NETWORK CAMERA

ZN-D100VE

Installation Manual

GANZ IP

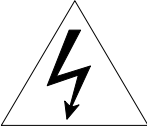# INFORMATION TO USER

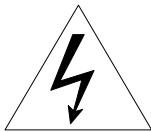<table>
<tr><td rowspan="2"></td><td>CAUTION</td><td rowspan="2"></td></tr>
<tr><td>RISK OF ELECTRIC SHOCK,
DO NOT OPEN</td></tr>
<tr><td colspan="3">CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SEERIVCE PERSONEL.</td></tr>
</table>

	This symbol is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.
	This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Table of Contents

1. FEATURES

Camera

- Indoor Fixed Mini Dome IP Camera
- High Quality Compression in real time streaming
- 1/4" VGA CMOS

Streaming

- Dual streaming mode (such as different codec/resolution/bit rate and so on.)
- De-interlacing on DSP
- Burnt-in text supported
- Unicast/Multicast supported

Video/Audio

- Video compression: H.264/MPEG4/MJPEG (30FPS@D1)
- Audio compression: G.711(µLaw, aLaw)/PCM
- Video Motion Detection supported
- 2-way mono audio supported

Network

- RTSP/ HTTP protocol supported
- 10/100 Base-T Ethernet

Additional Features

- Built-in Video Content Analysis
- OSD supported
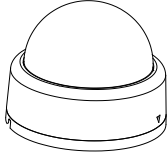- SDK (Software Development Kit) provided

@   @

- ÁZÞÙ Presence (Included as basic)
- ÁZÞÙ Surveillance (Optional)

2. PACKAGE CONTENTS

Unpack carefully and handle the equipment with care. The packaging contains:

ZN-D100VE   **DC power adaptor**
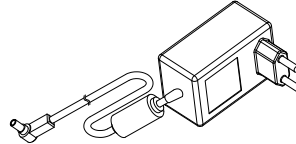
Extension cable
(for LAN, power connector, and audio)   **Quick Installation Guide**
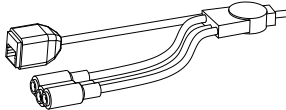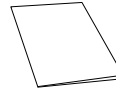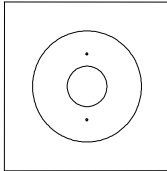
Installation Template   **Screws and Anchor block**

Hex wrench driver

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Note   The above contents are subject to change without prior notice.

3. PART NAMES
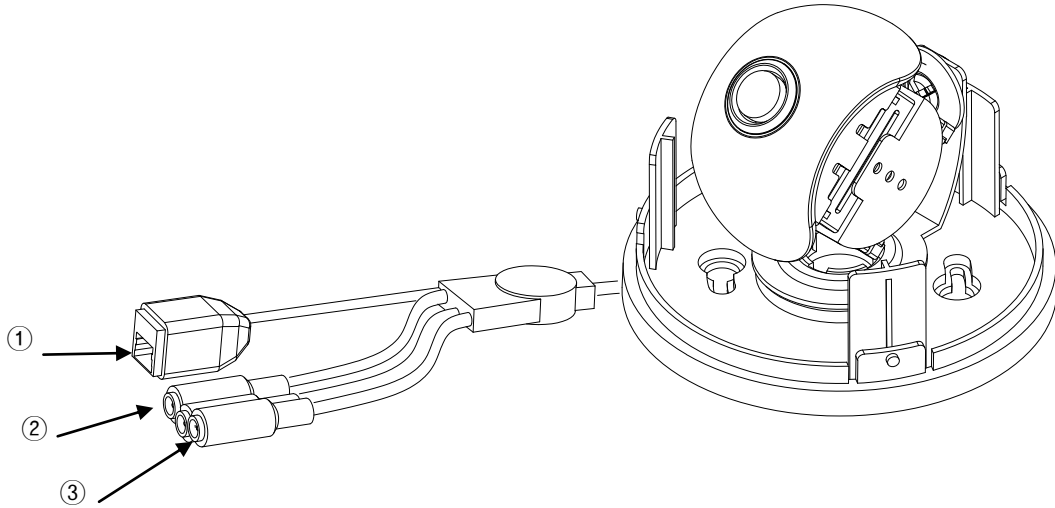
* Models herein and their appearance are subject to change without any prior notice.

①**LAN Connector (Ethernet)**
This is a RJ45 LAN connector for 10/100 Base-T Ethernet.

② **Audio in/ out Cable**
ZN-D100VE has a mono audio input and a mono audio output.

③**Power Adaptor Connector (DC 12V)**
ZN-D100VE needs a DC 12V 1A adapter for power supply.

4. INSTALLATION
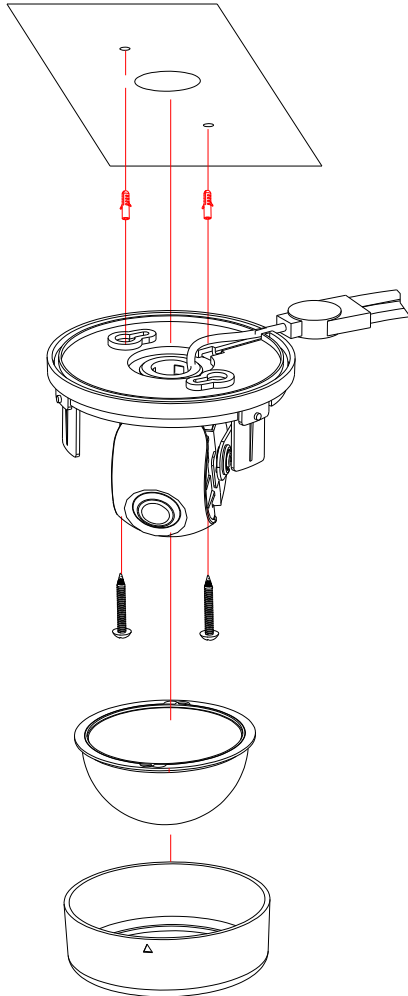
1) Connect the LAN cable, power supply cable, and the video loop out cable with the ZN-D100VE.

2) Place the installation template on the ceiling.

3) Drill two holes on the template and insert anchor blocks into the holes. Fasten the ZN-D100VE with screws.

4) Put the dome cover on the main body of the ZN-D100VE. Make sure the main body and the cover fit each other into place.

i Note

When assembling the main body of the ZN-D100VE and its dome cover, make sure they fit each other into place.

! Caution

The ZN-D100VE may fall off the ceiling even after the proper installation and mounting. To prevent any accident, make sure the ceiling is firm and stable enough to support the ZN-D100VE. If any reinforcement is needed, consult with your safety personnel and proceed with the installation.

4.1. Installation Template
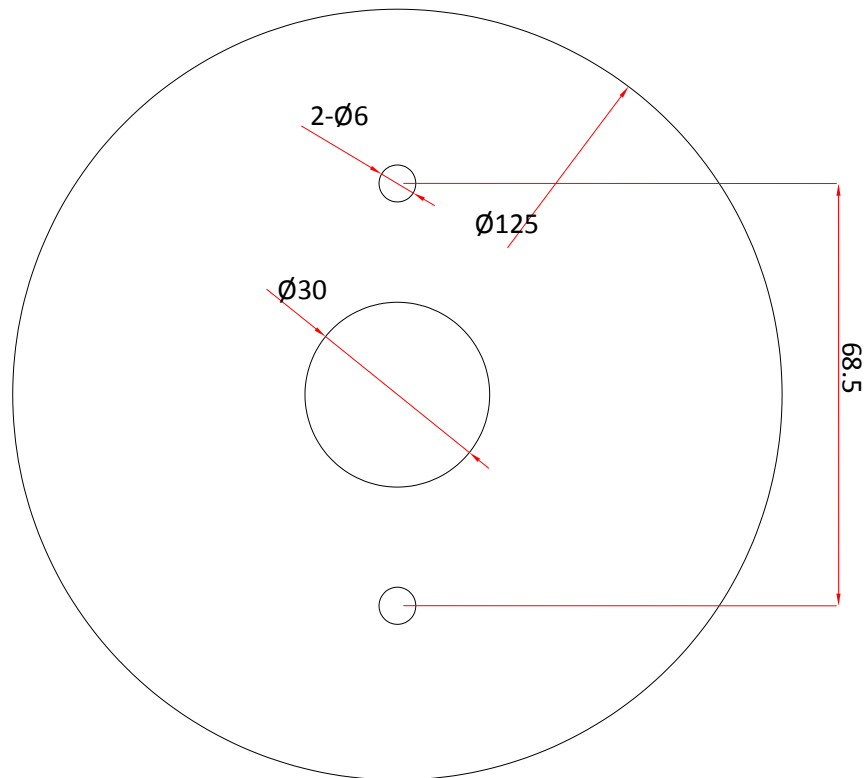
4.2. Manual adjustment for 3-axis movements
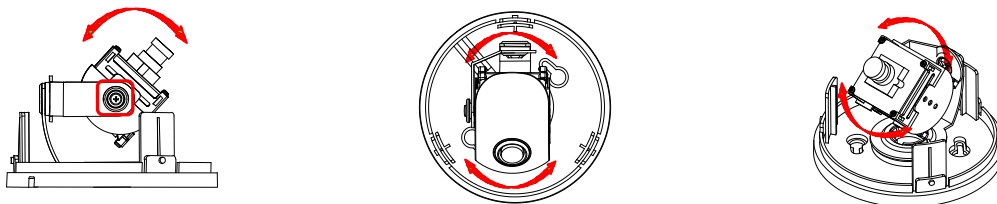
After installation, make a manual adjustment on the inner liner. Perform 3-axis movements manually by turning the inner liner to different directions as above, and check if it moves properly. After adjustment, fasten the screw of the rotation axis.

4.3. Lens Focus Adjustment
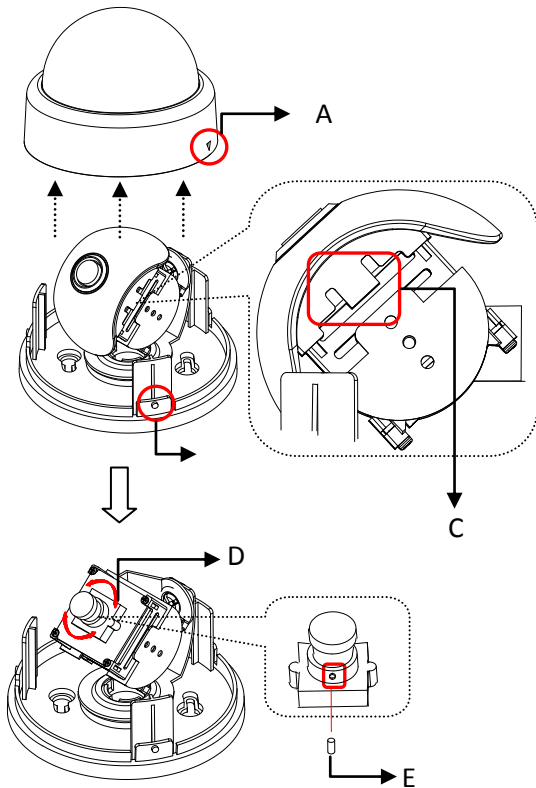
1) Open the dome cover from the device.

2) Uncover the latch(C) carefully to remove the lens cover.

3) Rotate the lens focus ring(D) to adjust the focus and fasten the screw(E) using the included hex wrench.

4) Push the lens cover to the module until the latch(C) clicks into position.

5) Attach the dome cover by aligning protrusion on the body (B) with the inverted triangle mark of the dome cover (A). Turn the dome cover clockwise to lock.

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

4.4. Setting the Image Attribute

You can set the image attribute of camera through the webpage.
The menu of image attribute can be seen under **Setup > Video & Audio > Video-in > Attribute Setting**. Brightness, contrast, hue, saturation and sharpness can be adjusted.

5. CONNECTIONS

LAN

DC 12V

⚠ **Caution**
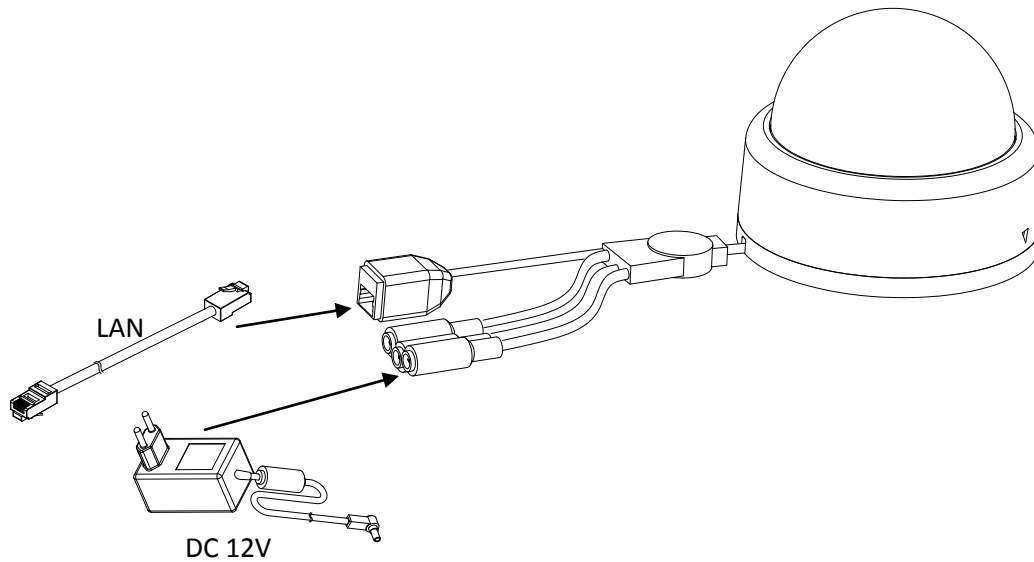
Make sure the polarity is correct. Incorrect connection may cause malfunction or damage to the IP device.

⚠ **Caution**

Power Adaptor Connector (DC 12V)

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6. CONFIGURATION

6.1.Set up network environment

The default IP address of your IP device is 192.168.XXX.XXX. You can find the available IP address from the MAC address of your device. Please make sure the device and your PC are on the same network segment before running the installation. If the network segment between your PC and the device is different, change your PC's settings as below.

IP address   : **192.168.xxx.xxx**
Subnet mask: **255.255.0.0**
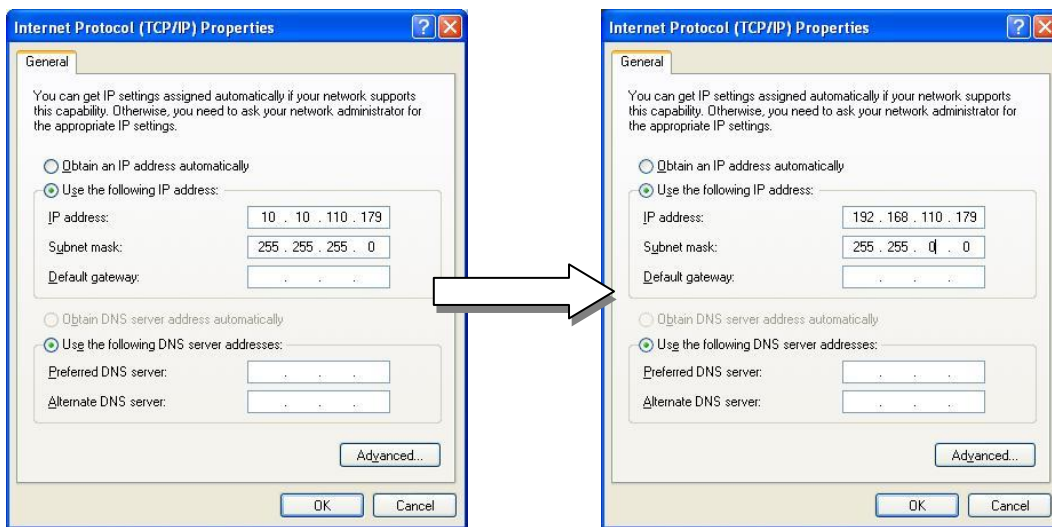
6.2.View video on web page

View the live video on a web page using your IP device and its IP address. You can use the ZNS-GIT IPAdminTool or enter the IP address on the web page.

6.2.1.View video using ZNS-GIT IPAdmin Tool

ZNS-GIT IPAdminTool automatically searches all activated GANZ network camera and encoder series and shows the product name, IP address, MAC address and etc. ZNS-GIT IPAdminTool is provided with SDK at the following SDK path.

{SDK root}\BIN\TOOLS\AdminTool\

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To use the ZNS-GIT IPAdminTool and view the live video on a web page:

1. Start ZNS-GIT IPAdminTool. Names and info of currently activated devices appear as a list.
2. Right-click on the desired device and select **Web view**.
3. Select **Continue to this website** on the Security Certificate Alert page.
   (The explanation and captured images at this manual are mainly on the basis of Internet Explorer 7.0)
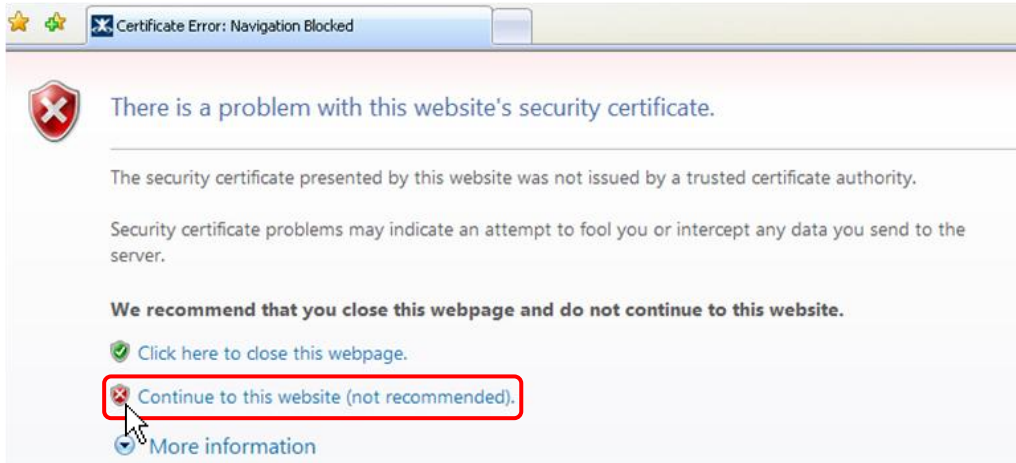
4. Click **pop-up blocked** and install the ActiveX control as below. You need to install the ActiveX for displaying the images.

5. Wait for a few seconds while the web page loads. The live video is displayed as below.

6. If the live video is not displayed and "Can not Create XMLDOMDocument Install MSXML4.0" message is shown as below, please download and Install from the link below.
http://www.microsoft.com/downloads/details.aspx?familyid=3144B72B-B4F2-46DA-B4B6-C5D7485F2B42&displaylang=en
(Imbedded Intelligence-Library requires MS XML 4.0 library which is an xml parser made by Microsoft.)

6.2.2.View video using IP address

View the live video on a web page using your IP device and its IP address. To have the correct IP address ready and use it on a web page:
1. Convert a MAC address to an IP address or check the IP address on the ZNS-GIT IPAdminTool.

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

MAC address = 00-1C-B8-C0-14-B1 → IP address = 192.168.20.177

the Hexadecimal number to Decimal number.
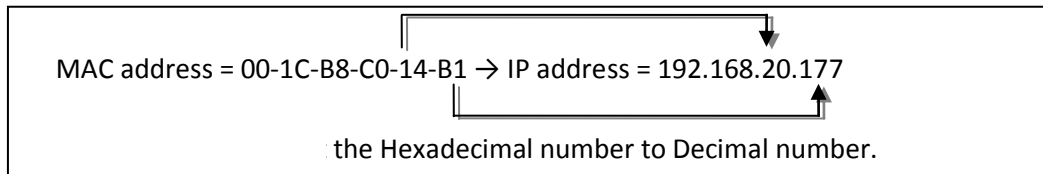
2. Open a web browser and enter the IP address of the device.
3. Click **Continue to this website** on the Security Certificate Alert page.
4. Click **pop-up blocked** and install the ActiveX control. You need to install the ActiveX for displaying the images.
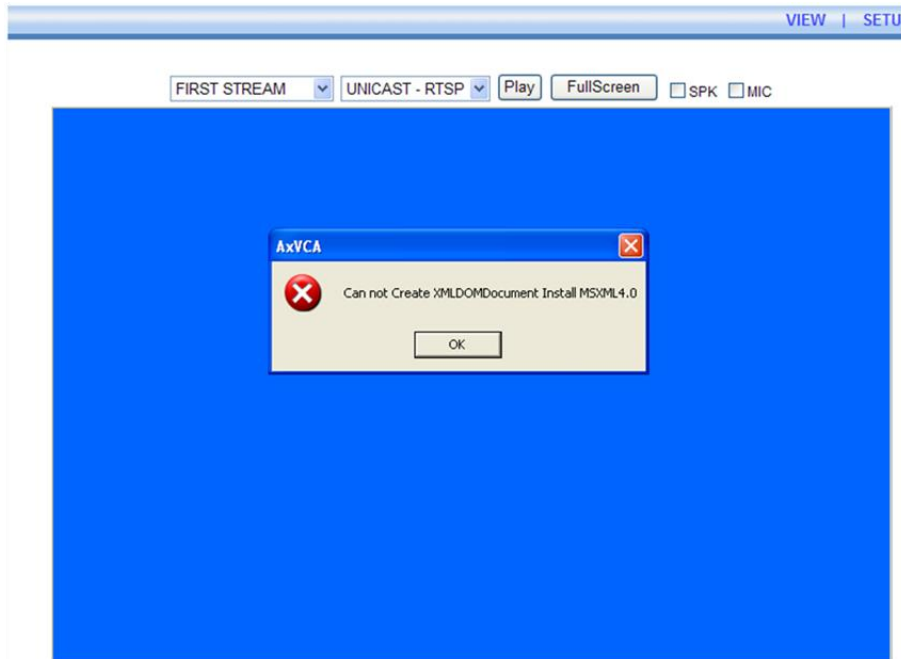5. Wait for a few seconds while the web page loads. The live video is displayed.

6.3. Reset

Hardware Reset is **NOT** supported. (Software Reset is available.)

6.4. Factory Default

Hardware Factory Reset is **NOT** supported. (Software Factory Reset is available.)

APPENDIX (A): SPECIFICATIONS

Summary

Camera Module		
CMOS	Image Sensor	1/4" VGA CMOS
	Effective Pixels	640 x 480
	Scanning system	Progressive Scan
	Horizontal Resolution	550 TV Lines
	Min. Illumination	3 Lux Color 0.1 Lux DSS On
Lens		Focal Length 3.6 mm, F.# 2.0, Board type, Lens for Security Camera
Day & Night		Not Supported
Video		
Compression Format		H.264, MPEG-4, MJPEG Selectable per Stream
Number of Streams		Dual Stream, Configurable
Resolution		D1[*1], 4CIF[*1], VGA, CIF, QCIF
Compression FPS		30 fps
Deinterlacing		Supported (DSP)
Motion Detection		Supported
OSD		Supported (DSP)
Burnt-in Text (Digital)		Supported (DSP)
Output		Not Available
Audio		
Input/output		1/1 channel
Compression Format		G.711
Function		
Digital Input/output		Not Supported
Network		10/100 Base-T
Power over Ethernet		Not Available
Protocol		TCP/IP, UDP/IP, HTTP, RTSP, RTCP, RTP/UDP, RTP/TCP, SNTP, mDNS, UPnP, SMTP, SOCK, IGMP, DHCP, FTP, DDNS, SSL v2/v3, IEEE 802.1X, SSH
Material		Polycarbonate
Dimensions		Housing: 124(D) x 100(H) mm, Dome: 100.0(Φ) mm
Color		White

*1. These image sizes are scaled up resolutions.

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Electrical Characteristics

| Video Output	1Vp-p, 75Ω
Audio Input	Linein, 1.43Vp-p(Min 1.35Vp-p, max 1.49 Vp-p), 39 KΩ
Audio Output	Lineout, 46mW Power, 16 Ω
Power Source(Approx)	12 V DC 290 mA

Environment Condition

Operating Temperature	0 °C ~ 50 °C (32 °F ~ 122 °F)
Operating Humidity	Up to 85% RH

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Imbedded Intelligence

ZNS Presence (Included as Standard)	
High Performance	Advanced Tracking Algorithm, Low False Alarm Rate
Easy to Use	Intuitive Web Browser Interface
Detection Zones	Multi-segment Polygons and Lines
On-screen Display	Real-time Display of Tracking Data and Events
Burnt-in Annotation	Stream or Analog video out (※Analog video out support can vary depending on the device model and hardware version and the firmware version)
ZNS Surveillance (Optional)	
Detection Behavior	Camera Tampering, Direction, Stopping, Loitering, Entering, Exiting, Appear, and Disappear Filters
3D Behavior	Perspective Corrected Size and Speed Filters
Statistics	Counting Functions and Other Statistics
Meta Data	Binary XML Format
Image Stabilization (Optional)	
Electronic Stabilization	Removes Camera Sway

APPENDIX (B): DIMENSIONS

Ø124

40

100

50

R50

(Unit: mm)

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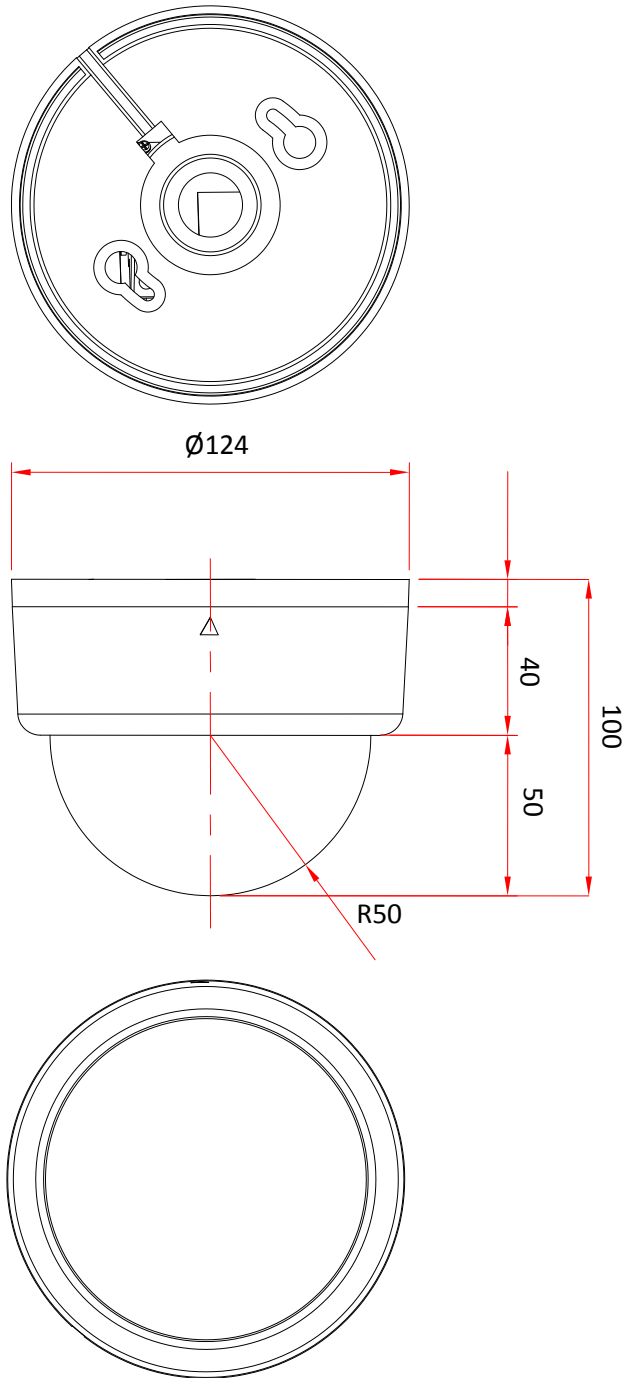
APPENDIX (D): TROUBLE SHOOTING

Checking your Firmware

Firmware is software that determines the functionality of the device. One of your first actions when troubleshooting a problem should be to check the currently installed version. The latest version may contain a correction that fixes your particular problem. The current firmware version in your device can be seen under Setup > About > Version

New firmware can be downloaded at the FTP site. When you download firmware from the FTP, your product will receive the latest available functionality. Always read the upgrade instructions and release notes available with each new release, before updating the firmware. Please contact us to get an FTP account.

Support

If you cannot resolve an issue, for additional assistance, please contact your supplier or system integrator.

If you contact our support, please help us help you resolve your problems expediently by providing a server report, log file and a brief description of the problem.

1. In the address bar of your browser, after the unit IP address enter following CGI command.
   <IP ADDRESS> /nvc-cgi/admin/param.cgi?action=list
   The server report contains important information about the device, as well as a list of the current parameters.

2. The Log messages in the device can prove a useful diagnostic tool for troubleshooting.
   Go to Setup > Maintenance > System Log > LOG LIST > message.