

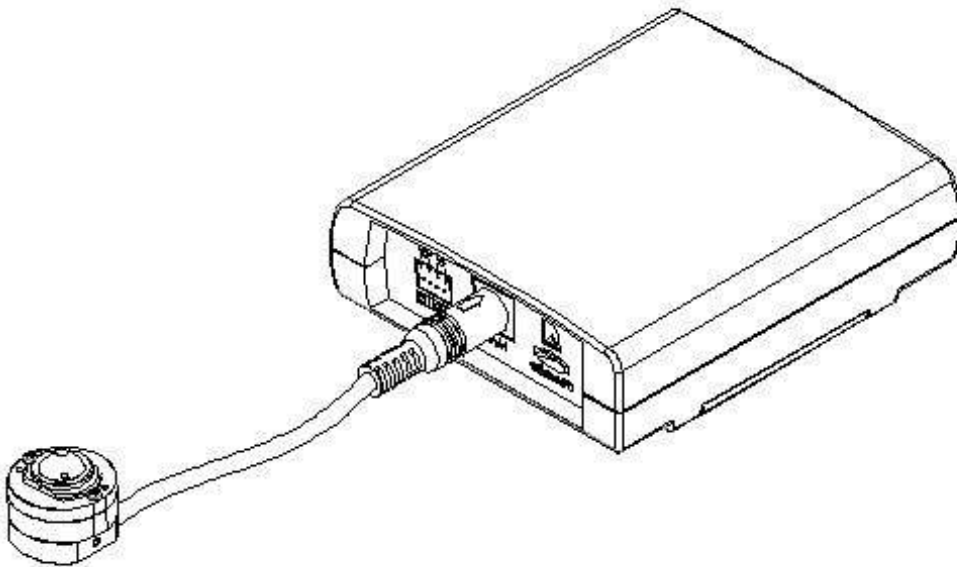
H.264 NETWORK CAMERA

GANZ  
**PixelPro** WITH **OXI** TECHNOLOGY  
**SERIES**

**ZN1-V4FN3, ZN1-V4FN4**

| **Installation Guide**

Before connecting, operating or adjusting this product,  
read this instruction booklet carefully and completely



# Precaution

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- Please read this manual carefully before installing the units.
- Never disassemble the main unit and the camera unit. Unauthorized disassembly may cause equipment failure or damage to the unit.
- Do not install the product on unstable brackets, unstable or vibrating surfaces since this could cause damage to the product.
- Use only the accessories provided or recommended by the manufacturer.
- Do not operate the camera in environments beyond the specified temperature. Refer to “**Environment Condition**” on “**APPENDIX(A): SPECIFICATIONS**” in this manual.
- Before applying power to the camera, check the power source to ensure that it is within the specifications. Refer to “**Electrical Characteristics**” on “**APPENDIX(A): SPECIFICATIONS**”.

# Safety Instruction

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- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with a dry cloth.
- 7) Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
- 9) Only use the attachments/accessories specified by the manufacturer.
- 10) Use only with a cart, stand, tripod or bracket specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- 12) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 13) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 14) **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall not be placed on apparatus.

# Table of Contents

<b>Precaution</b> .....	<b>2</b>
<b>Safety Instruction</b> .....	<b>3</b>
<b>1. FEATURES</b> .....	<b>5</b>
<b>2. PACKAGE CONTENTS</b> .....	<b>6</b>
<b>3. PART NAMES</b> .....	<b>7</b>
<b>4. INSTALLATION</b> .....	<b>9</b>
4.1. Camera Unit Installation .....	9
4.2. Main Unit Installation.....	13
4.3. Setting the Image Attribute .....	14
<b>5. CONNECTIONS</b> .....	<b>15</b>
<b>6. CONFIGURATION</b> .....	<b>18</b>
6.1. Set up network environment .....	18
6.1.1. Generic IP Environment .....	18
6.1.2. Custom IP Environment.....	19
6.2. View video on web page .....	20
6.2.1. ActiveX Installation.....	20
6.2.2. View video using IPAdmin Tool .....	21
6.3. Reset.....	22
6.4. Factory Default.....	22
6.5. Safe Mode .....	23
<b>APPENDIX (A): SPECIFICATIONS</b> .....	<b>25</b>
Summary .....	25
Electrical Characteristics .....	26
Environment Condition .....	26
Mechanical Condition .....	26
<b>APPENDIX (B): POWER OVER ETHERNET</b> .....	<b>27</b>
Power Comparison .....	27
<b>APPENDIX (C): DIMENSIONS</b> .....	<b>28</b>
<b>APPENDIX (D): HEXADECIMAL-DECIMAL CONVERSION TABLE</b> .....	<b>31</b>
<b>REVISION HISTORY</b> .....	<b>35</b>

# 1. FEATURES

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## Camera

- Pinhole camera
- 1/3" 1080p CMOS Image Sensor
- Digital Day/Night
- Digital WDR

## Video

- H.264 Baseline, Main, High profile(MPEG-4 Part 10/AVC), MJPEG(Motion JPEG)
- Max 30fps in 1080p
- Text Overlay

## Network

- 10 / 100 Base-T Ethernet

## Integration

- Software Development Kit (SDK) available
- ONVIF Compliant (Profile S)

## General

- microSD slot
- Power Over Ethernet (PoE)

## Video Contents Analysis (VCA)

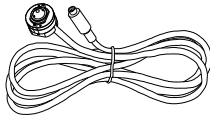
- VCA Presence (Standard)
- VCA Surveillance (Optional)

## 2. PACKAGE CONTENTS

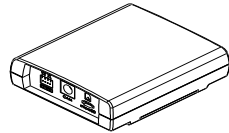
Please unpack the package carefully and handle the equipment with care.

The package contains:

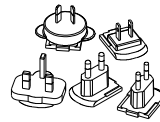
**Camera Unit**



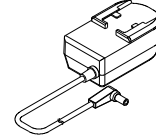
**Main Unit**



**Universal Plugs**



**Power Adaptor (12VDC)**



**Double-sided tape  
for Covert Cover**



**Covert Cover**



**Rotate Ring**



**Surface Mount Bracket**



**PAN/TILT Bracket**



**Tapping Screws  
(TP1 M3x20) x 2pcs**



**Screws  
(TP2 M3x6(Ni)) x 2pcs**



**Anchor Blocks  
(M4x25) x 5pcs**



**Tapping Screws  
(TS1 M4x25) x 5pcs**



**Cable Clamps x 3 pcs**



**Ferrite Core**



**Tapping Screws  
(TP1 M4x20) x 3pcs**



**4 Pin Terminal Block**

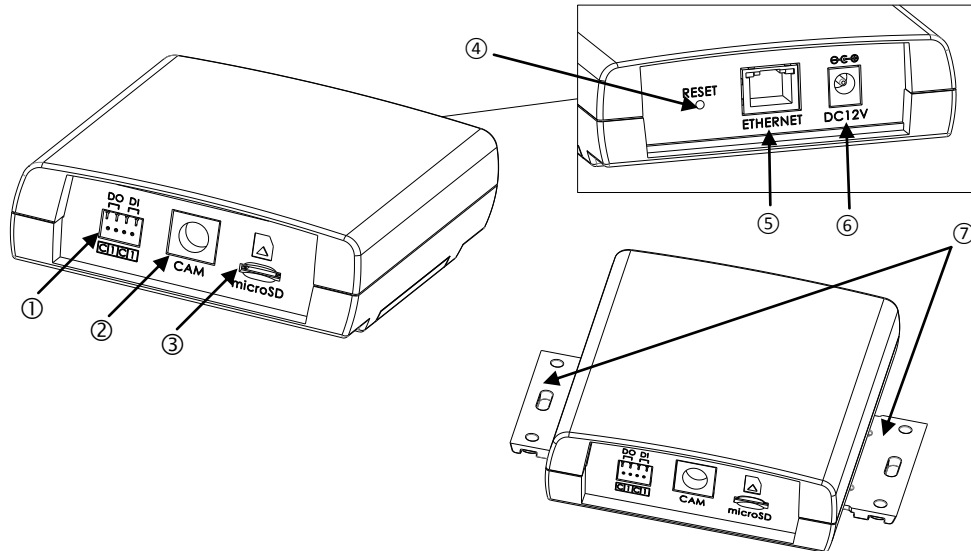


**Note**

The contents above are subject to change without prior notice.

## 3. PART NAMES

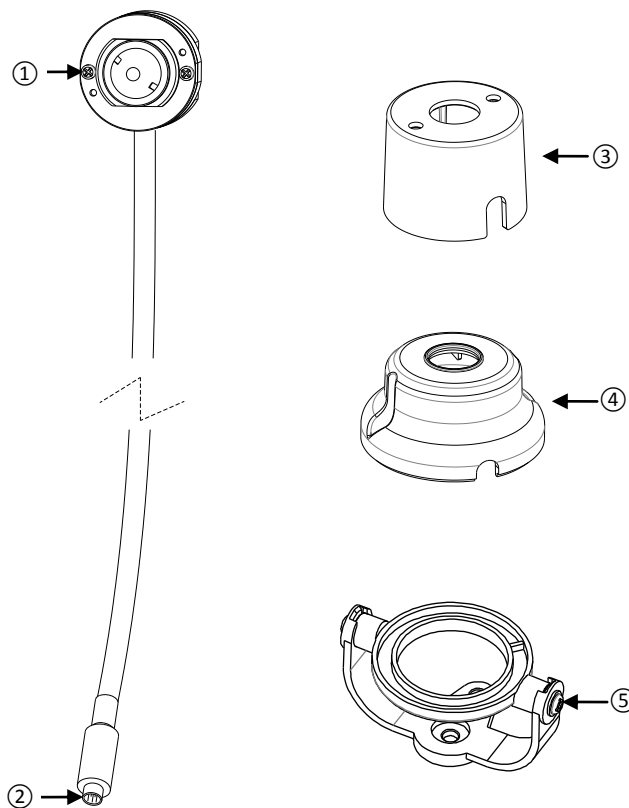
### Main Unit



\* Model herein and its appearance are subject to change without any prior notice.

- ① **Terminal connector**  
Connector for cable connection for digital input / output. Refer to “**5. CONNECTIONS**” for more details.
- ② **Camera Connector**  
Connector for camera unit
- ③ **microSD slot**  
Supports up to 64GB. Class 4 and higher SD card is recommended for HD recordings.
- ④ **Reset button**  
This button will restart or reset to factory default settings. Refer to “**6.3. Reset**” and “**6.4. Factory Default**” for more details.
- ⑤ **LAN Connector**  
RJ45 LAN connector for 10/100 Base-T Ethernet (PoE supported)
- ⑥ **Power Adaptor Connector**  
12VDC power supply connection
- ⑦ **Slide Plate**  
Built-in mounting bracket for main unit

## Camera Unit with conjoined accessories



\* Models herein and their appearance are subject to change without any prior notice.

**① Camera**

Pinhole camera

**② Camera DIN connector**

Connector to be inserted to the camera connector on the main unit

**③ Covert Cover**

Bracket to be installed behind the wall or ceiling to hold the camera inside

**④ Surface Mount Bracket**

Bracket to be installed on the wall or ceiling to hold the camera inside

**⑤ Pan/Tilt Bracket**

Bracket to be installed on the wall or ceiling for camera's angle adjustment

It shall be combined with the rotate ring and the surface mount bracket for the complete installation.



## 4. INSTALLATION

The installation method of ZN1-V4FN3 and ZN1-V4FN4 is identical.

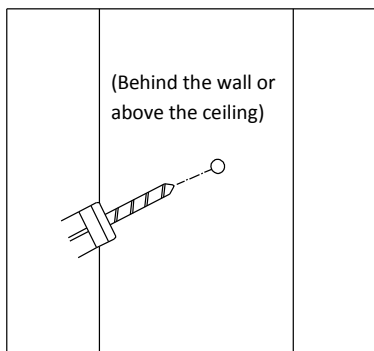
The installation method of the camera unit differs depending on your bracket type, but the rest of the overall installation process is the same.

### 4.1. Camera Unit Installation

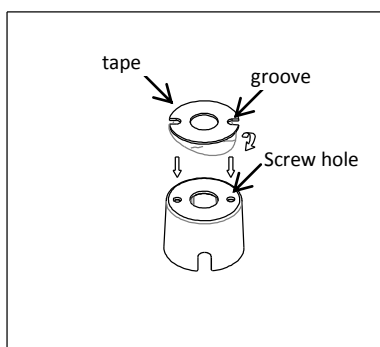
There are three different ways to install the camera unit:

- Covertly behind the wall or ceiling by using the covert cover
- Mounted and fixed on the wall or ceiling by using the surface mount bracket
- Mounted and fixed on the wall or ceiling by using the pan/tilt bracket to enable the camera's angle adjustment

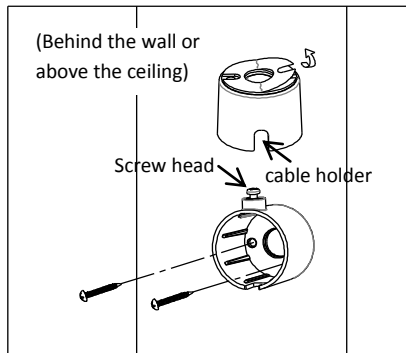
#### Covert Installation



- 1) Drill a hole with 3mm diameters on a desired spot where the camera lens will be located.

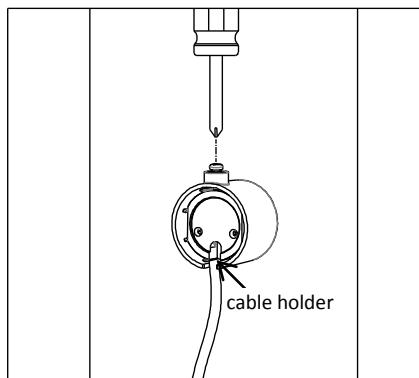


- 2) Peel off one side of the double-sided tape, and attach it to the flat surface of the covert cover by aligning the grooves on the tape with the screw holes on the covert cover.

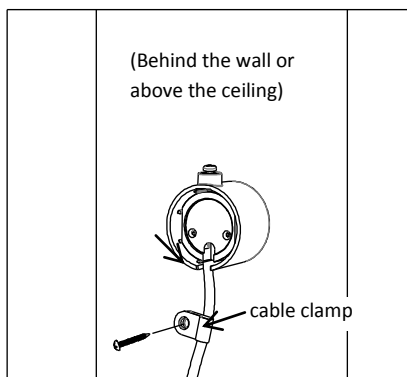


**3)** Peel off the other side of the tape, and stick the taped surface to the installation surface by placing it with the screw head upward and the cable holder downward and aligning it with the drilled hole on the installation surface.

**4)** Fasten the covert cover by using the tapping screws (M3x20) appropriate for the material of the installation surface.

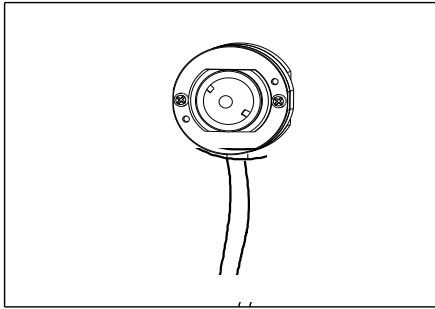


**5)** Place the camera inside the covert cover by routing the camera's cable through the cable holder on the covert cover, and tighten the top screw head to fix the camera.

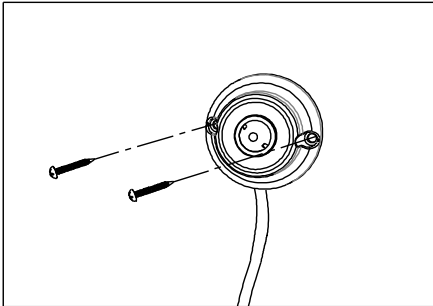


**6)** Use the cable clamp optionally if you want to fix the camera's cable to a desired spot with a tapping screw (M4x20).

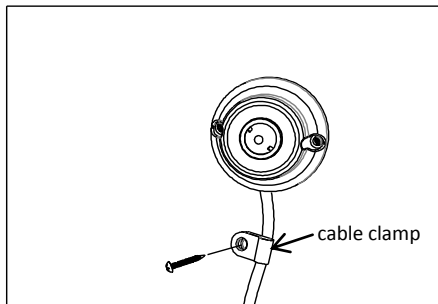
## Surface Installation for fixed angle



- 1) Place the camera on a desired installation surface.

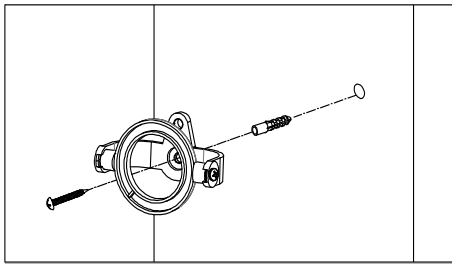


- 2) Cover the camera with the surface mount bracket by routing the camera's cable into the cable holder on the bracket. Then, fasten the bracket using the tapping screws (M3x20) and anchor blocks appropriate for the material of the installation surface.

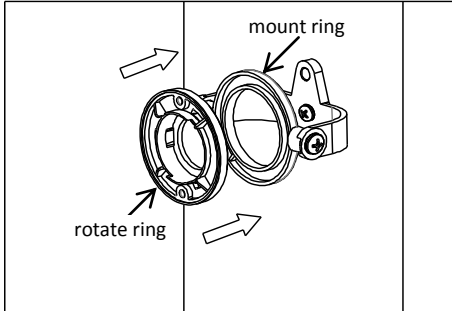


- 3) Use the cable clamp optionally if you want to fix the camera's cable to a desired spot with a tapping screw (M4x20).

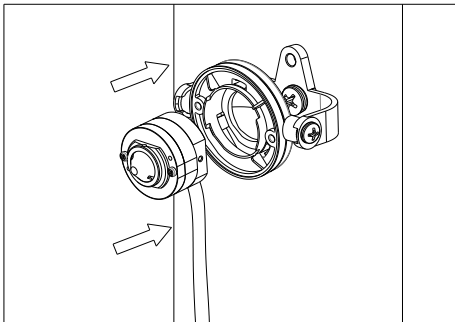
## Surface Installation for pan/tilt adjustment



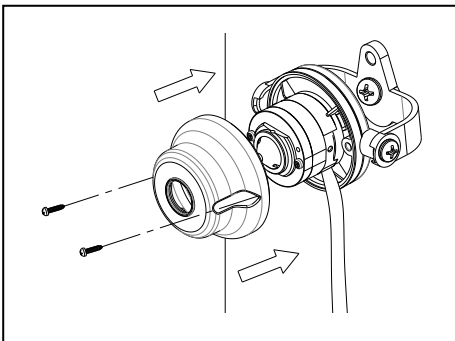
- 1) Drill a hole on a desired installation surface, and insert an anchor block into the hole.
- 2) Fix the pan/tilt bracket by inserting the tapping screw (M4x25) to be passed through the screw hole on the bracket and tightening it into the anchor block.



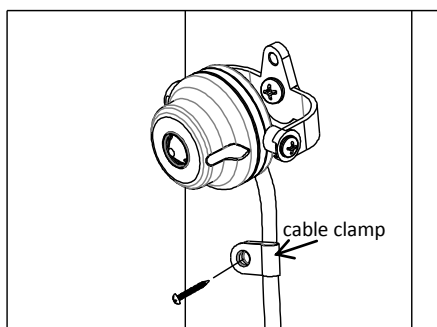
- 3) Insert the rotate ring into the bracket by pressing it into the bracket's mount ring.



- 4) Place the camera unit on the pan/tilt bracket.



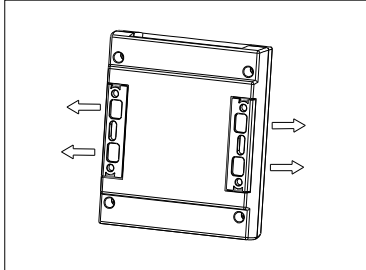
- 5) Place the surface mount bracket on top of the camera, fix the bracket by inserting the tapping screws (M3x6) into the screw holes on the bracket by aligning the screw holes with the holes on the rotate ring on the pan/tilt bracket, and tighten the screws.



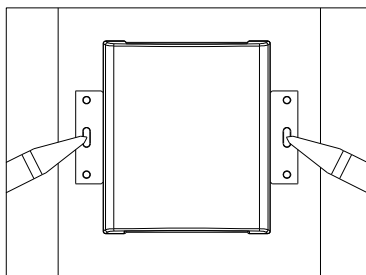
- 6) Use the cable clamp optionally if you want to fix the camera's cable to a desired spot with a tapping screw (M4x20).

## 4.2. Main Unit Installation

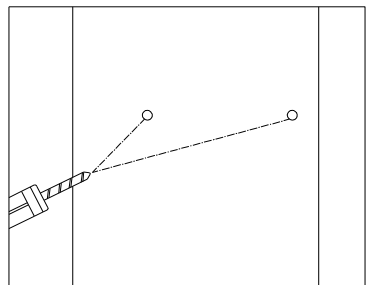
The main unit can be mounted on the installation surface by the built-in slide plates.



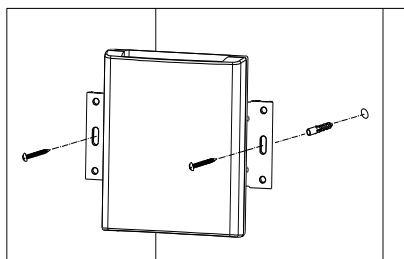
- 1) Pull out both slide plates at the bottom of the main unit.



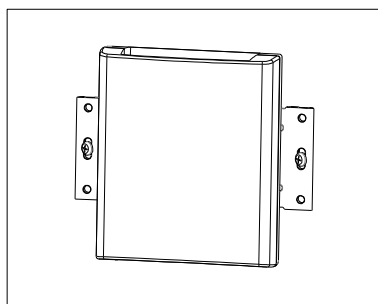
- 2) Place the main unit on the installation surface by facing the bottom of the main unit toward the installation surface, and mark the drilling spots based on the alignment holes on the slide plates.



- 3) Drill the marked spots with a screw driver.



- 4) Insert the anchor blocks to the drilled holes, and tighten them into the installation surface.
- 5) Place the main unit in the same way as in 2), and insert the tapping screws to be passed through the alignment holes on the main unit.



- 6) Tighten the screws into the anchor blocks to fix the main unit to the installation surface.

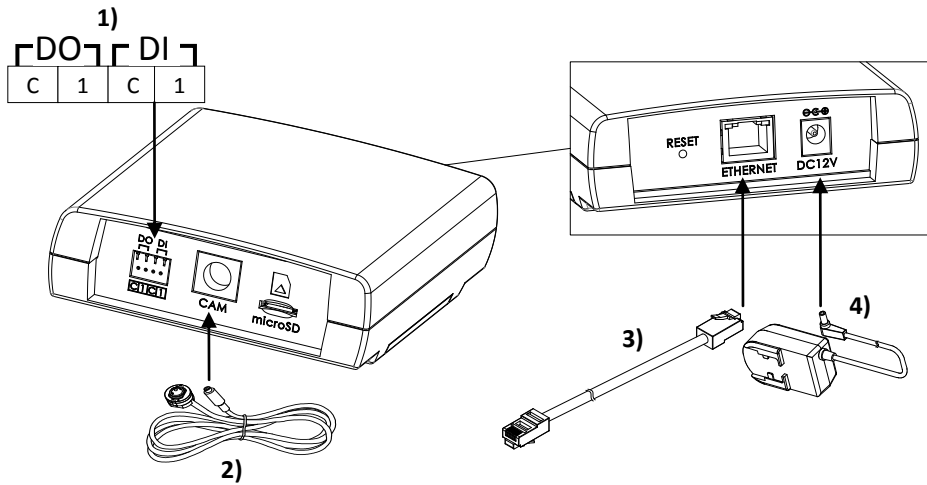
## 4.3. Setting the Image Attribute

Through the camera's webpage, users can configure image settings. The menu of image attribute is available under Video Appearance menu in Setup > Video & Audio > Camera. The following features can be adjusted: Brightness, Contrast, Saturation, Sharpness and orientation

For more detailed information, refer to the provided "PixelPro GXi series Web Page User's Manual".

The screenshot displays the camera's web interface for configuring image attributes. The breadcrumb trail is 'Setup > Video > Camera'. The 'General' section shows the 'Friendly name' as 'ZN1-V4FN4'. The 'Video Appearance' section includes sliders for Brightness, Contrast, Saturation, and Sharpness, all set to 128. The 'Video Transform' section has checkboxes for 'Vertical flip' and 'Horizontal mirror', and radio buttons for 'Rotation' set to 'None'. A note states: 'Image rotation cannot be used while VCA is in use. Go to VCA Configuration'. The 'Exposure' section has 'Exposure mode' set to 'Auto' with a 'Maximum shutter speed' of 1/2000. Other options include 'Manual' (1/30) and 'Flickerless' (50Hz/60Hz). 'Maximum AGC' is 50, 'Exposure adjustment' is 0 EV, 'Back light compensation' is 'Off center', and 'Digital slow shutter' is 'off'. The 'Digital Wide Dynamic Range' section has 'Enable' unchecked and 'Level' set to 8. The 'Day & Night' section has 'Day & Night mode' set to 'Auto', 'Day to Night level' at 1, and 'Night to Day level' at 3. The 'White Balance' section has 'White balance mode' set to 'atw2', 'Red' at 128, and 'Blue' at 128. The 'Image Signal Processing' section has 'Dynamic 2D DNR' set to 3. At the bottom are buttons for 'Apply', 'Cancel', 'Preview', and 'Pop-up'.

# 5. CONNECTIONS

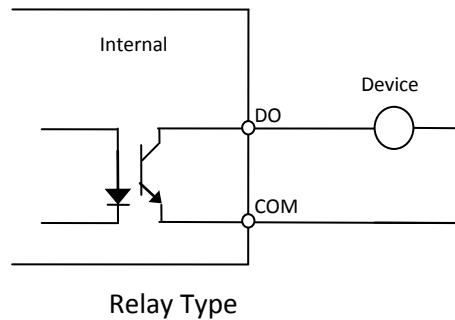


## DI/DO terminal connector

1) Connect external input/output devices (e.g. alarm device) optionally if they are necessary. Refer to the reference below for the appropriate connections.

**DO (Alarm)** – For connecting an external device such as relays and LEDs. Do the electrical wiring correctly referring to the following information.

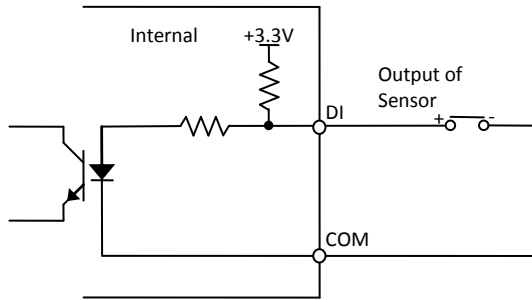
DO	Function	Specifications
C	Ground	
1	Output	0 to 24 VDC Max load: 50mA



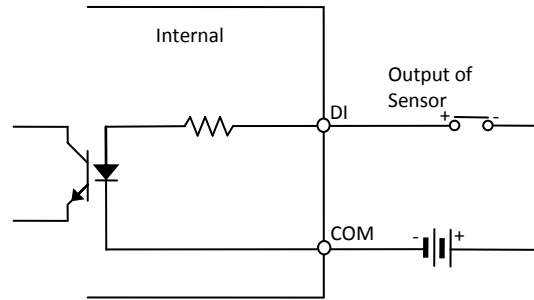
Then, the connected device can be activated via its webpage. Go to **“6. CONFIGURATION”** for more details for its setting.

**DI (Sensor)** – For connecting a device such as a PIR and a door/window sensor.  
Do the electrical wiring correctly referring to the following information.

DI	Function	Specifications
C	Ground	
1	Input	0 to 5 VDC Max load: 50mA



Relay Type

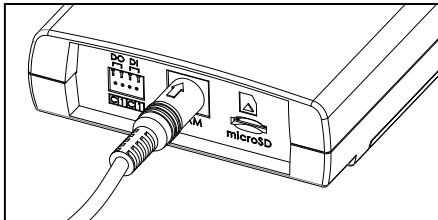


Voltage Type

Then, the connected device can be activated via its webpage.  
Go to **"6. CONFIGURATION"** for more details for its setting.

### Camera connector

- 2) Connect the camera unit to the main unit by inserting the camera's DIN connector to the camera's connector on the main unit by placing the arrow mark on the camera's DIN connector upward like the image below.





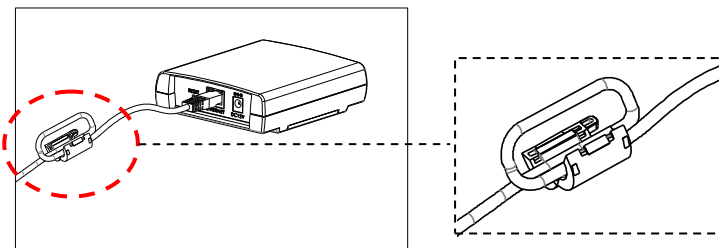
## LAN connector

3) Connect the main unit to the network using an Ethernet cable (RJ45). Then, install the ferrite core on the Ethernet cable. Refer to the explanations below for the ferrite core installation.

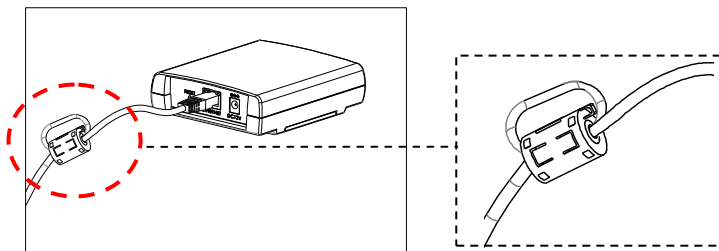
In case you intend to power the device using the LAN cable, a PoE switch should be available in your network. Refer to “**Appendix (B): Power over Ethernet**” for more details.

### Use of the ferrite core

Installation of the provided ferrite core is highly recommended to reduce high frequency electrical noise level. Here below are the instructions to install the ferrite core on the Ethernet cable.



- 1) Open the ferrite core by lifting the clip.
- 2) Make one loop with the cable through the ferrite core. (See the enlarged image above.)



- 3) Close the ferrite core to hold the cable loop in the ferrite core's chamber.

## Power connector

4) Connect a 12VDC power adaptor to the power connector on the main unit.

If the camera is powered via PoE, a power adaptor is not necessary to be connected to the main unit.

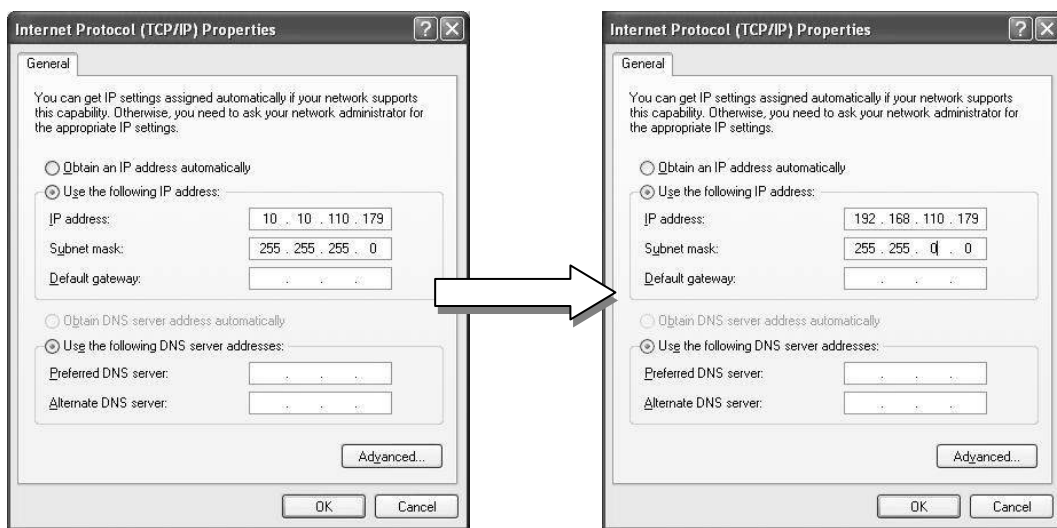
# 6. CONFIGURATION

## 6.1. Set up network environment

The default IP address of the device is 192.168.XXX.XXX. Users can identify the IP address of the device from converting the MAC address's hexadecimal numbers, which is attached to the device. Be sure that the device and PC are on a same area network before running the installation.

IP address : **192.168.xxx.xxx**

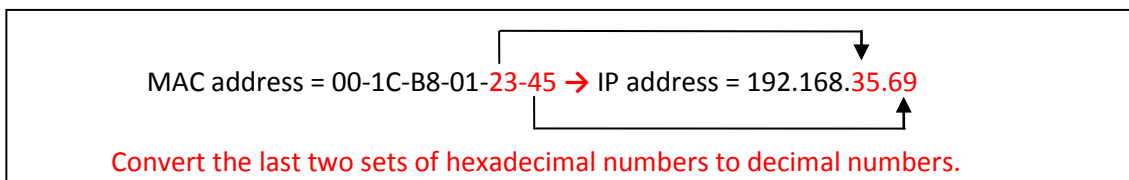
Subnet mask: **255.255.0.0**



### 6.1.1. Generic IP Environment

In case of generic private network environment where IP address 192.168.XXX.XXX are used, users may view the live streaming images on a web page using the device's default IP address: Convert the device's MAC address to the IP address. Refer to the Hexadecimal-Decimal Conversion Chart at the end of the manual.

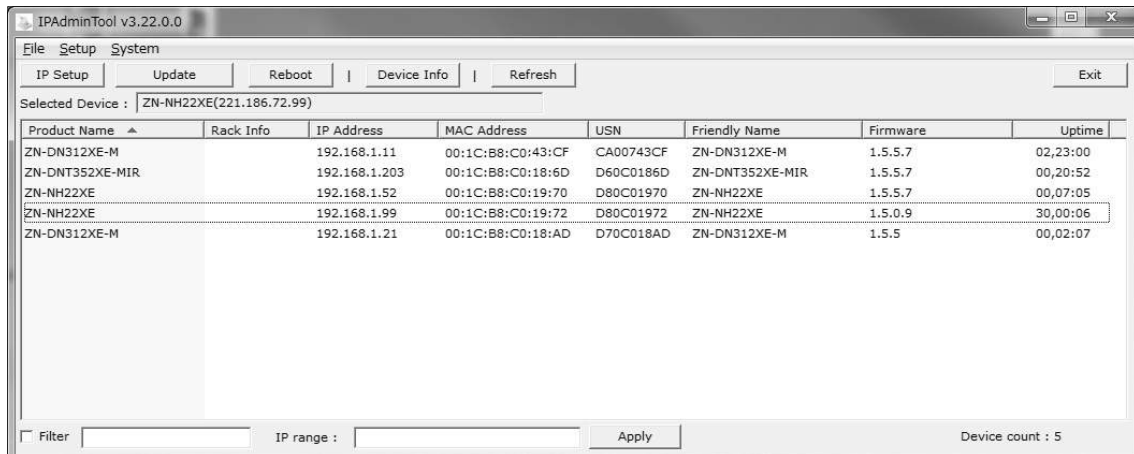
(The MAC address of the device is attached on the side or bottom of the device.)



1. Start the Microsoft® Internet Explorer web browser and enter the address of the device.
2. Web streaming and device configurations are supported through ActiveX program. When the ActiveX installation window appears, authorize and install the ActiveX.

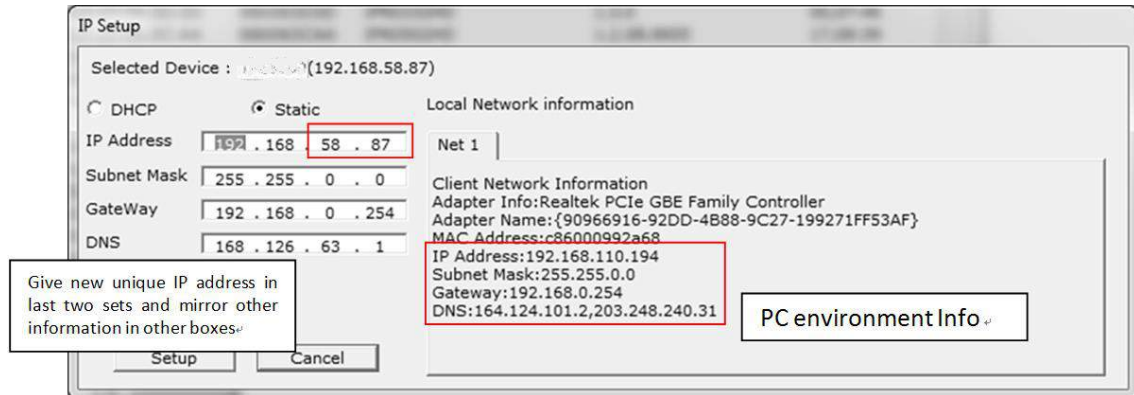
## 6.1.2. Custom IP Environment

IPAdminTool is a management tool, which automatically scans all of the network products for users to perform administrative tasks, which includes network configurations, firmware update, device reboot, and device organizations.



To modify the device's default IP address for customized network area;

1. Find the device from the IPAdminTool's list and highlight the device's name.
2. Right-click the mouse and select "IP Address"; IP Setup window appears.

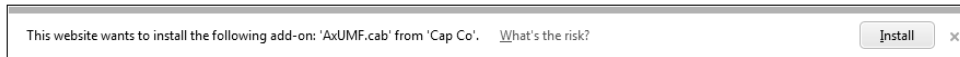


3. In the IP Setup's window, information under "Local Network information" displays the user/PC's network area information. Those information need to be incorporated to the IP Address, Subnet Mask, Gateway, and DNS boxes, except the last 2 sets of IP Address, which are to be the unique numbers for the device. Refer to the image above for the setting
4. Click "Setup" to complete the modification.

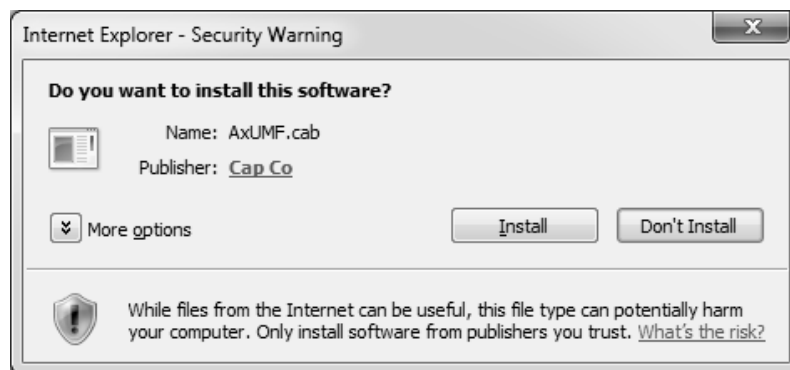
## 6.2. View video on web page

Type the proper IP address to view the live streaming images through a web browser. The default username and password is **root / pass**.

### 6.2.1. ActiveX Installation



1. When the browser asks to install the AxUMF software, click **"Install"** to proceed.



2. When Setup installation pop-up window appears, click **"Install"** to proceed with rest of installations.



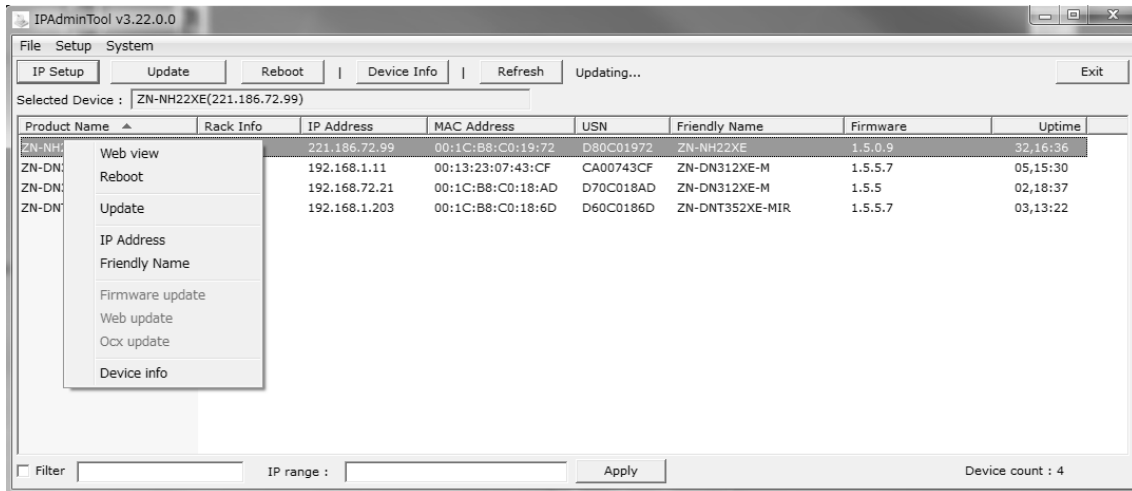
#### Note

Depending on system OS and Internet Explorer version, installation experience may differ from one another. Figures described above are from Windows 7, Internet Explorer 9 environment.

## 6.2.2. View video using IPAdmin Tool

IPAdminTool automatically searches all activated network encoders and IP cameras and shows the product name, IP address, MAC address and etc.

1. From the IPAdminTool's product list, select the device by highlighting it.
2. Right-click the mouse and select "Web view".



3. The system's default web browser opens the device's address.



Whether directly accessing the streaming video through typing IP address on a web page or taking steps through IPAdminTool, the ActiveX is needed to be installed for the Microsoft® Internet Explorer to have the complete configuration privileges.

## 6.3. Reset

Perform the following procedures to reset your device:

1. Press the reset button for 2 seconds while the device is in use.
2. Wait for the system to reboot.



### Caution

Please do not hold for more than 2 seconds. Otherwise, the camera may be switched to its Factory Default settings.

---

## 6.4. Factory Default

Resetting the device back to the factory default will initialize all parameters including the IP address back to the factory defaults. To reset back to the factory default:

1. Press the reset button and hold.
2. Release the button after 10 seconds.
3. Wait for the system to reboot.

---

The factory default settings can be inferred as follows:



### Note

IP address:	192.168.xx.yy
Network mask:	255.255.0.0
Gateway:	192.168.0.1
User ID:	root
Password:	pass

---

## 6.5. Safe Mode

### What is Safe Mode?

Your IP camera or encoder could encounter an unexpected occasion such as broken firmware file or uncompleted loading of firmware file during system booting. To restore the device from the occasions, the device provides the emergency firmware as a factory default. Your device will get restarted with safe mode when there is any error on your booting system files.

### Why does your IP camera or encoder boot in Safe Mode?

Normally, the cause of 'safe mode' is classified into two types.

- \* When the power supply is unplugged in the middle of system booting.
- \* When the firmware files required for system booting are damaged.

**IMPORTANT:** Your device will turn into the safe mode when it fails to boot certain times.

### How to recover your system from Safe Mode

**Safe Mode**

Your device has entered safe mode now. Device is usually forced to safe mode when device recognizes itself not operating normally over times.  
In most cases, repeated unstable power connection during the boot is the main cause for safe mode.  
If you have seen your device in safe mode for the first time, just follow the instructions below to reboot the device.

1. Click 'Start Reboot' on the current page.
2. Wait until the device completely reboots. (\*It may take a few seconds to several minutes.)
3. Refresh the webpage to check if it appears normal.

If the device is not recovered after you have done the above instructions, it may indicate that settings in device may have been corrupted.  
Then, try the instructions as follows to reset all settings.

1. Click 'Reset All Settings' on the current page.
2. Wait until the device resets all settings. (\*It may take a few seconds to several minutes.)
3. Check if the webpage appears normal.

If the device is still in safe mode after you have done the above procedure, it may indicate that there may be a corruption on the firmware of the device.  
In this case, the device cannot be booted normally.  
Thus, perform the firmware update according to the instructions below.

1. Click 'Browse', and select the appropriate firmware file.
2. Click 'START' to restore the firmware to the device. (\*You will see the relevant messages during the firmware update.)
3. Check if the webpage appears normal.

If you are still on this page even after the above procedure, your device may have encountered the worst situation. Certain part of the hardware on the device may have been broken. Thus, you should contact your local agency for further assistance.

---

**Reboot**

---

**Reset All Settings**

---

**Upload Firmware Image**

Choose a firmware image to upload:

The messages above will appear on the webpage when your device has been rebooted in 'safe mode'. Then, you should follow the instructions on the webpage according to the steps in a row.



There are two types of firmware files when you receive a firmware folder from your vendor. When you need to update the firmware as the final resolution in case your device is in safe mode like above, ensure that the firmware means the firmware file for the device with the file name as GXi-V.1.X.X.X-~~~.enc.



There is another method to update firmware, which is using IPAdminTool. Please refer to '**IPAdminTool User's Manual.pdf**' for the detailed procedure.

---



If your device is still at safe mode after trying to update firmware, please contact your local agency to get further assistance.

---

\* Firmware update for safe mode itself: If you want to update the firmware for safe mode, you should upload a firmware file with the following file name: GXi-SAFEMODE.~~~.enc.



# APPENDIX (A): SPECIFICATIONS

## Summary

Camera Module			
CMOS	Image Sensor	1/3" 1080p CMOS	
	Effective Pixels	1920 x 1080	
	Scanning system	Progressive scanning	
ELECTRICAL	Resolution	1920 x 1080	
	Min. Illumination	<b>ZN1-V4FN4</b>	Color: 1.4Lux / BW: 0.01Lux (DSS ON)
		<b>ZN1-V4FN3</b>	Color: 1.0Lux / BW: 0.007Lux (DSS ON)
	AGC Control	Auto	
Lens	<b>ZN1-V4FN4</b>	3.7mm, F2.5, Angle of View: approx. 63°(H), 33°(V)	
	<b>ZN1-V4FN3</b>	2.8 mm, F2.0, Angle of View: approx. 82°(H), 43°(V)	
Day & Night		Digital Day & Night	
Wide Dynamic Range		Digital WDR	
Video			
Compression Format		H.264 Baseline, Main, High profile(MPEG-4 Part 10/ AVC), MJPEG(Motion JPEG)	
Number of Streams		Dual Stream, Configurable streams in H.264, MJPEG H.264: Controllable frame rate, bandwidth(VBR/CBR) MJPEG: Controllable frame rate, JPEG quality	
Resolution		1920x1080, 1280x720, 1120x630, 960x540, 800x450, 640x360, 480x270, 320x180	
Compression FPS		30fps@1080p	
Motion Detection		Built-in	
Burnt-in Text (Digital)		Video stream overlay text	
Audio			
Input/output		-	
Compression Format		-	
Function			
Digital Input/output		1/1 channel	
RS-485		-	
Network		10/100 Base-T	
Power over Ethernet (PoE)		Supported	
Protocol		QoS Layer 3 DiffServ, TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTCP, RTP/UDP, RTP/TCP, mDNS, UPnP™, SMTP, DHCP, DNS, DynDNS, NTP, SNMPv1/v2c/v3(MIB-II), IGMP, ICMP, SSLv2/v3, TLSv1	
SD Slot		1 microSD slot(up to 64GB) ※ Micro SD Card is not included (Recommend Class 4 and higher for HD recordings)	

## Electrical Characteristics

Power Source	12VDC / PoE (IEEE802.3af )
Power Consumption	3.6W @ 12VDC
Video Output	-
Audio Input	-
Audio Output	-
D/I	Max 50mA@5VDC, TTL level 1.5V threshold
D/O	Max 50mA@24VDC On-state resistance:50 $\Omega$ (max continuous)

## Environment Condition

Operating Temperature	Operating Range -10 °C ~ +50 °C (14°F ~ 122°F) (Not Include Cold Start)
Operating Humidity	Up to 85% RH

## Mechanical Condition

Material	Polycarbonate
Color	White
Dimension	Main Unit: 107 x 124 x 36 mm Camera Unit : 28.1( $\varnothing$ ) x 25 mm Covert Cover: 34( $\varnothing$ ) x 26 mm Surface Mount Bracket: 44( $\varnothing$ ) x 23mm Pan/Tilt Bracket: 44( $\varnothing$ ) x 34mm Cable Length: 6.1m(20ft)
Weight (Approx.)	Main Unit: 225g Camera Unit: 250g

\* The specifications and/or appearance of the product may change without a prior notice.

## APPENDIX (B): POWER OVER ETHERNET

The Power over Ethernet (PoE) is designed to extract power from a conventional twisted pair Category 5 Ethernet cable, conforming to the IEEE 802.3af Power-over-Ethernet (PoE) standard. The IEEE 802.3af allows for two power options for Category 5 cables.

The IEEE 802.3af-2003 standard allows up to 15.4 W of power to device. However, 12.95W is the available power, as some power gets lost in the cable.

The updated IEEE 802.3at-2009 (PoE+) standard allows up to 25.5W (Max 34.2 W) of power to device. PoE has advantages over conventional power in such places where AC powers cannot be reached or is expensive to wire.

### Power Comparison

The PoE Property supported by the device is 802.3af.

Property	802.3af	802.3at
Available Power	12.95 W	25.50 W
Max. Power by PSE	15.40 W	34.20 W
Max. Current	350 mA	600 mA
Supported Cable	Category 3 or higher	Category 5 or higher



For proper activation of PoE, the Category 5 cable must be shorter than 100m and conform the PoE standard.



#### **With non-Power Sourcing Equipment (non-PSE)**

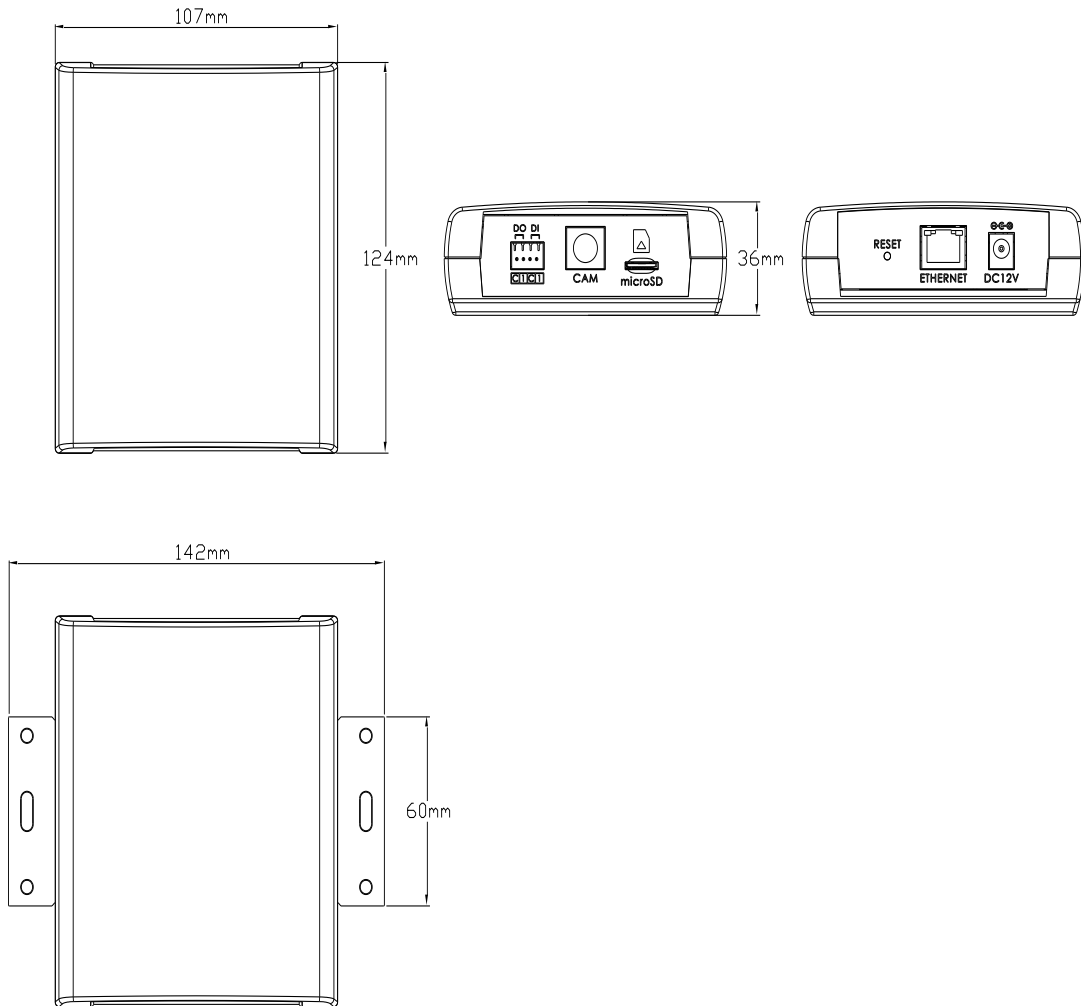
When it is connected with non PSE, the power adaptor should be connected.

#### **With power adaptor**

Connecting both PSE and power adaptor does not do any harm to the product. Disconnecting PSE or power adaptor from device does not reboot the device as long as either one is connected to the device.

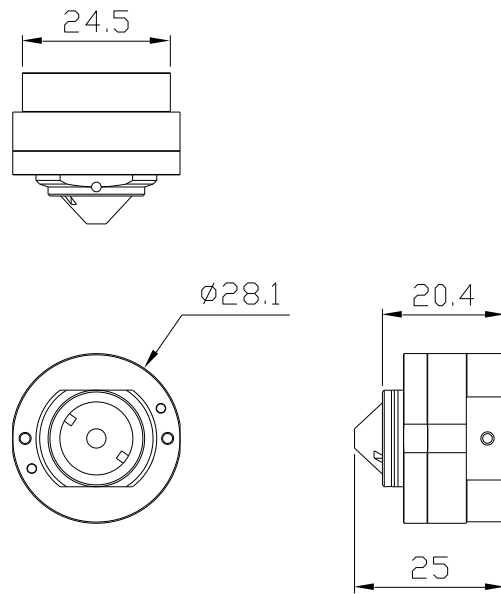
# APPENDIX (C): DIMENSIONS

## [ Main Unit ]



(Unit: mm)

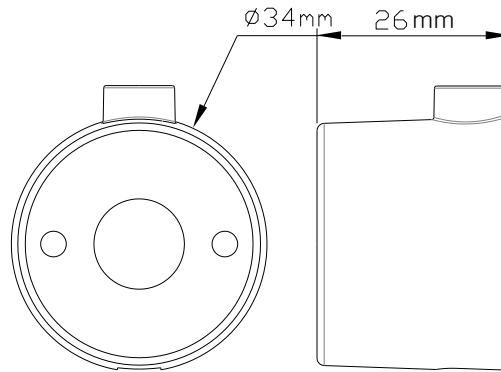
**[ Camera Unit ]**



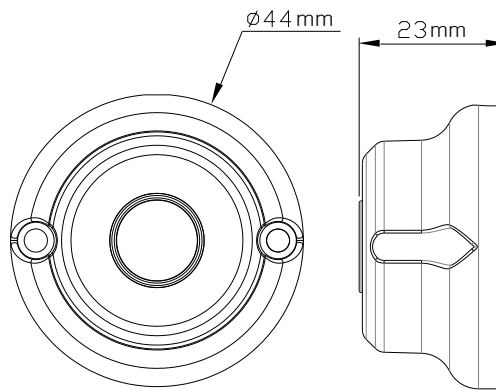
(Unit: mm)

**[ Bracket ]**

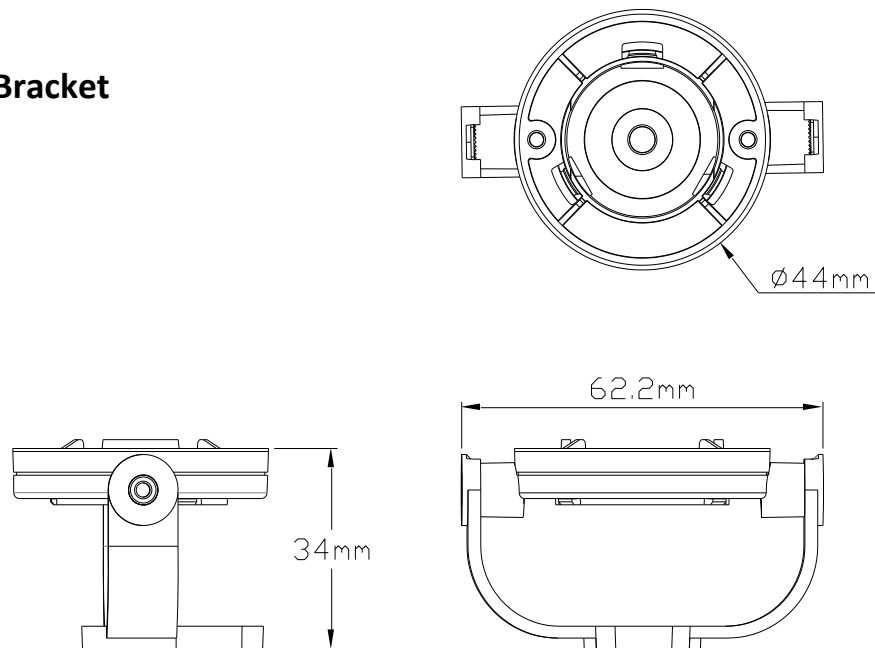
**Covert Cover**



**Surface Mount Bracket**



**Pan / Tilt Bracket**



(Unit: mm)

# APPENDIX (D): HEXADECIMAL-DECIMAL CONVERSION TABLE

Refer to the following table when converting the MAC address of the device to the IP address.

Hex	Dec	Hex	Dec	Hex	Dec	Hex	Dec	Hex	Dec	Hex	Dec	Hex	Dec	Hex	Dec
0	0	25	37	4A	74	6F	111	94	148	B9	185	DE	222		
1	1	26	38	4B	75	70	112	95	149	BA	186	DF	223		
2	2	27	39	4C	76	71	113	96	150	BB	187	E0	224		
3	3	28	40	4D	77	72	114	97	151	BC	188	E1	225		
4	4	29	41	4E	78	73	115	98	152	BD	189	E2	226		
5	5	2A	42	4F	79	74	116	99	153	BE	190	E3	227		
6	6	2B	43	50	80	75	117	9A	154	BF	191	E4	228		
7	7	2C	44	51	81	76	118	9B	155	C0	192	E5	229		
8	8	2D	45	52	82	77	119	9C	156	C1	193	E6	230		
9	9	2E	46	53	83	78	120	9D	157	C2	194	E7	231		
0A	10	2F	47	54	84	79	121	9E	158	C3	195	E8	232		
0B	11	30	48	55	85	7A	122	9F	159	C4	196	E9	233		
0C	12	31	49	56	86	7B	123	A0	160	C5	197	EA	234		
0D	13	32	50	57	87	7C	124	A1	161	C6	198	EB	235		
0E	14	33	51	58	88	7D	125	A2	162	C7	199	EC	236		
0F	15	34	52	59	89	7E	126	A3	163	C8	200	ED	237		
10	16	35	53	5A	90	7F	127	A4	164	C9	201	EE	238		
11	17	36	54	5B	91	80	128	A5	165	CA	202	EF	239		
12	18	37	55	5C	92	81	129	A6	166	CB	203	F0	240		
13	19	38	56	5D	93	82	130	A7	167	CC	204	F1	241		
14	20	39	57	5E	94	83	131	A8	168	CD	205	F2	242		
15	21	3A	58	5F	95	84	132	A9	169	CE	206	F3	243		
16	22	3B	59	60	96	85	133	AA	170	CF	207	F4	244		
17	23	3C	60	61	97	86	134	AB	171	D0	208	F5	245		
18	24	3D	61	62	98	87	135	AC	172	D1	209	F6	246		
19	25	3E	62	63	99	88	136	AD	173	D2	210	F7	247		
1A	26	3F	63	64	100	89	137	AE	174	D3	211	F8	248		
1B	27	40	64	65	101	8A	138	AF	175	D4	212	F9	249		
1C	28	41	65	66	102	8B	139	B0	176	D5	213	FA	250		
1D	29	42	66	67	103	8C	140	B1	177	D6	214	FB	251		
1E	30	43	67	68	104	8D	141	B2	178	D7	215	FC	252		
1F	31	44	68	69	105	8E	142	B3	179	D8	216	FD	253		
20	32	45	69	6A	106	8F	143	B4	180	D9	217	FE	254		
21	33	46	70	6B	107	90	144	B5	181	DA	218	FF	255		
22	34	47	71	6C	108	91	145	B6	182	DB	219				
23	35	48	72	6D	109	92	146	B7	183	DC	220				
24	36	49	73	6E	110	93	147	B8	184	DD	221				



## English

### Disposal of your old appliance

1. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
2. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

## Français/French

### Élimination de votre ancien appareil

1. Ce symbole, représentant une poubelle sur roulettes barrée d'une croix, signifie que le produit est couvert par la directive européenne 2002/96/EC.
2. Tous les produits électriques et électroniques doivent être éliminés séparément de la chaîne de collecte municipale des ordures, par l'intermédiaire des installations de collecte prescrites et désignées par le gouvernement ou les autorités locales.
3. Une élimination conforme aux instructions aidera à réduire les conséquences négatives et risques éventuels pour l'environnement et la santé humaine.
4. Pour plus d'informations concernant l'élimination de votre ancien appareil, veuillez contacter votre mairie, le service des ordures ménagères ou encore le magasin où vous avez acheté ce produit.

## Deutsch/German

### Entsorgung von Altgeräten

1. Wenn dieses Symbol eines durchgestrichenen Abfalleimers auf einem Produkt angebracht ist, unterliegt dieses Produkt der europäischen Richtlinie 2002/96/EC.
2. Alle Elektro- und Elektronik-Altgeräte müssen getrennt vom Hausmüll über die dafür staatlich vorgesehenen Stellen entsorgt werden.
3. Mit der ordnungsgemäßen Entsorgung des alten Geräts vermeiden Sie Umweltschäden und eine Gefährdung der persönlichen Gesundheit.
4. Weitere Informationen zur Entsorgung des alten Geräts erhalten Sie bei der Stadtverwaltung, beim Entsorgungsamt oder in dem Geschäft, wo Sie das Produkt erworben haben.



## Italiano/Italian

### RAEE: SMALTIMENTO DELLE VOSTRE VECCHIE APPARECCHIATURE

1. Quando il simbolo del "Cassonetto Barrato" è apposto su un prodotto, significa che lo stesso può ricadere nei termini previsti dalla Direttiva Europea nr. 2002/96/EC in funzione dell'attuazione definita dalla Legislazione dei singoli stati membri dell'Unione Europea.
2. Tutti i prodotti elettrici ed elettronici dovrebbero essere smaltiti separatamente dai rifiuti municipali, tramite appositi contenitori, approvati dall'Amministrazione Comunale o dalle Autorità Locali.
3. Il corretto smaltimento delle vostre vecchie apparecchiature, contribuirà a prevenire possibili conseguenze di impatto negativo sull'ambiente e per la salute dell'uomo.
4. Per maggiori informazioni circa lo smaltimento delle vostre vecchie apparecchiature, siete pregati di contattare l'ufficio municipale della vostra città, il servizio di smaltimento rifiuti o il punto vendita nel quale avete acquistato il prodotto.

## Polski/Polish

### Utylizacja starych urządzeń

1. Kiedy do produktu dołączony jest niniejszy przekreślony symbol kołowego pojemnika na śmieci, oznacza to, że produkt jest objęty europejską dyrektywą 2002/96/EC.
2. Wszystkie elektryczne i elektroniczne produkty powinny być utylizowane niezależnie od odpadów miejskich, z wykorzystaniem przeznaczonych do tego miejsc składowania wskazanych przez rząd lub miejscowe władze.
3. Właściwy sposób utylizacji starego urządzenia pomoże zapobiec potencjalnie negatywnemu wpływowi na zdrowie i środowisko.
4. Aby uzyskać więcej informacji o sposobach utylizacji starych urządzeń, należy skontaktować się z władzami lokalnymi, przedsiębiorstwem zajmującym się utylizacją odpadów lub sklepem, w którym produkt został kupiony.

## Português/Portuguese

### Eliminação do seu antigo aparelho

1. Quando este símbolo de latão cruzado estiver afixado a um produto, significa que o produto é abrangido pela Directiva Europeia 2002/96/EC.
2. Todos os produtos eléctricos e electrónicos devem ser eliminados separadamente da coleta de lixo municipal através de pontos de recolha designados, facilitados pelo governo ou autoridades locais.
3. A eliminação correcta do seu aparelho antigo ajuda a evitar potenciais consequências negativas para o ambiente e para a saúde humana.
4. Para obter informações mais detalhadas acerca da eliminação do seu aparelho antigo, contacte as autoridades locais, um serviço de eliminação de resíduos ou a loja onde comprou o produto.

## Español/Spanish

### Cómo deshacerse de aparatos eléctricos y electrónicos viejos

1. Si en un producto aparece el símbolo de un contenedor de basura tachado, significa que éste se acoge a la Directiva 2002/96/EC.
2. Todos los aparatos eléctricos o electrónicos se deben desechar de forma distinta del servicio municipal de recogida de basura, a través de puntos de recogida designados por el gobierno o las autoridades locales.
3. La correcta recogida y tratamiento de los dispositivos inservibles contribuye a evitar riesgos potenciales para el medio ambiente y la salud pública.
4. Para obtener más información sobre cómo deshacerse de sus aparatos eléctricos y electrónicos viejos, póngase en contacto con su ayuntamiento, el servicio de recogida de basuras o el establecimiento donde adquirió el producto.

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# REVISION HISTORY

MAN#	DATE(M/D/Y)	Comments
06-2014-A	06/06/2014	First release version
06-2014-B	06/10/2014	Revised screws information