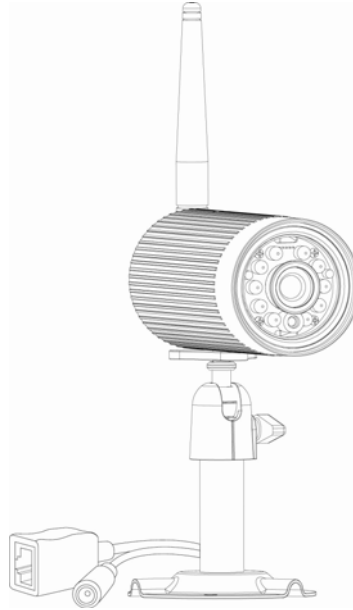# Network Camera

Installation and Operating Instructions

Version 1.0

Model: APPCAM23

<u>These instructions should be retained in a safe place for future reference.</u>

CONTENTS

1. INTRODUCTION

The WIP APP Camera is a wireless security system designed for easily creating your home security network. Downloading the free App, you can view and capture video clips of any motion detected by the wireless camera(s) and store them onto the memory card via smart phones and/or tablets running iOS/Android. Snapshot function captures images and stored them directly to smart phones and/or tablets. Guarding your love ones and properties, the wireless camera offers superior quality video with true-color. It is weatherproof, suitable for day/night use and reliable that you can trust for your home security.

PLEASE READ BEFORE YOU START:
Always use discretion when installing CCTV equipment, especially when there is perceived policy. Enquire relevant local regulations applicable to the lawful installation of video recording/surveillance. Third party consent may be required.

WIRELESS DEVICES OPERATING RANGE:
Ensure the signal reception viewed from the wireless camera(s) is the best possible reception between the camera(s) and the WiFi router. If necessary, reduce the distance between the camera(s) and the WiFi router to improve overall system performance. Wireless Color Camera Recordable CCTV Kit operating on a secure digital 2.4GHz frequency which could greatly reduce interference from product such as wireless routers, cordless phones or microwave ovens.

IMPORTANT SAFETY PRECAUTIONS:
Please read before installing and using this product.
Damages caused by non-compliance with this operating manual will void the warranty! We will not assume any liability for damages to items or persons caused by improper handling or non-compliance with the safety notices! Any warranty claim will be null and void in such cases.
(1) Do not drop, puncture or disassemble the camera; otherwise the warranty will be voided.
(2) Avoid all contact with water, and dry hands before using.
(3) Never tug on the power cords. Use the plug to unplug it from the wall outlet.
(4) Do not expose the camera to high temperature or leave it in direct sunlight. Doing so may damage the camera or cause camera temporary malfunction.
(5) Use the devices with care. Avoid pressing hard on the camera body.
(6) For your own safety, avoid using the camera or power off the camera when there is a storm or lightning.
(7) Remove the power adapter during long periods between usages.
(8) Use only the accessories and power adapters supplied by the manufacturer.
(9) To meet the regulations pertaining to parental responsibility, keep the devices out of the reach of infants.

(10) Check power cables, do not get crushed or damaged by sharp edges whenever the devices are in operation.

FCC Compliance Statement: This device complies with Part 15 of the FCC rules. Operation is subjected 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.

Products with CE Marking comply with EMC Directive (2004/108/EC); Low Voltage Directive (73/23/EEC); R&TTE(1999/5/EC) issued by the Commission of the European Community. Compliance with these directives implies conformity to the following European Norms:
EMC: EN 301 489
LVD: EN 60950
Radio: EN 300 328

FCC/CE WARNING

This equipment has been tested and found to comply with limits for a Class B digital device, pursuant to Part 15 of the FCC rules and ETSI(EN) 300328. These limits are designed to provide reasonable protection against harmful interference in residential installations. 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 interference to radio or television equipment 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.-Move the equipment away from the receiver.-Plug the equipment into an outlet on a circuit different from that to which the receiver is connected.-Consult the dealer or an experienced radio/television technician for additional suggestions. You are cautioned that any change or modifications to the equipment not expressly approved by the party responsible for compliance could void your authority to operate such equipment.

DISPOSAL

If the camera system no longer functions or can no longer be repaired, it must be disposed of according to the valid statutory regulations. Disposal of spent batteries/accumulators: You are required by law (Battery Ordinance) to return all spent batteries and accumulators. Disposing of spent batteries/accumulators with common household waste is prohibited! Batteries/accumulators that contain hazardous substances are marked with the symbols on the side. These symbols indicate that it is prohibited to dispose of these batteries/accumulators in the household waste. The abbreviations for the respective heavy metals are: Cd=cadmium, Hg=mercury, Pb=lead. Y ou can return spent batteries and accumulators that can no longer be charged to the designated collection points in your community, outlets or wherever batteries or accumulators are sold. Following these instructions will allow you to fulfill the legal requirements and contribute to the protection of our environment!

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment
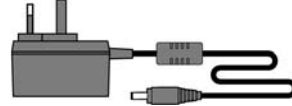
2. KIT CONTENT

A App Camera x 1

B Camera Stand x 1

C Camera Antenna x 1
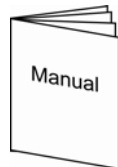
D 5V/1A Power Adapter for Camera

E Ethernet Cable x 1

F Screw Bag x 1

G Manual x 1

Tools Required:
- Electric drill
- 5mm masonry drill bit
- 15mm masonry drill bit
- No. 2 Philips screwdriver

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3. SAFETY AND INSTALLATION TIPS

Do not attempt to open the units with the power adaptor plug connected to avoid any risk of personal injury.

When installing CCTV camera(s), always follow manufacturer's advice when using power tools, steps, ladders, etc. and wear suitable protective equipment (e.g. safety goggles) when drilling holes. Before drilling holes through walls, check for hidden electricity cables and water pipes. The use of cable/pipe detector is advisable.

It is also advisable to avoid exposing any cameras to extreme weather conditions (e.g, under a gutter which is prone to any water leaks). When installing any cameras with this unit, it is advisable to use cable conduit to protect any video/power extension cables from being exposed externally and to prevent/reduce the chances of the cables being tampered with. After drilling any hole though an external wall for a cable, ensure the hole is sealed up around the cable using a sealant to prevent drafts.

To prevent a fire or electrical shock hazard, do not attempt to open the housing while the unit is exposed to rain, water or wet conditions. There are no user serviceable parts inside. Refer servicing to qualified service personnel. Avoid pointing the camera(s) directly at the sun or any bushes, tree branches or moving objects that might unnecessarily cause the camera to record.
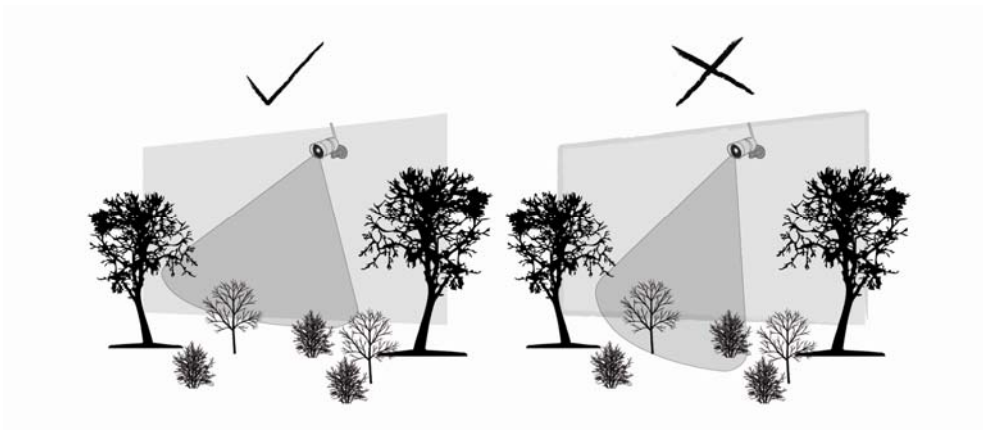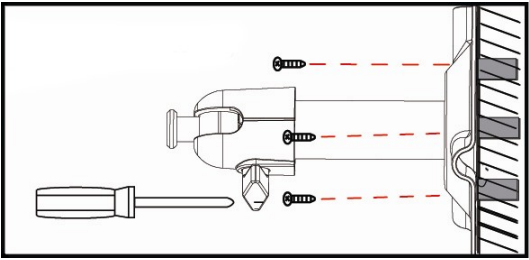
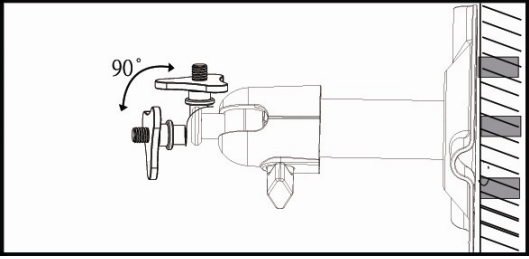## Planning your layout
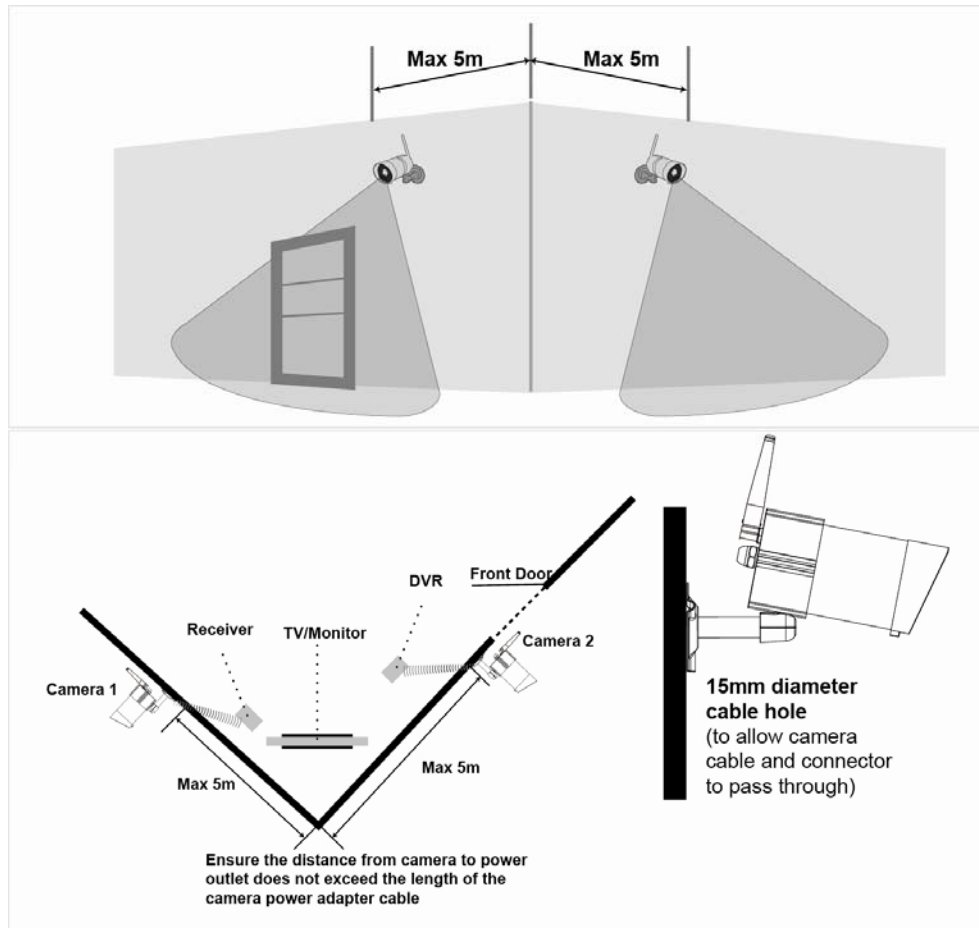
Night Vision

The camera has built-in infra-red LEDs to allow you to view at night for 24hrs surveillance. The LEDs will automatically activate at night and the picture viewed will turn to black and white. The night viewing range is up to 5 meters.
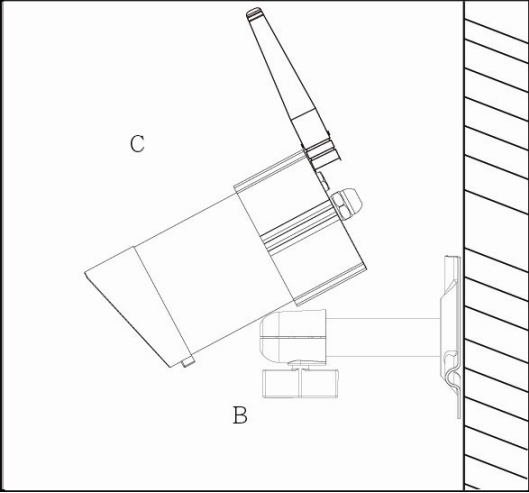
Camera Installation
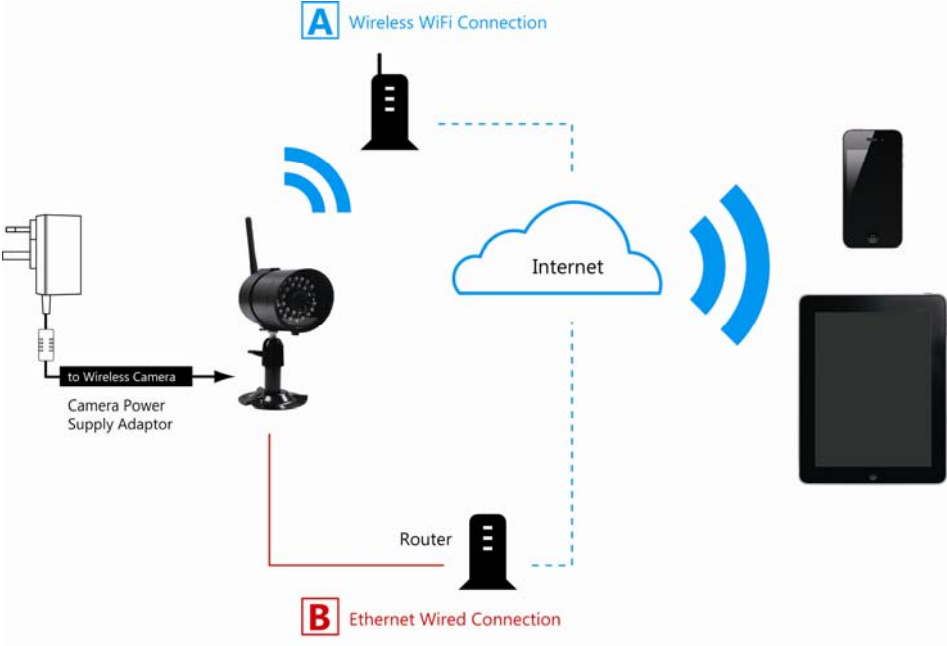
A. Secure camera stand on the wall
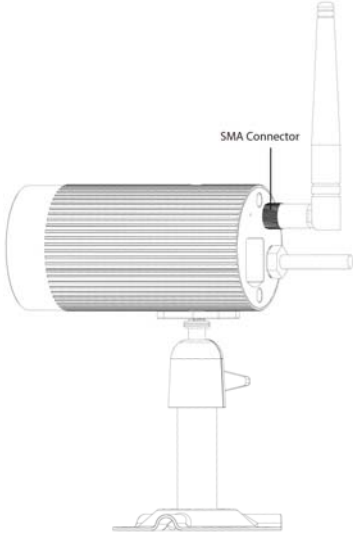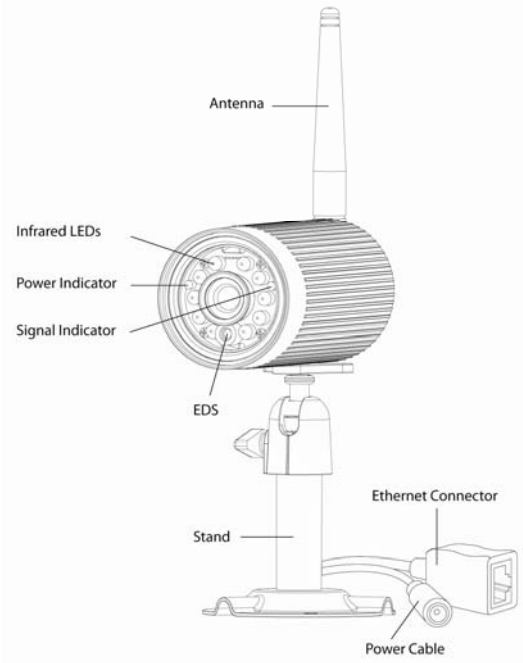
B. Loosen up the Thumb screw

C. Adjust proper view angle then secure the joint with T-bolt.

Connection Diagram

4. CAMERA OVERVIEW

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5. DOWNLOAD AND USE THE APP

 The WAPP CAM is designed to remotely view the live camera video with your smart phone or tablet device. Please follow these steps to download, setup and use the App.

Download the App
1. From you Android smart phone or tablet device, click the Android Market.
2. Tap on the search icon and type in "APPCAM." The icon appears as a square with an orange emblem.
3. Click on the App to choose and click the download button.
4. Press the "Accept and Download" button to begin your download.
5. Once the download completed, you'll see the App icon appears on your smart phone and/or tablet panel.

App Setup
1. Ensure your camera has been correctly connected to the Internet. (page 8)
2. Connect your smart phone or tablet device to WiFi. You can also wire the Ethernet cable to connect your device to the Internet. (see page 8)
3. Locate the APPCAM icon in your applications and click the icon to launch the App. The boot screen appears.
4. Tap the ADD CAMERA icon to add the camera to the App.
5. The System Information panel appears. You can specify a name or use the default system name for your camera in the SYSTEM NAME field.
6. Enter the DID code that provided with your camera in the DID

field.

7. Enter the default password 123456 in the PASSWORD field.
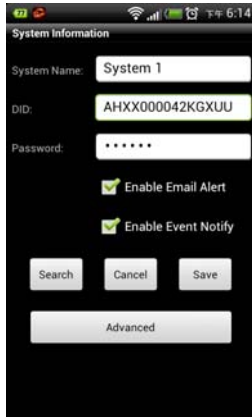
"Enable Email Alert" option will send an email alert to your smart phone or tablet whenever the motion detection is triggered.

"Enable Event Notify" option will notify you whenever any recording event is produced.

Note: When you type in the default password, the system will alarm you to change it. Please follow the instruction of the DEVICE PASSWORD section to change the default password into your personal security code. (page 16)

8. Click SAVE to complete the camera settings.

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You can also use the SEARCH feature for a quick setup. This feature will automatically search for your camera(s) on your local area network (LAN). Please follow the steps below.

1. Connect your smart phone or tablet device to WiFi which the camera is used.
2. Click SEARCH button in the App. The system will automatically find the available camera on the local area network (LAN) and carry out the DID code in the DID field. You only need to enter the default password 123456.
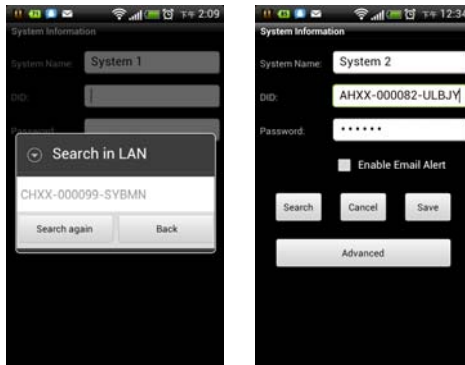
3. Follow the instruction of the DEVICE PASSWORD section to change the default password into your personal security code. (page 16)

Once the camera is connected, the App will show the video as below. You can tap the icons to add more cameras or configure the advanced settings.

Tap to add more camera(s).

Tap to setup the camera configuration.

Tap to update the status of camera(s).

Tap to enable PIN lock or enter the INFORMATION page.

The ADD CAMERA icon allows you to add more cameras. The systems supports up to 4 concurrent cameras. Tap the ADD CAMERA icon and follow the steps of App setup to add more cameras. (page 10)

Note: If you have multiple cameras connected to the system, the App will arrange the cameras vertically. Scroll down the list and tap the camera panel to enlarge the video you want to view.

The CAMERA SETTING icon allows you to setup the detail configuration of the camera. Please refer to the ADVANCED SETTING section. (page 15)

The UPDATE icon will refresh the status of camera connection(s).

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 The INFORMATION icon allows you to enable PIN lock or check the App information.

Setup PIN Lock

If you enable PIN Lock, the user will be asked to enter the PIN code when you turn on your mobile device.

1. Click the "Enable lock when starting" then type in your PIN code.
2. Confirm your PIN code again.

About

Tap the ABOUT icon to check the WIP and API Kernel version information.

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App Operation

When you launch the App on the smart phone or tablet, the image displayed on the main screen is the latest captured camera image from previously established session. The App then updates the status of all cameras automatically.

You can take a snapshot or record a video clip with the icons below.
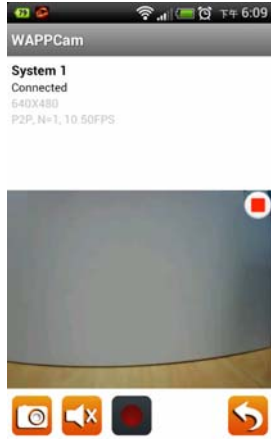
Tap the SNAPSHOT icon to capture screen images.

Tap the MUTE icon to turn on/off the volume when playback the video.

Tap the RECORD icon to record and tap again to stop recording.

Tap the RETURN icon to return to previous level.

When you take snapshots, the App will save the images into the camera roll of your mobile device.
When the system starts recording, the video clips will be saved into the memory card.

Tip: You can turn the device sideways for a horizontal view.

Advanced Setting

The Advanced setting allow you to setup the time zone, device password, video setting, WiFi setting, sensitivity setting, and email setting. You can also format the SD card or check the device information here.

Tap the CAMERA SETTING icon ![icon]. The following icons appear on the panel.

Tap the ADVANCED SETTING icon to setup camera configuration. Press to enter the advanced settings

Tap the DELETE icon to remove current camera.

Tap the EVENT LIST icon to check the recorded events.

ADVANCED SETTING sub-menu:

Admin Password	The security code for your advanced settings.
Time Zone	Setup the time zone for your system.
Device Password	Change the default password into personal security code
Video Setting	Configure the screen resolution
WiFi Setting	Build up your WiFi connection
Sensitivity Setting	Choose the configuration of motion detection
Email Setting	Setup your email for email alert
SD Card Format	Format SD card
Device Information	Check the App and API Kernel version

Admin Password

The Admin Password is a specific security code for your advanced settings. The default password is 123456. Please use this function to change the default password into your personal admin password. For the protection of your system configuration, every time you change the advanced settings, you need to enter the admin password.
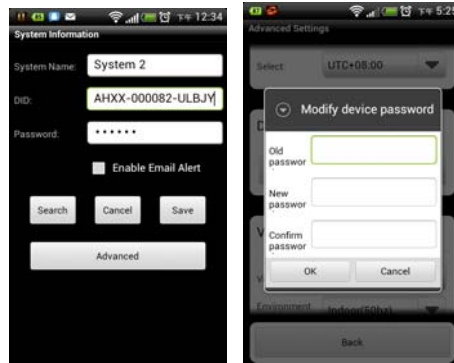
Time Zone

The drop-down list shows the world time zone. Select the time zone that will work the best for you.

Device Password

The default password of the camera is 123456. Please use this function to change the default password into your personal security code.
1. Click the MODIFY button.
2. Type in the old password once and new password twice. Then press OK to confirm.

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Video Setting
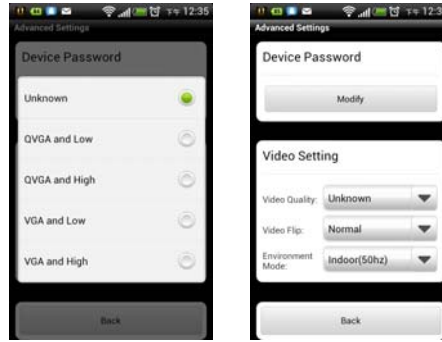
The video setting section allows
you to configure the video
quality and environment mode.

Video Quality
Set up the video format to
VGA/QVGA with High/Low
resolution.

Environment Mode
Choose the appropriate option in accordance with
local power frequency.

WiFi Setting

The WiFi setting allows you to
choose the WiFi connection
that you wish to use and setup
the WiFi environment.

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Sensitivity Setting

Set up the sensitivity of motion sensor from OFF, LOW to HIGH.

If you set OFF the sensitivity setting, the system will turn off the motion detection function.

If you configure the sensitivity setting into LOW or HIGH, the system will start recording when any movement occurs within the viewing angle of the camera. Please adjust the setting to acquire the expected motion detection.
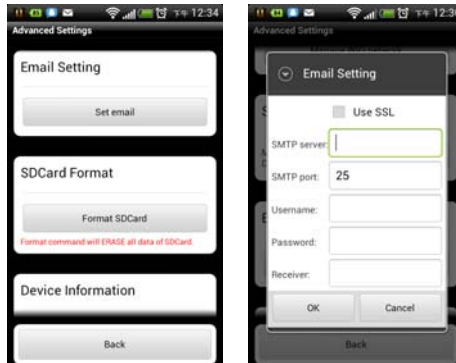
Email Setting

The email setting allows you to configure the email environment, email account and password.

Click the "Use SSL" check box will transmit the data in encryption.

SD Card Format

This function will erase all data of the SD card. Click OK to continue.

Note: Please backup the data before formatting.

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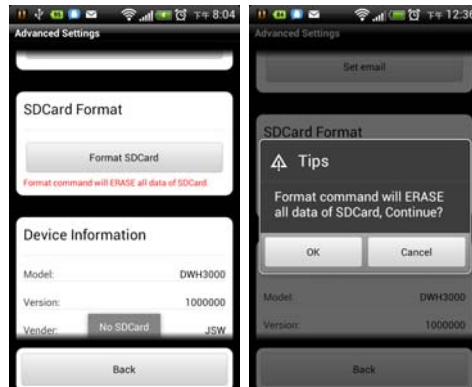
Device Information

This section contains the model number, device version, vendor name, total size and available size of the memory card.

6. TROUBLE SHOOTING

IF…	SOLUTION
No image appears	• Make sure the power adaptor is not damaged or defective and plugged into an electrical outlet with power. • Relocate the camera to obtain the best reception of wireless signals. • Make sure the camera is properly configured in App.
Low wireless signal Poor image quality	• Wireless devices such as wireless home stereo system may reduce the signal strength. Leave as much space as possible between the camera/mobile device and these wireless devices. • Clean the camera lens using lens cleaning cloth. Spots or dust on the lens can also cause image quality problems.
Motion detection is not working	• Make sure the sensitivity setting is not turned OFF. (page 17). • Adjust the sensitivity of the motion sensor. (page 17) • In motion detection mode, a moving object within the camera viewing angle is necessary to trigger the motion sensor for recording • Make sure the system date and time have been correctly setup.

Bright white spots appear at night time	• The camera's infrared LEDs produce invisible light that reflects off surfaces such as glass. Install the camera on the other side of windows or place the lens flush against the surface to improve the night vision. It is suggested to install camera(s) under well lit area. Note: Please check the environment rating (Ingress) of the camera(s) before installing outdoors.
Memory card error	• Make sure the memory card is correctly inserted and formatted. • Use the provided memory card within the package to ensure proper operation. Note: Please backup the data before formatting. Format function will erase all the data on the memory card.
Wrong data and time are shown.	• Wrong date and/or time will result in unexpected record schedule. Make sure you've selected the correct time zone. (page 17) • Confirm the system date/time of the mobile device to ensure correct operation.

7. ABOUT DIGITAL WIRELESS TECHNOLOGY

This section offers some helpful information to overcome most of the problems you may encounter. We hope this section can help you to enjoy a pleasant setup.

About 2.4GHz Digital Wireless Signal

This innovative digital wireless solution integrates advance Frequency Hopping Spread spectrum (FHSS) technology. This technology greatly reduce the interference that comes from other devices using the same radio frequency (2.4GHz), e.g. WIFI, Bluetooth, Zigbee, cordless phone...etc. You now can enjoy a more pleasant wireless surveillance quality without flicking and noisy image. However, weaker signal (lag or still image) can be observed yet from time to time, depending on the environment where the system is installed. Complied with FCC part 15.247,ETSI(EN)300 328, audio / video signals transmitted out about or over 500 foot / 150meter in line of sight should be supported. Line of sign installation, though, is usually not a common practice. Factors affecting transmission include microwave ovens or other high frequency electromagnetic waves. Reinforced concrete walls, large scale metal products and metal furniture should not be located near the camera or the receiver. Water creates an obstacle and should not be placed near. Human bodies such as a person passing through may cause unstable signal quality

How to improve the wireless signal quality?

If possible, remove obstacles in between camera and receiver that might reflect the signal. These could include furniture, cabinets, and walls. If you feel the wireless signal is not improvement. Or simply relocate the camera closer to the receiver.

Why Image Compression?

In order to provide a private and interference free wireless service, this digital wireless solution works on a 2Mb narrow hopping band. Different from traditional 2.4GHz analog signal, this digital wireless signal is compressed and presented as Motion JPEG (MJPEG) format. By digitalizing and compressing the raw analog data, the bandwidth is used more efficiently and securely. Consequentially, you might observe an indent image line on a larger display receiver or plasma TV.

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8. PRODUCTION SPECIFICATION

Networking Parameter	
Wireless Technology	IEEE 802.11 b/g
Network Connection	Ethernet (10/100 Base-T/Base -TX); Wifi
Network Protocols	TCP/IP, UDP, SMTP, NTP, DHCP, ARP
Simultaneous Viewers	4 concurrent sessions
Security	WPA /WPA2 (TKIP, 128 bit AES)
Camera Parameter	
Image Sensor	1/4" CMOS
Antenna	3dBi Waterproof Dipole
Housing	Weather resistance metal
Environment Rating (Ingress)	IP66
Camera Environment	Indoor (50Hz); Indoor(60Hz); Outdoor
Storage Memory	T Flash memory (not included in the package)
Viewing Angle	H: 60° V: 43°
Min. Illumination	1~8 lux
Lowlight resolution	10 IR LEDs with IR switcher
Lowlight visibility	5 meters above
Video Audio Parameter	
Image Compression	H.264
Image Resolution	VGA 640x480 / QVGA 320x240
Recording Frame Rate	max 30 FPS
Supported Mobile Internet Device	
iOS requirement	V5.01X or above
Android requirement	Android 2.3X or above
Hardware requirement	Cortex A6 800MHz or above; 1GB internal memory or above
General Parameter	
Power Requirements	100~240V switching power supply DC 5V 1A
Power Consumption	650mA max
Camera Body Dimension	42*42*92mm
Weight (Main Body)	210 g

Operating Temperature	-10°~+50°C

9. STORAGE MEDIA MANAGEMENT

Micro SD Card Capacity	640 x 480 (VGA)
1G	60 Minutes
2G	110 Minutes
8G	400 Minutes
16G	950 Minutes
32G	1880 Minutes

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