

wifiCAMit

User's Guide

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Revision History

| Version | Date | Changes |
|----------------|-------------------|--|
| 1.0.0.0 | October 05, 2007 | First Release of wifiCAMit User's Guide |
| 1.0.0.1 | December 21, 2007 | Add the description of advanced network settings in Appendix B |
| 1.0.0.2 | July 08, 2008 | Remove all of the description on Trigger In / Out connector |

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1. Product Overview

1.1 Introduction

wifiCAMit is a Plug & Play wireless IP camera with a CMOS image sensor as well as built-in IP address, Ethernet Software Stacks and Protocols. Plug the wifiCAMit directly into an RJ45 Ethernet port of network devices with RJ45 cable or use wireless network 802.11b / 802.11g to watch the camera site from anywhere around the world. Connecting directly to Ethernet networks, wifiCAMit is a standalone digital network camera requiring no server at the camera site. wifiCAMit will provide a complete security solution for you with the easiest installation.

1.2 Features

- Low cost, DIY security camera – Simple installation and multiple mounting methods
- No computer is needed at monitored site
- Up to 8 users concurrently browsing the same camera
- Standard JPEG image format
- Two-level password protection
- Optional security accessories package, including powerBox, RFIO, RF sensor and contact sensor for the wired/wireless trigger-in

1.3 Package Contents

- 1 x wifiCAMit camera
- 1 x CD with setup software and user's manual
- 1 x RJ45 Ethernet cable
- 1 x Desktop / Wall & Ceiling mount

2. Physical Description

The following information contains the physical description of wifiCAMit camera. This includes the functions and the locations of each connector and indicator. This information provides useful reference when installing the product. Please familiarize yourself with wifiCAMit cameras.

2.1 Panels

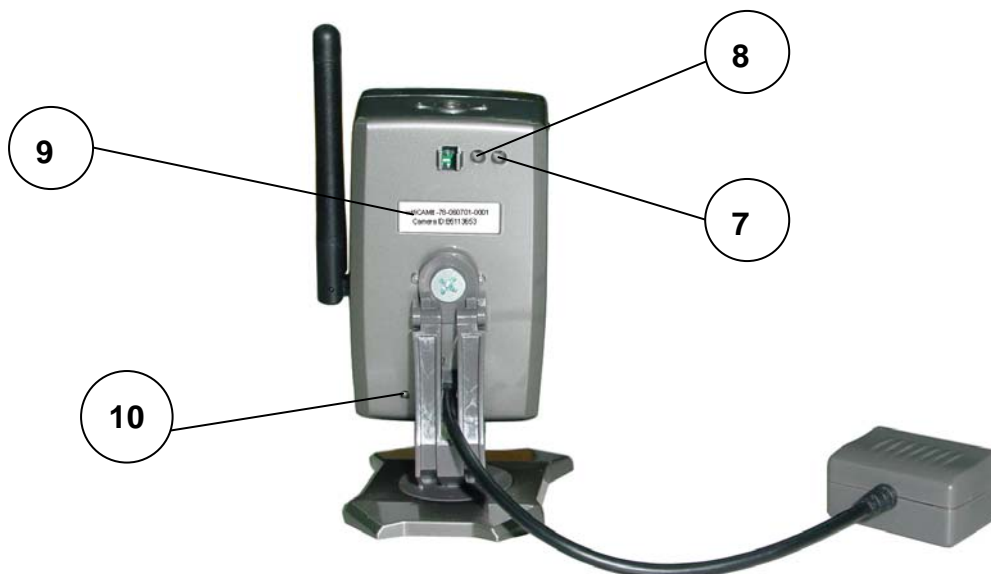
2.1.1 Front Panel

For more related description, please refer to the Section 2.2 and Section 2.2.1.



2.1.2 Rear Panel

For more detailed description, please refer to the Section 2.2 and Section 2.2.2.



2.2 Illustration

| No. in Figures | Name on wifiCAMit | Description | Remark |
|----------------|-----------------------------|---|--|
| 1 | RJ45 network connector | To connect to the camera and Ethernet port via RJ45 cable | Refer to section 2.2.1 for front panel information |
| 2 | RJ22 power supply connector | To connect to the camera and power adapter via RJ22 interface | Refer to section 2.2.1 for front panel information |
| 3 | Lens | 300k pixels CMOS sensor | Refer to section 2.2.1 for front panel information |
| 4 | Antenna | For wireless access | Refer to section 2.2.1 for front panel information |
| 5 | Wire/Wireless switch | To change the wired or wireless mode for wifiCAMit | Refer to section 2.2.1 for front panel information |
| 6 | RFIO slot | To install the optional RFIO device | Refer to section 2.2.1 for front panel information |
| 7 | SW_1 | Press SW_1 button, then wifiCAMit will perform the power reset | N/A |
| 8 | SW_2 | Press and hold SW_2 button for 5~10 seconds to reset the camera to its factory defaults | The green indicator LED of RJ45 port will light when it is finished with the reset procedure |
| 9 | Camera information | Serial number, camera ID and firmware version | Refer to section 2.2.2 for rear panel information |
| 10 | LED | To display the status of the camera in wired or wireless mode | Refer to section 2.2.3 for LED description on the rear panel |

2.2.1 Front Panel Information

RJ45 Network Connector

wifiCAMit is designed for 10/100Mbps Ethernet networks. wifiCAMit connects to the network via category 5 cable.

RJ22 Power Supply Connector

wifiCAMit adopts unique RJ22 cable for power supply. The specifications of wifiCAMit's power adapter are as follows:

- Input: 100 ~ 240V AC, 50/60Hz
- Output: 5V DC / 1A

Lens

wifiCAMit box includes a standard 75° wide angle lens fixed to the camera. Other types of lens are also available upon request. Please note that different price may apply to different lenses.

Antenna

Support WEP and WPA modes for wireless access.

Wire/ Wireless Switch

To switch the wifiCAMit camera into the wired or wireless mode, please push the switch up for wireless mode or down for wired mode.

RFIO Slot

Plug the optional RFIO device for the wireless trigger-in.

2.2.2 Rear Panel Information

Serial Number / Camera ID / Firmware version

The label sticker includes the serial number, camera ID and the firmware version of the camera.



NOTE:

If you have updated the camera firmware version, the firmware version information may no longer be valid.

2.2.3 LED Description on the Rear Panel

| Mode | Color | Status |
|-------------------|-------|---|
| Wired(LAN) | Red | Off when +5V DC power is turning on. Lit when the device works normally. Blinks when getting the SSID and password of the DHCP2WIFI router. |
| Wireless | Red | Off when failing to connect with the Access Point / router. Lit when the connection with the Access Point / router is successful and the device works normally. Blinks when any traffic is present. |

3. Assembling Camera

wifiCAMit is designed for users to mount in three methods, including desktop, ceiling and wall (see the following figures). Please use the desktop strut or wall & ceiling strut separately to mount the camera based on your needs. The desktop strut is used for desktop mounting only, and the wall & ceiling strut is suitable for desktop, ceiling and wall mounting. The figures and description provided in the following section will assist you in assembling and installing the camera correctly. It is recommended to configure the camera before positioning the camera. The default method is the desktop mount with desktop strut.



3.1 Mounting Methods

wifiCAMit comes with a desktop mount as the default purchase. If users would like to adopt wall & ceiling mount, please follow the steps below. Procedures of ceiling mounting are the same as the ones of wall mounting. The difference between these two mounting methods lies in the position of screwing. Here we only take the wall mount of wifiCAMit for example to demonstrate the mounting method.

- (1) First, please unscrew and remove the desktop strut in advance.



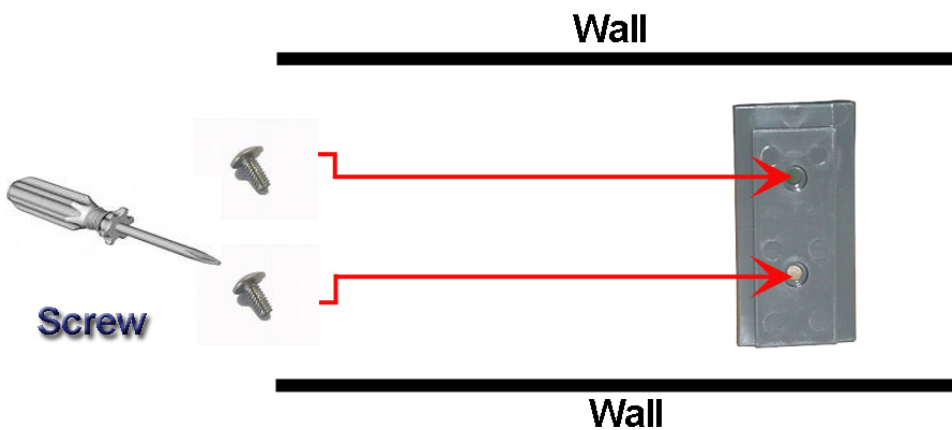
- (2) Assemble the wall & ceiling strut coming with the package, and then fasten the camera with the screw on the **BACK** of the camera. (For the ceiling mount, you should fasten the camera with the screw on the **TOP** of the camera.)



- (3) Link and lock the base coming with the package and strut together.



- (4) Before positioning the camera, please drill the wall at the desired position and screw the fixed board. Then, hang the camera on the fixed board along the slot of the bottom.



4. Reset to Default

wifiCAMit provides “Reset Power” and “Reset Default” buttons that will be easy for users to reset the camera. The buttons are located on the back of the camera (See 1 and 2 of the figure below).



| No. in Figures | Name on wifiCAMit | Description | Remark |
|----------------|-------------------|--|---|
| 1 | SW_1 | Press SW_1 button then wifiCAMit will do the power reset. | N/A |
| 2 | SW_2 | Press and hold SW_2 button for 5~10 seconds to reset the camera to its factory defaults. | The green indicator LED of RJ45 port will light when it is finished with the reset procedure. |

Default Setting for wifiCAMit:

- 1) DHCP
- 2) If IP is not assigned within 30 seconds, the default IP then will become: **192.168.8.99:8299** for wired mode.
- 3) Public password: blank
- 4) Supervisor password: blank

Appendix A – Technical Specifications

- Advanced 120 MIPS RISC processor(build in 64kB Flash program memory and 20kB SRAM data/program memory)
- 4M x 16bits SDRAM
- Lens:
 - Focal Length:3.6 mm
 - Aperture: F 2.0
 - Angle of View (DIA): ~75 degrees
- RJ22 for 5V DC /100~240V AC adapter
- Image Sensor Specification:
 - 1/4" CMOS Sensor
 - QCIF, QVGA and VGA
 - 30 frames/sec
 - Dynamic range: 60 dB
 - Sensitivity: 3.0 V/LUX-Sec
- Trigger input: Normal Close to Open or Low to High TTL level
- Power consumption: 5V DC/ 750 mA
- International Image Standard
 - 640x480, 320x240, 176x144
- 24bit Colored Motion JPEG images
- Frame/Sec. (In wired mode):
 - 640x480 @ 3+frames
 - 320x240 @ 6+frames
 - 176x144 @ 7+frames
- Wireless Operation Mode:
 - Ad Hoc / Infrastructure
- Encryption Type:
 - WEP (5 ASCII / WEP 13 ASCII), WEP (10 HES / 26 HEX)
 - WPA / TKIP, WPA / AES
- Operating Environment:
 - Temperature 0~55°C
 - Humidity 80% relative at 25°C
- Network Protocol:
 - UDP, TCP/IP, HTTP, NTP, DHCP, ARP, etc.
 - Automatically switch between 10/100baseT/TX Fast Ethernet
 - Customized Network communication protocol for avoiding hackers

- Weight: 150g (without the stand)
- Dimension of Main Body: 60 x 45 x 100 mm (without the stand)

Note: Any specification is subject to change without any notice.

Appendix B – Advanced Network Settings

If you are not using a router, very likely you are using a DSL modem with PPPoE for single PC or multiple PCs. If your Internet allows only one IP or has no more spare IP from PPPoE, you would need to buy a new router. If your PPPoE still have a spare IP, you could setup PPPoE for the camera.

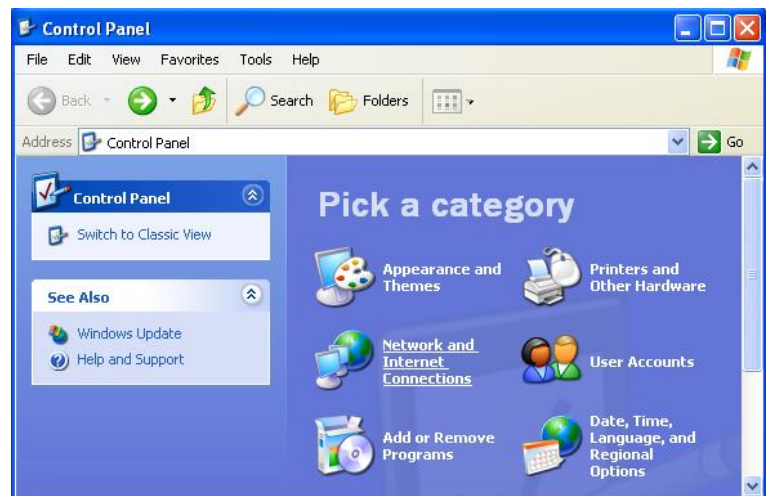
■ Set up a new router

Find out the type of your WAN port of your Internet service: fixed IP, DHCP or PPPoE. (Please ask your Internet Service Provider for the connection details and information). Setup the new router according to the manual comes with the new router. After your PC connected to the new router is able to connect to the Internet, please follow the Quick Installation Guide for wifiCAMit to set up your camera.

■ Set up PPPoE for the camera

Please follow the steps below to set up your PC:

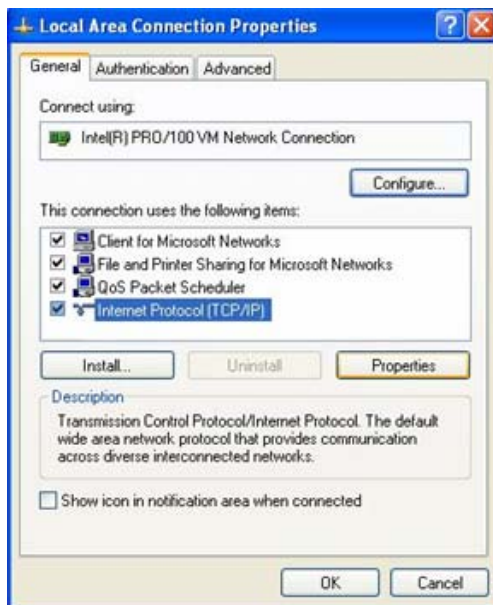
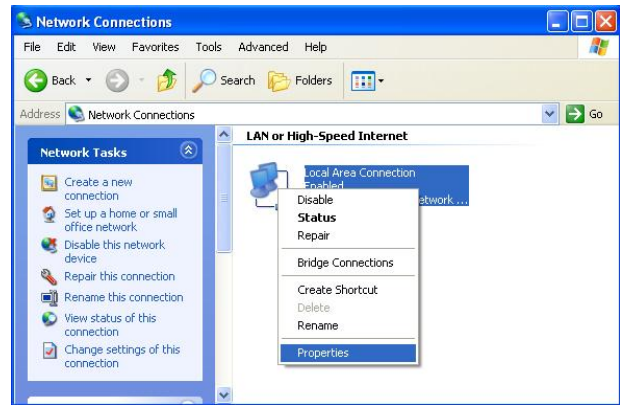
- 1) Go to Start → Settings → Control Panel.
- 2) Click “Network and Internet Connections”.



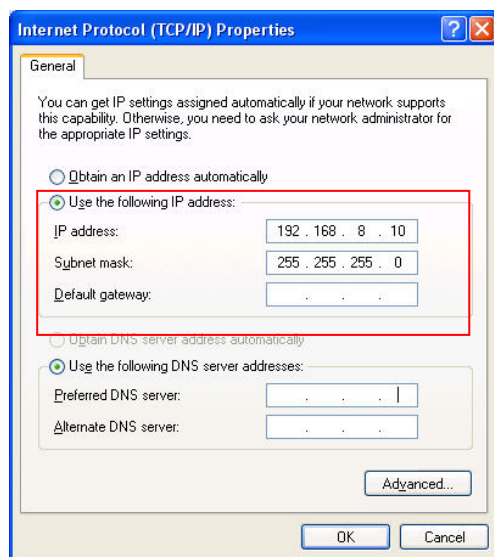
- 3) Click “Network Connections”.



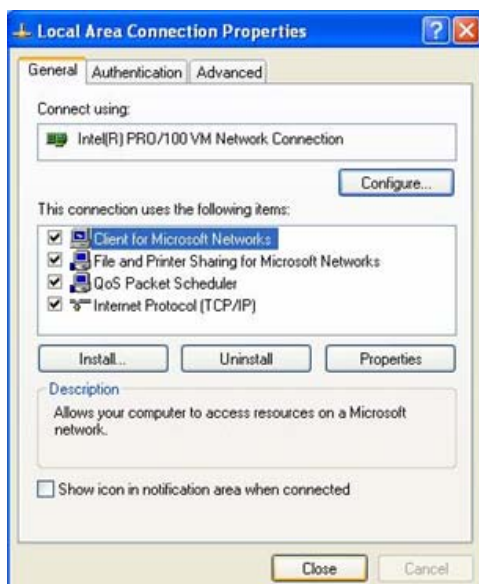
4) Highlight the icon “Local Area Connection”, right click your mouse, and choose “Properties” function.



5) Highlight “Internet Protocol (TCP/IP)”, and then press **Properties** button.



6) Choose “Use the following IP address”, and then follow the figure to input the IP address and Subnet mask. Finally, press **OK** button to exit the “Internet Protocol (TCP/IP) Properties” window.



7) Press **Close** button to close the “Local Area Connection Properties” window, and then follow eCAMit Deluxe User's Guide in CD to install the eCAMit Deluxe software to view cameras.