PELCO™

IWM/IWM24 Series Wall Mount

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Important Safety Instructions

Read these instructions.

1. Keep these instructions.

2. Heed all warnings.

3. Follow all instructions.

4. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

5. Only use attachments/accessories specified by the manufacturer.

6. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

7. Installation should be done only by qualified personnel and conform to all local codes.

8. Unless the unit is specifically marked as a NEMA Type 3, 3R, 3S, 4, 4X, 6, or 6P enclosure, it is designed for indoor use only and it must not be installed where exposed to rain and moisture.

9. Use only installation methods and materials capable of supporting four times the maximum specified load.

10. Use stainless steel hardware to fasten the mount to outdoor surfaces.

11. To prevent damage from water leakage when installing a mount outdoors on a roof or wall, apply sealant around the bolt holes between the mount and mounting surface.

12. Only use replacement parts recommended by Pelco.

The product and/or manual may bear the following marks:

⚡ This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.

⚠ This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

CAUTION:
RISK OF ELECTRIC SHOCK. DO NOT OPEN.

Description

IWM/IWM24 Series wall mounts are designed for use with Spectra®, DF5, DF8, and Sarix™ IE Series pendant domes. The indoor/outdoor mounts can be installed directly to a wall or attached to an adapter and mounted to a corner, parapet, or pole mount. The mounts support maximum loads of 75 lb (34 kg) and feature cable feedthrough holes to conceal wiring.

The IWM24 Series mount has a 24 VAC, 100 VA transformer with selectable input power (120/240 VAC, 50/60 Hz).

MODELS

IWM-BK	Black-finish wall mount
IWM-GY	Same as IWM-BK except gray finish
IWM-SR	Same as IWM-BK except light gray finish (for Sarix IE Series domes; requires IE-P pendant mount adapter)
IWM24-BK	Black-finish wall mount with 100 VA transformer inside mount to power dome
IWM24-GY	Same as IWM24-BK except gray finish
IWM24-SR	Same as IWM24-BK except light gray finish (for Sarix IE Series domes; requires IE-P pendant mount adapter)
IWM-SW/IWM24-SW	Same as IWM-BK/IWM24-BK except white finish (RAL9003)

IWM SERIES

PARTS LIST

Qty	Description
1	Wall mount with mounting plate

USER SUPPLIED PARTS LIST

The following parts are needed but not supplied:

Qty	Description
4	Mounting fasteners, up to 3/8-inch diameter
1	*(Outdoor installations only)* Waterproof sealant for fastener holes to prevent water damage
1	*(Optional)* 1.5-inch NPT threaded pipe

IWM24 SERIES

PARTS LIST

Qty	Description
1	Wall mount with mounting plate

USER SUPPLIED PARTS LIST

The following parts are needed but not supplied:

Qty	Description
1 or 2	Conduit fitting(s) or gland(s) of appropriate size, depending on installation type (external or through-wall)
4	Mounting fasteners, up to 3/8-inch (0.95 cm) diameter
1 or 2	Fitting nut(s), depending on installation type (external or through-wall)
1	*(Outdoor installations only)* Waterproof sealant for fastener holes to prevent water damage
1	*(Optional)* 1.5-inch NPT threaded pipe

Installation

IWM SERIES MODELS

PREPARE THE MOUNTING SURFACE

1. Determine the mounting location:
   - If the mount is to be attached to a corner, parapet, or pole mount adapter, install the adapter plate (refer to the instructions supplied with the adapter).
   - If the mount is to be attached to a wall, use the base of the IWM Series mount as a template and mark the four fastener positions on the mounting surface.

2. Set the mount aside and prepare the holes for the fasteners (not supplied).

PULL THE WIRING AND ATTACH THE MOUNT TO THE SURFACE

1. Pull the video/power wiring through the mount. (Refer to Table A on page 9 for video coaxial cable requirements. Refer to Table B on page 9 for the recommended 24 VAC wiring distance information.)

2. Attach the mount securely with four fasteners of appropriate length (not supplied). Use fasteners with a maximum diameter of 3/8-inch.

3. *(Outdoor installations only)* Seal the fastener holes with an appropriate sealant (not supplied) to prevent water damage. Be sure to apply the sealant between the mount and the mounting surface.

4. *(Optional)* If using a 1.5-inch NPT threaded pipe (not supplied), pull the wiring through the pipe.

INSTALL THE DOME

1. Attach the dome back box to the mount and tighten the setscrew.

2. Make all necessary electrical connections to dome.

3. Refer to the manual supplied with the dome system to complete the installation.

IWM24 SERIES MODELS

PREPARE THE MOUNTING SURFACE

1. Determine the mounting location:
   - If the mount is to be attached to a corner, parapet, or pole mount adapter, install the adapter plate (refer to the instructions supplied with the adapter).
   - If the mount is to be attached to a wall, use the base of the IWM24 Series mount as a template and mark the four fastener positions on the mounting surface.

2. Set the mount aside and prepare the holes for the fasteners (not supplied).

PREPARE THE IWM24 SERIES MOUNT FOR INSTALLATION

1. Loosen the two Phillips pan-head screws, and remove the access plate from the bottom of the mount arm.
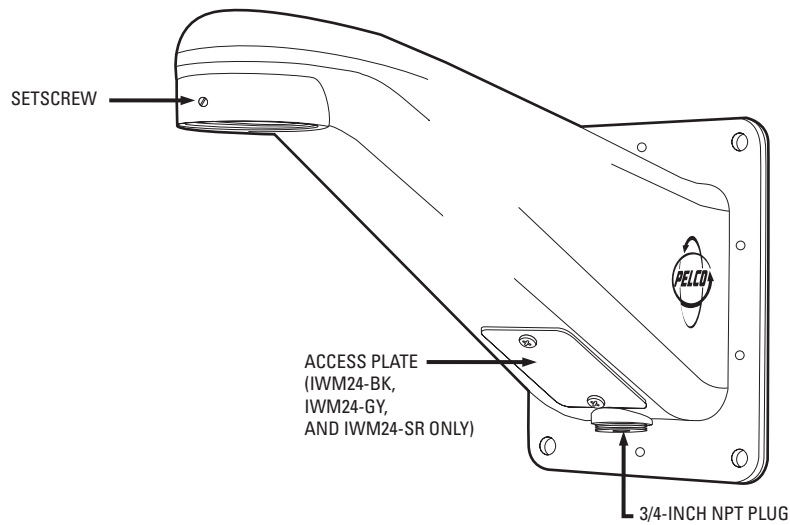

SETSCREW

ACCESS PLATE
(IWM24-BK,
IWM24-GY,
AND IWM24-SR ONLY)

3/4-INCH NPT PLUG

Figure 1. IWM24 Series Mount

2. Install the conduit fittings or glands (not supplied) in either the bottom or the back of the mount, depending on installation type.
   - To install the conduit fitting or gland in the bottom of the mount:
     (1) Remove the 0.75-inch (1.91 cm) NPT plug.
     (2) Install a conduit fitting or gland in the 0.75-inch NPT hole.
   - To install the conduit fittings or glands (not supplied) in the back of the mount:
     (1) Insert the male end of the conduit fitting or gland into the cable hole located on the back plate of the mount.
     (2) Hold the conduit fitting or gland in the hole with one hand while you reach into the mount through the access hole with the other hand.
     (3) Attach a fitting nut (not supplied) to the conduit fitting or gland, and rotate the fitting nut to hand-tighten.
     (4) Repeat the previous steps to install a second conduit fitting or gland.

3. The transformer is preset to operate at 120 VAC. If necessary, change the voltage selection switch to operate at 230 VAC (refer to Figure 2).

4. Install the proper fuse for the set voltage (refer to Figure 2). For 120 VAC, use the 1.6 A, 120 VAC, fast-acting fuse; or for 240 VAC, use the 500 mA, 240 VAC, fast-acting fuse. The fuse holder is located to the left of the voltage selection switch.

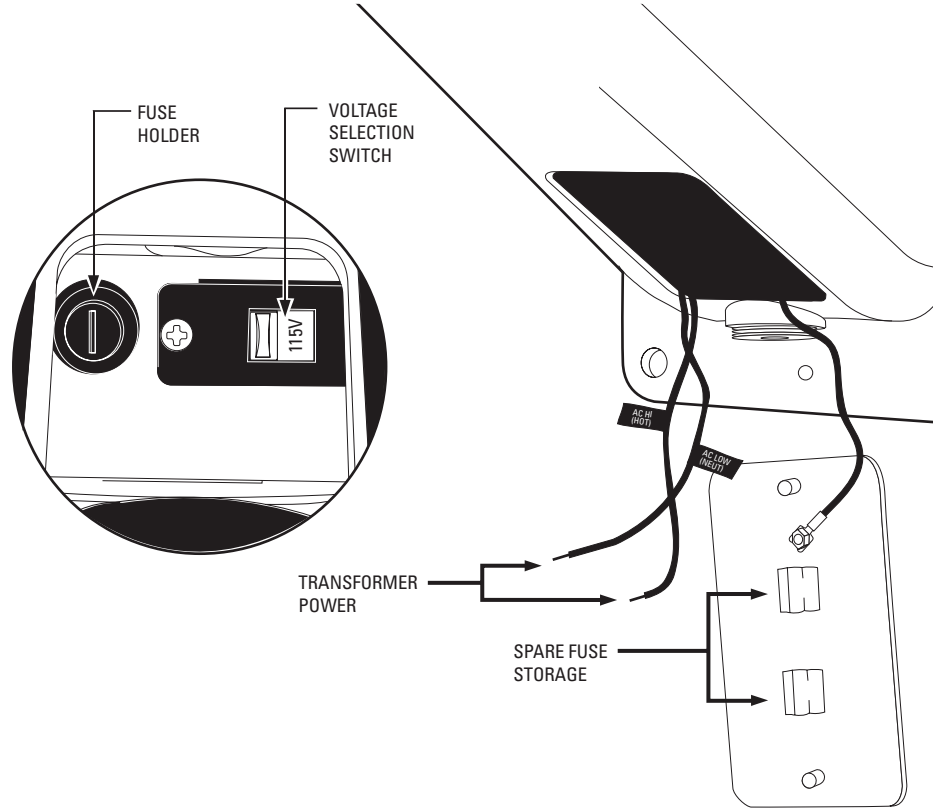   **NOTE:** The mount arm is shipped with extra fuses.

Figure 2. Voltage Selection Switch and Fuse Holder Location

PULL THE WIRING AND ATTACH THE MOUNT TO THE SURFACE

1. Pull the video/power wiring through either the bottom or the back of the mount and attach the mount to the mounting surface, depending on installation type. (Refer to Table A on page 9 for video coaxial cable requirements. Refer to Table B on page 9 for the recommended 24 VAC wiring distance information.)

   • To pull the wiring through the bottom of the mount:
     (1) Attach the mount to the mounting surface with four fasteners of an appropriate length (not supplied). Use fasteners with a maximum diameter of 3/8-inch.
     (2) Tighten the fasteners to create a waterproof seal between the gasket and the back of the mounting plate.
     (3) Pull the cables through the conduit fitting or gland in the bottom of the mount.
     (4) Continue to pull the video cable through the top of the mount.

   • To pull the wiring through the back of the mount:
     (1) Pull the cables through the conduit fittings or glands under the transformer in the back of the mount.
     (2) Continue to pull the video cable through the top of the mount.
     (3) Attach the mount to the mounting surface with four fasteners of an appropriate length (not supplied). Use fasteners with a maximum diameter of 3/8-inch.
     (4) Tighten the fasteners to create a waterproof seal between the gasket and the back of the mounting plate.

   NOTE: When installing the mount to a wall outdoors, you must seal the fastener holes with an appropriate sealant (not supplied) to prevent water damage. Be sure to apply the sealant between the mount and the mounting surface.

CONNECT THE INPUT POWER

1. Connect the power to the transformer (refer to Figure 3).

   a. Connect the AC High (hot) wire to the clamp on the black transformer wire. The AC High wire is labeled AC HI [HOT].

   b. Connect the AC Low (neutral) wire to the clamp on the white transformer wire. The AC Low wire is labeled AC LOW [NEUT].

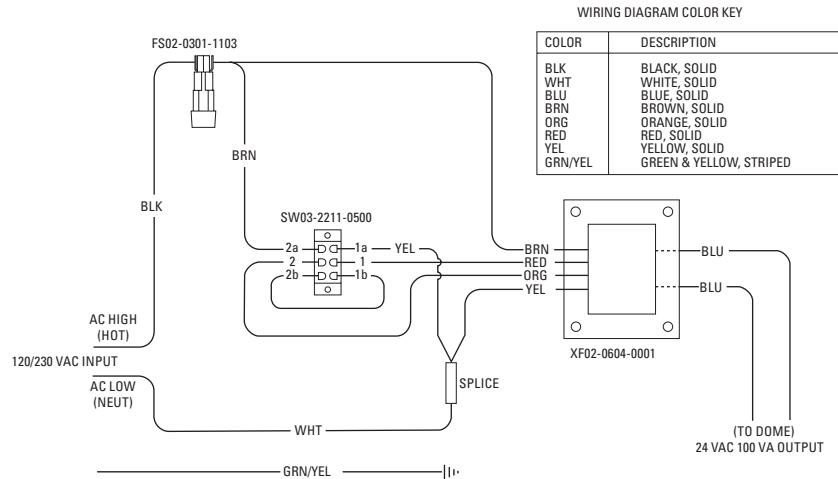2. Connect the input ground wire to the green and yellow striped wire that is attached to the mount.

Figure 3. IWM24 Wiring

INSTALL THE DOME

1. Attach the dome back box to the mount and tighten the setscrew.

2. Make all necessary electrical connections to the dome.

   WARNING: If you are wiring more than one dome, wire the power in each dome the same way. For example, the wiring from one side of the transformer must be connected to the corresponding connector on each dome. If you reverse the wiring, the cameras will be out of phase with each other and may produce a vertical roll when switching between cameras.

3. Place extra fuses in the clips attached to the inside of the access plate.

4. Replace the access plate and tighten the screws to compress the gasket and create a waterproof seal.

5. Refer to the manual supplied with the dome system to complete the installation.

Wiring Requirements and Distances

Table A. Video Coaxial Cable Requirements

Cable Type*	Maximum Distance
RG59/U	750 ft (229 m)
RG6/U	1,000 ft (305 m)
RG11/U	1,500 ft (457 m)

*Minimum cable requirements:
 75-ohms impedance
 All-copper center conductor
 All-copper braided shield with 95% braid
 coverage

Table B describes the recommended maximum distances for 24 VAC applications, which are calculated with a 10 percent voltage drop. (Ten percent is generally the maximum allowable voltage drop for AC-powered devices. For example, an enclosure that requires 80 VA and is installed 35 feet (10 m) from the transformer would require a minimum wire gauge of 20 AWG.

Table B. 24 VAC Wiring Distances

Total VA	Wire Gauge						Maximum distance from transformer to load
	20 (0.5 mm^2)	18 (1.0 mm^2)	16 (1.5 mm^2)	14 (2.5 mm^2)	12 (4.0 mm^2)	10 (6.0 mm^2)	
10	283 (86)	451 (137)	716 (218)	1142 (348)	1811 (551)	2880 (877)	
20	141 (42)	225 (68)	358 (109)	571 (174)	905 (275)	1440 (438)	
30	94 (28)	150 (45)	238 (72)	380 (115)	603 (183)	960 (292)	
40	70 (21)	112 (34)	179 (54)	285 (86)	452 (137)	720 (219)	
50	56 (17)	90 (27)	143 (43)	228 (69)	362 (110)	576 (175)	
60	47 (14)	75 (22)	119 (36)	190 (57)	301 (91)	480 (146)	
70	40 (12)	64 (19)	102 (31)	163 (49)	258 (78)	411 (125)	
80	35 (10)	56 (17)	89 (27)	142 (43)	226 (68)	360 (109)	
90	31 (9)	50 (15)	79 (24)	126 (38)	201 (61)	320 (97)	
100	28 (8)	45 (13)	71 (21)	114 (34)	181 (55)	288 (87)	

NOTE: Wire gauges are standard AWG or metric sizes. Distances are calculated in feet; values in parentheses are meters.
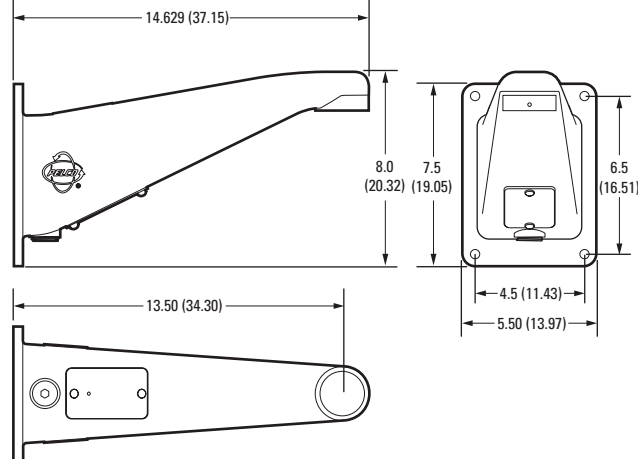
Specifications

MECHANICAL

Construction   Cast aluminum

Finish
   IWM-BK,   IWM24-BK   Black polyester powder coat
   IWM-GY,   IWM24-GY   Gray polyester powder coat
   IWM-SR,   IWM24-SR   Light gray polyester powder coat
   IWM-SW, IWM24-SW   White finish (RAL9003) polyester powder coat

Cable Entry   One 0.75-inch (1.91 cm) NPT opening on the bottom of the mount
   IWM Series Mount   Two cable feedthrough holes on the mounting plate accommodate 0.50-inch (1.27 cm) fittings or PG13.5
   IWM24 Series Mount   liquid-tight gland fittings; one 0.75-inch (1.91 cm) NPT opening on the bottom of the mount for conduit
                            connector

Mount Method   Secure to wall with 4 fasteners of appropriate length (fasteners not supplied); use fasteners up to
                            3/8-inch (0.95 cm) diameter

Locking Method   6-32 Allen-head setscrew to tighten pipe

Dome Mounting   Dome screws directly into mount

Maximum Load   75 lb (34 kg)

ELECTRICAL

IWM24 Series   Switchable 120/240 VAC, 50/60 Hz through an internal slide switch
   Input Power   24 VAC, 100 VA transformer
   Output Power   One 1.6 A, 120 VAC fast-acting fuse
   Fuse   One 500 mA, 240 VAC fast-acting fuse

GENERAL

Environment   Indoor/outdoor

Operating Range   −50° to 120°F (−46° to 49°C)

Unit Weight
   IWM Series   2.46   lb   (1.12   kg)
   IWM24 Series   6.58 lb (2.98 kg)

Ratings (IWM24 Series only)   Meets NEMA 4 and IP 56 standards

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

PRODUCT WARRANTY AND RETURN INFORMATION

WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship **for a period of one year** after the date of shipment.

Exceptions to this warranty are as noted below:

- Five years:
  - Fiber optic products
  - Unshielded Twisted Pair (UTP) transmission products
  - CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and MC3651H-2X camera models
- Three years:
  - Pelco-designed fixed network cameras and network dome cameras with Sarix™ technology.
  - Pelco-branded fixed camera models (CCC1390H Series, C10DN Series, C10CH Series, and IP3701H Series)
  - EH1500 Series enclosures
  - Spectra® IV products (including Spectra IV IP)
  - Camclosure® Series (IS, ICS, IP) integrated camera systems
  - DX Series digital video recorders (except DX9000 Series which is covered for a period of one year), DVR5100 Series digital video recorders, Digital Sentry® Series hardware products, DVX Series digital video recorders, and NVR300 Series network video recorders
  - Endura® Series distributed network-based video products
  - Genex® Series products (multiplexers, server, and keyboard)
  - PMCL200/300/400 Series LCD monitors
  - PMCL5xx Series FHD monitors
- Two years:
  - Standard varifocal, fixed focal, and motorized zoom lenses
  - DF5/DF8 Series fixed dome products
  - Legacy® Series integrated positioning systems
  - Spectra III™, Spectra Mini, Spectra Mini IP, Esprit®, ExSite®, and PS20 scanners, including when used in continuous motion applications.
  - Esprit Ti and TI2500 Series thermal imaging products
  - Esprit and WW5700 Series window wiper (excluding wiper blades).
  - CM6700/CM6800/CM9700 Series matrix
  - Digital Light Processing (DLP®) displays (except lamp and color wheel). The lamp and color wheel will be covered for a period of 90 days. The air filter is not covered under warranty.
  - Intelli-M® eIDC controllers
- One year:
  - Video cassette recorders (VCRs), except video heads. Video heads will be covered for a period of six months.
- Six months:
  - All pan and tilts, scanners, or preset lenses used in continuous motion applications (preset scan, tour, and auto scan modes).

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to a Pelco designated location. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental, or consequential damages (including loss of use, loss of profit, and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

1. Model and serial number
2. Date of shipment, P.O. number, sales order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product that does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

RETURNS

To expedite parts returned for repair or credit, please call Pelco at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair) and designated return location.

All merchandise returned for credit may be subject to a 20 percent restocking and refurbishing charge.

Goods returned for repair or credit should be clearly identified with the assigned CA or RA number and freight should be prepaid.

2-10-10

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
C288M	–	Original version.
C288M-A	9/97	Completely revised. Includes IWM24 Series mounts.
C288M-B	3/98	Included wiring diagram. Modified Section 3.2, step 3f. Changed manual pagination.
C288M-C	5/99	Removed template. Revised Description and Installation instructions. Updated Dimension Drawing. Added certifications. Changed to new format.
C288M-D	12/01	Modified manual to reflect changes per ECO 01-7388. Changed to new format. Removed IWM-WT model.
C288M-E	10/03	Modified manual to incorporate power wiring changes per ECO 03-8870.
C288M-F	7/04	Modified manual to incorporate design changes per ECO 04-9902.
C288M-G	8/05	Revised manual per ECO 05-11280 to change input power and a fuse value from 230 VAC to 240 VAC.
C288M-H	10/10	Added the IWM-SR and IWM24-SR models, added a parts list, revised the installation sections, and updated the warranty.
C288M-I	3/20	Added -SW models.

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