

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

ISTA-D 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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Index

- 04** • Component information
- 05** • Product division and part names
- 06** • Checklist before product installation
- 07** • Select product installation location
- 08** • Product installation and precautions
- 11** • Network connection and setup
- 15** • How to set OSD
- 16** • Installation Inspection Check Sheet
- 17** • technical drawing



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 (M4)		1	Knife block Set
	1	Guide Sticker		1	Bracket Finish Sticker
	1	Waterproof connector (for IP models)		1	OSD-KEY (for HDmodels)
	1	LAN Cable (500mm)		1	Product Instruction Manual

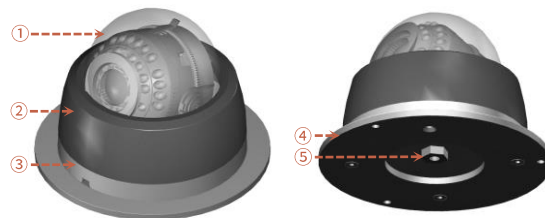
Optional components (purchased separately)

Picture	Qty	Explanation	Picture	Qty	Explanation

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.

iSTA-D100 Series

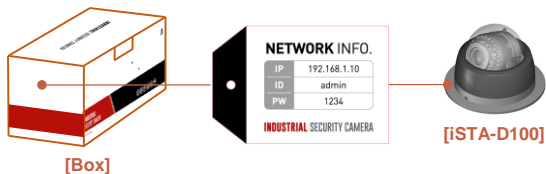


Series name	Model name	Details
iSTA-D100 Series	ISTA-D100Z	Vari-Focal(2.7-12mm) + IP 2M + IRLED
	ISTA-D101Z	Vari-Focal(2.7-12mm) + HD 2M + IRLED

No	Detailed name	No	Detailed name
1	Dome Bubble	11	
2	Top Cover	12	
3	Bottom Cover	13	
4	Ceiling Mount Bracket	14	
5	Bottom Cover Cable Nut	15	
6		16	
7		17	
8		18	
9		19	
10		20	

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

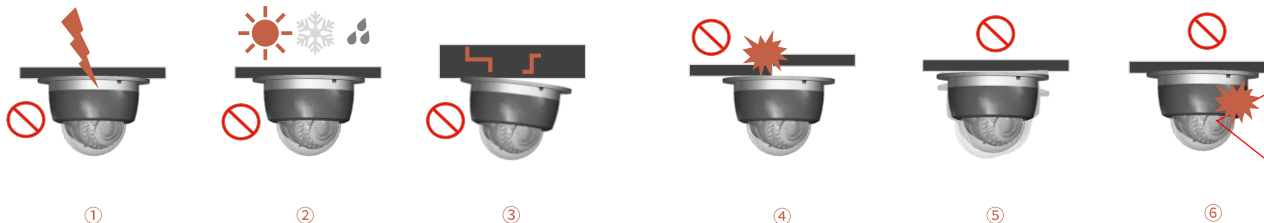


No	L wrench specification	No	L wrench specification
1	M4 (Ceiling Bracket Mounting)	11	
2		12	
3		13	
4		14	
5		15	
6		16	
7		17	
8		18	
9		19	
10		20	

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



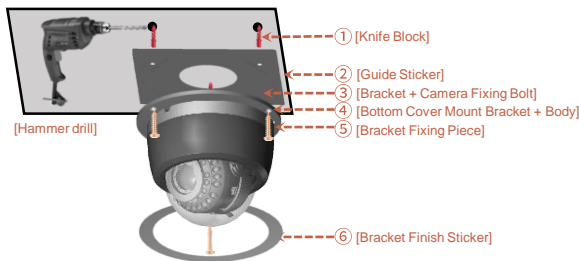
When selecting the initial location to install the product, consider the following.

- ① Confirm 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.
- ② 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 these influences.
- ③ 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.
- ④ It is not suitable for installation in an environment where the mount bracket cannot be adhered to due to a step in the product installation area.
- ⑤ 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.
- ⑥ When installing the product, adjust the lens within the range where the angle of view is not affected by the top cover of the product.

Product Installation and Precautions

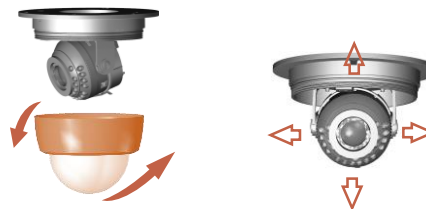
The manufacturer is not responsible for any problems caused by installing a bracket other than the genuine bracket provided by the manufacturer.

Basic installation of the product



- Select the location to install the product.
Secure the maximum angle of view as much as possible, and select a location that does not affect the angle of view.
- Attach the guide sticker of ② to the installation location.
- Drill an M6 hole using a hammer drill at the perforation location of the guide sticker.
- Insert the knife block of ① into the perforated position.
- Align the bottom cover mount bracket of ④ and the ISTA-D100 main body to the perforated position. sort it.
- With the piece for fixing the bracket in ⑤, fix the bracket according to the insertion position of the knife block.
- Attach the bracket finishing sticker in ⑥ so that the knife block is not visible.

How to adjust the product's angle of view

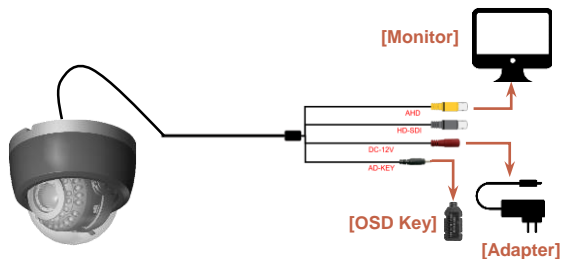


- Disassemble the top cover by turning it by hand.
- Adjust the angle of view by turning the gimbal with the lens up and down and left and right in the desired direction.
- Before closing the top cover, turn on the product and check the normal image angle.
- After installing the top cover, rotate it in the opposite direction of disassembly to fasten the top cover.

Product Installation and Precautions

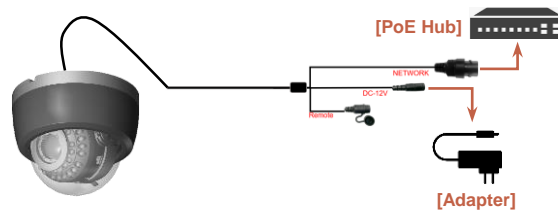
The manufacturer is not responsible for damages caused by product failure due to product connector wiring errors.

Install the HD version



- Connect the video and power to each output end of the cable gland by referring to the figure above. do.
- At this time, the video output can select EX-SDI from HD-SDI output, and from AHD output TVI/CVI/CVBS can be selected (selectable in OSD mode)
- Connect the 12V power adapter to supply power.
- Connect the OSD Key provided as an accessory to adjust the OSD option.

Installation of IP version

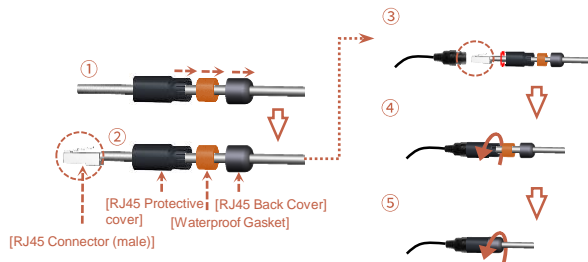


- When connecting to a network through a PoE HUB, do not connect a separate power adapter.
- Separate DC-12V voltage when connecting directly to a general HUB or router, not a PoE HUB to supply power.
- The toggle switch for factory reset of the product is integrated with the cable.
- Connect the waterproof connector of the RJ45 terminal by referring to page 11.

Product Installation and Precautions

The manufacturer is not responsible for any water damage caused by not installing the waterproof connector.

Install waterproof connector

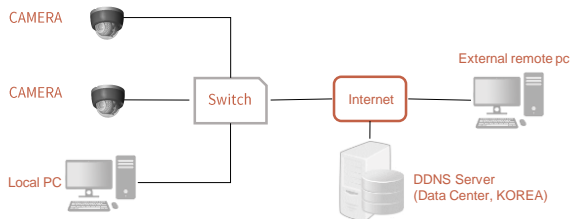


- Insert the waterproof connector assembly into the LAN cable as shown in ①.
- As shown in ②, install the RJ45 connector according to the direct cable arrangement.
- As in ③, connect the RJ45 (female) terminal and the RJ45 (male) terminal of the cable.
- As in ④, connect the RJ45 protective cover, waterproof gasket, and RJ45 back cover in the order.
- As in ⑤, turn it by hand as much as you can to finish.

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

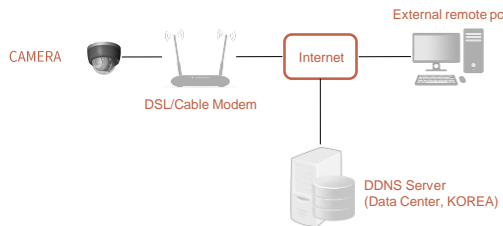


- Run the Internet browser of the local PC.
- Enter the IP address of the camera you want to access in the browser's address bar.
- From a remote PC on the external Internet in a LAN environment to a camera installed in a LAN environment. When connecting, if port forwarding is not done or if a firewall 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.

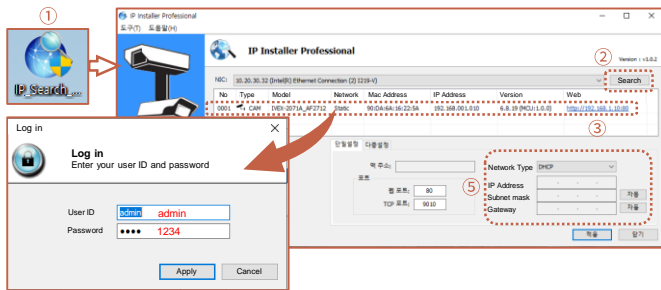
Tip

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

Network Connection and Setup

The IP address range of the user's computer and the IP address range of the camera 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.

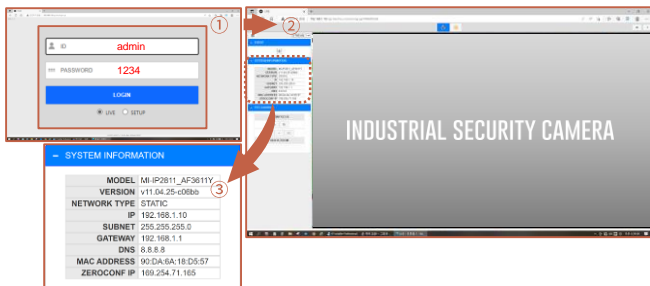
Tip

- 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

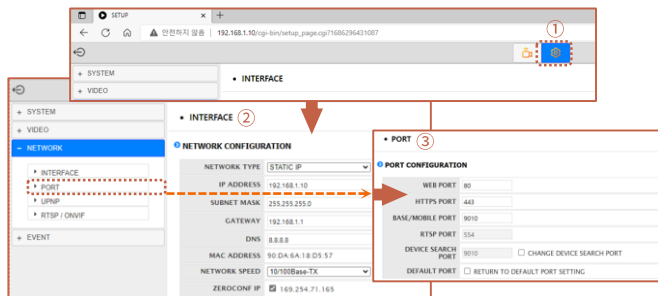
Web viewer access can be checked in normal operation through Google Chrome and Microsoft Edge browsers.

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.

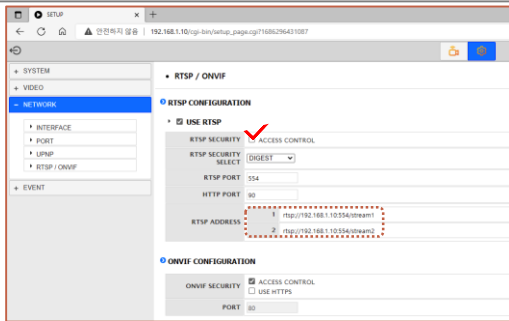
Tip

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

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`

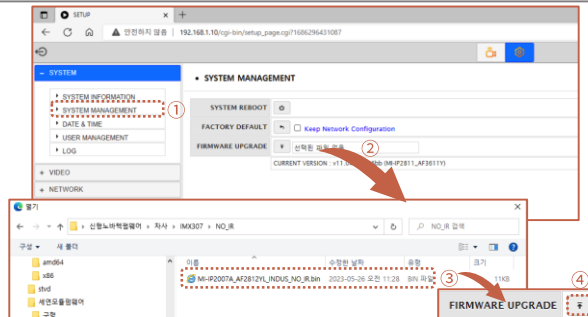
Multicast SUB Stream (Channel 2) : `rtsp://camera IP:554/stream2`

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

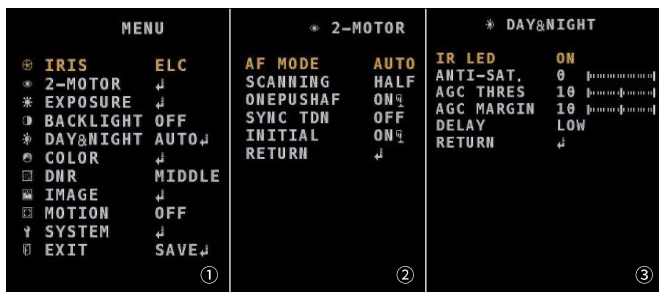
- If the firmware update is not completed normally, the product cannot be used.

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

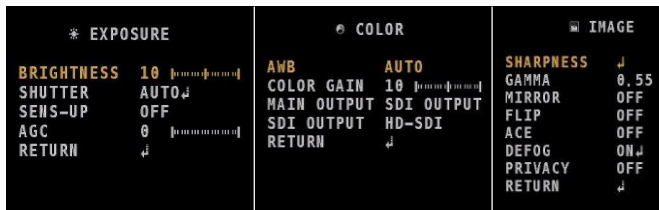
How to set OSD (HD version)

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

OSD menu screen description

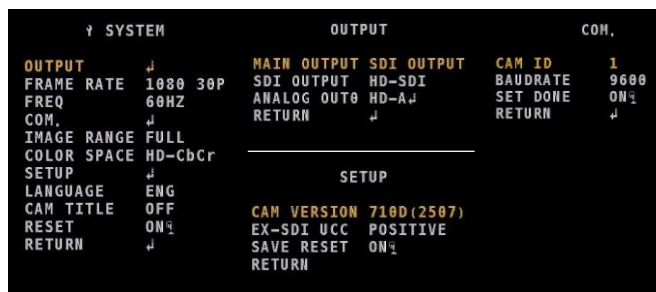


- The main menu is composed of ①.
- Refer to the pictures ② and ③ for AF mode adjustment and IR-LED control.
- To save all menus, press the 'SAVE' button of EXIT to save normally it will become



- 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

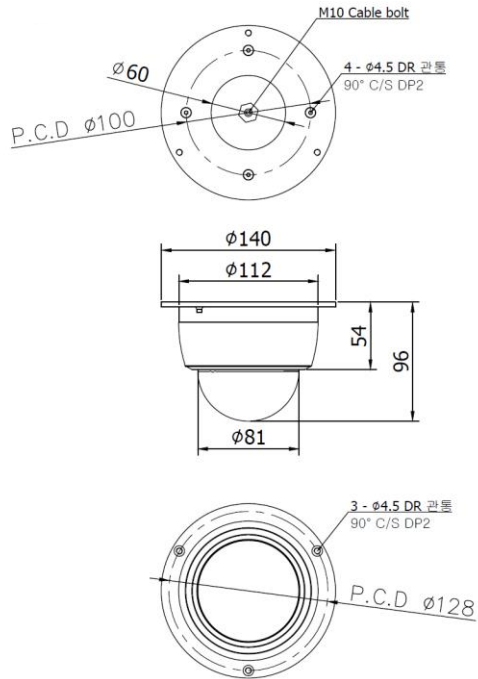
Installation Inspection Check Sheet

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	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"/>
4	Pay attention to the polarity (+, -) of the data line (RS-485) and connect it to the connection terminal correctly.	<input type="checkbox"/>
5	If applicable, properly connect the video cable (BNC terminal) to the recorder or monitor to check normal video output.	<input type="checkbox"/>
6	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"/>
7	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"/>
8	If applicable, check IR-LED operation.	<input type="checkbox"/>
9	Make a final check to see if there are any abnormalities in the zoom / video / control status.	<input type="checkbox"/>

Technical Drawing – iSTA-D100 Series

iSTA-D100 Series



INDUSTRIAL SECURITY CAMERA