

INDUSTRIAL SECURITY CAMERA

Product instruction Manual

Class A equipment (business broadcasting and communication equipment)

This device is a business (class A) electromagnetic wave suitability device, and sellers or users are advised to pay attention to this point.

It is intended for use outside the home.



Through QR code,
you can find PDF file

Product User Manual

iVEX-PL Series

Notice on Copyright and Trademark Usage

Products and company names mentioned in this manual are trademarks or registered trademarks belonging to the company.

WARRANTY

If the product is not normally installed due to a defect under normal use conditions,

The manufacturer will repair it free of charge through the place of purchase.

The warranty period is 1 years, and the following situations are excluded from the warranty.

- Abnormalities caused by product changes over time or natural wear and tear during use
 - Damage to fastening parts due to negligence when assembling the product
 - ※ The appearance and specifications of the product may be changed without prior notice to improve performance.
-

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PC System Recommended Specifications

- * CPU: Intel Core 2 Duo 2.4 GHz or higher (when using 1920x1080 30fps)
Intel Core i7 2.8 GHz or higher (when using 1920x1080 60fps)
- * Resolution: 1280x1024 or higher (32-bit color)
- * Memory: 2GB or more
- * Supported OS: Windows XP, VISTA, 7, 8, 10 / Mac OS 10.7 or later
- * Supported web browsers: Microsoft Internet Explorer (Ver. 8~11),
Microsoft Edge (Ver. 94 ~118) Latest 118
Mozilla Firefox (Ver. 9~19) Latest 85
Google Chrome (Ver. 15~15) Latest 88
Apple Safari (Ver. 6.0.2) Latest 14
 - Windows 8 is supported only in desktop mode.
 - Beta version or developer version other than the version released on the official site Not supported.
 - For IPv6 access, Windows 7 or later is recommended.
 - Safari Browser is supported only on Mac OS X.
- * Video memory: 256MB or more
 - The video memory card driver is not installed correctly, or the latest version is not available. If not, the video may not play normally.
 - When using two or more monitors, playback performance may decrease depending on system specifications.
may fall.

Component information

Before starting the installation, carefully check the following components enclosed in the product box to ensure that no parts are missing during installation.

Basic Components

Picture	Qty	Explanation	Picture	Qty	Explanation
	1	L-Wrench set (M5,M4,M3, M1.5)		1	Hex Bolt Set (M8*15)
	1	Copper tube Terminal (M6)		1	Knife block Set
	1	Spare Bolt Set		1	Product instruction Manual

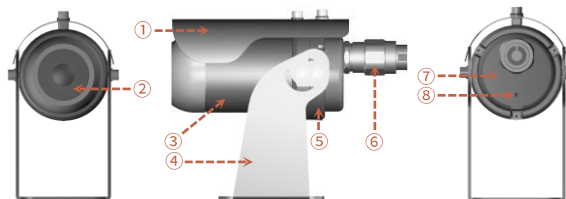
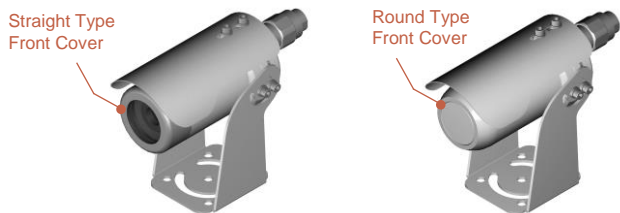
Optional components (purchased separately)

Picture	Qty	Explanation	Picture	Qty	Explanation
	1	Wall Bracket		1	Sealing Bracket
	1	Anchor Bolt			

Product division and part names

Please familiarize yourself with the part names of each product as they are important to provide fast and accurate service for problems in each part.

iVEX-PL-30 Series



Series name	Model name	Details
iVEX-PL-30 Series	IVEX-PL-30	Vari-Focal(2.7-12mm/DC iris) + IP 2M(IMX-307) + ROUND
	IVEX-PL-3011R	Vari-Focal(3.6-11mm) + IP 2M(IMX-385) + ROUND
	IVEX-PL-3011RA	Vari-Focal(2.7-12mm) + IP 2M(IMX-307) + ROUND
	IVEX-PL-3111R	Vari-Focal(2.7-12mm) + HD 2M(IMX-307) + ROUND

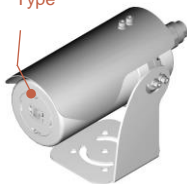
No	Detailed name	No	Detailed name
1	SUN Shield	11	
2	Front Cover	12	
3	Main Body	13	
4	Mount Bracket	14	
5	Ring Bracket	15	
6	Cable Gland NPT 1/2"	16	
7	Rear Cover	17	
8	Ground hole	18	
9		19	
10		20	

Product division and part names

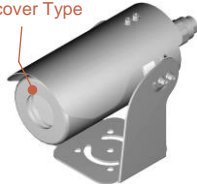
Please familiarize yourself with the part names of each product as they are important to provide fast and accurate service for problems in each part.

iVEX-PL-10 Series

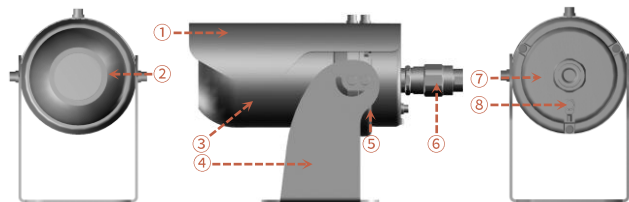
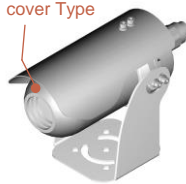
GE Glass +
Protection Grid
Type



Straight front
cover Type



Round front
cover Type



Series name	Model name	Details
iVEX-PL-10 Series	IVEX-PL-1011R	30X Zoom + IP 2M(Ambarella) + ROUND
	IVEX-PL-1111R	30X Zoom + HD 2M + ROUND
	IVEX-PL-1000SGT	열화상카메라 + ROUND(열화상커버+프로텍션그리드)

No	Detailed name	No	Detailed name
1	Sun Shield	11	
2	Front Cover	12	
3	Main Body	13	
4	Mount Bracket	14	
5	Ring Bracket	15	
6	Cable Gland NPT 1/2"	16	
7	Rear Cover	17	
8	Ground hole	18	
9		19	
10		20	

About the contents of the manual

Please read the product user manual carefully before installing and using this product, and keep the manual in a separate place for future reference.

Safety rules

1. Explosive hazard

- This product complies with applicable standard code EN/IEC 60079-14, EN/IEC 60079-17, etc. Installation and maintenance must be performed by qualified personnel according to national standards.
- Do not open the product while power is supplied within an explosion-proof area.
- Installation of the product should be carried out using appropriate tools.
- The manufacturer recommends using explosion-proof tools.
- Connection testing and maintenance work in non-hazardous areas is recommended.
- Grounding is essential to reduce the risk of ignition of products installed in explosive environments.
- The device must be connected to protective earth.
At this time, it is recommended to use an approved material for the grounding cable.
- Before turning on the product in a potentially explosive place, check that the connection parts such as cable glands are properly closed. Check it out.
- If the surface temperature of the device is raised by direct sunlight exposure, the device's surface temperature rating is rated against direct sunlight.
It is judged only by ambient air temperature without consideration.
- Ensure that all devices are certified for the application and the environment in which it is installed.
- Any changes not approved by the manufacturer are not guaranteed.

2. Risk of electric shock

- When installing or performing maintenance with the breaker turned on, make sure that the product is turned off.
- A power-off device must be included in the electrical installation and can be recognized very quickly and turned OFF when necessary. Need to check.
- An earth leakage breaker with a maximum of 16A is recommended for the electrical installation to which the device is connected.
- The minimum gap between circuit breaker contacts must be 3 mm (0.1").
- Do not use worn or corroded cables.
- All cables must comply with IEC 60332-1-2, IEC 60332-1-3 and IEC/EN 60079-14.
- When installing and operating, the characteristics of the power supply provided by the facility and the characteristics of the power supply required by the product match Check if you do
- This product is not suitable for use in locations where children may be present.

3. Work attention

- Confirm that the installation method meets the explosion-proof regulations and specifications. After connection, it is recommended to install after testing in a non-hazardous area before installation in the field.
- Use an appropriate cable that can withstand the operating temperature.
- All unused cables must be electrically insulated.
- This product can only be installed in standard locations.
- Proceed with the installation after confirming whether the power supply source of the product is PoE or DC power and the appropriate power source.
- Unauthorized modification by the manufacturer, use of non-genuine spare parts, unauthorized use. Damage caused by installation, maintenance and repair by unskilled personnel
We accept no responsibility for any damage to the instrument.
- For technical service, refer only to authorized technicians.
- This product should only be repaired by properly trained personnel or under the supervision of the manufacturer's personnel.
- When repairing, use only the manufacturer's genuine parts.

4. Understanding the installation process

- Installers must comply with general accident prevention standards when handling the product.
- Before proceeding with the installation, compare/check with the components in the user manual to check whether they match.
- Equipment installation in explosion-proof areas must be performed by professional technicians.
- The manufacturer assumes all responsibility for damages caused by improper use of the device mentioned in this user manual.
doesn't support We also reserve the right to change some parts without comment.
- It is the responsibility of the user to select the surface on which the product is to be fixed, so there are instructions for attaching the product to a specific surface
Fixtures are not provided. It is the installer's responsibility to select the appropriate fixture for their particular application.
Use installation methods and materials capable of supporting at least four times the weight of the product.
- For all product maintenance, we recommend that you receive repairs by sending the product to the manufacturer.

Identification method

Product specification inspection

INDUSVISION <small>Vision For All Industry</small>	
③ → 제품명 : IVEK-PL-30	한국산업기술시험원 17-KA280-0204X-0205X Ex d IIC T6 Ex tb IIIC T85 °C DEKRA 15ATEX0051X II 2 G Ex db IIC T6 Gb II 2 D Ex tb IIIC T85 °C Db IECEx DEK 15.0030X Ex db IIC T6 Gb Ex tb IIIC T85 °C Db Ex tb IIIC T85 °C Db 케이블 글랜드 크기 및 유형 : NPT 1/2"-14 : According to ANSI/ASME B1.20.1 제조년월 : 제조국가 : 대한민국
④ → Serial No :	
② → 제조사 : (주) 인더비전	
⑤ → 정격 : PoE Class3	
⑥ → 사용 온도 : -25°C ≤ Ta ≤ +65°C	
① → ⚠ 경고 폭발 위험이 있는 곳에서 열지 마시오. 사용자 매뉴얼을 참고하여 적절한 케이블 글랜드 및 케이블을 선택하십시오.	

[KOR Ver.]

INDUSVISION <small>Vision For All Industry</small>	
③ → Name of Type : IVEK-PL-30	0344 DEKRA 15ATEX0051X II 2 G Ex db IIC T6 Gb II 2 D Ex tb IIIC T85 °C Db IECEx DEK 15.0030X Ex db IIC T6 Gb Ex tb IIIC T85 °C Db Rating DC 12V, Max 5.3W, PoE Class3 Tamb -25°C ≤ Ta ≤ +65°C Type and size of entry : NPT 1/2"-14 According to ANSI / ASME B1.20.1 Manufacture Date : Made in Korea
④ → Serial No :	
② → Manufacturer : INDUSVISION INC.	
⑤ → 388, Songnae-daero, Bucheon-si, Gyeonggi-do, 14502 Republic of Korea	
① → ⚠ WARNING - Do not open when an explosive atmosphere is present. - Please refer to the instruction manual for selection a proper cable glands and cables.	

[ENG Ver.]

INDUSVISION <small>Vision For All Industry</small>	
③ → 모델명 : IVEK-PL-30	JPEX - DEK18.0010X Ex d IIC T6 Gb Ex tb IIIC T85 °C Db DEKRA 15ATEX0051X II 2 G Ex db IIC T6 Gb II 2 D Ex tb IIIC T85 °C Db IECEx DEK 15.0030X Ex db IIC T6 Gb Ex tb IIIC T85 °C Db 정격 DC12V, Max 4W, PoE Class3 周囲温度 -25°C ≤ Ta ≤ +65°C ケーブル導入部 : NPT 1/2"-14 According to ANSI / ASME B1.20.1 製造年 : MADE IN KOREA
④ → シリアル番号:	
② → 製造商(Manufacturer) : INDUSVISION INC. 大韓民国, 京畿道, 富川市, ソンネ通り 388, 203-704号, 14502	
⑤ → ⚠ 警告(WARNING) 爆発の危険がある場所で開かないでください。 ユーザーマニュアルを参照して、適切な ケーブルグランドとケーブルを選択してください。	

[JPN Ver.]

Explosion Proof Certification Label Description

- ① Precautions
- ② Manufacturer and address
- ③ Model name
- ④ Serial number: 10 digits of product model code – 2 digits for production year and month – consists of manufacturing serial number
- ⑤ Operating temperature: Ambient temperature (-40°C ≤ Ta ≤ +Tx°C, -40°C ≤ Ta ≤ Tx°C or Tx°C)
- ⑥ T Class (Tx or Tx... Tx)
- ⑦ IP protection level
- ⑧ Maximum surface temperature (Tx°C or Tx°C... Tx°C)
- ⑨ Safety certification number
- ⑩ Safety certification issuing authority

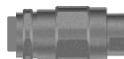
Identification method

Product Certification Number Inspection

Certification	IVEX-PL-1X Series Certification Number
IECEX	IECEX DEK 15.0030X
ATEX	DEKRA 15ATEX0051X
JPEX	DEK18.0010X
KCs	22-KA2BO-0609X~0620X

Certification	IVEX-PL-3X Series Certification Number
IECEX	IECEX DEK 15.0030X
ATEX	DEKRA 15ATEX0051X
JPEX	DEK18.0011X
KCs	22-KA2BO-0609X~0620X

Cable gland inspection



- Manufacture : Shinhwa Industrial Electric.
- Entry threads : NPT 1/2"-14 According to ANSI/ASME B1.20.1
- Model No : ECG
- Protection type : Ex d IIC, IP65
- Certi. No : KGS 16-GA2BO-0835
- C.B : Korea Gas Safety Corporation
- IP Rating : IP65
- Operating Temperature : -60°C to 100°C



- Manufacture : OSCG.
- Entry threads : NPT 1/2"-14 According to ANSI/ASME B1.20.1
- Model No : OS-A2F-U
- Protection type : Ex d IIC, IP65
- Certi. No : IECEX PRE 17.0062X , Presafe 17 ATEX 11454X
KCS 18KA2BO-0364X
- C.B : Korea Testing Laboratory
- IP Rating : IP66/67
- Operating Temperature : -60°C~110°C



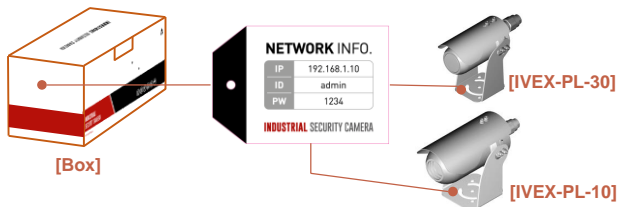
- Manufacture : Hummel AG
- Entry threads : NPT 1/2"-14 According to ANSI/ASME B1.20.1
- Model No : EXIOS A2F NPT 1/2" 9~16mm, INOX 1.4404
- Protection type : Ex d e IIC Gb, Ex ta IIIC Da
- Certi. No : IECEX DEK 12.0039X
- C.B : DEKRA Certification B.V.
- IP Rating : IP66, 67 and 68(5bar)
- Operating Temperature : -60°C to 105°C



- Model No. : DONG A Bucheon Korea CE1180
(A2FC 20-C (M)NPT1/2" X (F)NPT1/2")
- Entry Threads : NPT 1/2"
- Protection Type : Ex db IIC Gb, Ex eb IIC Gb, Ex tb IIIC Db
- Certificate No : Baseefa08 ATEX 0011X / IECEX BAS08.0003X
- BS, IEC & CENELEC According to Zone1,Zone2, Zone21, Zone22, gas group IIA, IIB, IIC Suitable for use in
- IP Rating : IP66, IP67
- Operating Temperature : -60°C~+100°C

Checklist before product installation

Check product operation information and appearance status



* On the product label on the product packaging box and on the tag on the sunshield portion of the product
After checking the information necessary for initial operation such as IP address, ID, password, etc. Keep it so you don't lose it.

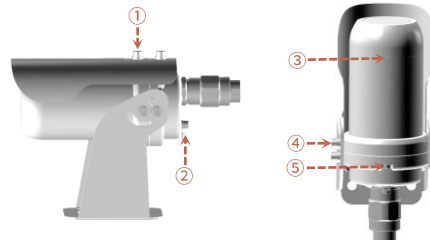
Check the packing box

- When delivering the product, check that the packaging is intact and has not been dropped or torn.
- In the case of returning a broken product, we recommend that you reuse the packaging box provided for transportation. Recommended.
- The box label attached to the product box contains the information shown in the picture above.
- Before discarding the box, back up the information entered on the label to prevent product operation problems. wish.

Safe Disposal of Packaging Materials

- Among packaging materials, PE foam, excluding paper, is subject to separate discharge. Therefore, please separate and dispose according to the separate collection method or regulations.

Check the specifications of the L wrench

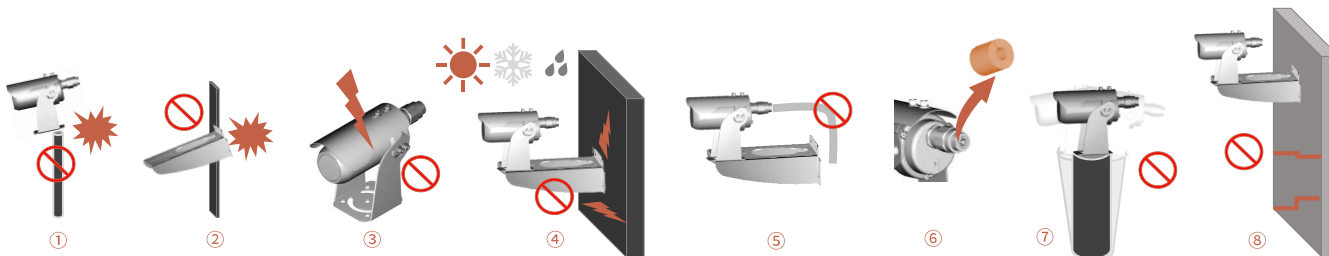


No	L wrench specification	No	L wrench specification
1	M5 (Equipped with sun shield)	11	
2	M4 (Ground-copper tube terminal)	12	
3	M1.5 (Front cover tanning bolts)	13	
4	M5 (Mount bracket)	14	
5	M3 (Ring bracket)	15	
6		16	
7		17	
8		18	
9		19	
10		20	

Select product installation location

When selecting a location to install the product, be sure to install it in a place that does not have any inconsistencies as in the case below.

Things to consider when installing the product



When selecting the initial location to install the product, consider the following.

- ① If the environment in which the product is installed is smaller than the bottom size of the product's mount bracket, there is a risk of the product falling, making it unsuitable for installation.
- ② Check if the size of the mounting part, such as the 'wall mount bracket' and H-beam, provided by the manufacturer is suitable for installation.
- ③ Check that the environment where the product is installed is not an area where lightning often occurs, and install it in a place where there is no influence of lightning if possible.
- ④ If the environment in which the product is installed receives many external factors such as high temperature, high humidity and low temperature due to direct sunlight, it is recommended to avoid this influence.
- ⑤ In preparation for the length of the wall bracket in the environment where the product is installed, the calculated length of the curvature of the product and flexible must be reflected and installed.
- ⑥ After receiving the product, be sure to remove the protective sponge inserted in the back of the cable gland to prevent damage to the cable sheath while moving the product.
- ⑦ If the environment where the product is installed has severe vibration, it may affect the image, so it is recommended to install after attaching a device that can attenuate vibration such as a separate damper.
- ⑧ If the environment in which the product is installed is poor and the weight of the product (about 5Kg) cannot be supported, safety may be a problem, so it is recommended to install it in another safe place.

Product installation and precautions

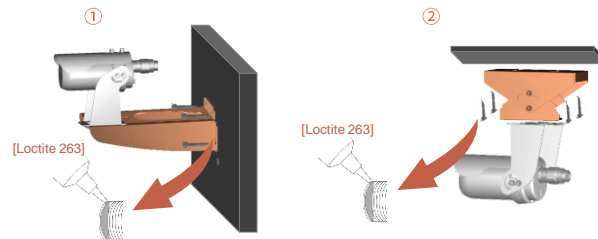
The manufacturer is not responsible for any problems caused by installing a bracket other than the genuine bracket provided by the manufacturer.

Installation using the product's mount bracket



- First, select the installation method from the picture above.
- Place the base bracket where it will be installed and mark the perforation point.
- Insert the knife block provided with the product into the perforation.
- Insert the cross piece provided with the product into the knife block position on the bracket.
- Loosen the bolts on the base bracket slightly to adjust the height and level of the video and finish.
- Equipment for wall perforation is not provided.

Installation using wall mount brackets and ceiling brackets

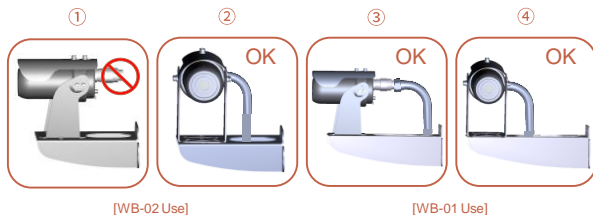


- The wall mount bracket can be fixed on a vertical wall.
- The sealing bracket can be fixed to the ceiling surface.
- Attach the bracket to the wall with the supplied set anchors capable of withstanding at least four times the weight of the unit. Please fix.
- Then, fix the device to the bracket using the supplied hex bolt SET.
- At this time, check that there are no foreign substances in the thread or fastening hole of the product.
- After applying enough locking compound (Loctite 263) on the 4 bolts, tighten the bolts lock.
- The thread compound should set for one hour, during which time the installation should be completed.
- When tightening the bolts, tighten the torque to 35Nm.

Product installation and precautions

The manufacturer is not responsible for product failure damage caused by lightning or surge caused by improper grounding of the product.

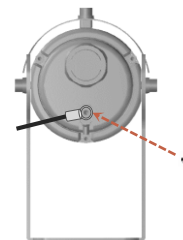
Wall Bracket Usage Guide



- When installing the two types of wall brackets provided by the manufacturer, depending on the wall bracket model
The installer should be aware that the method ① is not applicable.
- It is recommended to install the camera through the method of ②, ③, ④ suggested in the manual.

Ground (ground) installation

- M5 copper tube terminal
- Material: copper, tin alloy

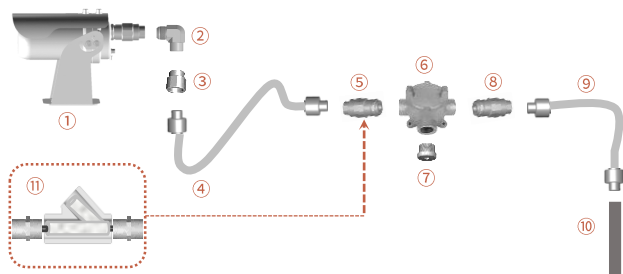


- Product grounding must be performed using an external cable (12AWG) with a cross section of 3mm².
- The lug to be used for connection to the grounding power supply is connected to the grounding copper tube terminal provided with the product.
Use the M5*8 (wrench bolt) screw and fix it to the ground hole with the provided L wrench.
- A separate crimping machine is required for crimping copper tube terminals.
At this time, the manufacturer does not provide a separate press.

Product installation and precautions

Among the explosion-proof installation materials below, cable glands can be replaced with sealing fittings.

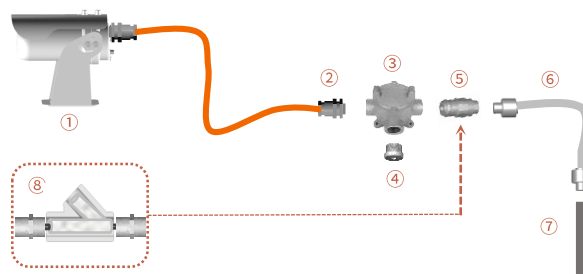
Installation using explosion-proof installation materials



Connect the product and explosion-proof installation materials in the order below.

- ① IVEX-PL Series products
- ② Elbow (NPT ½" to NPT ½")
- ③ Reducer (NPT ½" to PF 22)
- ④ EXP-Flexible (PF 22 to PF 22) – Length: 700mm
- ⑤ Cable gland (PF 22 to PF 22)
- ⑥ Joint box (PF 22)
- ⑦ Plug (PF 22)
- ⑧ Cable gland (PF 22 to PF 22)
- ⑨ EXP-Flexible (PF 22 to PF 22) – Length: 700mm
- ⑩ Steel wire pipe (PF 22)
- ⑪ When using a sealing fitting + nipple instead of a cable gland, the inside of the sealing fitting must be finished with compound.

Installation using armored cables



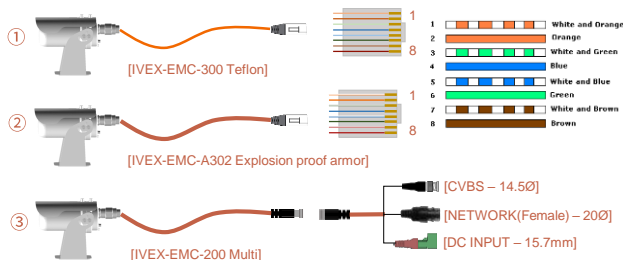
Connect the product and explosion-proof installation materials in the order below.

- ① IVEX-PL Series products (integrated explosion-proof armored cable)
- ② Cable gland (PF 22)
- ③ Joint box (PF 22)
- ④ Plug (PF 22)
- ⑤ Cable gland (PF 22 to PF 22)
- ⑥ EXP-Flexible (PF 22 to PF 22) – Length: 700mm
- ⑦ Steel wire pipe (PF 22)
- ⑧ When using a sealing fitting + nipple instead of a cable gland, be sure to clean the inside of the sealing fitting. Please finish with compound.

Product installation and precautions

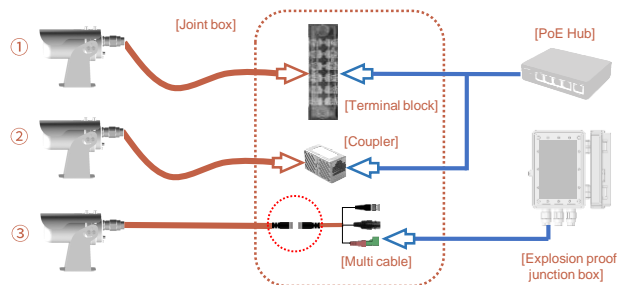
When working with the network cable through the RJ-45 tool, it is essential to check through the tester as there is a possibility of network failure due to miswiring or operator error.

Configuration diagram for each built-in cable



- The IVEX-EMC-300 Teflon cable in ① is a dedicated 8P network cable. Therefore, according to the site situation, after cutting according to the length of the cable, refer to the line arrangement in the figure ①. Cable length can be adjusted.
- The IVEX-EMC-A302 explosion-proof armored cable in ② is a dedicated 8P network explosion-proof cable. Therefore, according to the site situation, after cutting according to the length of the cable, refer to the line arrangement in the figure ①. Cable length can be adjusted
- The IVEX-EMC-200 multi-cable in ③ is a multi-output cable. Therefore, it is impossible to adjust the length, and the length initially provided by the manufacturer is used. Any excess length of cable must be handled inside the joint box. Also, this cable needs to be connected with the OUTPUT cable, and this connection must be made with a joint. It must be done inside the box.

Connection diagram between joint boxes

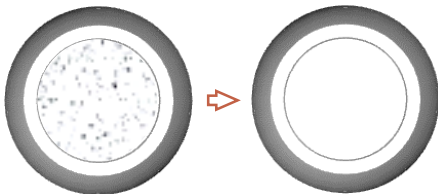


- Like ①, PoE connection can be made using the terminal block inside the joint box. At this time, No. 4,5 of the RJ45 array are '+' and No. 7,8 are '-', and No. 1,2,3,6 are connected to the terminal block. Connect 1, 2, 3, 4, pair 4, 5 to 5, pair 7, 8 and connect to 6 Can be used.
- As shown in ②, you can use the RJ45 connector as it is and use a coupler to connect easily. can. However, coupler terminals may be corroded due to moisture in the joint box, which may cause poor contact. there is.
- As shown in ③, multi-cables can be connected to each cable connected to the explosion-proof junction box. there is. At this time, after connecting the CVBS (or AHD output) terminal and RS-485 terminal, be sure to insulate them. It is taped with tape, and it is taped in the same way after connecting multiple cables. to maintain insulation from external leakage current.

Maintenance after product installation

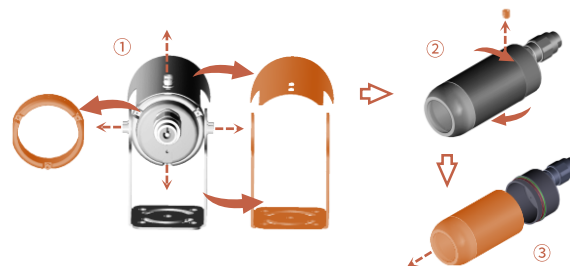
When replacing or maintaining the camera, be sure to move to a safe area, not an explosion-proof area.

Periodic cleaning



- Regular cleaning should be performed so that no more than 5mm of dust accumulates on the surface of the product. do. (for anti-static purposes)
- Tempered Glass Glass should be cleaned with mild soapy water diluted with water.
- Be sure to clean the surface of the device with a damp cloth.

Disassembly/assembly of products for inspection

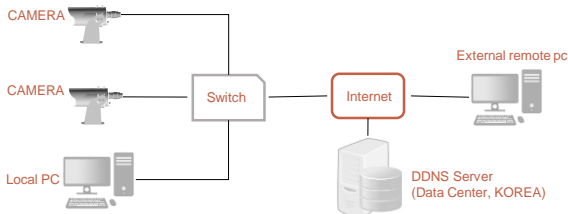


- After separating the sun shield and mount bracket as shown in ①, disassemble the ring bracket and remove the bolts on the exterior. Remove all.
- As shown in ②, remove the head bolt on the top of the main body and turn the main body clockwise. disassemble.
- You can inspect the module inside by disassembling the front cover + main body assembly as shown in ③. there is.
- When disassembling the product, it must be disassembled/inspected in a place without ambient moisture, and For dew condensation caused by moisture inflow during disassembly/inspection, the manufacturer not responsible.

Network Connection and Setup

You can set the network environment of the camera according to the user's network connection configuration.

Installing the camera directly in a LAN environment

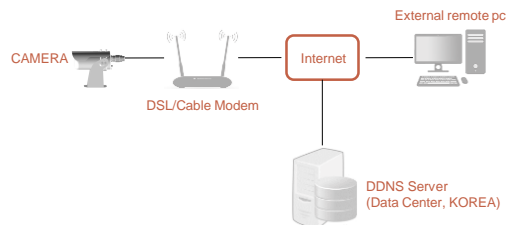


- Run the Internet browser of the local PC.
- Enter the IP address of the camera you want to access in the browser's address bar.
- From a remote PC on the external Internet in a LAN environment to a camera installed in a LAN environment. When connecting, if port forwarding is not done or if a firewall is installed, the connection is not possible. may not be. In this case, contact your network administrator.
- When the product is shipped, the IP address is a fixed IP as in 'Checking product operation information and appearance status'. It is set.

Tip

- If you lose the box or tag displaying the IP address, ID, and PW, you can contact us through the manufacturer's website. You can download the IP Search program.

Installing the camera directly in a LAN environment



- Direct connection between user computer and network camera.
- Use the IP Search program to find the IP address of the camera from the user's computer to the Internet. Change it to an IP address that can be accessed through a browser.
- Connect to the web viewer using an internet browser.
- Move to the [Setup] page.
- Go to [Network] - [DDNS] setting page and set DDNS.
- [Basic] - Go to the [IP & Port] setting page and set the IP type to [DHCP].
- Disconnect the camera from the user's computer and connect it directly to the modem.
- Reboot the camera.

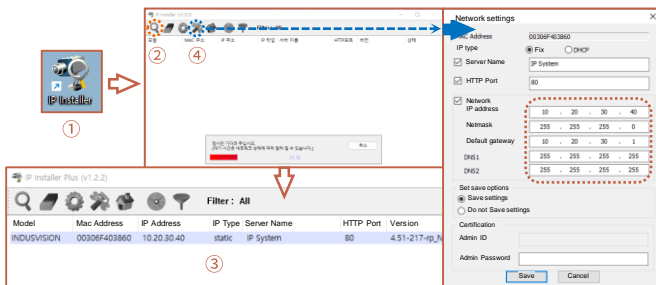
Tip

- Disposal of the device must be properly disposed of in accordance with the e-waste guidelines and environmental regulations.

Network Connection and Setup (IVEX-PL-10 Series)

The IP address range of the user's computer and the IP address range of the camera must match for normal web viewer access.

Using the IP Search program

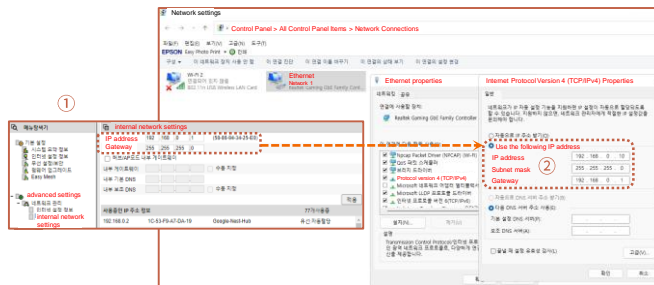


- Click the icon such as ① on the IP Search program downloaded to the user's computer Run.
- When the IP Search program is executed, click ② icon to start IP search.
If the IP address is normally searched as shown in ③, double-click the searched IP address to open the web viewer.
can connect. (default IP address: 10.20.30.40 / ID: root / PW: root)
- If you need to change the IP address, click the corresponding icon as ④ in the IP Search program. Click to change IP address.

Tip

- HTTP Port: HTTP used when accessing the camera using an Internet browser Port, the initial value is 80.
- RTSP Port: This is the port that controls real-time streaming, and the initial value is 554.

PC network settings depending on whether an IP sharer is used



- As in ①, connect to the internal network settings of the user's router.
(The menu name or access method may differ depending on the router manufacturer.)
- IP Address: Set according to the private IP range provided by the IP sharer.
Ex) 192.168.1.2~254, 192.168.0.2~254, 192.168.XXX.2~254
- Subnet Mask: If the <Subnet Mask> of the IP router is the <Subnet Mask> of the camera It's possible.
- Gateway: The IP router's <Local IP Address> becomes the camera's <Gateway> value.
- ② Check if the IP settings of the same band are set in the network settings of the user's computer. Check.

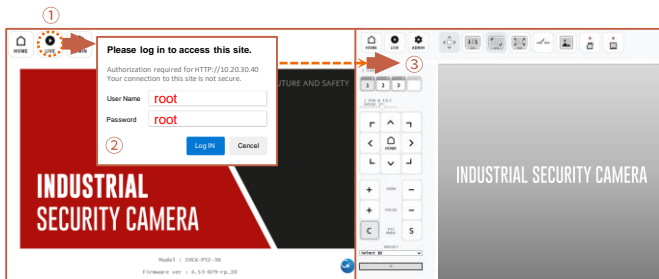
Tip

- If there are more than 25 cameras, camera 1 (192.168.0.3), camera 2 (192.168.0.4), etc. Set different IP addresses and use the same subnet mask and gateway.

Network Connection and Setup (IVEX-PL-10 Series)

Web viewer access can be checked in normal operation through Google Chrome and Microsoft Edge browsers.

Web viewer access



- Run a web browser such as Chrome or Edge on the user's computer.
- Enter the IP address set on the camera into the web browser address bar.
- If you connect to the camera normally as in ① and press the 'LIVE' button on the top left of the screen, the same as ②

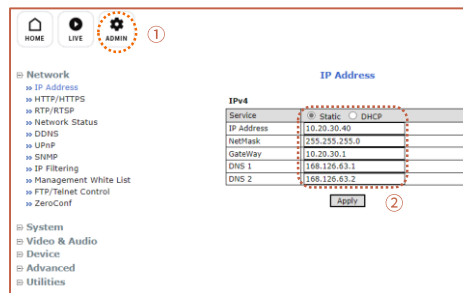
The ID/PW input window is executed, and input the initial ID/PW 'root'.
(For security, be sure to change the initial ID/PW after setting.)

- As shown in ③, you can check the OSD window for PTZ control along with the output of the live screen. there is.

Tip

When operating the web viewer in Internet Explorer 11, 'Active X' must be downloaded and executed.

Change IP Settings in Web Viewer



- There is a SETUP menu that displays the 'ADMIN' icon in ① on the live screen. Now.
- You cannot go back to the static IP and DHCP status for the camera IP address by clicking the 'IP Address' menu.
it's okay. Static IP allows you to change your IP address.
- When all changes are complete, click the 'Apply' button to save the settings.
- After 30 seconds, you can connect to the changed IP address in your web browser.

Tip

If the IP address you want to change is an IP address that is being used by another device in the same band You may not be able to access the web viewer due to an IP conflict.

Network Connection and Setup (IVEX-PL-10 Series)

When setting up RTSP, you must first check if the '554 PORT' of the router is open.

RTSP settings

Service	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	
RTSP Port	554	(Default:554, 554 ~ 65534)
Packet Size	1	(Default:1, 1 ~ 12)
Keep-Alive	<input checked="" type="radio"/> On <input type="radio"/> Off	
RTP Auth Algorithm	<input checked="" type="radio"/> MD5 <input type="radio"/> SHA256	
Camera 1	Multicast Address	0.0.0.0 (Disable:0.0.0.0 ~ 225.0.0.0 ~ 239.255.255.255)
	Multicast Port	0 (Disable:0, 2048 ~ 65534)
Camera 2	Multicast Address	0.0.0.0 (Disable:0.0.0.0 ~ 225.0.0.0 ~ 239.255.255.255)
	Multicast Port	0 (Disable:0, 2048 ~ 65534)
Camera 3	Multicast Address	0.0.0.0 (Disable:0.0.0.0 ~ 225.0.0.0 ~ 239.255.255.255)
	Multicast Port	0 (Disable:0, 2048 ~ 65534)

- **Service:** Set whether to use RTP/RTSP.
- **RTSP Port:** Sets the RTSP Port. The default value is 554.
- **Packet Size:** This is the menu to set the Packet Size to be transmitted via RTP/RTSP. If the value is low, compatibility with many S/Ws is maintained. It divides and transmits small amount of packets. The higher the value, the fewer packets are divided and transmitted. However, if the program does not support a high value, no video is displayed.
- **Keep-Alive:** Sends the current camera status through continuous UDP communication. Some S/W and equipment are not supported.
- **RTP Auth Algorithm:** Determines the RTP encryption authentication method.
- **MD5** is highly compatible with many S/W. If set to **SHA256**, stronger encryption is applied, but it cannot be played on S/W or devices that do not support SHA256, such as VLC.

Unicast Primary Stream (1번 Channel) : rtsp://camera IP/cam0_0

Unicast Secondary Stream (2번 Channel) : rtsp://camera IP/cam0_1

Unicast Tertiary Stream (3번 Channel) : rtsp://camera IP/cam0_2

Multicast Primary Stream (1번 Channel) : rtsp://camera IP/mcam0_0

Multicast Secondary Stream (2번 Channel) : rtsp://camera IP/mcam0_1

Multicast Tertiary Stream (3번 Channel) : rtsp://camera IP/mcam0_2

Firmware update method

HOME LIVE ADMIN

Network
System
Video & Audio
Device
Advanced
Utilities
Log
Reboot
Restore Default
Update

Update

Firmware Update [Start] 1

PTZ Device Driver Update [Start]

Sensor Device Driver Update [Start]

PTZ Firmware Update [Start]

System Information

Mac Address (S/N) 00:30:6F:40:3F:55

Firmware version 1.4.53-007up_ID

Please upload *_of_nTarge*. * file for Firmware.
For the system safety, "Do not close this window compulsory."

Select file [do] [cancel] [OK] [ESC] [F4]

Description
Processing: 0 %

Next Cancel & Report

- Press the 'ADMIN' icon at the top of the web viewer to enter the SETUP menu.
- Press the 'UPDATE' menu as in ① and click the 'Firmware Update -> Start' button at the top of the menu. Click.
- When a pop-up window like ② appears, click the 'Select File' button to specify the file to be upgraded. do.
- Click the 'NEXT' button at the bottom of the pop-up window in ② to proceed with the upgrade.

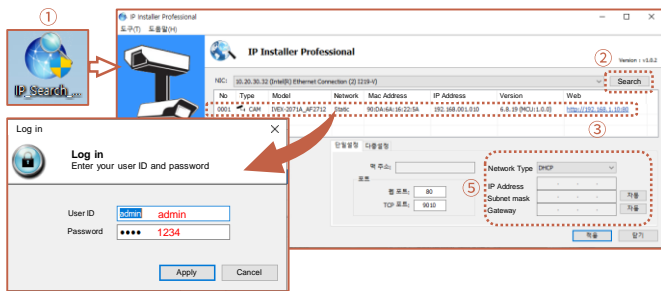
Tip

- If the firmware update is not completed normally, the product cannot be used.
- Please note that this problem must be returned to the manufacturer and repaired.

Network Connection and Setup (IVEX-PL-30 Series)

The IP address range of the user's computer and the IP address range of the camera must match for normal web viewer access.

Using the IP Search program

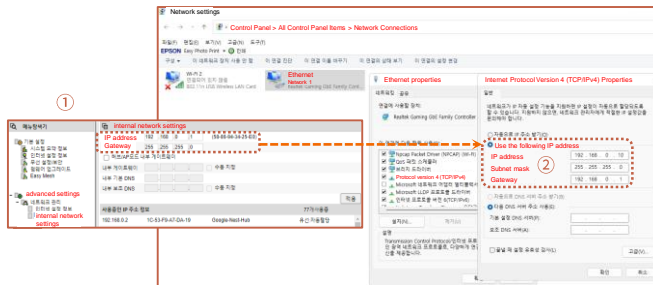


- Click the icon such as ① on the IP Search program downloaded to the user's computer Run.
- When the IP Search program is executed, click the search button as shown in ② to start IP search. If the IP address is normally searched as shown in ③, double-click the searched IP address to open the web viewer. can connect.
- When the input window like ④ appears, enter ID / PW. (default IP address: 192.168.1.10 / ID: admin / PW: 1234)
- If you need to change the IP address, set the corresponding camera as in ⑤ in the IP Search program. You can change the IP address by clicking on the search content.

Tip

- HTTP Port: HTTP used when accessing the camera using an Internet browser Port, the initial value is 80.
- RTSP Port: This is the port that controls real-time streaming. The initial value is 554.

PC network settings depending on whether an IP sharer is used



- As in ①, connect to the internal network settings of the user's router. (The menu name or access method may differ depending on the router manufacturer.)
- IP Address: Set according to the private IP range provided by the IP sharer. Ex) 192.168.1.2~254, 192.168.0.2~254, 192.168.XXX.2~254
- Subnet Mask: If the <Subnet Mask> of the IP router is the <Subnet Mask> of the camera It's possible.
- Gateway: The IP router's <Local IP Address> becomes the camera's <Gateway> value.
- ② Check if the IP settings of the same band are set in the network settings of the user's computer. Check.

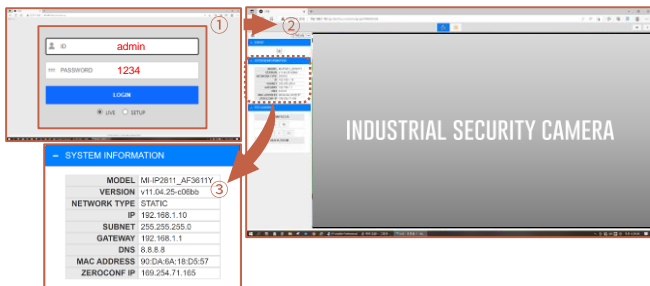
Tip

- If there are more than 2 cameras, camera 1 (192.168.0.3), camera 2 (192.168.0.4), etc. Set different IP addresses and use the same subnet mask and gateway.

Network Connection and Setup (IVEX-PL-30 Series)

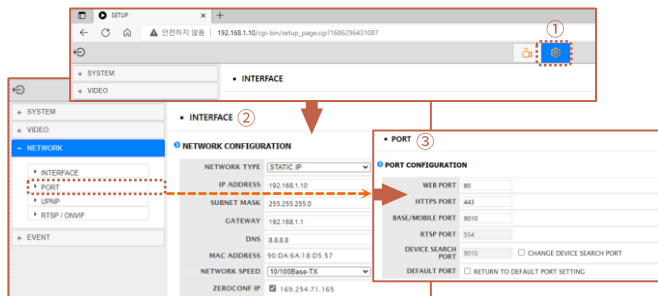
Web viewer access can be checked in normal operation through Google Chrome and Microsoft Edge browsers.

Web viewer access



- Run a web browser such as Chrome or Edge on the user's computer.
- Enter the IP address set on the camera into the web browser address bar.
- Connect to the camera normally as in ①, and enter the initial ID/PW 'admin / 1234' in the pop-up window.
Enter. (For security, be sure to change the initial ID/PW after setting.)
- After accessing the LIVE screen as in ②, select F/W version and F/W version from the system information menu on the left as in ③ Information such as IP address can be checked.

Change IP Settings in Web Viewer



- If you press the 'SETUP' icon in ① on the live screen, it will take you to the SETUP menu where you can set. enter.
- Click the 'INTERFACE' menu in ② to set a fixed IP and DHCP for the camera IP address. status, and static IP can change the IP address.
- When all changes are completed, press the 'SAVE' button to save the settings.
- After about 30 seconds, you will be able to connect to the changed IP address in your web browser.
- If you click 'PORT' in ③, you can check each port address.
Please refer to the port settings of the router, etc.

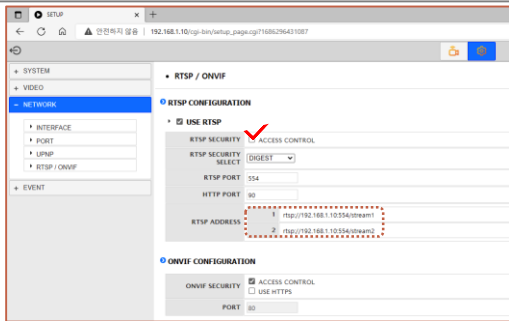
Tip

If the IP address you want to change is an IP address that is being used by another device in the same band You may not be able to access the web viewer due to an IP conflict.

Network Connection and Setup (IVEX-PL-30 Series)

When setting RTSP, you must first check if the '554 PORT' of the router is open.

RTSP settings



RTSP SECURITY : Set whether to use RTP/RTSP.

RTSP SECURITY SELECT: Sets whether or not to control RTSP access.

RTSP Port : Set the RTSP Port. The default value is 554.

RTSP ADDRESS:

Multicast MAIN Stream (Channel 1) : `rtsp://camera IP:554/stream1`

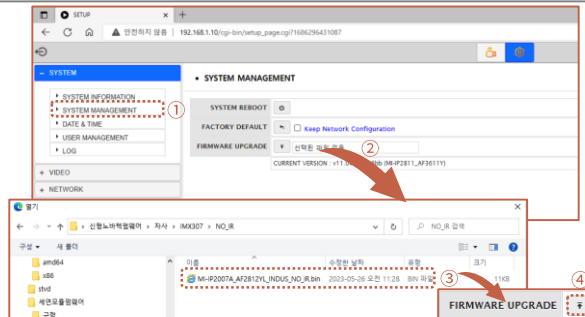
Multicast SUB Stream (Channel 2) : `rtsp://camera IP:554/stream2`

ONVIF SECURITY : Set whether to use WS-SECURITY (web service security).

When accessing RTSP through a web browser, without entering ID/PW in the following way Access is possible.

- `rtsp://admin:1234@192.168.1.10:554/stream1`

Firmware update method



- Press the 'SETUP' icon at the top of the web viewer to enter the SETUP menu.

- Press the 'SYSTEM UPGRADE' menu as in ① and click the 'Select File' menu in ②.

- You can select the downloaded file in the pop-up window as shown in ③.

- After selecting the file, click the 'UPGRADE' button in ④ to proceed with the upgrade.

* Upgrade files can be provided through the manufacturer.

Tip

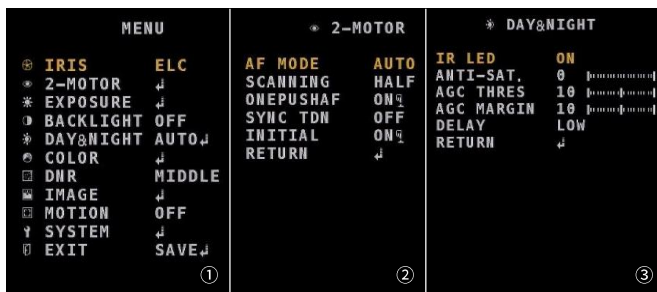
- If the firmware update is not completed normally, the product cannot be used.

- Please note that this problem must be returned to the manufacturer and repaired.

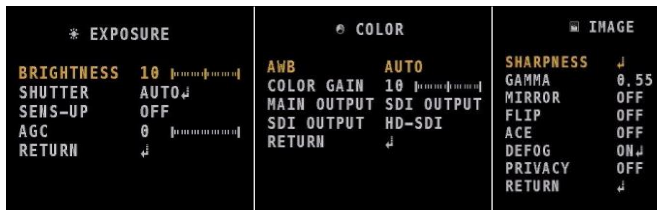
How to set OSD (IVEX-PL-30 Series – HD version)

If you have purchased an analog output product with AHD output, please refer to this manual.

OSD menu screen description

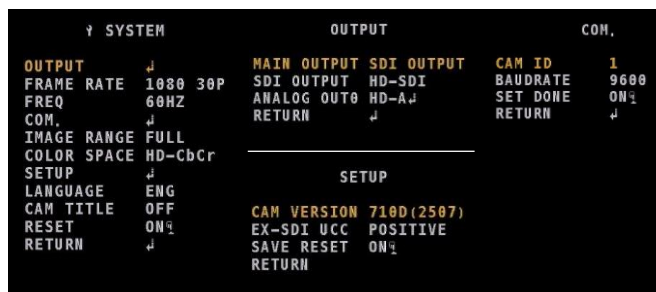


- The main menu is composed of ①.
- Refer to the pictures ② and ③ for AF mode adjustment and IR-LED control.
- To save all menus, press the 'SAVE' button of EXIT to save normally it will become



- The setting that affects the image quality is the menu shown in the figure above.

How to set up the system



- This is a menu to select the video output format that is important for HD video.
- The way to access the menu is as shown in the figure above.
- The video output (OUTPUT) conversion sequence is as above.
- Switch the video output by referring to the order below.
- Since the video output format is changed when video is converted, video output may not come out.
- At this time, if you turn the device power ON->OFF, the format will not be saved.

MAIN OUTPUT : SDI -> ANALOG

SDI OUTPUT : HD-SDI -> EX-SDI1.0 -> EX-SDI2.0 -> OFF

ANALOG OUTPUT : HD-AHD -> CVBS -> HD-CVI -> HD-TVI

Installation Inspection Check Sheet

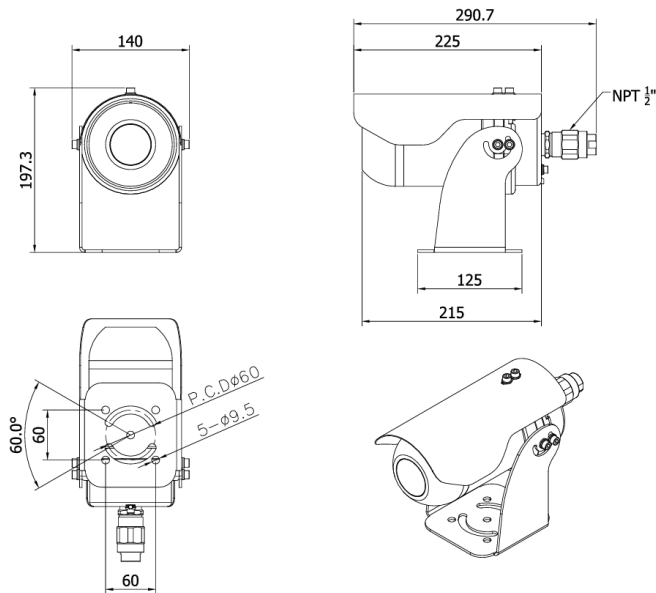
1. When receiving the product, prior to on-site installation, be sure to perform on-site installation only when there is no problem after inspecting the pre-checklist according to the following order.
2. Please note that service measures may be charged for problems that occur during on-site delivery without prior checklist inspection.

No	Checking list	Check
1	Remove the IP address tag attached to the product's mount bracket after installing and fixing the device.	<input type="checkbox"/>
2	Do not throw away at least one product box and PE foam for defective shipment to the manufacturer.	<input type="checkbox"/>
3	Remove the protective sponge to prevent damage to the cable sheath of the cable gland after fixing the device.	<input type="checkbox"/>
4	Depending on the input specifications of the separate power supply or the power supply (SMPS) supplied by the manufacturer and the PoE injector Connect with care.	<input type="checkbox"/>
5	Pay attention to the polarity (+, -) of the data line (RS-485) and connect it to the connection terminal correctly.	<input type="checkbox"/>
6	If applicable, properly connect the video cable (BNC terminal) to the recorder or monitor to check normal video output.	<input type="checkbox"/>
7	Connect the CAT.5 cable (RJ-45 Jack) to the connection terminal correctly and check that video and control operate normally under the optimal network environment.	<input type="checkbox"/>
8	Check/set if the ZOOM IN/OUT control protocol and control baud rate match the NVR or communication equipment you are using.	<input type="checkbox"/>
9	If applicable, check IR-LED operation.	<input type="checkbox"/>
10	Make a final check to see if there are any abnormalities in the zoom / video / control status.	<input type="checkbox"/>

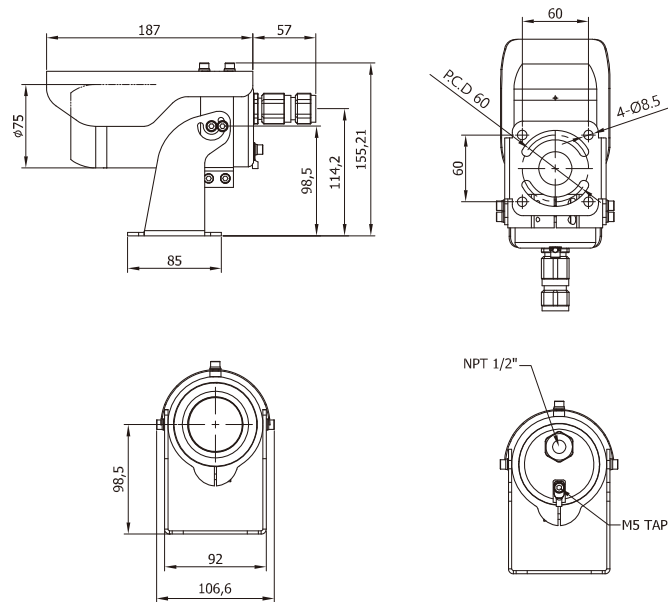
Technical Drawing – PL Series

Before/after product installation, refer to technical drawings to review site conditions.

IVEX-PL-10 Series



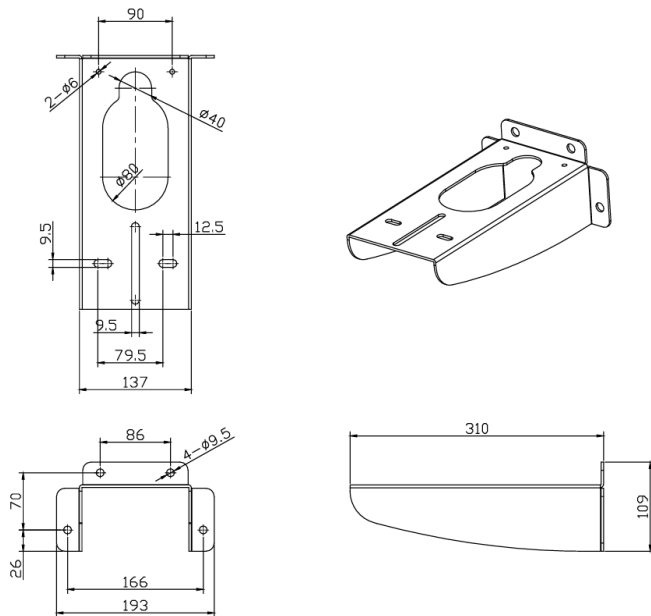
IVEX-PL-30 Series



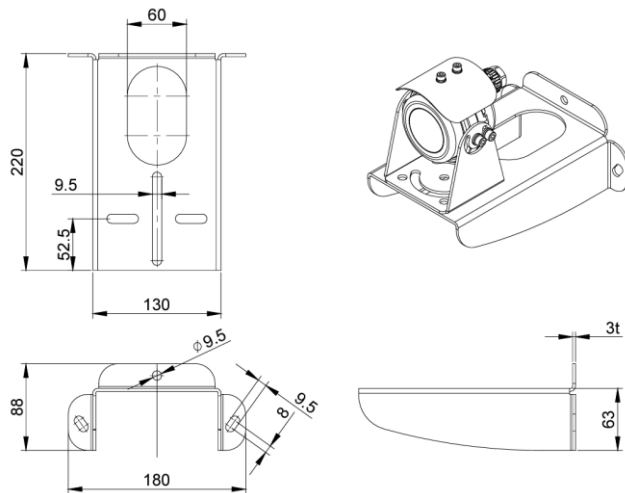
Technical Drawing – Mount Bracket

Before/after product installation, refer to technical drawings to review site conditions.

Wall mount bracket (IVEX-PL-10 Series)



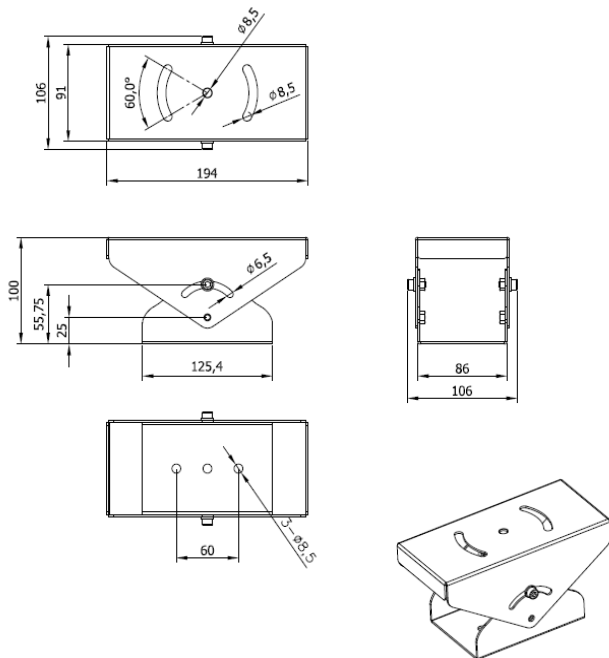
Wall mount bracket (IVEX-PL-30 Series)



Technical Drawing – Mount Bracket

Before/after product installation, refer to technical drawings to review site conditions.

Sealing bracket (IVEX-PL-30 Series)



INDUSTRIAL SECURITY CAMERA