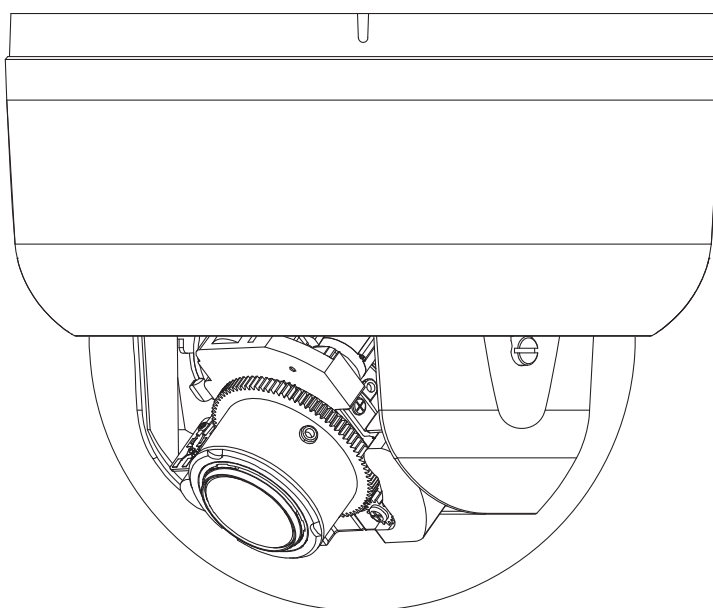


Ikegami

Instruction Manual (Introduction Part)

Network Camera **IPD-DM300**



OUTDOOR USE WARNING
WARNING—TO PREVENT FIRE
OR ELECTRIC SHOCK, DO NOT
EXPOSE THIS APPLIANCE TO
RAIN OR MOISTURE.

Thank you very much for choosing Ikegami network camera.

In order to leverage its capability for the maximum extent, please read the “Instruction Manual” thoroughly.

Safety Precautions (Be sure to follow all the contents.)

To Use the Product Safely

Before start using the product, thoroughly read this “To Use the Product Safely” and the “Instruction Manual” and use the product correctly. After reading the manuals, keep them at an easily accessible place.

Pictorial Indication

In this manual and on the product, there are many pictorial indications used for achieving safe use of the product and prevention of damages to you, other people, and your assets.

The indications and meanings are as follows. Please thoroughly understand the contents of the safety part first, and then start reading the main part.

Please understand that some indications may not match to the actual product that you have purchased.



Warning

It indicates the content with possibilities of death or serious injury due to negligence to follow the instruction and mishandling.



Caution

It indicates the content with possibilities of personal injury or physical damage due to negligence to follow the instruction and mishandling.

Examples of Pictorial Indications



The “△” symbol indicates the contents that require cautions (including danger and warning).

The detailed content of the caution is indicated in the triangle (caution of electric shock in case of the left drawing).



The “○” symbol indicates prohibited actions.

The detailed prohibition content is indicated in or near the circle (prohibition of disassembly in case of the left drawing).



The “●” symbol indicates the mandatory or instructed actions.

The detailed content of instruction is indicated in the black circle (pulling out the power plug from the outlet in case of the left drawing).

Usage Note

Warning



- **Do not remove the case and rear panel of the device!**

There are sections with high voltage inside, which causes electric shock. Consult your dealer or sales person for inspection, servicing, and repair of inside of the device.



- **Do not put a container filled with water on the device!**

If the water is poured inside of the device, fire or electric shock may be caused.



- **Do not place a small metal piece on the device!**

If the metal piece drops inside of the device, fire or electric shock may be caused.



- **Do not use the power supply voltage that is other than the specified voltage!**

Fire or electric shock may be caused.



- **Do not pour water on the device or do not wet the device!**

Fire or electric shock may be caused.

In particular, pay close attention when the device is operated in the rain, snow, at the seaside, and waterfront.



- **Do not insert a foreign object such as a metal piece or a combustible object from the aperture of the device! Do not drop such foreign object inside the device!**

Fire or electric shock may be caused.



- **Do not damage the power supply cord! Do not process the cord! Do not forcibly bend the cord! Do not twist the cord! Do not pull the cord! Do not heat up the cord!**

The cord may get damaged, causing fire or electric shock.



- **Do not modify the device!**

Fire or electric shock may be caused.



- **Do not use the device at a place, where water exists, such as in the bathroom or the shower room!**

Fire or electric shock may be caused.



- **When the thunder starts rumbling, do not touch the coaxial connector/cable or the power supply plug!**

Electric shock may be caused.



- **Do not connect a device, of which consumption power (W) exceeds the specified value!**

Fire may be caused. The power (W) that the AC outlet of this device can supply is indicated near the AC outlet or in the Instruction manual.

Installation

Warning



- **Do not install the device on an unstable location!**
The device may be dropped or fallen over, causing injury.



- **Do not place a heavy object on the power supply cord! Do not place this device on the power supply cord!**
The cord may get damaged, causing fire or electric shock. If the cord is covered such as by a carpet, the cord may be hidden, and a heavy object may be placed on the cord.



- **Do not install the device at where water exists!**
Fire or electric shock may be caused.



- **Do not connect any device that is other than the specified ones!**
Fire or electric shock may be caused.



- **When fixing this device, request the work to a specialty constructor!**
When fixing this device, it is necessary to take a specified procedure. Otherwise, the device may be dropped or fallen over, causing fire, electric shock, or injury. In particular, if the device is fixed on the wall or to the ceiling, be sure to request the work to a specialty constructor. In addition, consult your dealer or the sales person for the mounting cost.

Measures Taken in Abnormal Conditions

Warning



- **When there is smoke, strange smell, or unusual sound, turn off the power immediately and disconnect the power supply plug!**
If the device is continuously used without taking appropriate actions, fire or electric shock may be caused.
Check that the smoke stops and request your dealer or the sales person for the repair.
Never try to repair on your own. It is very dangerous.



- **When water comes inside of the device, turn off the power switch and disconnect the power supply plug!**
If the device is continuously used without taking appropriate actions, fire or electric shock may be caused.
Contact your dealer or the sales person.



- **When any foreign object comes inside of the device, turn off the power switch and disconnect the power supply plug!**
If the device is continuously used without taking appropriate actions, fire or electric shock may be caused.
Contact your dealer or the sales person.



- **When the device becomes faulty, turn off the power switch and disconnect the power supply plug!**
If the device is continuously used without taking appropriate actions, fire or electric shock may be caused.
Request your dealer or the sales person for the repair

Measures Taken in Abnormal Conditions



Warning



- **When the device is dropped or when the case is damaged, turn off the power switch and disconnect the power supply plug!**

If the device is continuously used without taking appropriate actions, fire or electric shock may be caused.

Contact your dealer or the sales person.



- **When the power supply cord is damaged (exposing core wire or broken wire), request for the replacement!**

If the device is continuously used without taking appropriate actions, fire or electric shock may be caused.

Request your dealer or the sales person for the replacement.

Usage Note



Caution



- **Do not ride on the device!**

The device may fall over or get damaged, causing injury.



- **Do not place a heavy object on the device!**

The device may be unbalanced, and the object on the device may fall, causing injury.



- **When moving the device, be sure to turn off the power, disconnect the plug, and remove the connecting cable between equipment!**

The cord may get damaged, causing fire or electric shock.



- **If the device is not used for a long time, disconnect the power supply plug from the outlet for safety purpose!**

Fire may be caused.



- **Do not look at the sun or the lighting through the lens!**

The intense light on the eye may cause vision disorder.

Installation



Caution



- **Do not install the device in a location, where is highly humid or much dust exist.**

Fire or electric shock may be caused.



- **Do not install the device at a location, where oily smoke or humidity exists, such as on the kitchen counter or near the humidifier.**

Fire or electric shock may be caused.



- **Do not block the vent hole of this device!**

When the vent hole is blocked, the inside temperature increases, causing fire. Do not use the device in the following situations.

- Putting the device facing up, horizontally, or upside down. Installing the device to a narrow place, where is not well ventilated
- Putting the device on the carpet or on the mattress. Covering the device with the tablecloth.



- **Do not locate the power supply cord near the heat generating device!**

The cord coating may melt, causing fire or electric shock.



- **When disconnecting the power supply plug, do not pull out by holding the power supply cord!**

The cord may get damaged, causing fire or electric shock. Be sure to hold the plug when disconnecting.



- **Do not plug in or out the power supply cord with a wet hand!**

Electric shock may be caused.

Batteries



Caution



- **Do not use a battery other than the specified one!**

Due to rapturing or leakage from the battery, fire, injury, or taint of the surrounding place may be caused.



- **Do not use new batteries and old batteries together!**

Due to rapturing or leakage from the battery, fire, injury, or taint of the surrounding place may be caused.



- **Connect the batteries correctly with the positive and negative polarities in the correct directions!**

When the battery is connected incorrectly, due to rapturing or leakage from the battery, fire, injury, or taint of the surrounding place may be caused.



- **Do not disassemble or heat up the battery. Do not throw the battery in the fire or water!**

Due to short-circuiting or leakage from the battery, fire, injury, or taint of the surrounding place may be caused.

Cleaning



Caution



- **When cleaning the device, turn off the power switch and disconnect the power supply plug!**

Electric shock may be caused.



- **Request the cleaning of inside of the device to your dealer or the sales person for at least once a year!**

If the system is continuously used with the dust being accumulated inside, fire or breakage may be caused. In particular, it is more effective if the cleaning takes place before the rainy season with high humidity.

In addition, consult your dealer or the sales person for the cleaning cost.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

CAUTION;

ANY CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PART RESPONSIBLE FOR COMPLIANCE COULD VOID THE USERS AUTHORITY TO OPERATE THE EQUIPMENT.

Instructions for Disposal of Electrical and Electronic Equipment in Private Households**Disposal of used Electric and Electronic Equipment**

(Applicable in the European Union and other European countries with waste recycling, disposal and collection methods)



This symbol on the product, or in the related documents in the package, indicates that this product shall not be treated as normal household waste. Instead, it should be taken to a proper applicable collection point or depot for the recycling of electrical and electronic equipment.

By ensuring this product is disposed of correctly, you will help prevent possible negative consequences for the environment and human health, which could otherwise be caused by inappropriate handling of this product. The correct recycling of materials will help to conserve natural resources.

For more detailed information about recycling of this product, please contact your local city authority, your household waste disposal service or the place where you purchased the product.

The product is intended to be supplied by a Listed Power Unit marked Limited Power Source and rated output 48Vdc, 0.140A minimum.

The product shall be installed by a qualified service person and the installation shall conform to all local codes.

The product is to be connected to only PoE networks without routing to the outside plant.

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1 Introduction

1.1 Standard Configuration

- Network indoor-type dome camera : 1 set
- Instruction Manual – Introduction Part (this manual) : 1 pc
- 8-pin terminal block for microphone/alarm : 1 pc
- Monitor output cable : 1 pc
- Mounting template : 1 set
- Anchoring screws : 2 pc
- Screws : 2 pc

1.2 About the Instruction Manual

The instruction manual for this device consists of two parts: Introduction Part and Application Part. This instruction manual explains cautions for handling, installation, and connection.

For the detailed operations and settings of the device, please download the manual from the following URL.

<http://www.ikegami.co.jp/en/products/download/security.html>

1.3 Caution on Handling

- Do not use this device at a place, where the device may get poured with water, or a humid place.
- Do not use the device at a hot or cold place, where the ambient temperature becomes lower than -10°C or higher than +50°C.
Otherwise, the image quality and parts may get affected adversely or the damage to the device may be caused.
- When installing the device in the camera housing, pay close attention to the temperature inside of the housing. In this situation, the temperature inside of the housing is handled as the ambient temperature of the camera.
- Never open the camera case. There are precision components inside; therefore, malfunction or accident may be caused.
- When conducting the installation work or connecting, be sure to turn off the power.
- Do not drop or give a strong shock to the camera while transporting the camera.
- Do not touch the lens mount inside with a hand or a finger.
- Do not let the camera face the sun.
- Due to the characteristics of the imaging element, the screen sometimes becomes rough in high temperature. However, it is normal and not malfunction.
- To use the focus function of the lens in the best condition, adjust the flange focus (distance from the lens mounting surface to the imaging surface).
- Use a lens that corresponds to 3M pixel in order to leverage the performance of this device.

1.4 Disclaimer

- (1) The purpose of this device is to take the video for monitoring. It is not for crime prevention.
- (2) We do not bear any responsibility over the following cases.
 - a. System failure, accident, and trouble caused by the connection with other maker's equipment
 - b. Accident and trouble caused by wrong use or negligence
 - c. Disassembly and repair that are not authorized by Ikegami
 - d. Abusive use of the monitored video, which was taken with this device, by the third party and damage and injury caused by such abusive use
 - e. Loss of the settings
 - f. Other injuries and damages caused in relation to this device directly or indirectly

1.5 Protection of Privacy Information

Within video information acquired with this device, the ones that can specify an individual person are the **personal information** subject of "Act on the Protection of Personal Information." Handle such video information in accordance with the law.

- * Refer to the **cases corresponding to the personal information** specified in "guideline concerning the Act on Protection of Personal Information relating to economy and industry" from the Ministry of Economy, Trade and Industry.

1.6 Cautions of Network Connection

This device is designed to be used by connecting to the network. To protect the system from the damages specific to the network connection, take the sufficient security measures under the responsibility of the customer.

The network-specific damages include damages by leakage/outflow of the information acquired by this device, unauthorized access, and the system stop. The measures include the followings; however, the customer needs to take other sufficient measures under the customer's responsibility.

- Do not place the device at a location, where the cable can be easily replaced.
- Secure the network safety (firewall, etc.).
- Periodically check for the virus on the connected PC.
- Limit the users on the connected PC (setting a password, etc.).
- Control as the authorized information do not leak.

1.7 Limiting the Applications of the Device

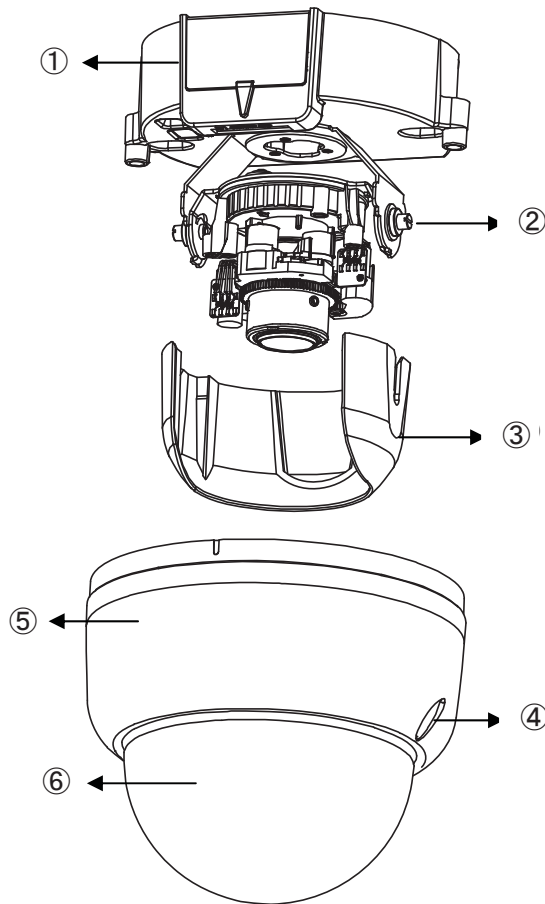
The applications of this device are limited by "VC-1 and AVC/H.264 patent portfolio license relating to the personal and non-commercial applications."

Follow this regulation and use this device for the personal applications and applications other than the commercial uses.

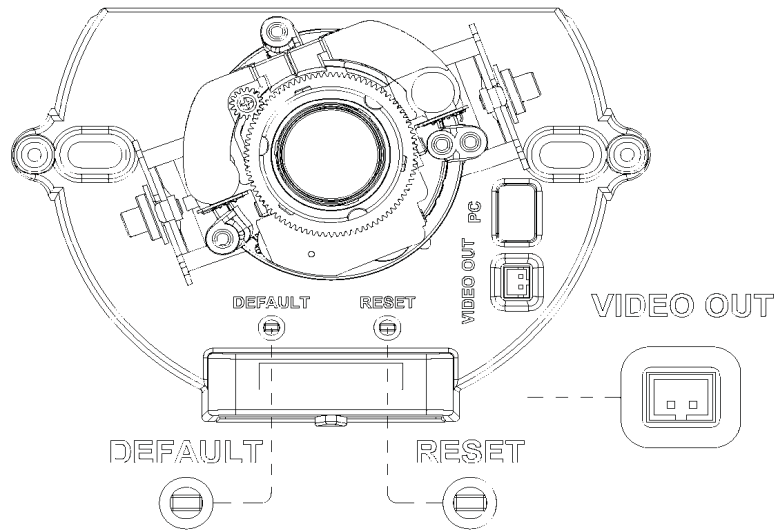
For details, please refer to <http://www.mpegla.com>.




2 Installation

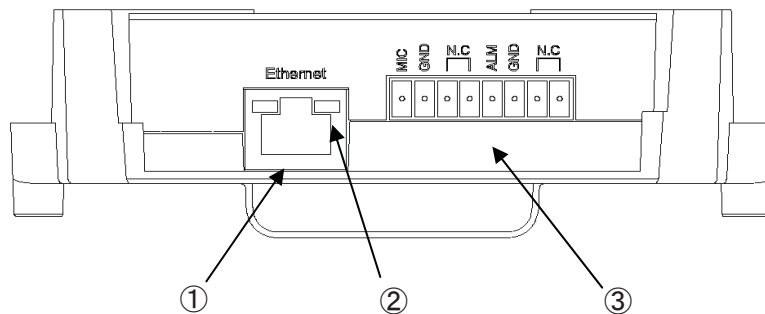
2.1 Names and Functions of Sections



- ① Camera lower case
- ② Fixing screws for the camera upper and lower directions (2 pc)
- ③ Internal cover
- ④ Fixing screws for the camera housing (2 pc)
- ⑤ Camera housing
- ⑥ Dome cover



DEFAULT 	Default	Pressing the button for five seconds or longer, the setting returns to the factory default value.
RESET 	Reset	Pressing the button restarts up the device.
VIDEO OUT 	Video output	Pressing this button connects the monitor output cable for the video output signal.



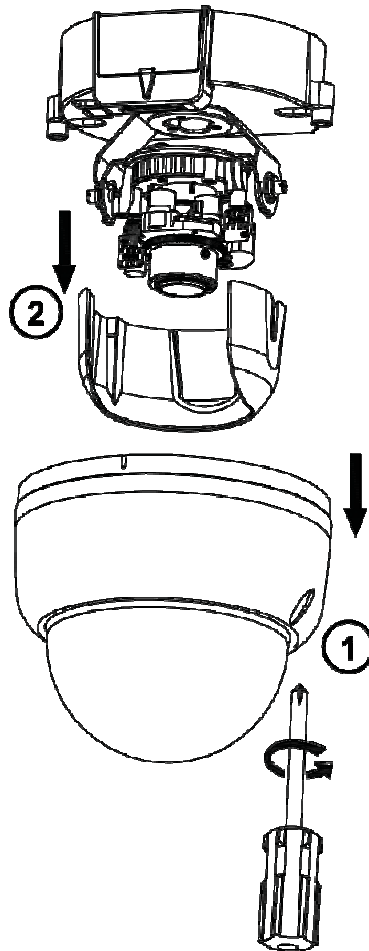
- ① Network video output terminal (RJ-45)
Connect to the HUB compatible with PoE.
- ② LED
Orange : It indicates that the data are transmitted/received between networks.
Green : It indicates the valid connection.
- ③ Block terminal block
It is connected when the microphone/alarm is input.

2.2 Camera Installation

2.2.1 Removing the Camera Housing

Refer to the following figure and the procedure.

- a. Loosen two screws of the camera housing to remove the camera housing.
- b. Pull slowly to remove the internal cover.



Caution

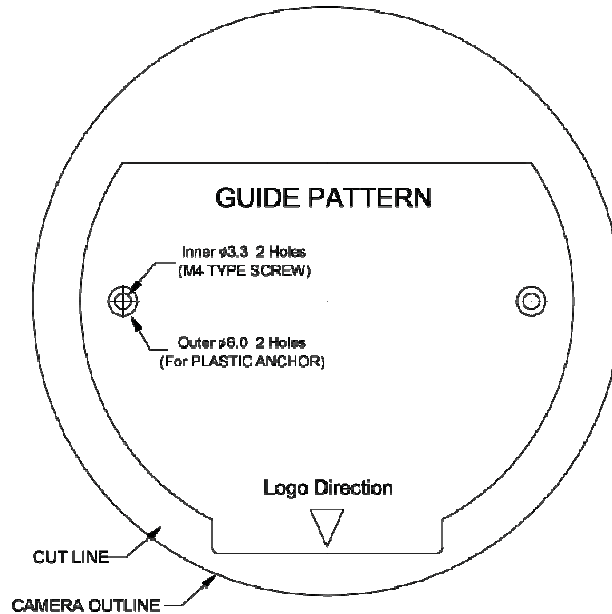
Before start removing the dome cover, be sure to turn off the power supply first.

This device does not have a power supply switch. Leave the network cable disconnected, or turn off the PoE HUB power supply.

2.2.2 Mounting the Camera

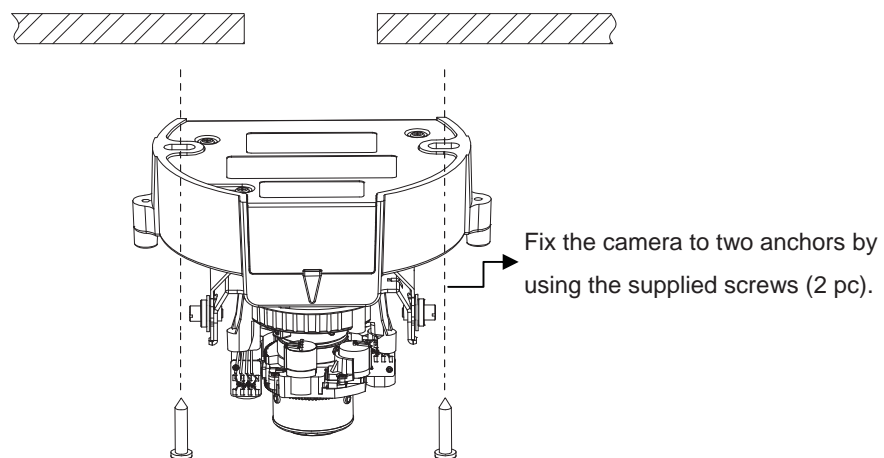
Step 1. Mounting the plastic anchor (supplied)

- By using the mounting template, put a mark at the mounting area for preparation.
 1. Put the supplied mounting template at the mounting surface. Open two 6-dia (0.2 inch) holes for the supplied plastic anchor at the specified positions.
 2. Then, insert the plastic anchors (supplied) at the two holes.

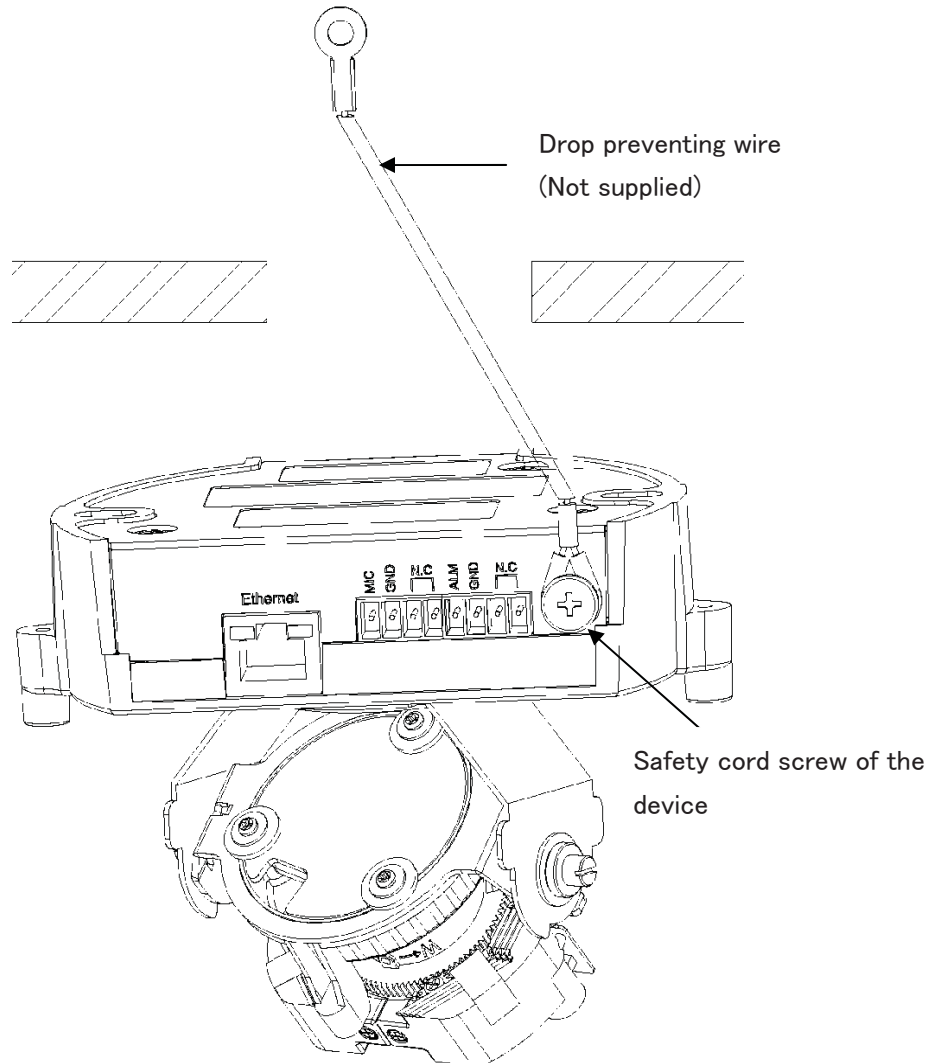


Step 2. Mounting method

- After removing the camera housing by taking the previously described procedure, fix the camera to the plastic anchor through two holes at the lower section of the camera by using the supplied TP4 tap screws (2 sets). Then, insert the network cable, audio, and alarm cable to the rear panel if necessary.



- When connecting the drop preventing wire (not supplied), attach the one end of the drop preventing wire to the mounting surface and attach the other end to the safety cord screw of the device.



Warning

Depending on the material of the mounting surface, screws and anchors that are different from the supplied ones may be required. To prevent falling of the device, be sure to check that the device is fixed securely with the drop preventing wire with the strength sufficient enough to keep the total weight of the device.
(Also pay close attention to the finishing process of the wire ends.)



Caution

It is necessary to connect one end of the drop preventing wire to the ceiling and the other end to the safety cord screw of the device.

2.2.3 Adjusting the Angle

This device consists of three axes for lens positioning, which are the pan, tilt, and horizontal position.

- **Pan adjustment (A)**

When the camera is attached to the wall or the tilted ceiling, turn the lens table to adjust.

- **Tilt adjustment (B)**

Loosen the fixing screw for camera up/down direction and change the camera position to fix.

- **Horizontal rotation (C)**

Rotate the lens section to adjust the angle.

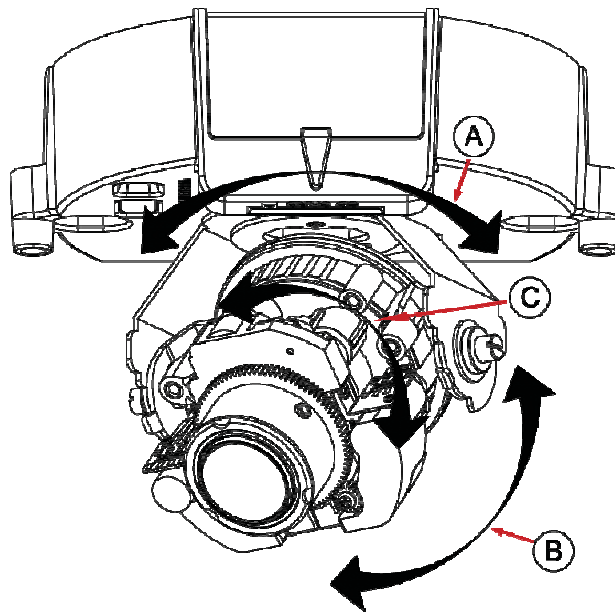
Do not rotate the lens in excess of the rotation limit. Otherwise, the internal cable may be cut by being twisted.



Caution

Limits for three axes positions:

- **Pan range: +/-175°**
- **Tilt range: 15° to 90°**
- **Horizontal rotation range: +/-175°**



2.2.4 Adjusting Zoom and Focus

- Adjustment is possible by the GUI menu settings. Please refer to the application part for details.



Caution

Manual adjustment is not possible.

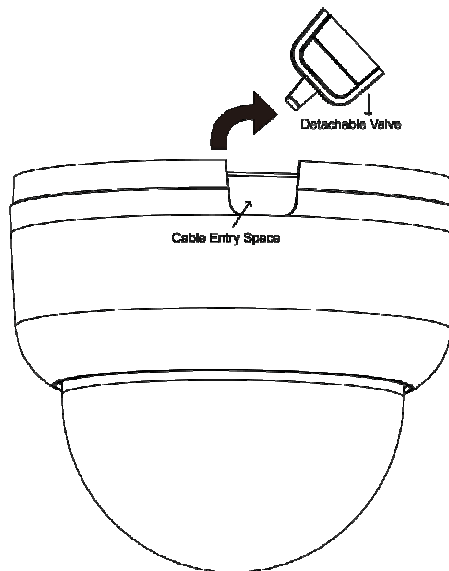
If the lens is forcibly moved, please take note that the lens may get broken.

2.2.5 Mounting the Camera Housing

The internal cover and the camera housing can be fixed by tightening two screws for fixing the housing.

After mounting the device, turn on the power of PoE. When mounting the camera housing, position as the detachable cover comes to the rear side, so the cable can be fed through.

(See the following figure.)



3 Connection

3.1 Camera Power Supply

This device can be connected to the network device that is compatible with the PoE standard (IEEE802.3af compatible). Therefore, the power supply work for the camera is not necessary. Connect the PoE power supply system (HUB, etc.) and the Ethernet cable (category 5 or higher) to the network terminal.

This device does not have a power supply switch. Pull out and insert the network cable or turn on and off the power of the PoE power supply system.

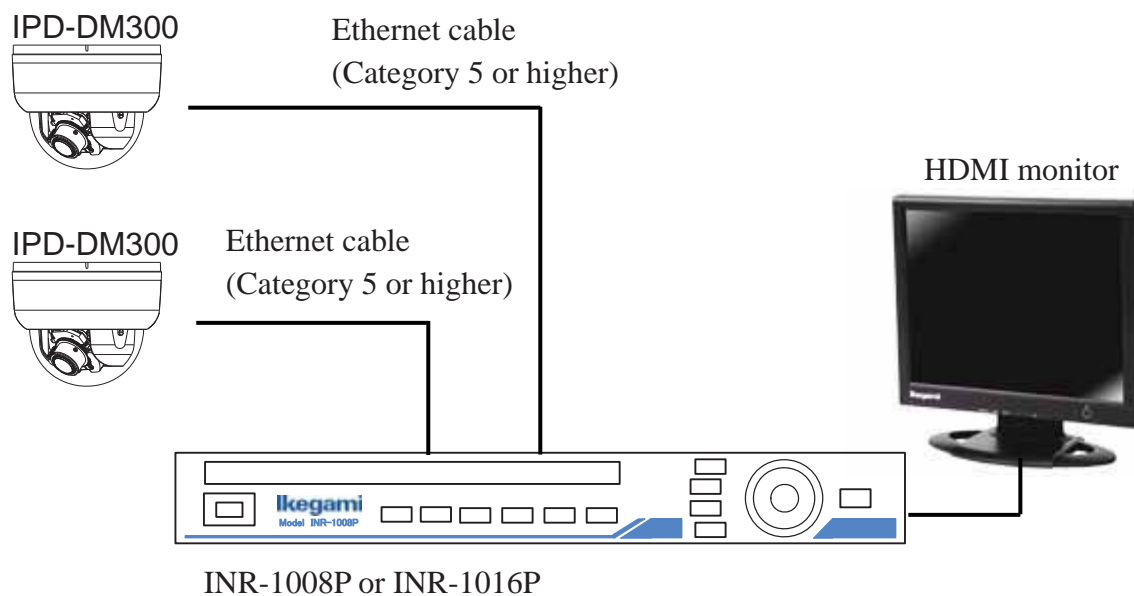
[Important]

- The maximum length of the Ethernet cable is 100m.
- To reconnect the Ethernet cable, wait for a while.

When the cable is connected immediately, there are cases that the power is not supplied from the PoE power supply system.

3.2 Example of Connection

Example of connection between this device and the network recorder (NVR)



3.3 IP Address

When the IP camera is used, setting of the IP address is necessary.

In this device, DHCP is valid by the default setting. When the DHCP server is provided in the network, the IP address is automatically acquired. Therefore, it is not necessary to change the IP address of the camera. When the DHCP server is not provided in the network, the default setting of the camera is as follows.

IP Address : 192.168.1.100

Subnet mask : 255.255.255.0

3.4 Logging In

1. Start up the browser (Internet Explorer, etc.) and in the address bar, enter the IP address of the network camera to change the setting.
2. Enter the user name and the password.

User name :admin

Password :admin

3. Click OK.



4 Warranty and After-sales Service

This product is delivered with the warranty certificate (in this manual). Please receive the warranty certificate at the time of purchase.

Fill in the specified items and check the written items. Then keep in a safe place.

- The warranty period is one year from the date of purchase. (However, it excludes consumables.)
According to the warranty certificate, your dealer will repair the product. See the warranty certificate for the details.
- For repairs after the end of warranty period, consult your dealer or the sales person. If the functions can be kept working by being repaired, the product can be repaired with consideration upon a request from the customer.
- Before requesting the repair, please take some time and review the instruction manual. Check the contents and tell us of the model name, purchased date, and status of the trouble as detailed as possible.
- For other details regarding the after-sale service, consult your dealer or the sales person.

* Be sure to conduct the maintenance inspections always at early timings.

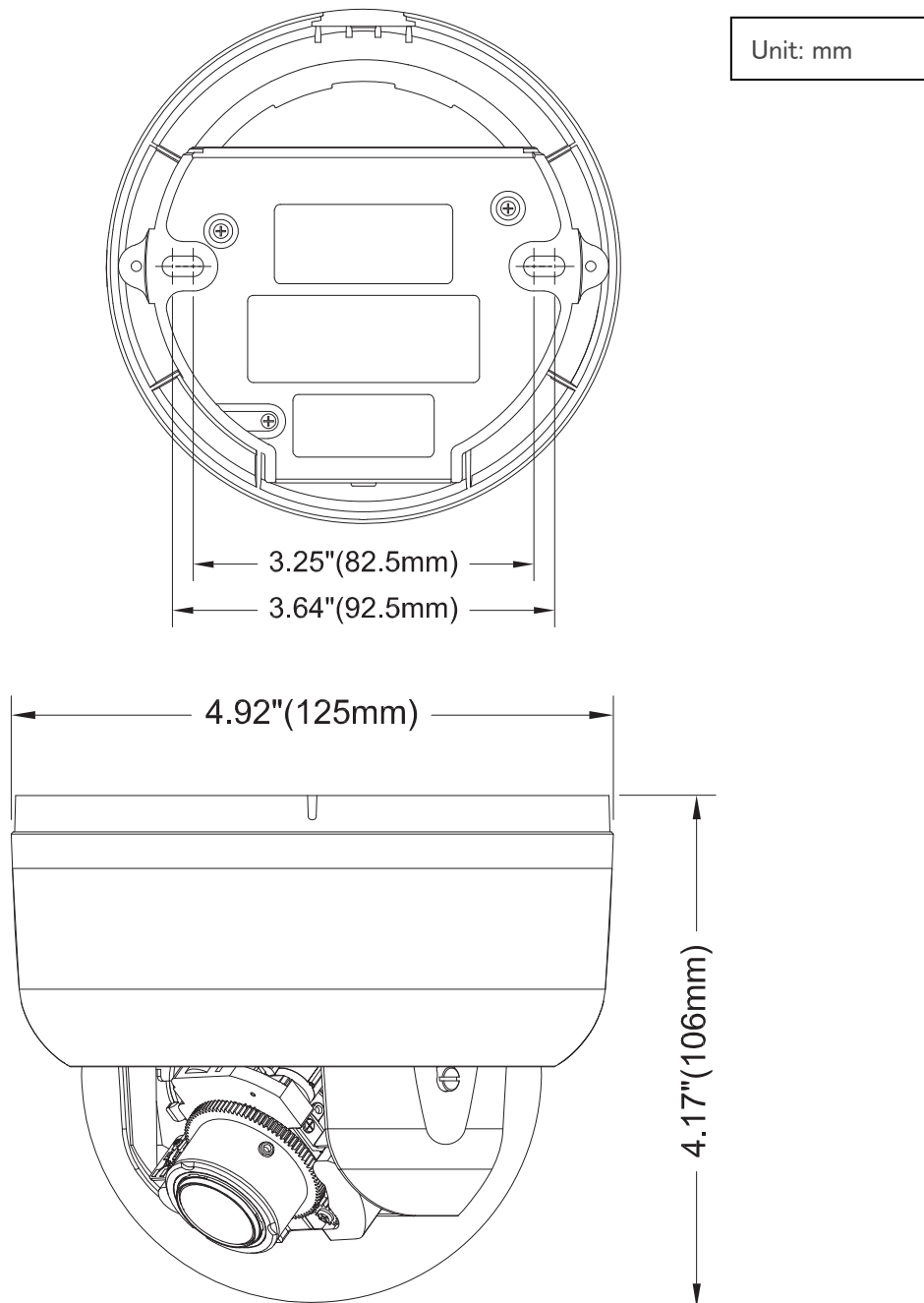
5 Specifications/Exterior

5.1 Specifications

(1) Imaging element	1/3 type CMOS sensor
(2) Scanning method	Progressive scan
(3) Synchronizing method	Internal synchronization: Crystal-lock
(4) Analog video output	VBS 1.0 Vp-p/75Ω (for angle adjustment)
(5) S/N ratio	50 dB (p-p/rms) or higher
(6) Lowest object illuminance	(Color) 2.00Lx/F1.2 (Electron sensitivity OFF, VBS output 50%) (Black and white) 0.25Lx/F1.2 (Electron sensitivity OFF, VBS output 25%)
(7) WDR function	Yes
(8) AGC	Yes
(9) Electron sensitivity	Yes, Switching between ON/OFF
(10) Switching between day and night	Corresponding to True Day/Night, Switching between auto/manual
(11) Automatic iris function	Corresponding to DC iris
(12) DETAIL correction	Yes
(13) White balance	ATW/Manual selection
(14) Privacy mask	Yes (setting possible up to the max. of 4 sections)
(15) Noise reduction	Yes (level adjustment possible)
(16) Camera ID	Yes
(17) Video setting	Two-pattern setting possible
- Compression method	H.264 or MJPEG
- Image size	1920 x 1080/1280 x 960/1280 x 720/640 x 480/640 x 360/320 x 240/320 x 176
- Frame rate	Max. 30 fps
- Bit rate (H.264)	256 Kbps to 12 Mbps (Only H.264 is valid)
- Image setting (MJPEG)	Yes (Only MJPEG is valid)
- Transmission mode	H.264: CBR / MJPEG: VBR
(18) Motion detection	Yes (mask setting possible)
(19) Audio function	Yes (one line)
- Input level	-20 dB
- Input impedance	2 kΩ
(20) Network	Ethernet 10Base-T/100Base-TX
(21) Protocol	TCP, UDP, RTP/RTCP/RTSP, HTTP, HTTPS, FTP, NTP, ICMP, IGMP, IPv4, ARP, DHCP, DNS
(22) Built-in lens	
- Focusing distance (f)	3.0 to 9.0 mm
- Maximum aperture ratio (F)	1.2
- Angle (H)	28.0° to 78.0°
(23) Dome cover	Smoke
(24) Power supply	PoE (IEEE 802.3af) CLASS 0
(25) Power consumption	Approx. 4.5W
(26) Operating ambient temperature/humidity	Within -10 to + 50°C/30 to 90 %RH (no condensation)

- (27) Exterior dimension (Dia. x H) 125 dia. x 106 mm (projection section excluded)
- (28) Mass Approx. 520g
- (29) Input/output connector
 - ETHERNET : RJ-45 (Auto-MDI/MDIX)
 - VIDEO OUT : Connector output (for angle adjustment)
(BNC output possible by using the attached monitor output cable)
 - MIC/ALARM : 8P block terminal block

5.2 Exterior



Ikegami

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