

2Megapixel FULL HD IP Camera

QUICK INSTALLATION GUIDE



Please read this manual carefully before installation and operation of the product.

Dear Customers!

By selecting this product, you have decided to use a professional device that guarantees highest quality and reliability. We would like to thank you very much for your confidence and kindly ask you to read the following instructions carefully before installation and operation in order to take full advantage of all quality features regarding this product.

	<b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN		<b>CAUTION</b> TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.
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The lighting flash with an arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of non-insulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**INFORMATION**  
This equipment has been tested and found to comply with limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**WARNING**  
Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

**CAUTION – To prevent electric shock and risk of the fire hazards**  
-Do NOT use power source other than that specified.  
-Do NOT expose this appliance to rain or moisture.

**Trademarks**  
All names used in this manual for hardware and software are probably registered trademarks of respective companies.

This installation should be made by a qualified service person and should conform to all local codes.

Precautions

- Please read the manual carefully before the installation in order to set up the camera correctly and to obtain the best picture quality.
- Please keep the manual in good condition for your future reference and service application.
- Installation and services should only be carried out by an authorized personnel according to local safety regulations.
- If any liquid or solid matter gets into the housing, immediately disconnect the camera from power supply and have it checked by your authorized dealer before reusing.
- Avoid installing the camera at extremely hot or cold places.
- If you are not a certified person, never try to dismantle the camera. To avoid electric shock, never remove the screws or covers. There are no parts inside that need maintenance by the user. All maintenance should be carried out by qualified personnel.
- Avoid installing the camera at a place of high humidity.
- Avoid installing the camera at the place exposed to gas or oil.
- Keep the top glass of the lens always clean in order to obtain the best picture quality all the time. Be careful not to be stained by fingerprint.
- Don't face the camera directly toward sunlight or sunlight reflecting area. IMAGE SENSOR may go defective at this condition.
- Please give a special attention to keep the unit from dangerous drop or external shock during the process of transportation or handling.
- Never try to touch the camera in wet hand. It may cause an electric shock.
- Do not expose the camera to radioactivity. It causes a serious damage on the IMAGE SENSOR.

Limitation of liability

This publication is provided "AS IS" without warranty of any kind, either express or implied, including but not limited to, the implied warranties of merchantability, fitness for any particular purpose, or non-infringement of the third party's right. This publication could include technical inaccuracies or typographical errors. Changes are added to the information herein, at any time, for the improvements of this publication and/or the corresponding product(s).

Disclaimer of warranty

In no event shall seller be liable to any party or any person, except for replacement or reasonable maintenance of the product, for the cases, including but not limited to below:

- (1) Any damage and loss, including without limitation, direct or indirect, special, consequential or exemplary, arising out of or relating to the product;
- (2) Personal injury or any damage caused by inappropriate use or negligent operation of the user
- (3) Unauthorized disassemble, repair or modification of the product by the user;
- (4) Inconvenience or any loss arising when images are not displayed, due to any reason or cause including any failure or problem of the product;
- (5) Any problem, consequential inconvenience, or loss or damage, arising out of the system combined by the devices of third party.
- (6) Any claim or action for damages, brought by any person or organization being photogenic subject, due to violation of privacy with the result of that surveillance-camera's picture, including saved data, for some reason, becomes public or is used for the purpose other than surveillance.

1. PRODUCT OVERVIEW

KEY FEATURES

- 2.0 Mega pixel 1/3" Progressive scan CMOS image sensor
- Dual Streaming of H.264 and M-JPEG
- Up to 30 frames per second at all image resolutions
- Supports image resolutions up to Full HD (1920 x 1080)
- Integrated motion detection with pre- and post-alarm image / video buffering
- Event-triggered FTP and email upload of still images and videos
- Full Duplex Two-Way Audio Support
- Digital PTZ
- UPnP supported
- External microphone input & speaker output support
- external sensors and external alarm devices support
- Supports CBR (constant bit rate) and CVBR (variable bit rate) modes
- Controllable frame rate
- Video access through any standard Web browser
- Privacy Masking up to 8 areas
- Supports IEEE 802.3af Power over Ethernet injectors, mid- and end-spans
- HTTPS supported (Hyper Text Transfer Protocol Secured)
- Integrated E-Mail, FTP, DDNS and DHCP client
- Extensive CGI API for software integration and remote programming operations
- Includes Windows based IP Installer and License-free 16 channel NVR software











SPECIFICATION

Classification		Specification
		2Megapixel FULL HD IP Camera
General	CPU	32-bit ARM9 RISC CPU up to 432MHz, 32KB I/D-Cache, MMU
	Flash	128 Mbyte Flash Memory
	SDRAM	1Gbit DDR2
	Image Sensor	2.0 Megapixel 1/3" Progressive scan CMOS image sensor
Image Pickup	Total Pixels	1920(H) x 1080(V) 2 Megapixel
	Effective Pixels	1920(H) x 1080(V) 2 Megapixel
	S/N Ratio	More than 50dB
	Min. Illumination	0.2Lux
	Day & Night	Auto (AGC D/N)
	Lens	3.7mm Megapixel Pinhole Lens
Video	Video Compression	H.264 High profile, Motion JPEG
	Resolutions	Up to 1920 x 1080
	Frame Rate	H.264 Up to 30fps with 1920 x 1080P MJPEG Up to 30fps with VGA resolution
	Video Streaming	Support multi stream with H.264, MJPEG Adjustable frame rate
	Pan / Tilt / Zoom	Digital PTZ
	Image Setting	Day & Night
		Auto White Balance
		Auto Exposure
		Privacy Mask
		Effect - Color, Sharpness, Mirror / V-Flip, etc.
Audio	Audio Streaming	Two-way, full duplex
	Audio Compression	G.711
	Sample Rate	8KHZ
	Data Rate	64Kbps
	Audio Input	Microphone input / 1 x Line-In (Mono)
	Audio Output	Line output / 1 x Line-Out (Mono)
Network	Security	Password protection User access log
	Supported Protocol	HTTPS encryption HTTP, HTTPS, FTP, SMTP, UPnP, DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, ICMP, DHCP
System integration	Intelligent Video	Motion detection 4 x 3 blocks Motion detection
	Alarm Trigger	External input / Normal Open / Close Type
	Alarm Events	File upload via ftp, e-mail Notification via email, FTP and TCP
	Video Buffer	5MB pre-alarm and post-alarm-180sec
	Firmware Upgrade	Remote upgrade via network
	API	CGI Interface document
	Reset Button	ActiveX Interface (ocx (dll) + document) 1 x Factory Reset Button
Power	Power Source	DC 12V / 1.5A, PoE (Power over Ethernet) : 802.3af

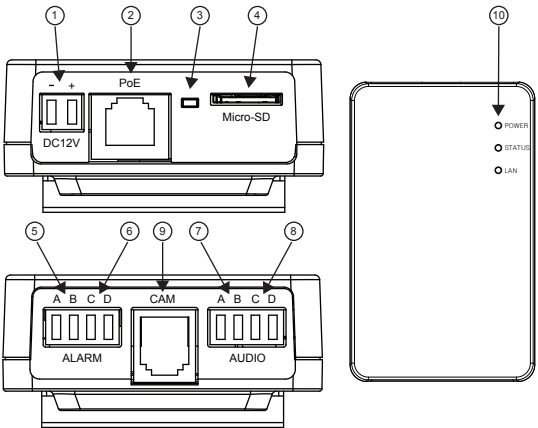
※ Specifications are subject to change without prior notice for improvement.

2. NAME AND FUNCTION OF EACH PART

2.1 PACKAGE CONTENTS

Appearance	Description
	IP Camera x 1
	Installation Guide x 1
	Terminal Block (2P) x 1
	Terminal Block (4P) x 2
	Tapping Screws (Ø3*20L) x 2
	Tapping Screws (Ø4*30L) x 2
	Plastic anchor x 2
	Module Cover x 1
	L-Wrench M3 x 1
	CD x 1

2.2 NAME AND FUNCTION



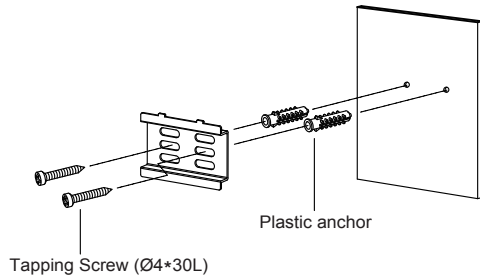
No.	Item	Description
①	Power Connector	DC12V
②	Network and POE Connector	POE (Power over Ethernet) and LAN Cable
③	Reset Button	Factory Reset
④	Micro SD Card Slot	Recording
⑤	A Alarm COM	Alarm Output
	B Alarm NO	
	C GND	
⑥	D Alarm IN	Alarm Input
⑦	A GND	Microphone Input
	B Micro Phone	
	C GND	
⑧	D Line - Out	Line Output
⑨	RJ-12 Connector	Sensor Unit Connection
⑩	Status LED	Power : Power ON Status : Network connection and video transmission (The LED blinking when motion detected) LAN : Link - UP

### 3. INSTALLATION

#### 3.1 Installation of Main Unit

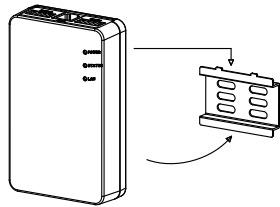
**Steps :**

1. Fix the standard mounting rail on the mounting surface.



- For wooden surface mounting, you can just use the self-tapping screws to fix the camera.
- For cement surface mounting, you need to use the Plastic anchors to fix the camera.

2. Hang the hook which is on upper-side of the main unit onto the rail, press a little harder on the lower part of the main unit, and then the elastic clasp will be automatically buckled.

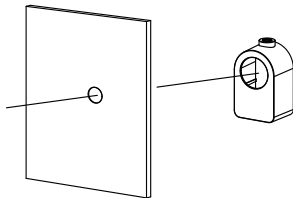


#### 3.2 Installation of Block-Shaped Sensor Unit

The camera supports concealed mounting and exposed mounting with a decorative cover.

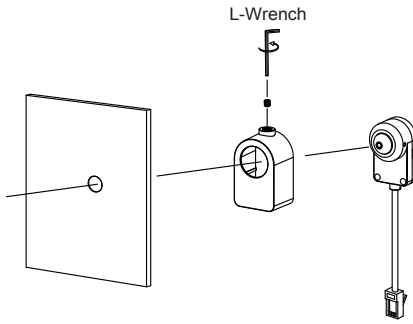
##### 3.2.1 Concealed Mounting

1. Remove the protection of the adhesive tape on the module cover. Paste the module cover on the mounting surface with aligning with the drilling hole.



2. Install the Block-shaped sensor unit into the module cover and make it to be buckled.
3. Tighten the fastening screw on the top of the module cover.

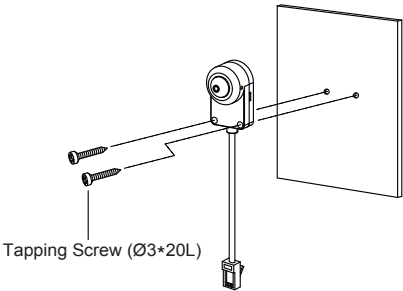
### 3. INSTALLATION



#### 3.2.2 Exposed Mounting

**Steps :**

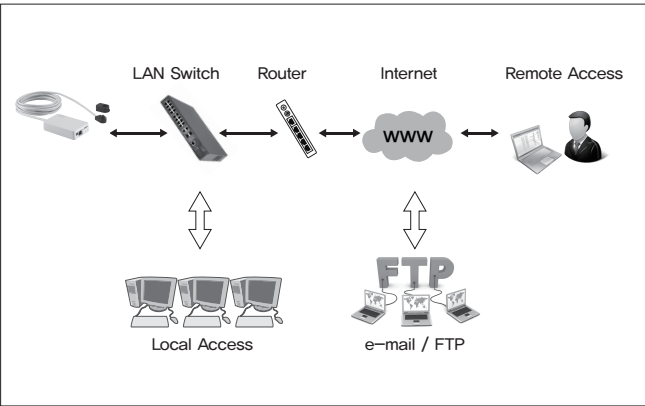
1. Fix the Block-shaped sensor unit on the mounting surface with screws.



- For wooden surface mounting, you can just use the self-tapping screws to fix the camera.
- For cement surface mounting, you need to use the expansion screws (locally procured) to fix the camera.

### 3.3 Installation Example

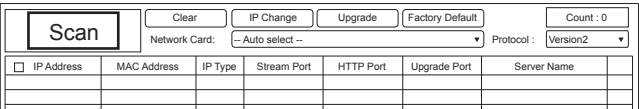
#### 3.3.1 Installation Example



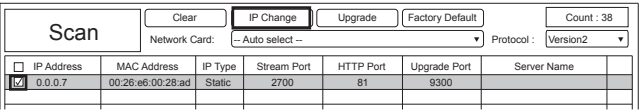
### 3. INSTALLATION

#### 3.3.2 Connecting Network

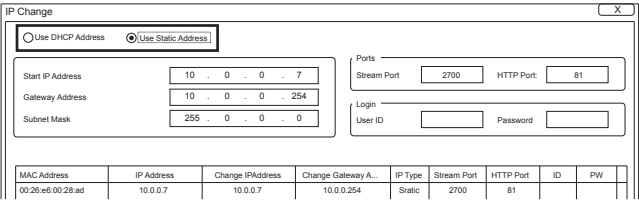
- 1) Run IPScan Utility program in the packaged CD.
- 2) Click "Scan" button. Once IPScan Utility program scanned, the panel shows every camera or video server connected on the local network.



- 3) The MAC address can be found on the label of the camera or video server.
- 4) From the cameras or video servers listed, select one and click "IP Change" to assign a new IP address.

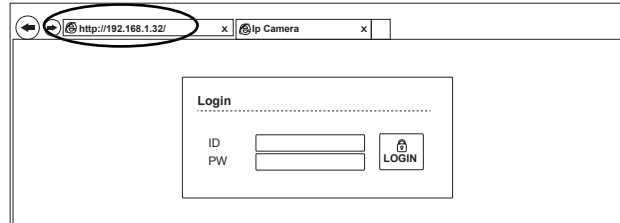


- 5) Select DHCP or STATIC, then change IP address. Default ID and password are "admin" and "1234" respectively.



#### 3.3.3 Accessing the Camera or video server's Homepage

- 1) After you assign IP address to your IP camera or video server and enter that camera or video server address on the Web Browser, you will be connected to the login page of the camera or video server as shown below.



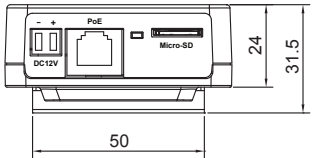
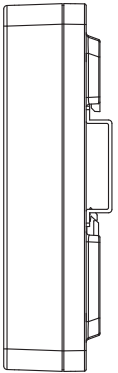
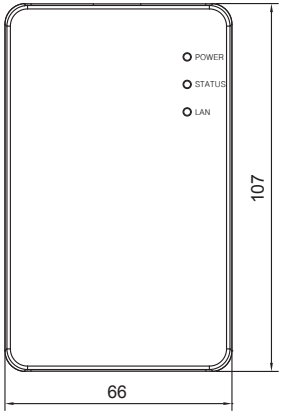
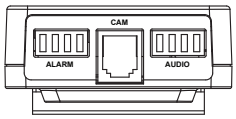
- 2) Enter a ID(username) and password to access the camera or video server. The default ID and password are "admin" and "1234".

- 3) The first time you login to the camera or video server using ActiveX, you are notified that a required ActiveX control is required. You need to allow the installation of ActiveX by clicking "Yes". It is normal for this process to take up to 30 seconds.

※ For more information, see the manual of IP camera or video server in the packaged CD.

### 4. DIMENSION (unit: mm)

#### • Main Unit



#### • Sensor Unit

