WiFi IP Camera

User's Guide

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Chapter 1

Introduction

1

This Chapter provides information of the WiFi IP Camera's features, components and capabilities.

Overview

Congratulations on the purchase of your new WiFi IP Camera. The WiFi IP Camera is a Day/Night WiFi IP Camera with 1080p resolution and 802.11ac WiFi connectivity. With built-in White Light LEDs, the WiFi IP Camera can provide illumination around 5 meters long under low light conditions in a simple, economical manner.

The WiFi IP Camera also comes with smart zoom feature, which allows images to be zoomed without losing picture quality. The central part of the picture is trimmed and enlarged without image processing.

Moreover, the duo-hinge and compact design of the camera can be extended from the wall and easily moved around, while still being firm enough to hold for odd angles.

Features

- *Standalone Design.* The WiFi IP Camera is a standalone system with built-in CPU and Video encoder. It requires only a power source and a connection to your Wireless iHub.

- *Dual Video Support.* The WiFi IP Camera can support H.264 and MJEPG video for different image compression.

- *Suitable for Home, Business or Public Facilities*. Whether for Home, Business or Public Facility surveillance, or just for entertainment and fun, the WiFi IP Camera has the features you need.

- *IR LED Support.* Each WiFi IP Camera has two infrared LEDs. The LEDs can provide illumination around 5 meters long, that can help to output a better video quality while under low-light conditions such as on cloudy days, or in the morning or evening.

- *Smart Zoom Support.* With its 16x (QHD) optical zoom, you can move closer without taking a single step, and the pictures captured by the image sensor of the camera are enlarged without losing quality.

Wireless Features

- *Supports 802.11ac Wireless Standard.* The 802.11ac standard provides backward compatibility with the 802.11n standards. The WiFi IP Camera can work with all 802.11ac, 802.11n, 802.11b and 802.11g Wireless stations.

- *Supports WPS.* WPS (Wi-Fi Protected Setup) can simplify the process of connecting you WiFi IP Camera to your wireless network by using the push button configuration (PBC) on the Wireless Access Point, or entering a PIN code if there's no button.

- *Wired and Wireless Network.* The WiFi IP Camera can be connected either with wire or wirelessly to your network.

- *WPS Support.* WPS (WiFi Protected Setup) can simplify the process of connecting any device to the wireless network by using the push button configuration (PBC) on the Waterproof HD IP Camera, or entering a PIN code if there's no button.
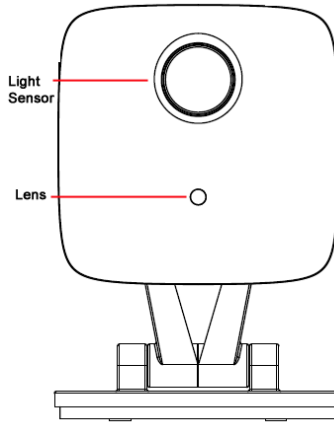
Physical Details - WiFi IP Camera

Front Panel

Figure 1: Front Panel

Light Sensor   This is hardware sensor to detect LUX.

Lens   No physical adjustment is required or possible for the lens, but you should ensure that the lens cover remain clean. The image quality is degraded if the lens cover is dirty or smudged.
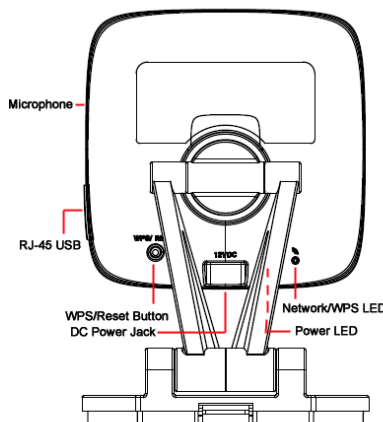
Rear Panel

Figure 2: Rear Panel

Microphone   The built-in microphone is useful for bi-direction voice conversation.

LAN port	Use the provided RJ-45 USB cable to connect your WiFi IP Camera to a 10/100BaseT hub or switch.

Note:
- Plugging in the RJ-45 USB cable will disable the Wireless interface. Only 1 interface can be active at any time.
- The RJ-45 USB cable should only be connected or disconnected when the camera is powered OFF. Attaching or detaching the RJ-45 USB cable while the camera is powered on does NOT switch the interface between wired and wireless.

WPS/Reset Button	Push the WPS button on the device and on your other wireless device to perform WPS function that easily creates an encryption-secured wireless connection automatically.

- **WPS PBC Mode**. When pressed and released (less then 3 seconds), the WiFi IP Camera will be in the WPS PBC mode (Auto link mode).
- **WPS Pin Code Mode**. When pressed and held for over 3 seconds, the WiFi IP Camera will be in the WPS Pin Code mode.
- **Reset to manufacturer default valued and reboot**. When pressed and held over 10 seconds, the settings of WiFi IP Camera will be set to their default values.
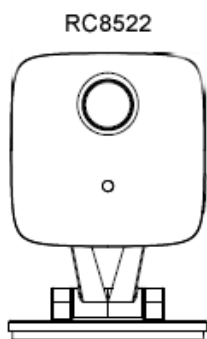
DC Power Input	Connect the supplied 12V power adapter here. Do not use other power adapters; doing so may damage the camera.
Power LED	
Network/WPS LED	

Package Contents

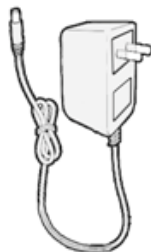The following items should be included in the package: If any of these items are damaged or missing, please contact your dealer immediately.

RC8522   Screw x 2 / Anchor x 2   Power Adapter   USB to Ethernet Cable

Chapter 2

Basic Setup

2

This Chapter provides information on how to install and configure the WiFi IP Camera.

System Requirements

- To use the Wireless interface on the wireless model, other Wireless devices must be compliant with the IEEE802.11ac, IEEE802.11n, IEEE802.11a, IEEE802.11b or IEEE802.11g specifications. All Wireless stations must use compatible settings.

> **Note!**
>
> **Mode: Infrastructure**
> **SSID: ANY**
> **Wireless Security: Disabled**
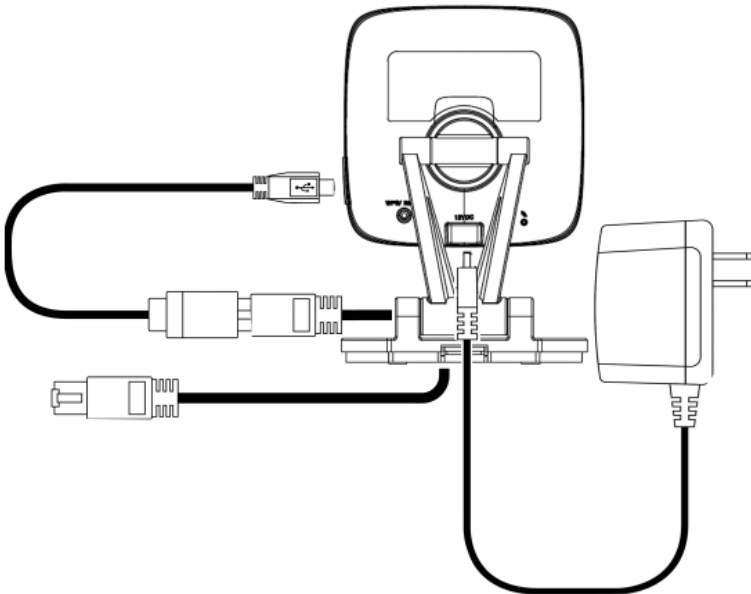> **Domain: USA**
> **Channel No.: Auto**

Installation

1. Find the Location

Identify the location for the WiFi IP Camera.

2. Connect the LAN Cable

Connect the WiFi IP Camera to a 10/100BaseT hub or switch, using the supplied RJ-45 USB cable and a standard LAN cable.

Note! For this Model, it will disable the Wireless Interface. The Wireless and LAN interfaces cannot be used simultaneously. Using the LAN interface is recommended for initial configuration. After the Wireless settings are correct, the Wireless interface can be used.

The first time you connect to the camera, you should connect the RJ-45 USB cable and configure the WiFi IP Camera with appropriate settings. Then you can unplug the RJ-45 USB cable and power off the camera. The WiFi IP Camera will be in wireless interface when you power on the camera again.

3. Power Up

Connect the supplied 12Vpower adapter to the WiFi IP Camera and power up. Use only the power adapter provided. Using a different one may cause hardware damage.

4. Check the LEDs

- The *Power* LED will turn on briefly, then start blinking. It will blink during startup, which will take 55 to 57 seconds. After startup is completed, the *Power* LED should remain ON.

- The *Network/WPS* LED should be ON.

Wall Mounting

*Note: Please ensure that the WiFi IP Camera is configured and added to the network before mounting it.

1. Push up to release the mounting plate from the stand
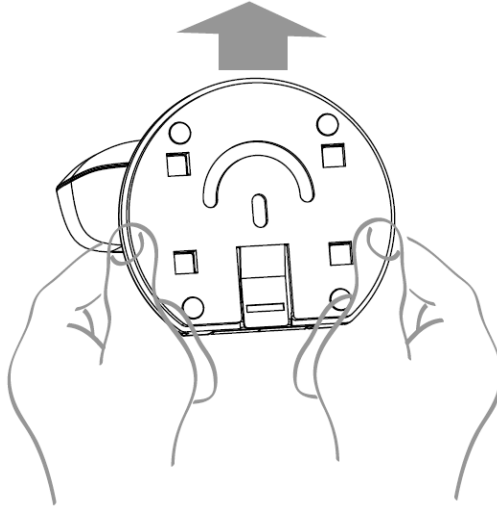
2. Identify the location for mounting the WiFi IP Camera.
3. Install and drive two screws 2/3 of the way into the wall.
4. Align the two mounting holes at the bottom of the camera stand with the two screws, and mount the mounting plate onto the screws.
    a. Mount the mounting plate with the screw first.

    b. Adjust the angel by moving the opening of the wall. Install the other screw after the adjustment.
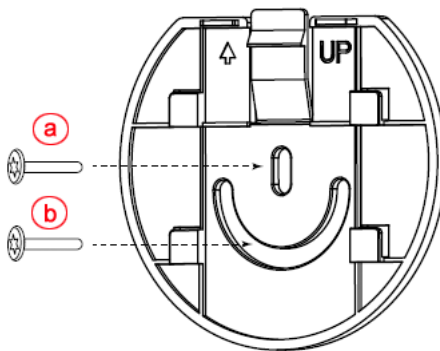
5. Attached the WiFi IP Camera to the mounting plate.
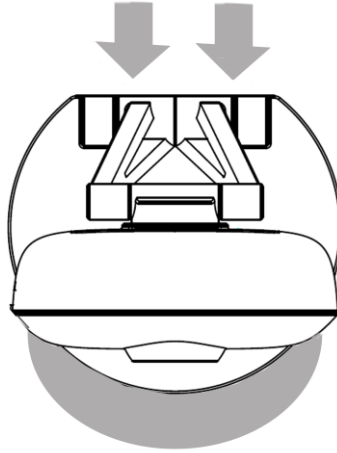
6. Connect the USB to RJ-45 cable to the USB port of the WiFi IP Camera. Then use a standard LAN cable to connect an available port on your router.

7. Connect the power cable into the back of the camera and plug the adapter end into a power outlet.

> **Use only the power adapter provided. Using a different one may lead to hardware damage.**

8. Adjust the WiFi IP Camera to a desired position and secure it firmly.

Multiple Use for Wall/Ceiling Mounting
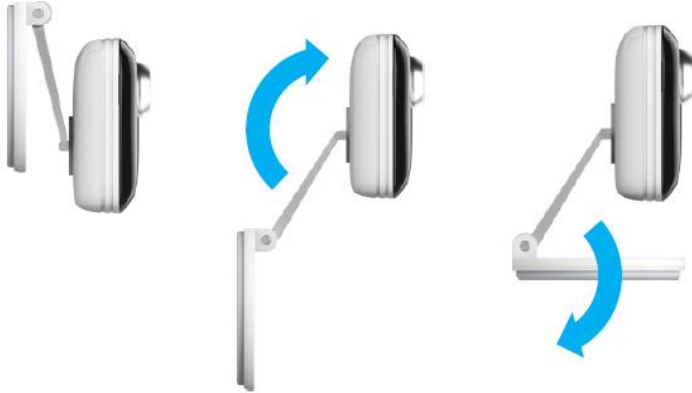
With the duo-hinge and compact design of the camera, it can offer users of added performance, smooth operation and installation convenience. Furthermore, the extension arm and smooth rotation can be adjusted to all angles for a dynamic point of view. Users can choose the desired angle to fulfill their needs, no matter either in wall mounting or ceiling mounting.

Wall/Ceiling Mounting Scenario

Note: Please try the angle measurement of the camera before installation, since there are still some limitations for wall/ceiling mounting.

Celling mounting

Side mounting

Front mounting
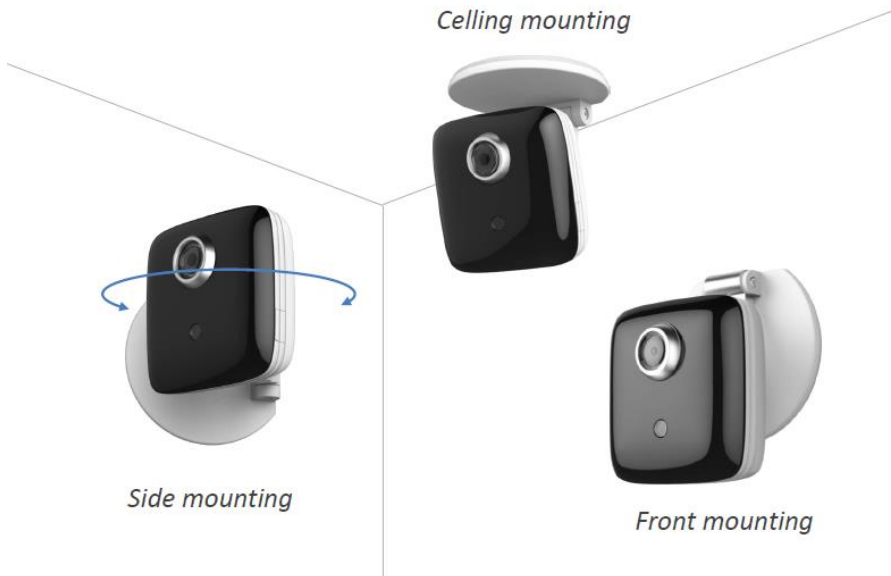
Chapter 3

<div style="float:right">**3**</div>

Viewing Live Video

This Chapter provides basic information about viewing live video.

Overview

After finishing setup via the Windows-based Wizard, all LAN users can view live video using Internet Explorer on Windows.

This chapter has details of viewing live video using Internet Explorer.

But many other powerful features and options are available:

- The camera administrator can also adjust the Video Stream, and restrict access to the video stream to known users by requiring viewers to supply a username and password.

- To make Live Video from the camera available via the Internet, your Internet Gateway or Router must be configured correctly.

Requirements

To view the live video stream generated by the WiFi IP Camera, you need to meet the following requirements:

- Windows XP, 32-bit Windows Vista, Windows 7/8/9.

- Internet Explorer 7 or later, Firefox 3.0 or later.

Connecting to a Camera on your LAN

To establish a connection from your PC to the WiFi IP Camera:
1. Start Internet Explorer.
2. In the Address box, enter "HTTP://" and the IP Address of the WiFi IP Camera.
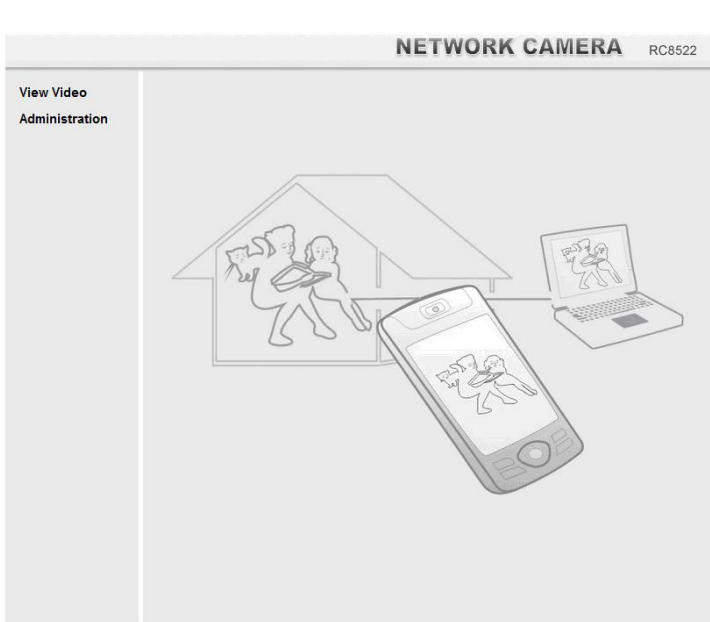3. When you connect, the following screen will be displayed.

Figure 3: Home Screen

4. Click *View Video*.
5. If the Administrator has restricted access to known users, you will then be prompted for a username and password.
   Enter the name and password assigned to you by the WiFi IP Camera administrator.
6. The first time you connect to the camera, you will be prompted to install decoders.
   Choose **"I accept the terms of the license agreement"** and click **"OK"**.
7. Video will start playing automatically. There may be a delay of a few seconds while the video stream is buffered.

Appendix A

Specifications

WiFi IP Camera

Model	WiFi IP Camera
Dimensions	72mm (W) x 68mm (H) x 30.5mm (D) (without Stand)
Operating Temperature	0° C to 45° C
Video compression	H.264 Main Profile and MJPEG
Image resolution	1080p (1920*1080),720p (1280*720), QHD (640*360), VGA (640*480), QVGA (320*240)
Storage Temperature	-20° C to 70° C
Network Protocols	TCP/IP, HTTP, HTTPS, DHCP, UPnP, NTP, RTP, RTCP, RTSP, DNS
Network Interface	1 RJ-45 LAN connection for Ethernet through Micro USB to Ethernet Cable
Wireless interface	IEEE 802.11ac/802.11n/802.11a/802.11b/802.11g compatible, WEP 64/128 bit, WPA/WPA2 personal security support
LEDs	2
IR LEDs	2
Power Adapter	12V/1A, 100~240 VAC

Regulatory Approvals

FCC Interference Statement

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 one of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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.

IMPORTANT NOTE:

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 22cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Country Code selection feature to be disabled for products marketed to the US/CANADA

Operation of this device is restricted to indoor use only