

2Megapixel Vandal-Proof FULL HD IP Camera

QUICK INSTALLATION GUIDE



ELIP-470

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.



The lightning 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 its 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 or video server'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 1/2.8" SONY progressive scan CMOS image sensor for excellent image quality
- Vandal Proof, fire resistant and tamper resistant
- Perfect tool-free 3-Axis mechanism inside
- Extended IR life cycle
- Dust and Moisture free (IP66 Waterproof), IK10 Certified
- 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
- 1 Port analog video loop-out
- External microphone input & speaker output connector
- External sensors or external alarm devices
- 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		2Megapixel Vandal-Proof 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 Pickup	Image Sensor	2.0 Megapixel 1/2.8" SONY progressive scan CMOS image sensor	
	Total Pixels	1952(H) x 1116(V) 2.18 Megapixel	
	Effective Pixels	1944(H) x 1104(V) 2.14 Megapixel	
	S/N Ratio	More than 50dB	
	Min. Illumination	0Lux (IR On)	
	IR Distance	20M	
	Day & Night	ICR Filter Changer	
	Lens Control	Motorized Lens Control	
	Lens	3 ~ 10.5mm Vari-focal Megapixel 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 CVBR / CBR in H.264
	Pan / Tilt / Zoom	Digital PTZ	
Image Setting		Day & Night	
		Auto White Balance	

		Auto Exposure
		Privacy Mask
		Effect - Color, Sharpness, Mirror / V-Flip, etc.
	Output	BNC x1, 1.0Vp-p, 75 ohm Composite Video, NTSC / PAL
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
		HTTPS encryption
Supported Protocol	HTTP, HTTPS, FTP, SMTP, UPnP, DNS, DDNS, NTP	
	RTSP, RTP, TCP, UDP, ICMP, DHCP	
System Integration	Intelligent Video	Motion detection 4 x 3 blocks
	Alarm Trigger	Motion detection
		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	
etc	Reset Button	ActiveX Interface (ocx (dll) + document)
		1 x Factory Reset Button
Physical	Power Source	DC 12V / 1.5A, PoE (Power over Ethernet) : 802.3af
	Power Consumption	Max. 7.6W with IR On
	Net Weight	1700g Appr. (Camera Only)
	LED's	Power, Network Connection
	Dimension	153(Ø) x 122(H)
Environment	Operating Temperature	-10 degree ~ 50 degree Celsius (-13F ~ 122F)
	Storage Temperature	-20 degree ~ 60 degree Celsius (-13F ~ 140F)
Software	Included Software	NVR Lite (16 Channel), IP Installer (Windows only)
Package	Package Contents	Network Camera, Use Manual, External Power Adaptor, Software CD

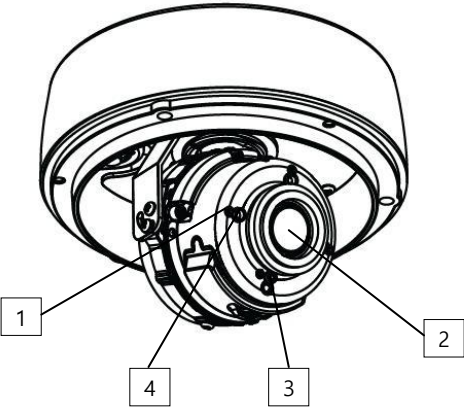
※ Specifications are subject to change without prior notice to enhance performance and stability.

2. NAME AND FUNCTION OF EACH PART

2.1 Package Contents

APPEARANCE	DESCRIPTION
	IP Camera x 1
	Installation Guide x 1
	Drilling Template x 1
	Torx L-Wrench x 1
	Tapping Screws x 4
	Plastic Anchor x 4
	LED Cap x 1
	CD x 1

2.2 Name and Function

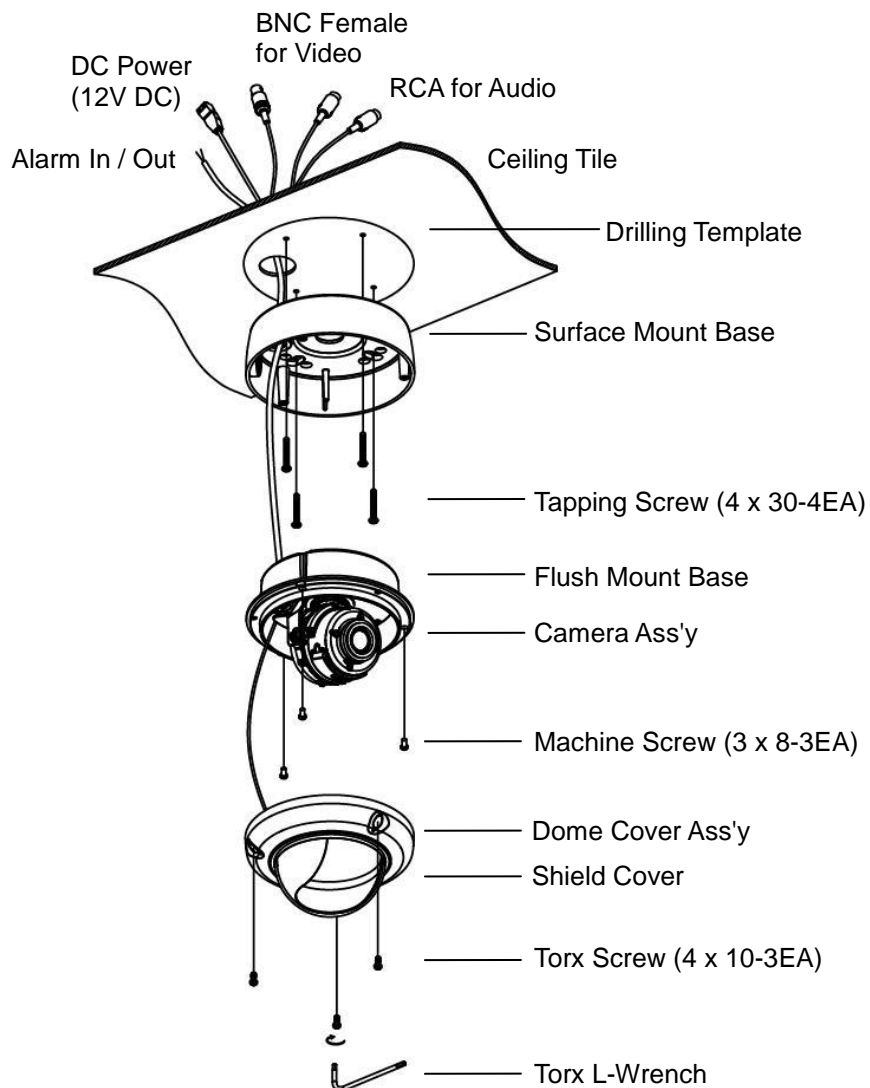


NO.	ITEM	DESCRIPTION
1	Status LED	- RED LED : Power On - GREEN LED : Network connection and Video transmission - GREEN LED Blinking : Motion Detection
2	Lens	3 ~ 10.5mm Vari-focal Megapixel Lens
3	Illumination sensor	Control IR LED by sensing light
4	IR LED	Infrared Hi-power LED

3. INSTALLATION

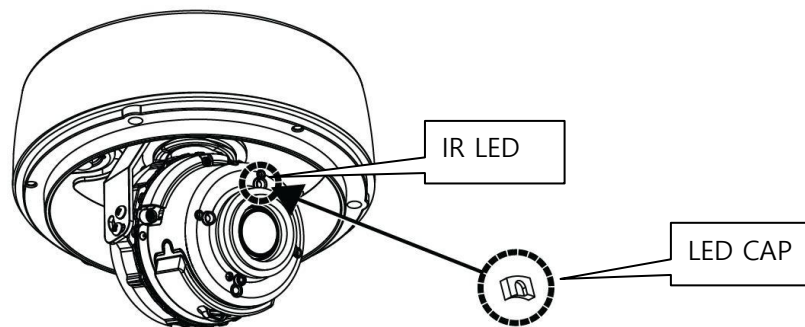
3.1 Installation overview

- Surface Mount



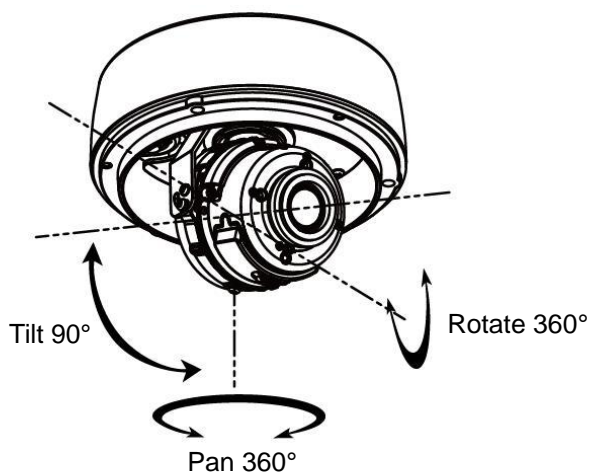
- ① Paste a Drilling Template on the ceiling or wall and drill screw points which will be done for installation.
- ② Fix the Surface Mounting Base by using Tapping Screws provided.
- ③ Fix the Flush mount Base on Surface Mounting Base.
- ④ Turn the camera Ass'y to the desired direction.
- ⑤ Turn the dome and shield cover to the camera direction.
- ⑥ Fix the Dome Cover Ass'y to the Flush mount Base by using Torx Screw and Torx L-Wrench.

※ **Caution.**



Please put a LED CAP on the IR LED if there is IR reflection.

3.2 3-Axis Adjustment



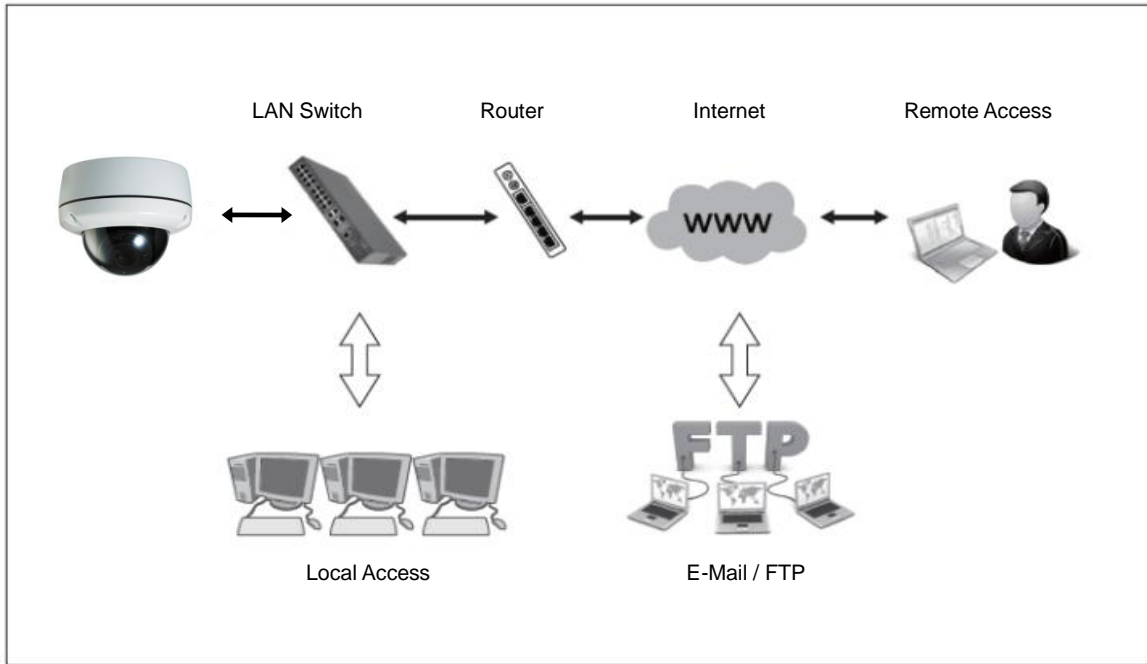
※ Tool-free 3-Axis mounting mechanism
Perfect Tri-axis!

- Panning axis up to 360° degree.
- Tilting axis up to 90° degree.
- Rotation axis up to 360° degree.

No need to use a tool for adjustment!
All adjustments are done quick and easy by hand!

3.3 INSTALLATION EXAMPLE

3.3.1 Installation Example



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.

Scan	Clear	IP Change	Upgrade	Factory Default	Count : 0		
Network Card: -- Auto select --				Protocol : Version2			
<input type="checkbox"/>	IP Address	MAC Address	IP Type	Stream Port	HTTP Port	Upgrade Port	Server Name

- 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.

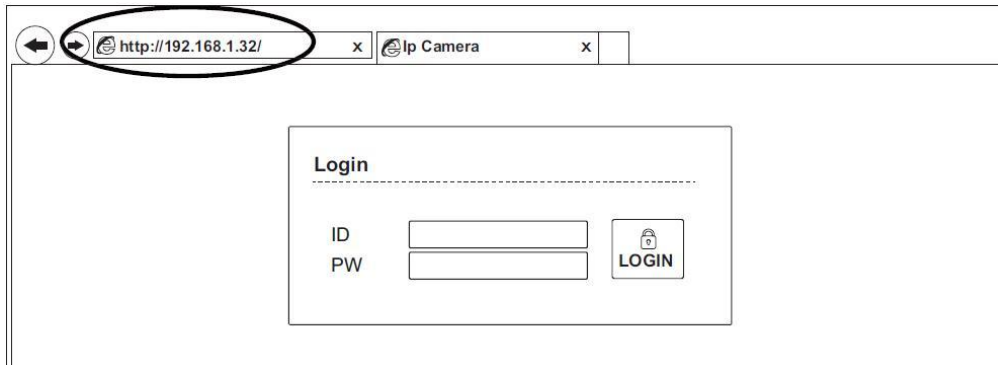
Scan	Clear	IP Change	Upgrade	Factory Default	Count : 0		
Network Card: -- Auto select --				Protocol : Version2			
<input type="checkbox"/>	IP Address	MAC Address	IP Type	Stream Port	HTTP Port	Upgrade Port	Server Name
<input checked="" type="checkbox"/>	0.0.0.7	00:26:e6:00:28:ad	Static	2700	81	9300	VD102i

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

IP Change									X
<input type="radio"/> Use DHCP Address		<input checked="" type="radio"/> Use Static Address							
Start IP Address	10 . 0 . 0 . 7			Ports	Stream Port	2700		HTTP Port:	81
Gateway Address	10 . 0 . 0 . 254			Login	User ID	Password			
Subnet Mask	255 . 0 . 0 . 0								
MAC Address	IP Address	Change IPAddress	Change Gateway A...	IP Type	Stream Port	HTTP Port	ID	PW	
00:26:e6:00:28:ad	10.0.0.7	10.0.0.7	10.0.0.254	Static	2700	81			

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 (mm)

