User's Manual

2.4GHz Wireless Color Camera Kit
(Day/Night & Weather-proof)
MODEL: CM-818C2

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EU Environmental Protection

Waste electrical products 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-2.4GHz frequency band, which could be legally used worldwide with no 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 2.4GHz ISM band. Please turn off one of the equipment to eliminate the interference.
Product Safety: This camera will emit electromagnetic wave, just like other wireless products. But its transmitting power is lesser than other wireless products, such as mobile phones. The 2.4 GHz 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 for our customers.

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

Notes on complying with FCC's "Statement of Conformity Information"
This product meets the requirements specified in Part 15 of the FCC Regulations. This product's performance satisfies the following two conditions:
(1)The equipment must not cause any detrimental interference;
(2)The equipment must receive and process any interference, including any possible interference caused by operation mistakes.
After testing the product, we confirm that it complies with the provision for Class C digital equipment in Part 15 of the FCC Regulations; and the receiver complies with the limitations for Class B digital equipment in Part 15 of the FCC Regulations. The product generates, utilizes and emits radio waves. It may cause detrimental interference to wireless communication if not installed and used according to the instructions in the manual. The product may cause interference in residential areas, and consumers should take necessary steps to eliminate the interference on their own. If the product causes any detrimental interference to wireless equipment or disturbs TV signals reception (which can be verified by turning on and off the product), you can try to troubleshoot by doing the following:
(1)Readjust the product or set it up in another place;
(2)Extend the distance between the equipment interfered and the product; and
(3)Consult a dealer or an experienced radio technician for help.

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 and parcel of people's private lives. We do not intend or make this product for such a purpose.
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 to 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 22cm from the heart pacemaker

DO NOT use the product to carry out any unlawful activities (such as voyeurism).

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 or lifetime.

PRODUCT

Package Contents

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

① Wireless camera ×2

② Universal bracket for camera ×2

③ Wireless receiver ×1

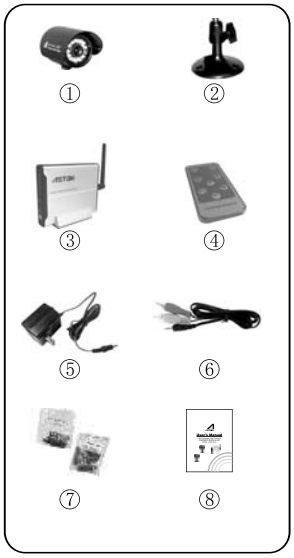
④ Remote control ×1

⑤ power adapter ×3

⑥ AV cable ×1

⑦ Mounting hardware ×1

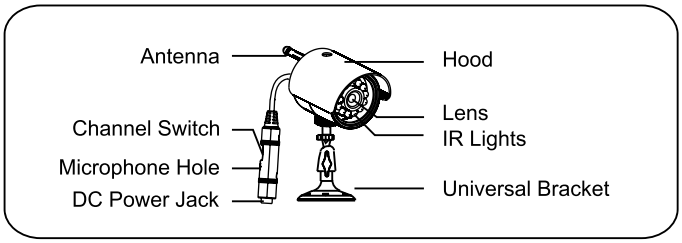
⑧ User's manual ×1



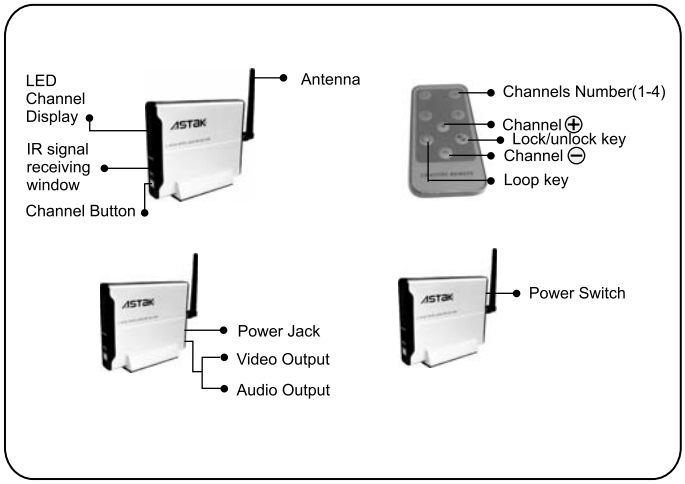
Note:
The pictures may be slightly different from the actual items.

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

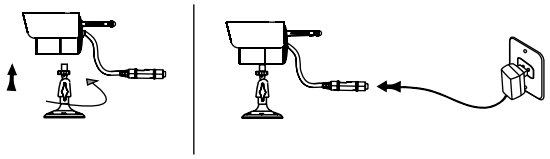
CCC Mark
China power supply authentication

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

INSTALLATION & USAGE

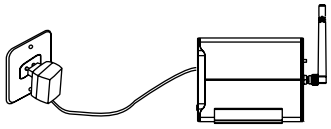
Installation

1. Install the universal bracket to camera and connect the power jack (DC 8V 200mA) to camera.

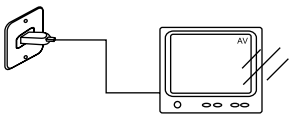


2. Connect the receiver to your TV with AV cable (yellow for video and red for audio).

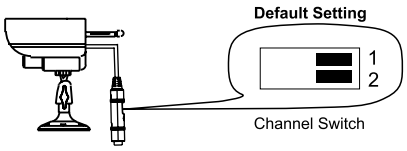
3. Connect the adapter (DC 8V 300mA) to the receiver. Slide the power switch to ON position. The power indicator lights up.



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

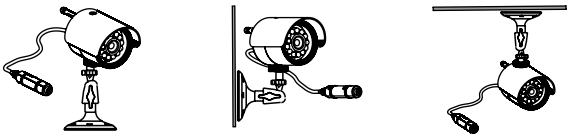


5. Open the channel switch cover and set the camera to desired channel.



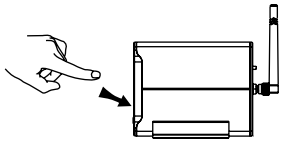
Notes:
This camera provides 4 channels. Please refer to ***Camera Channel Setup*** *section on page 11 for more details about channel setting.*
Please close the channel switch cover after setting the channel.

6. Mount the camera to desired location.

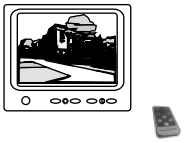


Note:
Please refer to ***Attach the Camera*** *section on page 9~10 for more details.*

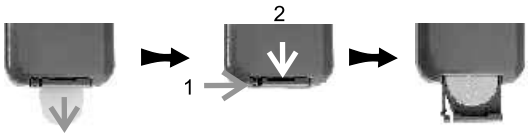
7. Set the channel of receiver same as that of camera by pressing the channel button continuously, until pictures are displayed on the monitor/TV



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



9. 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.

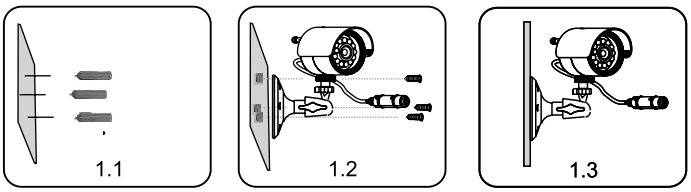


Attach the Camera

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

1. Attach 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 drive three screws through the bracket into the anchors.
1.3 Adjust the angle of your camera.



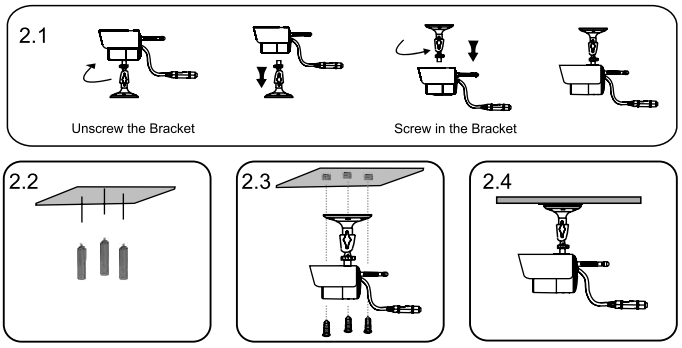
2. Attach to Ceiling

2.1Detach the universal bracket from the camera (if it is attached) and then install it to the camera top to prevent upside down pictures;

2.2Drill three holes on the ceiling in line with the holes in the universal bracket; Insert three screw anchors into the holes.

2.3Align the holes on the bracket and the ceiling, and drive three screws through the bracket into the anchors to fasten the camera.

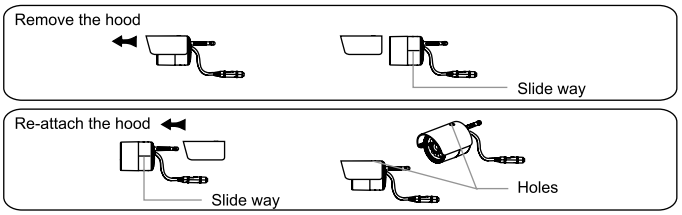
2.4Adjust angle of your camera for surveillance.



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

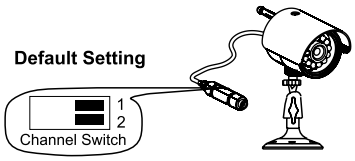
1. Slide the hood away along the groove from camera.

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.



Camera Channel Setup

This camera has 4 selectable channels to avoid possible interference from other nearby wireless devices. Please open the channel switch cover and set the **Channel Switch** with the **Channel Pick** as the following diagram



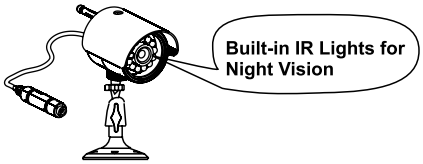
Channel Switch Setup Diagram

Channel Frequency

CH1=2,414MHz;
CH2=2,432MHz;
CH3=2,450MHz;
CH4=2,468MHz

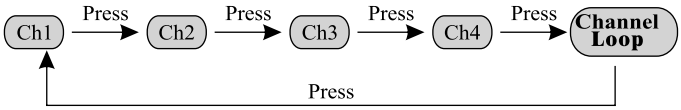
Night Vision

The built-in 12 Infra-red lights in camera provide 7m 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 ~ 4	Individual channel selection	One number displays in response to each press
− +	Channel decrement or increment	− 4→3→2→1 Loop ; + 1→2→3→4 Loop
1. ◌ 2. 1 ~ 4 3. ◌	Channel scanning for specific channels	1. Press loop key once to enable setting, "L" flashes; 2. Press keys 1~4 to input two or more 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, "L" 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, "o" flashes; press again to unlock, "E" flashes.

Notes:

- Press 1 ~ 4 to select one channel.
- Double press ◯ to automatically scan channels.
- To quit the channel scanning, press any key 1~4 or − +.
- To lock the remote control against the accidental touch or interference from other IR remote control, press 🔒 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 🔒 again, and the icon "🔓" appears.

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.

IC NOTE:

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 A/B digital apparatus meets all requirements of the Canadian Interference-Causing
Equipment Regulations.

SPECIFICATIONS

	Items	Value
	Transmission Frequency	ISM 2,400MHz~ 2,483MHz
	Transmission Distance	100m (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	CMOS
	CMOS Total Pixels	628×582 (PAL)/ 510×492 (NTSC)
	Antenna Type	Omni
	S/N Ratio	40dB (AGC OFF)
	Horizontal Resolution	380 TV Lines
	Minimum Illumination	1.0 Lux/F 2.0& 0 Lux (IR ON)
	Night Vision Range	7m
	Transmission Power	10mW (CE)/2mW (FCC)
	Power Supply	DC 8V 200mA
	Consumption Current	200mA (Max.)
	Weather-proof Level	IP54 (Main Body)
Receiver	Intermediate Frequency	480MHz
	Demodulation Type	FM
	Antenna	50ohm 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 experience any operation problem, please first check and try the following before presuming it is a defective product or consulting an experienced technician.

Trouble		Possible Solution
No image	No sound	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	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 is within range of the camera. 3. Move the receiver to a different but close-by location for better reception.
Shaped image	Normal sound	1. Make sure that the receiver is within range of the camera 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.
Normal image	Noisy sound	Interference with other devices nearby; Remove or turn off such devices.

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