
1. Ensure the sufficient ventilation space is available;
2. Do not shake or strike the product;
3. Keep it dry and dustless and avoid exposing it to direct sunlight;
4. Do not place product near any magnetic objects;
5. Avoid putting the product in places where the constantly changed temperature or humidity occurs;
6. Keep product away from heat sources such as electric heater;
7. Do not use the camera near aggressive chemicals;
8. Do not use this camera near water, for example, near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool and the like;
9. Do not use the camera in the places which are enclosed by metal. The surrounding metal like lifter, cabin, may shield the electromagnetic wave, and result in failure of signal reception;
10. Please obey the local government's environment protection policy;
11. Please turn off the power when left unused;
12. Do not disassemble or repair the camera or receiver; doing so might cause damages to the product.

PRODUCT

Package Contents

This package comes with the following items. Please check whether they are all included in the packaging box, if any item is missing, contact the retailer for replacement.

- ① 2.4GHz Wireless Camera × 1
- ② 2.4GHz Wireless Receiver × 1
- ③ Base Charger × 1
- ④ Adapter for Camera (DC 8V) × 1
- ⑤ Adapter for Receiver (DC 5V) × 1
- ⑥ AV Cable × 1
- ⑦ Mounting Hardware × 1
- ⑧ Earphone × 1
- ⑨ Li-battery × 2
- ⑩ User's Manual × 1

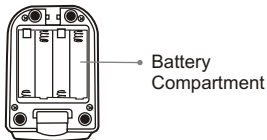
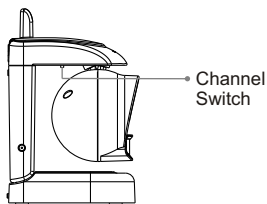
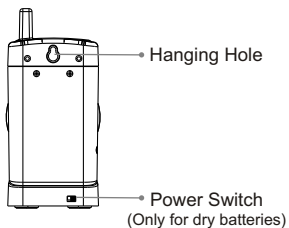
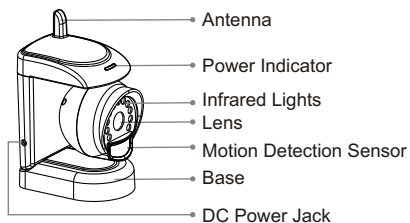


Note:

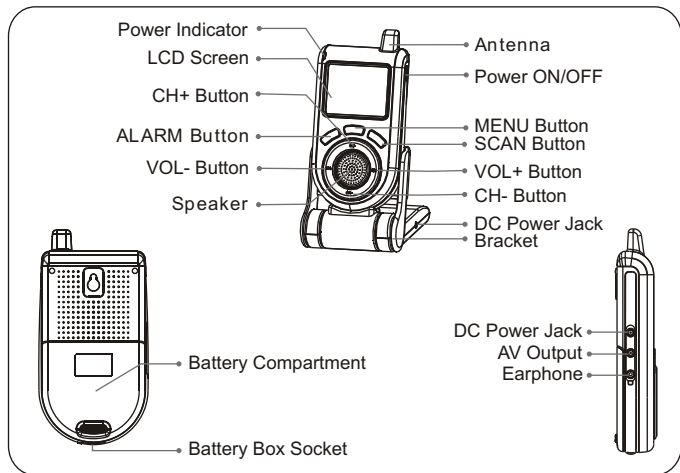
The pictures may vary from the actual objects.

Feature Locations

1. Camera



2. Receiver



Adapter

This product always conforms to the authenticated AC adapter. The adapter should be marked one of the following:



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



BS Mark

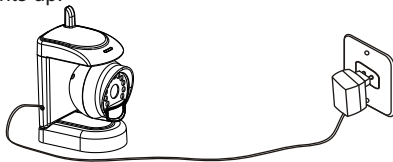
British power
supply authentication

Note: When using the power adapter, make sure the rating voltage is compatible with that of the device to avoid potential damages resulting from incorrect usage of power supply.

INSTALLATION & USAGE

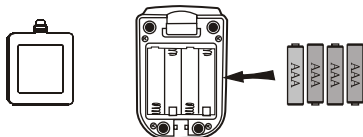
Installation

1. Connect the camera to the adapter (DC 8V 300mA). The power indicator lights up.



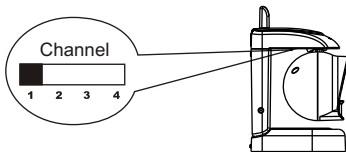
Notes:

- This camera can also work on dry battery ; please load 4 AAA batteries to the battery compartment at the bottom of camera with their polarities matched. And then slide the power switch to **ON** position, the power indicator lights up. (Not suitable for wall installation)

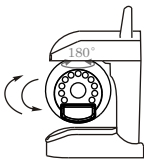


- The AC adapter will work instead of batteries after it is plugged. If the camera is left unused for a long period of time, please unplug the adapter and remove the batteries.
- The camera doesn't have the charge function on the AAA batteries.

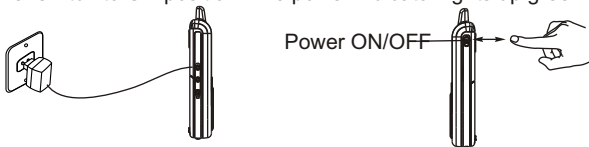
2. Set the camera to one desired channel (Please refer to Camera Channel Setup section on page 12 for more detail).



3. Rotate the camera to a suitable angle for surveillance.

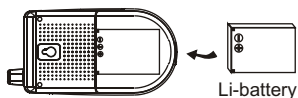


4. Connect the adapter (DC 5V 2A) to the receiver and slide the power switch to **ON** position. The power indicator lights up green.

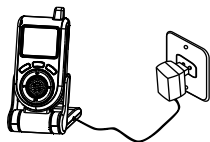


Note:

- The receiver also can work with Li-battery; load Li-battery to the compartment with their polarities matched.
- You are recommended to fully charge the li-battery before its first installation to optimize its life.
- The Li-battery will be charged after the adapter (DC 5V 2A) is plugged in. The charge indicator will light up red during charging and will turn green after a full charge.
- A full charge will take about 220 minutes hours, which can power the receiver for about 180 minutes continuously.
- Charge the li-battery once you see a red icon bickers on the LCD.
- Do not burn or disassemble the Li-battery.
- Do not short-circuit the battery, it may cause fire or electric shock.
- You also can charge the receiver by base charger. Please locate the receiver to the base charger, then connect it with the adapter (DC 5V 2A). The receiver will be charged. (Optional)



Install the Battery



Charge by Base Chareger

5. Set the receiver channel same as that of camera by pressing **CH+/CH-** continuously, and the pictures are displayed on the LCD screen.



Note: For bigger size pictures, please connect the receiver to a monitor/TV with AV cable. In this case, the LCD display will be disabled and turns black; the speaker of the receiver or the earphone will be deactivated at the same time.

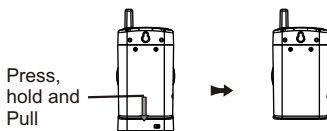


Tip: Press and hold **MENU** button will turn off the LCD. Receiver will go to **STAND BY** mode. If alarm is triggered, the LCD will turn on automatically.

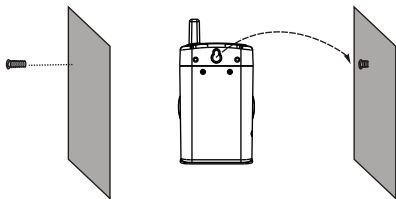
Fix the Camera

The camera can stand on desktop, it also can be mounted onto the wall. The steps of installation are as follows:

1. Press and hold the back side of the camera firmly and then pull the base downwards to remove it.



2. Drive one hole in the wall. Insert one mounting anchor firmly then insert a screw into the mounting anchor. Hang your camera on the screw.



Locate the Receiver

The receiver can be located horizontally or stand upright. If standing upright the base charge will be needed.



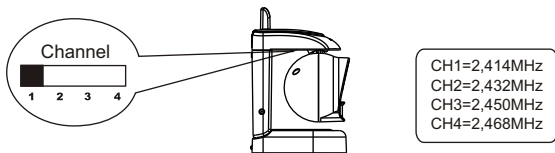
Horizontally



Stand Upright

Camera Channel Setup

The camera has 4 selectable channels. You could adjust the channel switch of camera to set the channel for multi-camera working or avoiding the interference. Please tune the channel switch to the desired channel as the following diagram.



Night Vision

The built-in Infra-red lights in camera provide night vision for 24hours surveillance. The Infra-red lights will be automatically activated in dark places. The picture will turn to Black & White (monochrome) in Night Vision status.



Receiver Mode Setup

The OSD interface of this receiver facilitates your operation to achieve the optimized effect.

1. Volume adjustment

Press **VOL+ / VOL-** button to adjust the volume of the receiver.

2. Channel selection

Press the **CH+ / CH-** button to select the matched channel.

3. Alarm mute ON/OFF

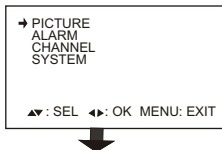
When abnormal situation occurs, the alarm sounds; press **ALARM** button once to mute the alarm sound, it will not sound for the next abnormal case detection unless you press the **ALARM** button again.

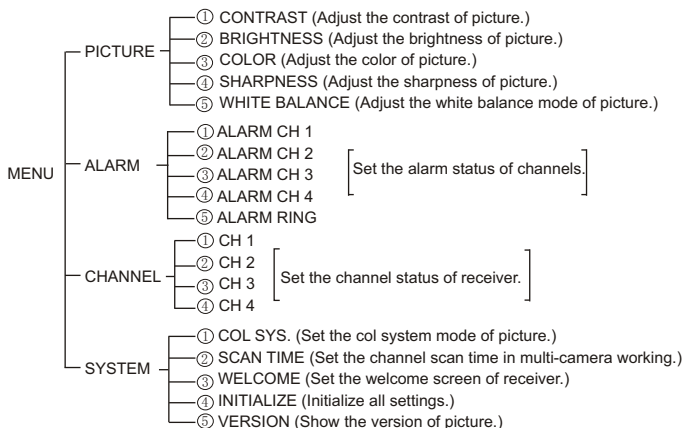
4. SCAN

In the multi-camera working mode, press the **SCAN** button once, all the available channels will be displayed one by one (default interval is 3s); press one more time to resume normal display.

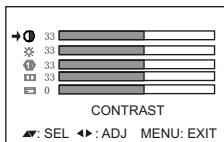
5. MENU setup

Press the **MENU** button once, the main menu pops up.





A. PICTURE SETUP--Select the item PICTURE by pressing **CH+/CH-** button and press **VOL+/VOL-** button to enter picture setup page as below:

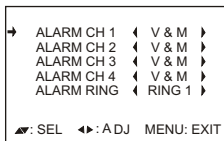


You are allowed to adjust the contrast, brightness, color, sharpness and white balance in this page.

You should press **CH+/CH-** button to select one item and press **VOL+/VOL-** button to adjust its value.

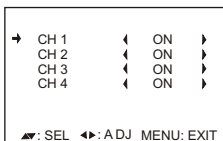
Press **MENU** button once to return to the main menu; twice to exit the menu setting screen.

B. ALARM SETUP---Select the item ALARM by pressing **CH+/CH-** button and press **VOL+/VOL-** button to enter alarm setup page as below:



You are allowed to set the alarm status of channels in this page. The choice of **MOTION** or **VOICE** will activate the alarm while **OFF** will deactivate it. You can choose the euphonious ring, RING 1-8 selectable. You should press **CH+/CH-** button to select one item and press **VOL+/VOL-** button to choose one desired option. Press **MENU** button once to return to the main menu; twice to exit the menu setting screen.

C. CHANNEL SETUP---Select the item CHANNEL by pressing **CH+/CH-** button and press **VOL+/VOL-** button to enter channel setup page as below:



You are allowed to adjust the channel status in this page. You should press **CH+/CH-** button to select one item and press **VOL+/VOL-** button to choose one desired option. Press **MENU** button once to return to the main menu; twice to exit the menu setting screen.

Note: If the channel is set to OFF, it will not be available for your selection by pressing **CH+/CH-** button.

D. SYSTEM SETUP---Select the item SYSTEM by pressing **CH+/CH-** button and press **VOL+/VOL-** button to enter special setup page as below:

→ COL SYS.	◀	AUTO	▶
SCAN TIME	◀	3S	▶
WELCOME	◀	ON	▶
INITIALIZE	◀	NO	▶
VERSION		▶▶	
▲: SEL ◀▶: A DJ MENU: EXIT			

You are allowed to adjust col system, scan time, welcome screen, initialization and version for the receiver in this page.

COL SYS.: You can choose PAL, NTSC or AUTO col in this page.

SCAN TIME: You are allowed to set scan time from 3s to 60s for channel looping function.

WELCOME: When ON is selected, the word "WELCOME" appears after the receiver is powered on; otherwise, when OFF, it will not.

INITIALIZE: Select INITIALIZE through **CH+/CH-** button; press **VOL+/VOL-** button once and "YES?" appears; if you are sure to resume the factory initial settings, press **VOL+/VOL-** button again and "YES" appears, the settings are initialized.

Version: You can see the version in this page.

Press **CH+/CH-** button to select one item and press **VOL+/VOL-** button to choose one desired option or adjust its value.

Press **MENU** button once to return to the main menu; twice to exit the menu setting screen.

SPECIFICATION

CAMERA	Imaging Sensor	CMOS
	CMOS Total Pixels	628*582(PAL);510*492(NTSC)
	View Angle	55°
	Minimum Illumination	5Lux/F1.2(IR OFF) & 0Lux(IR ON)
	Transmission Frequency	ISM 2,400MHz~2,483MHz
	Transmission Power	10mW/CE; 2mW/FCC
	Modulation Type	FM
	Bandwidth	18MHz
	Power Supply	DC 8V 300mA
	Motion Detection Angle	Horizontal:+180°; Vertical:+180°(Approx.)
	Sound Control Sensitivity	40dB(AGC OFF)
	Consumption Current	180mA & 230mA(IR ON)
	Unobstructed Effective Range	100m
	Night Vision Range	5m
	Dimensions(W*D*H)	85*109*111(mm)
	Weight	Approx. 185g(Main Body)
RECEIVER	LCD	2.5 Inch
	LCD Resolution	480*234
	Receiving Frequency	ISM 2,400MHz~2,483MHz
	Intermediate Frequency	480MHz
	Demodulation Type	FM
	Receiving Sensitivity	≤ -85dBm
	Power Supply	5V 2A
	Dimensions(W*D*H)	148*75*27*(mm)
	Weight	Approx.140g(Main body)
	Operating Temperature	-10°C~-+50°C/+14°F~-+122°F
	Storage Temperature	-30°C~-+85°C/-22°F~-+185°F
	Operating Humidity	85%RH

* Actual transmission range may vary according to weather, location, interference and building construction.

* All the specifications are subject to minor change without prior notice.

TROUBLESHOOTING

When you experience the operation problems, please check and try the following yourself before claiming that it is the defective product or consulting the experienced technician.

Abnormal Phenomena		Possible Reasons/Solutions
 No image	 No sound	Check whether the camera/receiver is connected to power supply and powered on.
 No image	 Noisy	Check whether the li-battery runs out
 Snowflakes on image	 Noisy	1. Check if the channel of receiver is the same as that of camera; 2. Check the distance & blocks.
 Ghost image	 Normal sound	1. Interfered with other devices; 2. Check the distance & blocks.
 No color	 Normal sound	Mismatching the TV system of PAL or NTSC.
 Normal image	 Noisy	Interfered with other devices nearby; Remove or turn off such devices.