

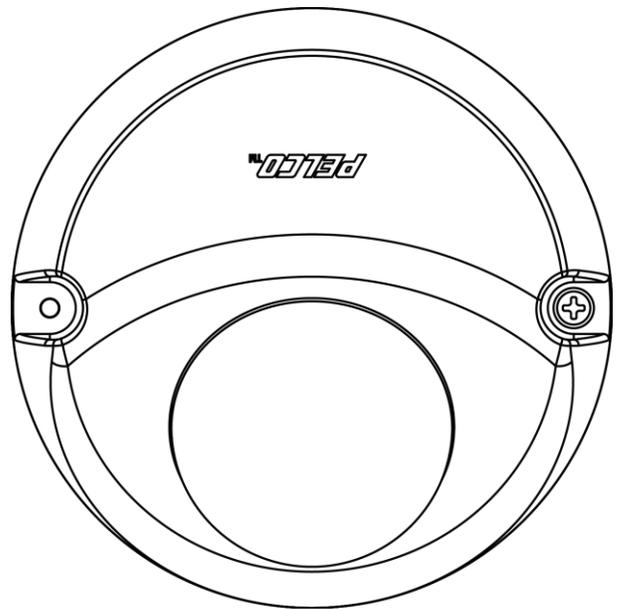


Sarix® Professional 3

IWP Series Rugged

Environmental Wedge Dome

Installation Manual



IWP133-1ERS	IWP236-1ERS
IWP232-1ERS	IWP333-1ERS
IWP233-1ERS	IWP532-1ERS
IWP234-1ERS	IWP533-1ERS

Content

- Important Notices3
 - REGULATORY NOTICES [FCC CLASS A]3
 - RADIO AND TELEVISION INTERFERENCE3
 - LEGAL NOTICE [AUDIO NOTICE]3
 - VIDEO QUALITY CAUTION3
 - OPEN SOURCE SOFTWARE4
 - KOREAN CLASS A EMC4
 - ESD WARNING4
 - WARRANTY4
 - NETWORK TOPOLOGY STATEMENT4
- Preface5
- 1. Product Overview6
 - 1.1 Dimensions6
 - 1.2 Model Instruction6
 - 1.3 Physical Characteristics7
- 2. Installation and Connection8
 - 2.1 Unpacking Everything8
 - 2.2 Optional Accessories8
 - 2.3 Installation9
 - 2.3.1 Checking Appearance9
 - 2.3.2 Disassembling the Camera9
 - 2.3.3 Mounting the Camera10
 - 2.3.4 Connecting the Cables12
 - 2.3.5 PoE Port & Waterproof Connector (IWPWPC) Wiring Procedure12
 - 2.3.6 Positioning the Camera13
 - 2.3.7 Sticking Desiccant13
 - 2.3.8 Completing the Camera Assembly14
- Pelco Troubleshooting Contact Information15

Important Notices

REGULATORY NOTICES [FCC CLASS A]

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.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

LEGAL NOTICE [AUDIO NOTICE]

SOME PELCO EQUIPMENT CONTAINS, AND THE SOFTWARE ENABLES, AUDIO/VISUAL AND RECORDING CAPABILITIES, THE IMPROPER USE OF WHICH MAY SUBJECT YOU TO CIVIL AND CRIMINAL PENALTIES. APPLICABLE LAWS REGARDING THE USE OF SUCH CAPABILITIES VARY BETWEEN JURISDICTIONS AND MAY REQUIRE, AMONG OTHER THINGS, EXPRESS WRITTEN CONSENT FROM RECORDED SUBJECTS. YOU ARE SOLELY RESPONSIBLE FOR INSURING STRICT COMPLIANCE WITH SUCH LAWS AND FOR STRICT ADHERENCE TO ANY/ALL RIGHTS OF PRIVACY AND PERSONALTY. USE OF THIS EQUIPMENT AND/OR SOFTWARE FOR ILLEGAL SURVEILLANCE OR MONITORING SHALL BE DEEMED UNAUTHORIZED USE IN VIOLATION OF THE END USER SOFTWARE AGREEMENT AND RESULT IN THE IMMEDIATE TERMINATION OF YOUR LICENSE RIGHTS THEREUNDER.

NOTE: Improper use of audio/visual recording equipment may subject you to civil and criminal penalties. Applicable laws regarding the use of such capabilities vary between jurisdictions and may require, among other things, express written consent from the recorded subjects. You are solely responsible for insuring strict compliance with such laws and for strict adherence to any/all right of privacy and personality.

VIDEO QUALITY CAUTION

FRAME RATE NOTICE REGARDING USER SELECTED OPTIONS

Pelco systems are capable of providing high quality video for both live viewing and playback. However, the systems can be used in lower quality modes, which can degrade picture quality, to allow for a slower rate of data transfer and to reduce the amount of video data stored. The picture quality can be degraded by either lowering the resolution, reducing the picture rate, or both. A picture degraded by having a reduced resolution may result in an image that is less clear or even indiscernible. A picture degraded by reducing the picture rate has fewer frames per second, which can result in images that appear to jump or move more quickly than normal during playback. Lower frame rates may result in a key event not being recorded by the system.

Judgment as to the suitability of the products for users' purposes is solely the users' responsibility. Users shall determine the suitability of the products for their own intended application, picture rate and picture quality. In the event users intend to use the video for evidentiary purposes in a judicial proceeding or otherwise, users should consult with their attorney regarding any particular requirements for such use.

OPEN SOURCE SOFTWARE

This product includes certain open source or other software originated from third parties that is subject to the GNU General Public License (GPL), GNU Library/Lesser General Public License (LGPL) and different and/or additional copyright licenses, disclaimers, and notices.

The exact terms of GPL, LGPL, and some other licenses are provided to you with this product. Please refer to the exact terms of the GPL and LGPL at <http://www.fsf.org> (Free Software Foundation) or <http://www.opensource.org> (Open Source Initiative) regarding your rights under said license. You may obtain a complete corresponding machine-readable copy of the source code of such software under the GPL or LGPL by sending your request to digitalsupport@pelco.com; the subject line should read Source Code Request. You will then receive an email with a link for you to download the source code.

This offer is valid for a period of three (3) years from the date of the distribution of this product by Pelco.

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.

ESD WARNING



WARNING: This product is sensitive to Electrostatic Discharge (ESD). To avoid ESD damage to this product, use ESD safe practices during installation. Before touching, adjusting or handling this product, correctly attach an ESD wrist strap to your wrist and appropriately discharge your body and tools. For more information about ESD control and safe handling practices of electronics, please refer to ANSI/ESD S20.20-1999 or contact the Electrostatic Discharge Association (www.esda.org).

WARRANTY

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

NETWORK TOPOLOGY STATEMENT

IMPORTANT NOTE. PLEASE READ. The network implementation is shown as a general representation only and is not intended to show a detailed network topology. Your actual network will differ, requiring changes or perhaps additional network equipment to accommodate the system as illustrated. Please contact your local Pelco representative to discuss your specific requirements.

Preface

This installation manual is to be used as a reference for the installation of the camera unit including wire connection, camera installation, and camera adjustment.

This manual provides the following information.

- **Product Overview:** The main functions and system requirements of the unit.
- **Installation and Connection:** Instructions on unit installation and wire connections.

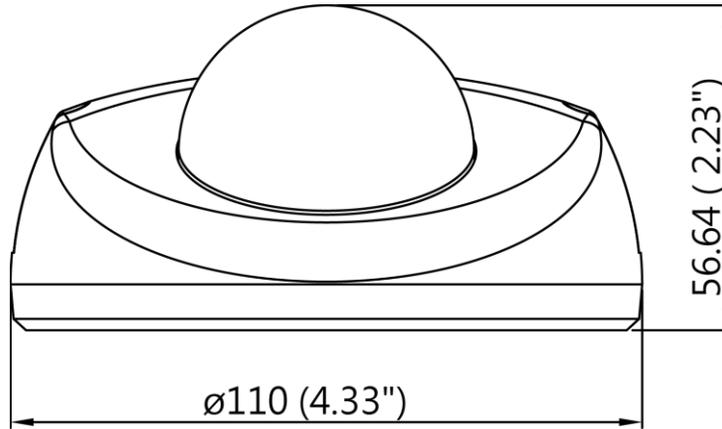
1. Product Overview

1.1 Dimensions

The dimensions of the Sarix Professional 3 Series Rugged Environmental Wedge Dome camera are depicted within the Figure 1-1 below.



NOTE: VALUES IN PARENTHESES ARE INCHES; ALL OTHERS ARE MILLIMETER.



RUGGED ENVIRONMENTAL WEDGE DOME

FIGURE 1-1: PHYSICAL DIMENSIONS

1.2 Model Instruction

The physical appearances and installation methods for the models indicated within the list below are similar. Consequently, in this manual the IWP533-1ERS model is an example to use as a reference to apply to all the varied models.

Model	Description
IWP133-1ERS	1MP Environmental Wedge Dome Camera with IR and 2.8mm Lens
IWP232-1ERS	2MP Environmental Wedge Dome Camera with IR and 2.4mm Lens
IWP233-1ERS	2MP Environmental Wedge Dome Camera with IR and 2.8mm Lens
IWP234-1ERS	2MP Environmental Wedge Dome Camera with IR and 4mm Lens
IWP236-1ERS	2MP Environmental Wedge Dome Camera with IR and 6mm Lens
IWP333-1ERS	3MP Environmental Wedge Dome Camera with IR and 2.8mm Lens
IWP532-1ERS	5MP Environmental Wedge Dome Camera with IR and 2.4mm Lens
IWP533-1ERS	5MP Environmental Wedge Dome Camera with IR and 2.8mm Lens

TABLE 1-1: MODELS LIST

1.3 Physical Characteristics

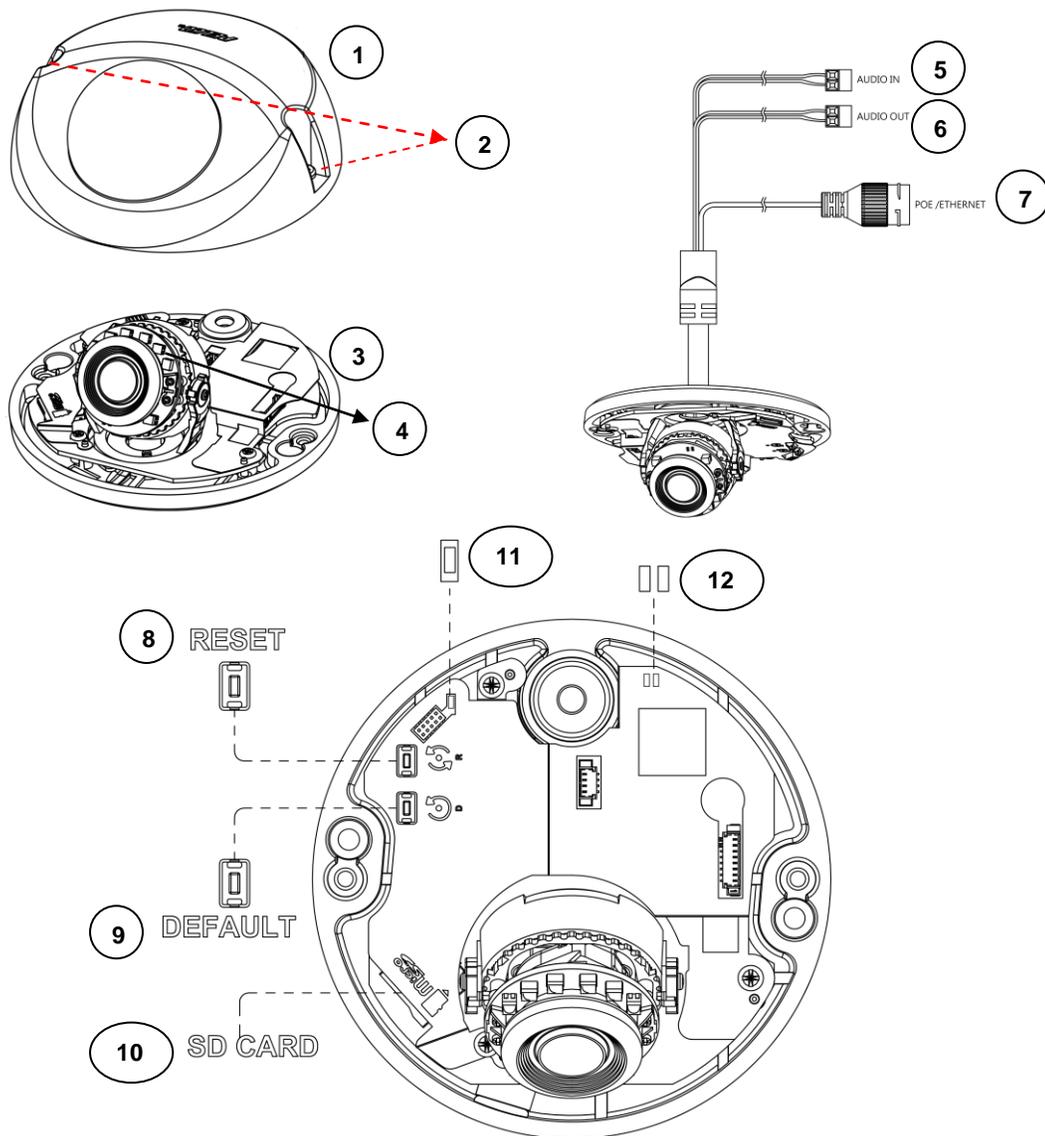


FIGURE 1-2: CAMERA CONNECTIONS AND FEATURES

1. **Lower Dome:** The top cover of the camera.
2. **Screws of Lower Dome * 2:** The screws for fixing lower dome with backbox.
3. **Backbox:** The bottom base of the camera.
4. **IR Board:** The IR LED embedded board for illumination under low-light environment.
5. **Audio In (Purple+ / Yellow-):** Via "+" and "-" ports, connect to external device like microphone that receives sound for camera.
6. **Audio Out (White+ / Gray-):** Via "+" and "-" ports, connect to device like speaker to be triggered through alarm output signals.
7. **PoE / Ethernet:** Insert an Ethernet cable that connects with a PoE compatible network device which supplies power and network into this port.
8. **Reset button (R):** Press the button for below 1 second to reboot the camera.

9. **Default button (D):** Press the button for 6 seconds to restore the camera's settings back to the factory default.
10. **Micro-SD Card Slot:** This slot is for inserting a micro SD card for extra file storage.
NOTE: An SDHC or SDXC card capable of a minimum write speed of 10 MB/sec is recommended for recording HD video. Pelco also recommends the SD card's operating temperature range be suitable for the environment it is intended to be used in.
11. **Booting Indicators:** LED indicator for booting and firmware upgrade (Green/Red/Amber). The LED behavior is:
 - **Boot Up:** LED solid Red. After 2 ~ 3 seconds, then:
 - Red to flashing Green if boot up is normal.
 - Remains solid Red if an error occurs.LED turns off 3 minutes after a successful reboot.
 - **Firmware Upgrade:** LED flashing Amber when firmware upgrade is running.
12. **LED Indicator:**
 - **Green LED:** With solid green, the LED indicates a live connection is established.
 - **Orange LED:** With flashing orange, the LED indicates data is being transmitted / received between camera and switch.

2. Installation and Connection

2.1 Unpacking Everything

Check all items in the product box against the order form and the packing slip. In addition to this manual, the items below are included in the packing box.

- Fixed Flat Dome Camera * 1
- Plastic Anchor * 2
- Pan Head Screw (Tapping Type) * 2
- Security Torx Bit (T20) * 1
- Mounting Template * 1
- RJ45 Waterproof Connector Kit * 1
- Desiccant * 1
- Supplemental Resources Sheet * 1
- Important Safety Instruction * 1
- ROHS Statement Slip * 1

Please contact your dealer if any items are missing.

2.2 Optional Accessories

- IMP3EBAP: Sarix 4S Electrical Box Adaptor Plate for Surface Mount
- IMP3PMB-1I: Sarix L-Type Bracket for Surface Mount

2.3 Installation

2.3.1 Checking Appearance

Although the protective materials used for the packaging have been tested to protect the unit from most events during transportation, check the unit and its accessories for any visible damage. Remove the protective film to check items in accordance with the list in **2.1 Unpacking Everything**.

2.3.2 Disassembling the Camera

Please refer to the steps in the figure below for correct disassembling order.

1. Loosen 2 lower dome screws with the T20 security torx bit (supplied).
2. Gently pull the lower dome upward to take it apart from the backbox.

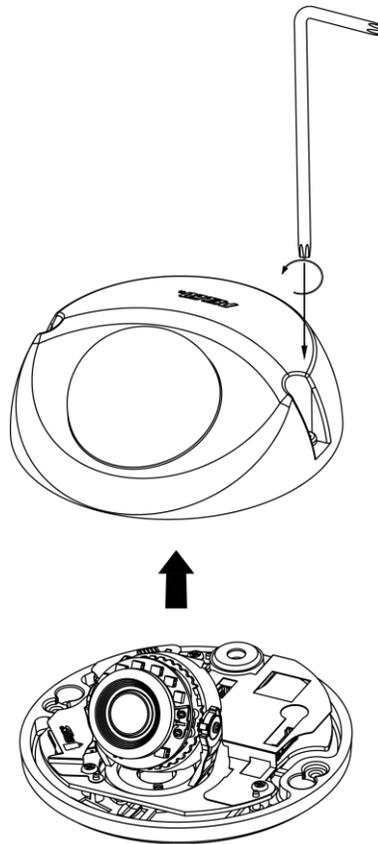


FIGURE 2-1: DISASSEMBLING THE CAMERA

2.3.3 Mounting the Camera

2.3.3.1 Surface Mount – Ceiling or Wall

1. Attach the mounting template to the wall or ceiling.
2. Drill two holes indicated on the mounting template and insert the plastic anchors into the holes.
3. Drill another hole with $\text{Ø}30\text{mm}$ in diameter as indicated on the mounting template in the wall or ceiling.
4. Pass all the signal cables through the hole.
5. Secure the backbox to the wall or ceiling with the 2 pan head screws (TP4).

NOTE: The mounting height above ground level shall be more than 3 meter for wall mount height.

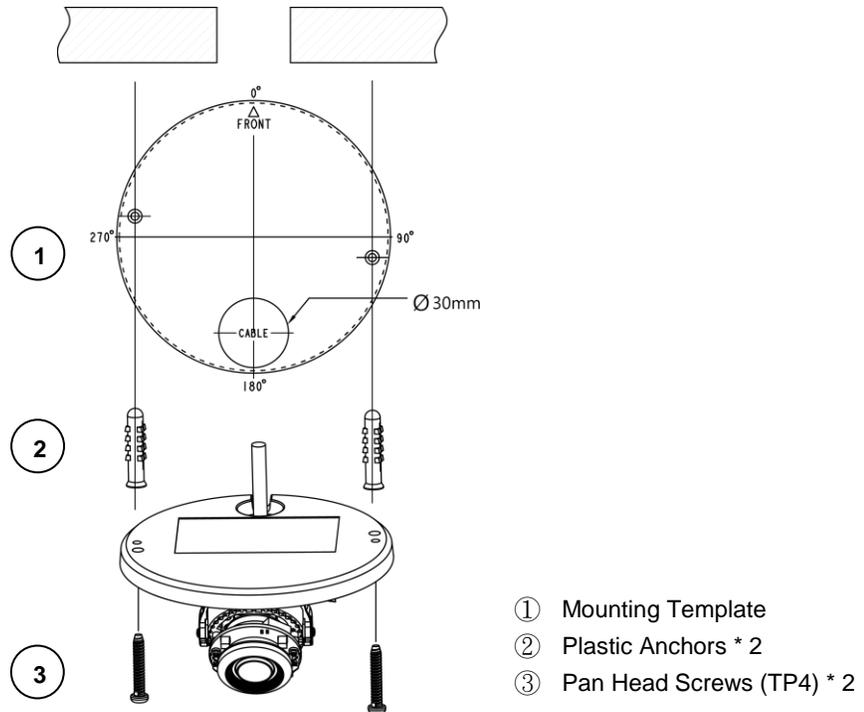


FIGURE 2-2: MOUNTING THE CAMERA

2.3.3.2 Surface Mount with IMP3EBAP

You can mount the camera to a surface with **IMP3EBAP**, a Sarix 4S electrical box adaptor plate. Refer to Figure 2-3 below for detailed process for surface mount with **IMP3EBAP**.

NOTE: IMP3EBAP is NOT provided, and it is mentioned only as additional surface mount for your reference.

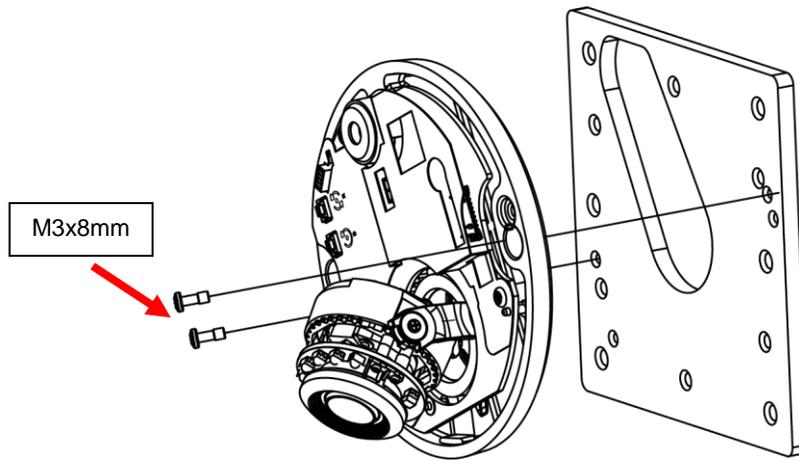


FIGURE 2-3: SURFACE MOUNT WITH IMP3EBAP

1. Fix the adaptor plate to the surface embedded with a 4S electrical box, single gang electrical box or double gang electrical box (optional) with 2 or 4 screws.
2. Pass all the cable through the adaptor plate and surface. Fasten the backbox onto the adaptor plate with 2 screws (M3x8mm), while feeding the cables through the backbox.

2.3.3.3 Surface Mount with IMP3PMB-1I

Also, you can mount the camera to a surface with **IMP3PMB-1I**, a Sarix L-type bracket. Refer to the figures below for detailed process for surface mount with **IMP3PMB-1I**.

NOTE: IM3PMB-1I is NOT provided, and it is mentioned only as additional surface mount for your reference.

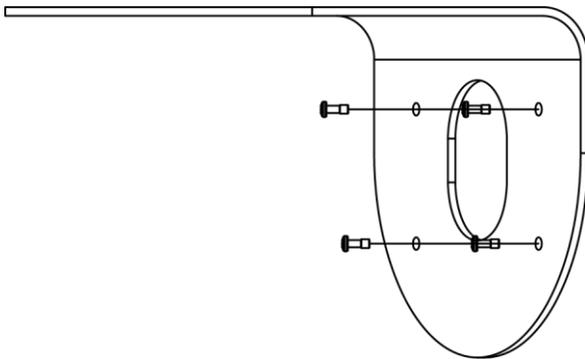


FIGURE 2-4: L-TYPE BRACKET IMP3PMB-1I

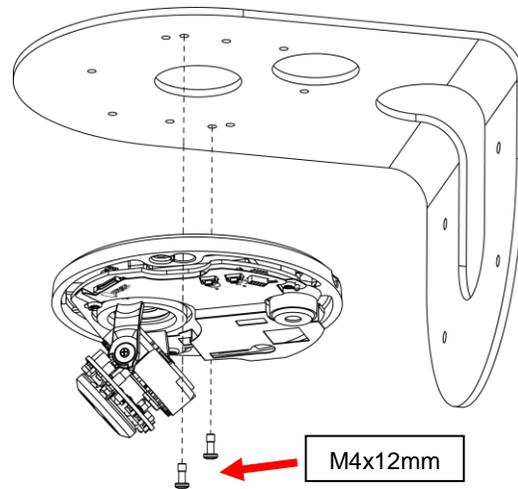


FIGURE 2-5: SURFACE MOUNT WITH IMP3PMB-1I

1. Fasten the L-type bracket onto the desired wall surface with 4 screws.
2. Pass all the cable through the L-type bracket.
3. Fasten the backbox onto the L-type bracket with 2 screws (M4x12mm), while feeding the cables through the backbox.

2.3.4 Connecting the Cables

- Connect the PoE (IEEE 802.3af Class 0) port with a RJ-45 jack that links a PoE compatible network device that supplied power with networking capability through the Ethernet cable.

NOTE:

- a. If a Class I PoE adapter or switch is used to provide power, be sure that the power cord is firmly plugged into the socket and confirm the main earth connection.
 - b. This product is intended to be supplied by a UL Listed 48Vdc, 350mA Gigabit Passive PoE injector, 802.3af/at PSE.
 - c. Interconnecting cables for PoE is intended to be supplied by a UL Listed type CL3P, CL3R or CL3X, marked "SUNLIGHT RESISTANT", "SUN. RES.", or "SR." and "water resistant" or "W".
 - d. To avoid the length deficiency, it's suggested to reserve about 10mm length of the network cable for connecting the cable to the RJ-45 network port before fix the cable to the cable slot.
- Insert audio in/out cables to the corresponding terminals of the camera if required.

2.3.5 PoE Port & Waterproof Connector (IWPWPC) Wiring Procedure

1. Terminate the Ethernet cable with a RJ45 connector after the cable passes through the waterproof connector.
2. Encircle the PoE port with the rubber O-Ring firmly.
3. Plug the RJ45 connector into the PoE port solidly for power supply and network connection.
4. Assemble the waterproof connector together with the PoE port tightly for ingress protection.

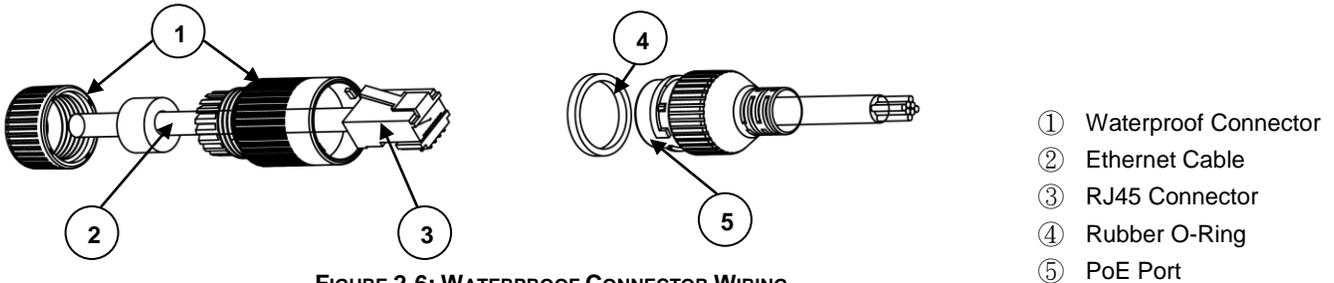


FIGURE 2-6: WATERPROOF CONNECTOR WIRING

2.3.6 Positioning the Camera

- **Pan Adjustment (A):** Rotate the lens camera assembly until you are satisfied with the field of view.
- **Horizontal Rotation (B):** Rotate the lens camera assembly in the camera module, but do not turn assembly more than 355° as this may cause the internal cables to be twisted, disconnected, or broken.
- **Tilt Adjustment (C):** Tilt the camera lens to your desired angle.

NOTE: Limitation for three axes position: Pan range: 0°~180°, Rotate range: 0°~355°, Tilt range: 0°~80°.

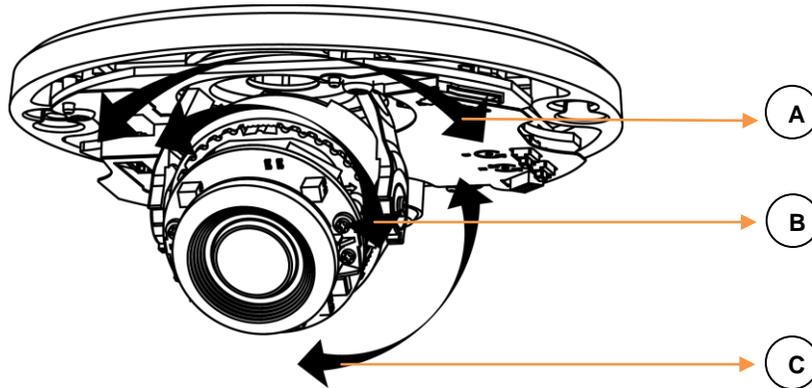


FIGURE 2-7: POSITIONING THE CAMERA

2.3.7 Sticking Desiccant

1. Take out the desiccant from the package.
2. Flip over the lower dome and apply desiccant to the circle recess as shown in the figure below.

NOTE: Be sure to apply the desiccant before camera assembly to avoid fogging.

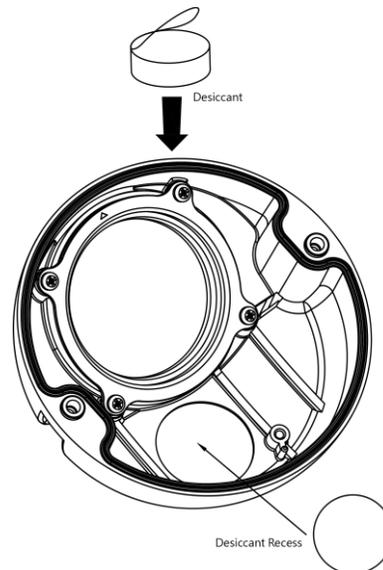


FIGURE 2-8: STICKING DESICCANT

2.3.8 Completing the Camera Assembly

1. After mounting the backbox to the surface, attach the lower dome with extra care on direction.
2. Fasten the lower dome with backbox by securing screws tightly via T20 torx bit to complete installation.

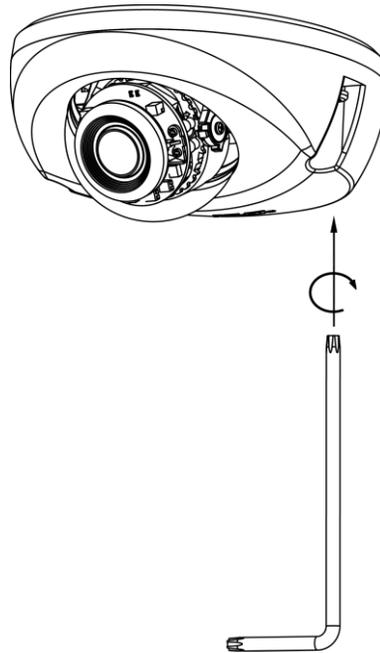


FIGURE 2-9: ASSEMBLING THE CAMERA

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 available when calling.

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



This equipment contains electrical or electronic components that must be recycled properly to comply with Directive 2002/96/EC of the European Union -regarding the disposal of waste electrical and electronic equipment (WEEE). Contact your local dealer for procedures for recycling this equipment.

REVISION HISTORY

Manual #	Date	Comments
C6631M	09/19	Rev.03



Pelco

625 W. Alluvial Fresno, California 93711 United States
(800) 289-9100 USA & Canada Phone
(800) 289-9150 USA & Canada Fax
+1 (559) 292-1981 International Phone
+1 (559) 348-1120 International Fax
www.pelco.com

Pelco, the Pelco logo, and other trademarks associated with Pelco products referred to in this publication are trademarks of Pelco, Inc. or its affiliates. ONVIF and the ONVIF logos are trademarks of ONVIF Inc. All other product names and services are the property of their respective companies. Product specifications and availability are subject to change without notice.

© Copyright 2019, Pelco, Inc.
All rights reserved.