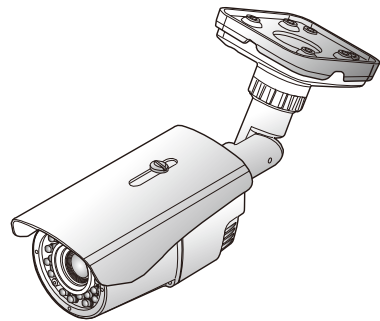


3 MEGA PIXEL HD NETWORK IR BULLET CAMERA USER'S MANUAL



- Sony 3Mega Pixel Image Sensor
- Triple Codec (H.264/MPEG4/MJPEG)
- Triple Stream
- Support Onvif
- Support POE
- IR LED : 40 units 850nm Infrared LED, 20,000hrs
- Night View Distance : Indoor 45 / Outdoor 30m
- External Control : Focus/Zoom(Gear Type), Reset/Factory Default(Joystick)
- Sense-Up (x6)
- True Day & Night(ICR)
- Built-in Concealed Cable Bracket
- Weatherproof (IP67)

IP3-002

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED
SERVICE PERSONNEL.

- The lightning flash with an arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "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 fire hazards:

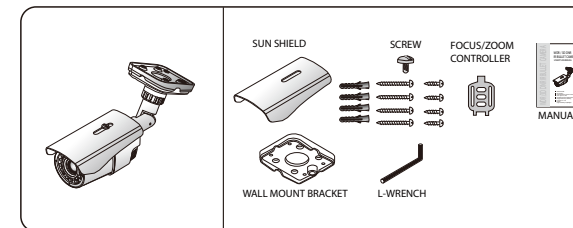
- Do NOT use power sources other than that specified.
- Do NOT expose this appliance to rain or moisture.

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

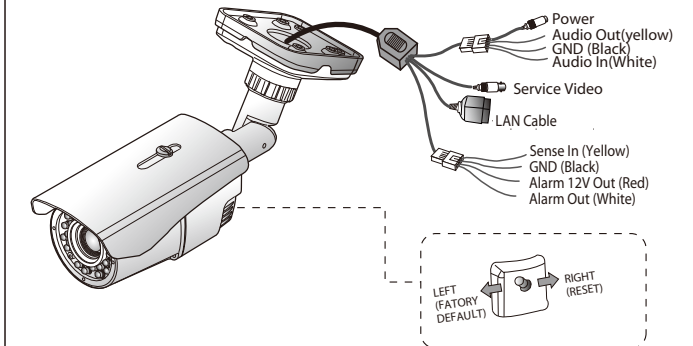
Precaution

- Do not Keep the camera face to strong light directly
- Do not install the camera in extreme temperature conditions .
- Do not disassemble the camera even if troubles happened
- To avoid malfunctions, never use the camera close to a gas or oil leak
- Do not drop the camera or subject them to physical shocks.
- Do not expose the camera to rain or spill beverage on it.
- Do not install the camera under unstable lighting conditions
- Do not install or use the camera in an environment where the humidity is high

Components



1. Interface



2. IP Initialization

Factory Default	IP Address	192.168.1.30
	Gateway	192.168.1.1
	Subnet mask	255.255.255.0
	I D	admin
	Password	admin
	Web Port	80
	RTSP Port	554

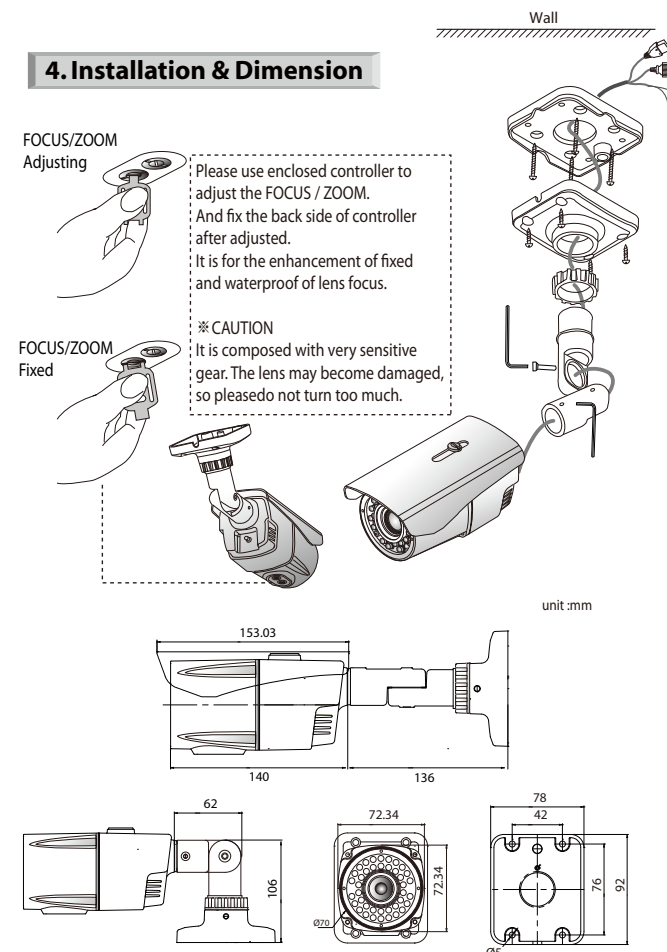
- * You should change the ID and Password after purchasing.
- * You will be responsible for all the damages unless you change the ID and Password.

3. Specification

CAMERA SECTION	
IMAGE	Image Sensor: 1/2.8" Sony Exmore 3MP Image Sensor Scan System: Progressive Scan Total Pixels: 2144(H) x 1588(V), 3.40 Mega Pixels Effective Pixels: 2048(H) x 1536(V), 3.14 Mega Pixels
Function	Day & Night: Auto/Day(Color)/Night(BW) Privacy Area: On/Off (6 Programmable Zone) WDR: DWDR (1~5Step) DNR: 1~63 Motion Detector: 48 Zone (On/Off, 1~5Step) Elec. Shutter: Auto(1/15~1/10000), Suppress Rolling, Manual Sense Up: 1~6 Step White Balance: Auto/Indoor/Outdoor/Fluorescent Ext. Video: VBS1.0Vp-p
Lens	Focal Length: 2.8~10 Mega Lens
IR LEDs	IR LEDs: 40 units Night View Distance: 30m
Electrical	Power Supply: DC12[V] ±10% / POE Current: Max 750mA
Environmental	Operating Temp.: -10°C ~ +50°C Preservation Temp.: -20°C ~ +60°C Humidity: 0% ~ 90%
Mechanical	Weight: Approx. 1,100 g
NETWORK SECTION	
System	OS: Embedded Linux
Network	Interface: RJ45 100/100 Base-T PoE Protocol: TCP/IP,UDP,IP,RTCP,RTSP,RTCP,NTP,HTTP,DHCP,FTP,SMTP,DNS,DDNS ver2.0 Onvif: iplinker.net DDNS: Max. 10 user Simultaneous Access: ver2.0
Video	Compress Format: H.264/MPEG4/MJPEG Resolution: 2048x1536/1600x1200/1920x1080/1280x1024/1280x720/640x480 Frame rate: 5fps ~ 15fps @ all resolution Video Quality: H.264,MPEG4 : Bitrate Control Streaming: MJPEG : Quality Level Control Triple Stream (Stream1,2,3) RTP/RTSP, UnicastRTP, Multicast RTP
Audio	Compress Format: G.711 u-law Streaming: Two way
Event	Sensor In: 1 (Digital Input) Alarm Out: 1 (Digital Out, Open Collector)
Web	Manager: IE, Firefox, Safari, Opera Viewer: IE only (Active-X)

Design and specifications are subject to change without notice.

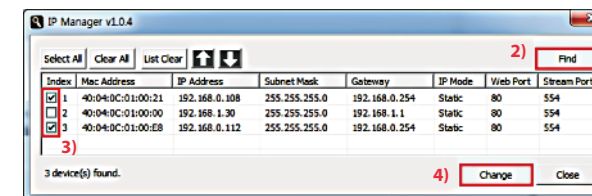
4. Installation & Dimension



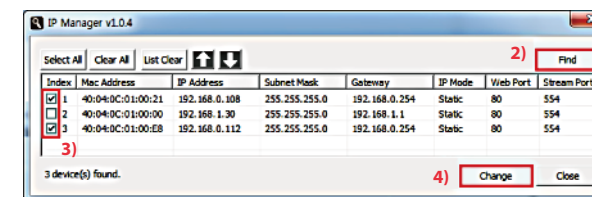
5. IP Manager

You can do all the settings about network by IP Manager.

- 1) Run IP Manager
- 2) Click Find
- 3) Choose the cameras you want to change
- 4) Click Change

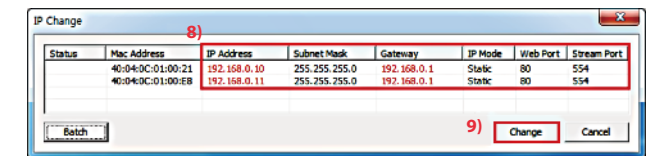
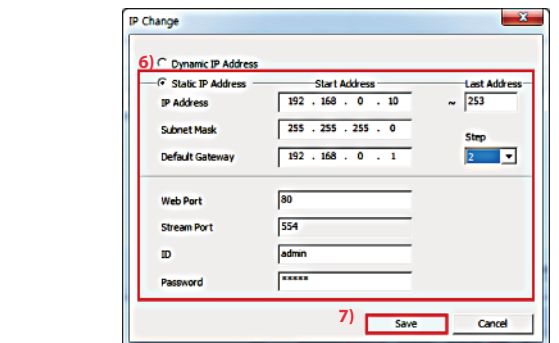


- 5) Click Batch

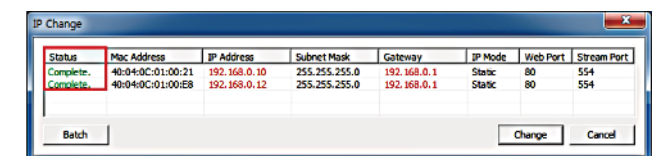


- 6) If you want to change many IP addresses, you can enter the starting IP address and the ending IP address, and enter each increasing step.
- 7) Click Save

- 8) Confirm if the changing values are correct.
- 9) Click Change



- 10) Check the Status
- 11) Try again for the failed cameras

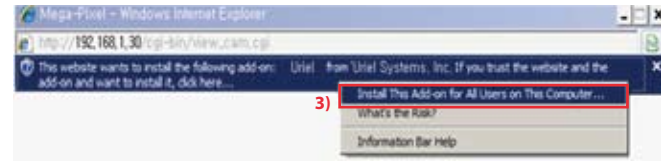


6. Web Viewer

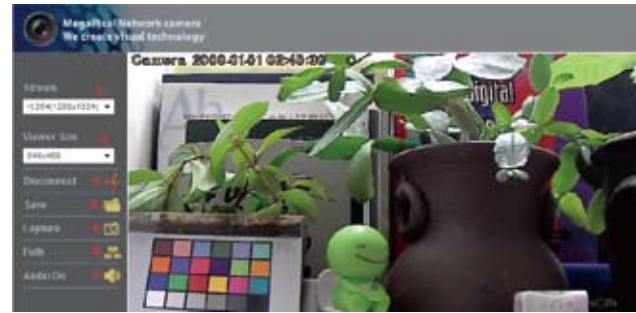
You can connect the web server inside the camera and check the picture.
First enter the address on internet explorer.
1) Enter ID / Password
2) Click Viewer



Install Active-X



Web viewer functions



- 1) Stream : Choosing stream, displaying the status of chosen stream
- 2) Viewer Size : Choose the size of window
- 3) Disconnect : Disconnect the camera
- 4) Save : Record the current moving picture in AVI file format.
- 5) Capture : Save the current still picture in BMP file format.
- 6) Path : Choose the directory to Save, Capture
- 7) Audio On : Turn On/Off Audio
Audio should be On at setting.

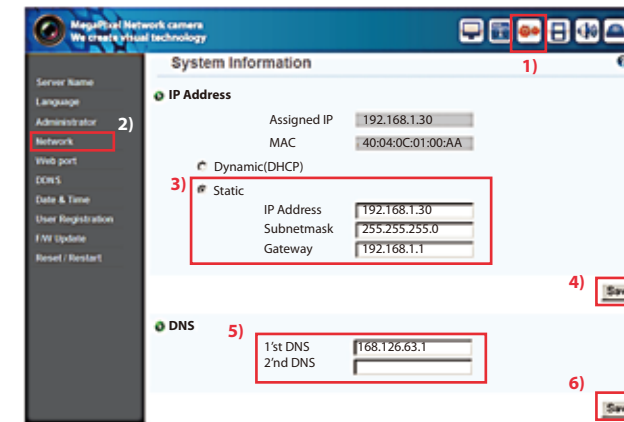
7. Web Manager

You can control all the functions through Web Manager log on.
When you use, you should change ID and Password and don't open for secure use.
1) Enter ID / Password
2) Click Manager



Check the network setting and change

When it is working fine under LAN condition, but not working under WAN, and the camera cannot receive the correct time from NTP server,

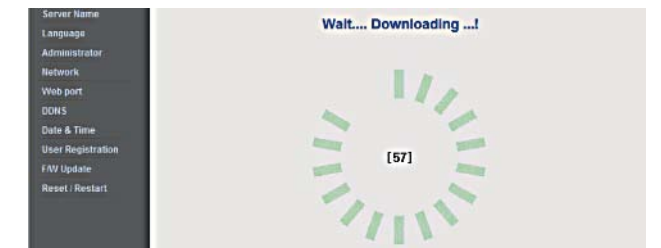


How to update the firmware

Update is needed to improve the functions and quality.
1) Click the find and choose the update file.
2) Click Update start and wait until Wait Downloading appears.
* Don't click any buttons when you are waiting.



3) Wait until Update completed
* Don't click any buttons when it is being updated.



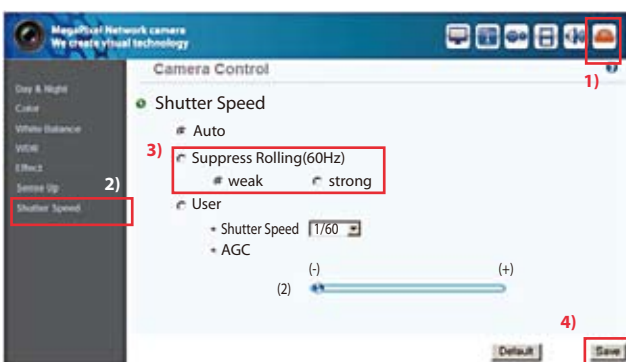
4) After Update completed, click Restart

8. Web Viewer

Suppress rolling



If there is a rolling picture under lighting, you can use this Suppress rolling function.
If you choose "Strong" on Suppress Rolling function, electric shutter will be fixed at 1/15 ~ 1/120 sec. you should be careful when you use it under bright lighting.
Click Help (?) for more details.



9. Web Manager

Frame rate / Bit rate adjustment



Refer to below bit rate and frame rate example for your easier understanding.
Current Status
Frame Rate : 30[fps]
Bit Rate : 4000[Kbps]

Case 1
Frame Rate 15[fps]
Bit Rate 4000[Kbps]

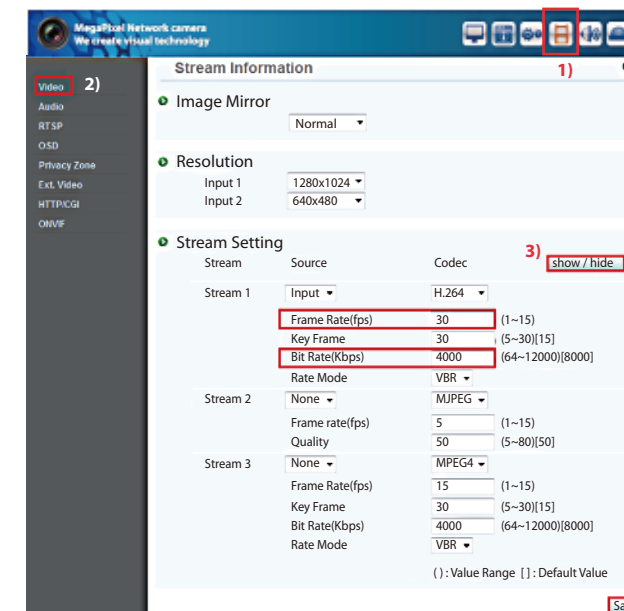
The pictures transferred per 1 sec. is decreased from 30 to 15.
The data size transferred per 1 sec. is maintained on 4000[Kbps]
Picture quality will be better, and network load will be same.

Case 2
Frame Rate 30[fps]
Bit Rate 2000[Kbps]

The pictures transferred per 1 sec. is maintained on 30.
The data size transferred per 1 sec. is decreased from 4000[Kbps] to 2000.
Picture quality will be worse and network load will be decreased from 4000[Kbps] to 2000, by half.

Case 3
Frame Rate 15[fps]
Bit Rate 2000[Kbps]

The pictures transferred per 1 sec. is decreased from 30 to 15.
The data size transferred per 1 sec. is decreased from 4000[Kbps] to 2000.
Picture quality is same, network load will be decreased from 4000[Kbps] to 2000, by half.
Therefore you should change both frame rate and bit rate.



How to set WDR



If you want to watch the more clear image under back light condition, you can do setting as below, and choose the step and click Save.

* You should check the pictures after click the Save button.

