

Next Gen Sarix® Enhanced IXE Series Box Cameras



**Installation Manual
C1335M 3/17**

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Important Notices

For more information about Pelco's product-specific important notices and thereto related information, refer to www.pelco.com/legal.

Regulatory Notices

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Radio and Television Interference

This equipment has been tested and found to comply with the limits of a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Changes and modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commission's rules.

CAN ICES-3(A)/NMB-3(A).

Korean Class A EMC

이 기기는 업무용 (A 급) 전자파 적합기기로서 판매자 또는 사용자는 이 점을 주의하시길 바라며, 가정 외의 지역에서 사용하는 것을 목적으로 합니다.

Warranty Statement

For information about Pelco's product warranty and thereto related information, refer to www.pelco.com/warranty.

UL Safety Notices

This product is intended to be supplied by a Listed Power Unit marked "L.P.S." (or "Limited Power Source") and rate output 24Vac, 50/60Hz, 1.28 minimum or 48 Vdc, 0.35A minimum.

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

Replaceable Batteries

CAUTION: Risk of Explosion if Battery is replaced by an Incorrect Type. Dispose of User Batteries According to the Instructions.

Introduction

The Next Gen Sarix® IXE Series IP cameras feature SureVision 3.0 technology that seamlessly deliver advanced low-light performance with wide dynamic range (WDR) and anti-bloom technologies that operate simultaneously. They are part of Pelco's Enhanced (E) range of cameras, providing industry-leading image quality and performance.

The Next Gen IXE Series Box Camera is easy to install, offers flexible mounting options, and uses a standard Web browser for easy remote setup and administration.

The Next Gen IXE Series Box Camera easily connects to Pelco IP and hybrid systems such as VideoXpert™, Endura® version 2.0 (or later), and Digital Sentry® version 7.3 (or later). The camera is also conformant with ONVIF Profile S, Profile G, and Profile Q for connection with third-party software. Pelco offers an Application Programming Interface (API) and Software Developer's Kit (SDK) for interfacing with Pelco's IP cameras.

This document describes the installation and initial setup procedures to begin operating the camera. For more information about operating your camera, refer to the operation manual specific to the product.

NOTE: For additional information about product documentation in English and other languages, go to www.pelco.com/sarix and navigate to the Next Gen IXE Series Box Camera website.

Models

IXE12	1.3 MPx Sarix Enhanced Box with SureVision 3.0: Low-light, WDR, day-night, network camera with built-in analytics
IXE22	2 MPx Sarix Enhanced Box with SureVision 3.0: Low-light, WDR, day-night, network camera with built-in analytics
IXE32	3 MPx Sarix Enhanced Box with SureVision 3.0: Low-light, WDR, day-night, network camera with built-in analytics

Recommended Mounts

C10-UM	Universal camera mount
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Recommended Enclosures

EH16 Series	Indoor and environmental enclosures (Note: This enclosure is not compatible with a 15 – 50mm lens.)
EH35 Series	Indoor and environmental enclosures
EH47 Series	Indoor and environmental enclosures

Recommended Lenses

YV3.3X15SR4A	MPx lens, varifocal, 15 – 50 mm, f/1.5
YV2.8X2.8SR4A	MPx lens, varifocal, 2.8 – 8 mm, f/1.3
YV2.7X2.2SR4A	MPx lens, varifocal, 2.2 – 6 mm, f/1.3

Getting Started

Before installing your device, thoroughly familiarize yourself with the information in the installation section of this manual.

NOTES:

- Pelco recommends connecting the device to a network that uses a Dynamic Host Configuration Protocol (DHCP) server to address devices.
- Do not use a network hub when configuring the network settings for the device.
- To ensure proper security, place the device behind a firewall when it is connected to a network.

Box Camera Models

Supplied Parts List

Qty	Description
1	Camera
1	IXE Series Box Camera Installation manual
1	Important Safety Instructions
1	Resources sheet
1	3-pin power connector

User-Supplied Parts List

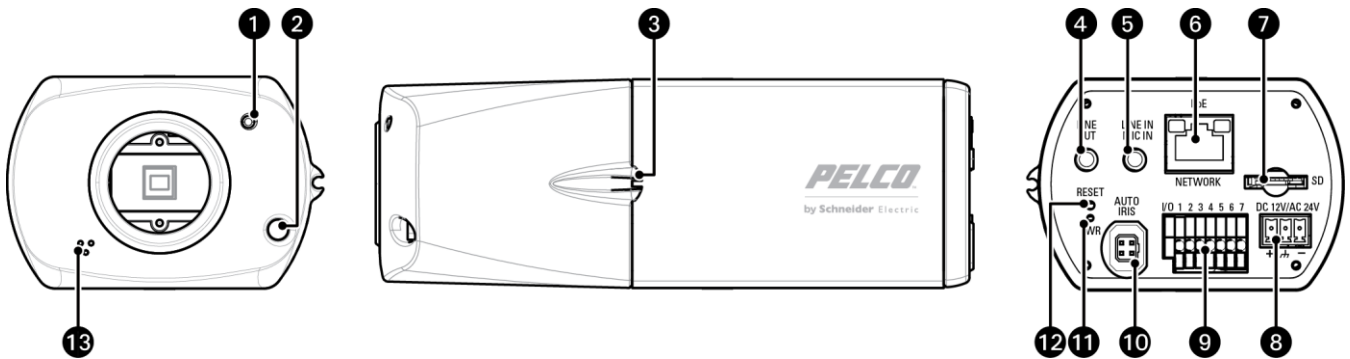
In addition to the standard tools and cables required for a video security installation, you will need to provide the following items:

Qty	Description
1	CS mount megapixel lens (refer to the Recommended Lenses section)
1	Micro SD card up to a 128 GB (Recommended: SanDisk Extreme® PLUS SDHC™ UHS-I)
1	RJ-45 connector to terminate wires
1	Cat5 (or higher) cable
1	Mounting hardware (refer to Recommended Mounts section)
2	18 AWG, 4-wire multi-conductor cable (if using alarm or relays)
1	Audio cable with 3.5 mm audio jack 2 or 3 conductor (if using line-in and line-out audio)

Product Label

The product label lists the model number, date code, serial number, and Media Access Control (MAC) address. This information might be required for setup. A product label is located on the bottom of the camera and on the side the product box.

Product Overview



- (1) **LED Light:** Flashes red and green when the camera is booting up.
- (2) **Light Sensor:** Used to detect the ambient light for day/night switching function.
- (3) **Iris Control Cable Clip:** Used to hold the cord in place along the side of the camera.
- (4) **Line Out:** Audio out.
- (5) **Microphone In/Line In:** Audio in.
- (6) **PoE Network Port:** Connects the camera to the IP network. Also supplies power to the camera (PoE), through the same connector.
- (7) **Micro SD Slot:** Used for local storage. To ensure reliable local storage, it is recommended that you use a 128 GB SanDisk Extreme® PLUS microSDHC™ UHS-I card. You must use a new SD card. If the card has previously been used or reformatted, the local storage feature may not function properly.
- (8) **Power DC 12V/AC 24V:** Auxiliary power—do not use with Power over Ethernet (PoE).
- (9) **Alarm/Relay Port:** Connects to alarms and relays.
- (10) **Auto Iris Lens Connector:** Controls the amount of light allowed through the lens. Insert the 4-pin connector from the DC iris lens into this connector.
- (11) **Power LED:** Green light indicates power connection.
- (12) **Reset:** Reboots the camera or restores the camera's factory default settings. This button is recessed. Using a small tool, such as a paper clip, press and release the reset button once to reboot the camera. Press and hold the Reset button for 20 seconds to restore the camera to the factory default settings.
- (13) **Built-in Microphone:** When enabled, the microphone receives external audio input. Use the Line In/Mic In port to connect to an external microphone.

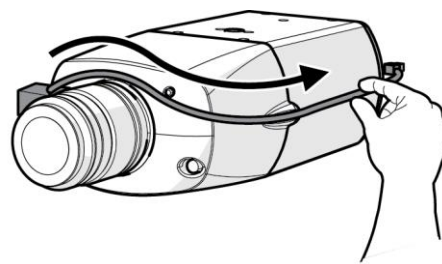
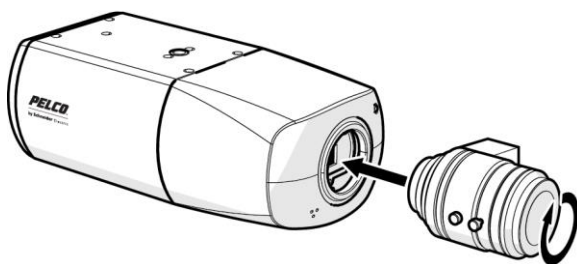
Installation

CAUTION: Hot surface! Always turn off power and allow the unit to cool prior to handling. Failure to follow these instructions can result in injury.

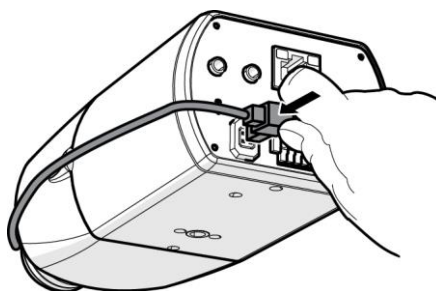
NOTE: Pelco megapixel (MPx) lenses have been designed and tested to deliver optimal image quality for the IXE Series box camera. The use of standard definition lens or any other lens not tested by Pelco on an IXE Series MPx box camera could limit the resolution of the camera, creating poor image quality.

1. Install the lens.

- a. Remove the outer cover and plastic window guard (with tab) from the lens mount.
- b. Tighten the lens onto the lens mount. Be careful to prevent dust from entering the space between the lens and the imager. If necessary, use clean, compressed air to remove any foreign matter (refer to the instructions shipped with the lens). Make sure the lens does not touch the camera imager when installed.



- c. Connect the auto iris cable to the 4-pin connector located on the back of the camera.



2. Install the camera on the mount in the desired location (refer to the Installation/Operations manual for the recommended mount). The camera can be attached to the mount from either the top or bottom threaded 1/4-20 threaded mounting hole, depending on the type of camera mount used in your installation.

3. Connect the wiring to the camera:

- a. Connect the network cable to the Ethernet network port on the back of the camera. Refer to the **Ethernet Wiring Requirement** section of this manual for more information.
- b. Connect the appropriate wires or cables:
 - (1) If using alarms or relays: Connect the 18 AWG individual wires to the connector at the rear of the camera. Press the orange tab while inserting the wire. Then release the tab

to hold. See the **Alarm Relay Wiring** section of this manual for more information.

- (2) Connect the audio jack to Line In and Line Out as required. Use a 3.5 mm audio jack to connect (mono or stereo jacks both work).
4. Apply power to the camera. The camera will complete a configuration sequence. The LED at the front of the camera will glow solid red during the configuration sequence and then blink green for one minute. The LED will turn off after the sequence is complete.
5. View the camera image by entering the camera's IP address on a Web browser. If you do not know the camera's IP address, install and run the Pelco Device Utility software (version 2.3 or later) available at www.pelco.com. The utility will locate the assigned name, IP address, and MAC address of the camera.
6. Adjust the camera view by moving it to the desired position.
7. Zoom and focus the lens:
 - a. In the user interface, log in to the camera. Refer to the **Logging On to the Camera** section of the manual.
 - b. Select the **Live View** page.
 - c. Select the **Focus Home** button to set the Auto Back Focus (ABF) at the home position.
 - d. Manually adjust the lens zoom.
 - e. Manually focus to the desired field of view (refer to the instructions shipped with the lens).
 - f. Select the **Quick Auto Focus** button to fine-tune the camera focus.

Cable Terminations

Ethernet Wiring Requirement for PoE

Connect a Cat5 cable or higher (Cat5e, Cat6) cable (not supplied) to the RJ-45 network connector. The 8-pin port includes video over Ethernet, and PoE for the camera. PoE injects power over the same cabling that carries the network data, eliminating the need for a separate power supply. This simplifies the installation and operation of the camera without affecting network performance.

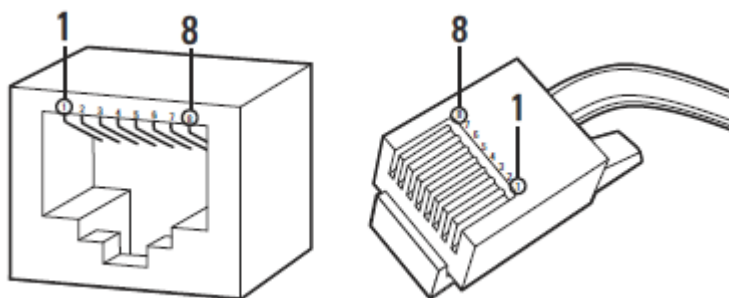


Table 1 Pin Definition

PoE Mode A			PoE Mode B		
Pin	Function		Pin	Function	
1	TxRx A +	DC +	1	TxRx A +	
2	TxRx A -	DC +	2	TxRX A -	
3	TxRx B +	DC -	3	TxRx B +	
4	TxRx C +		4	TxRx C +	DC +
5	TxRx C -		5	TxRx C -	DC +
6	TxRx B -	DC -	6	TxRx B -	
7	TxRx D +		7	TxRx D +	DC -
8	TxRx D -		8	TxRx D -	DC -

Alarm/Relay Port

The 7-pin Alarm/Relay port has the following pins and pin assignments:

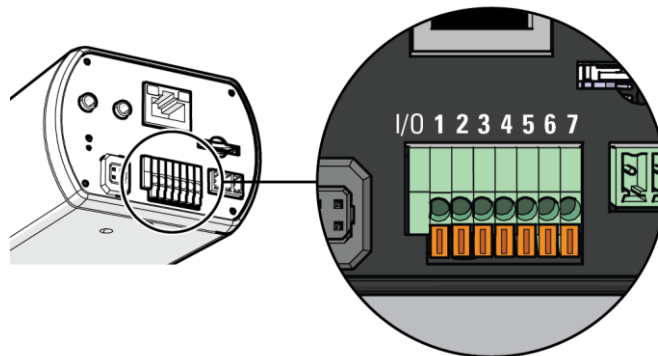


Table 2: Pin Descriptions for Alarm/Relay Port

Connector	Pin	Definition
Alarm I/O	1	Alarm Out +
	2	Alarm Out -
	3	Alarm In +
	4	Alarm In -
	5	GND
	6	D -
	7	D +

IP Address Settings

If the camera is connected to a Dynamic Host Configuration Protocol (DHCP) network and DHCP is set to On, the server automatically assigns an IP address to the camera. The default setting for the camera is DHCP On. To set the camera's IP address manually, set DHCP to Off.

NOTE: When DHCP is on, but a DHCP server cannot be found:

- Next Gen Sarix Enhanced cameras will simultaneously support two IP addressing schemes: 169.254.x.x and 192.168.0.x (starting from 192.168.0.20).
 - The default IP address on subnet mask 255.255.0.0 is automatically assigned as 169.254.x.y where x and y will take a value from 0 to 255 randomly. Please note cameras on the same subnet will not be assigned the same IP address to avoid IP conflicts.
 - The device defaults to an address of 192.168.0.20 on a 255.255.255.0 subnet. If 192.168.0.20 is already in use on the network, the Sarix device will increment the address by one until it finds an unused address (for example, 192.168.0.21 if 192.168.0.20 is in use).

Logging On to the Camera

After logging on to the camera, you can view video from the Web user interface.

1. Open the Web browser.
2. Type the camera's IP address in the browser address bar. If you do not know the camera's IP address, you can locate it using the Pelco Device Utility software.
3. When accessing the device in its initial out-of-the-box state, you will be prompted to set the initial administrator account password.

NOTE: The initial out-of-the-box state is also called "Factory Default Status."

Factory Default State:

The ONVIF Profile Q specification requires that the camera accept any commands without authentication when in a Factory Default State. In this initial state there are no users defined and accessing the camera through the web interface will result in a prompt to set the initial administrator account.

Once the initial administrator account is created, the camera should immediately request login credentials and should begin requiring credentials for ONVIF API requests.

Clicking the **Cancel** button when setting the initial administrator account prompt will cause the initial login process to be temporarily bypassed, allowing you to continue to configure the camera without credentials. When the session becomes inactive (e.g. times out) or another session is started, the camera will once again prompt you to set up the initial administrator account.

4. Click Log In.

Pelco Troubleshooting Contact Information

If the instructions provided fail to solve your problem, contact Pelco Product Support at 1-800-289-9100 (USA and Canada) or +1-559-292-1981 (international) for assistance. Be sure to have the serial number and model number available when calling.

Do not try to repair the unit yourself. Leave maintenance and repairs to qualified technical personnel only.



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