



IWM/IWM24 Series Wall Mount



C288M-G (8/05)

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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.

Description

IWM Series wall mount is designed for Spectra® Series pendant dome systems, and DF5 and DF8 fixed 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	Gray-finish wall mount
IWM24-BK	Black-finish wall mount with 100 VA transformer inside mount to power Spectra Series pendant domes.
IWM24-GY	Same as IWM24-BK except gray finish.

Installation

IWM-BK AND IWM-GY

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 mount as a template and mark the four fastener positions on the mounting surface. Set the IWM mount to the side and prepare the holes for the fasteners.
2. Pull the wiring through the mount. Refer to Table A for the type of video coaxial cable to use. For 24 VAC power, refer to Table B to determine the size of wire to use.
3. Attach the mount securely with four fasteners of appropriate length (fasteners are not provided). Use fasteners with a maximum diameter of 3/8-inch (0.95 cm) (fasteners are not supplied). If you install the IWM outdoors, seal the fastener holes with an appropriate sealant to prevent water damage. Apply the sealant between the mount and the mounting surface.
4. If using an NPT threaded pipe (not supplied), pull the wiring through the NPT pipe and the dome back box.
5. Attach the dome back box to the mount arm following the instructions in the dome manual.
6. Tighten the set screw on the mount.
7. Refer to the manual supplied with the Spectra dome system to complete the installation.

IWM24-BK AND IWM24-GY

PREPARE MOUNTING SURFACE

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 mount as a template and mark the four fastener positions on the mounting surface. Set the IWM24 mount to the side and prepare the holes for the fasteners.

PREPARE IWM24 MOUNT FOR INSTALLATION

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

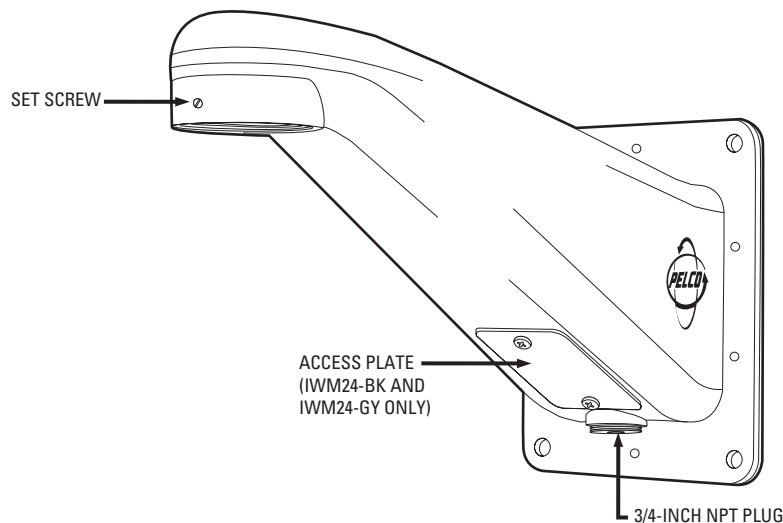


Figure 1. IWM24 Series Mount

2. Install the conduit fittings or glands. Refer to one of the following installation methods:

METHOD 1 – INSTALL A CONDUIT FITTING TO THE BOTTOM OF THE MOUNT

- Remove the 0.75-inch (1.91 cm) NPT plug.
- Install a conduit fitting in the 0.75-inch NPT hole.

METHOD 2 – INSTALL THE CONDUIT FITTINGS/GLANDS TO THE BACK OF THE MOUNT

- Insert the male end of the gland or conduit fitting into the cable hole located on the back plate of the mount.
 - Hold the gland or conduit fitting in the hole with one hand while you reach, with the other hand, into the mount through the access hole.
 - Attach the fitting nut to the gland or conduit fitting, and rotate the fitting nut to hand-tighten.
 - Repeat the above steps to install a second gland or conduit fitting.
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. Refer to Figure 2 and install the proper fuse for the set voltage. The fuse holder is located to the left of the voltage selection switch. The mount arm is shipped with extra fuses. For 120 VAC, use the 1.6A, 120 VAC, fast-acting fuse; or for 240 VAC, use the 500 mA, 240 VAC, fast-acting fuse.

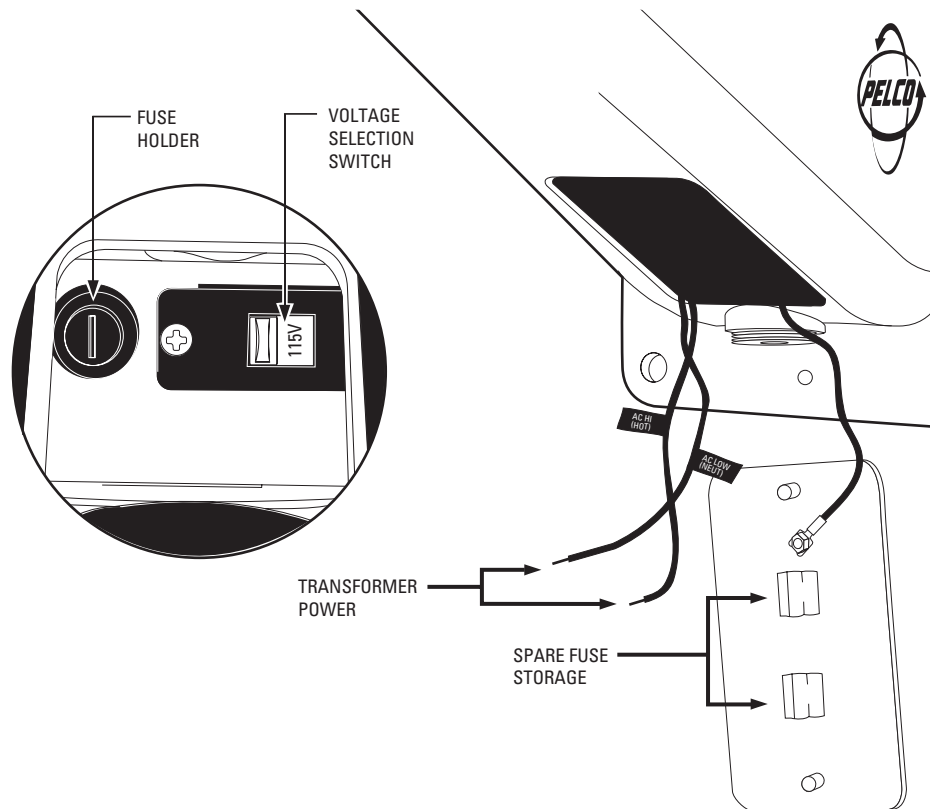


Figure 2. Voltage Selection Switch and Fuse Holder Location

PULL WIRING

1. Refer to Table A and B for coaxial cable requirements and 24 VAC wiring distances.
2. Pull wiring/cabling for video and power. Refer to one of the following installation methods:

METHOD 1 – THROUGH CONDUIT FITTINGS TO THE BOTTOM OF THE MOUNT

If you are pulling video and power cables from the bottom of the mount, first attach the mount. Then pull the cables through the conduit in the bottom of the mount. Continue to pull the video cable only through the top of the mount.

METHOD 2 – THROUGH CONDUIT FITTINGS/GLANDS TO THE BACK OF THE MOUNT

If you are pulling video and power cables through the back of the mounting plate, pull the cables through the glands or conduit under the transformer. Continue to pull the video cable only through the top of the mount. Attach the mount.

ATTACH THE MOUNT TO THE SURFACE

1. Attach the mount to the mounting surface with fasteners of an appropriate length with a maximum diameter of 3/8-inch (0.95 cm) (fasteners are not supplied). When installing the mount to a wall outdoors, seal the bolt holes with an appropriate sealant. Apply the sealant around the bolt holes between the mount and the wall.
2. Tighten the fasteners enough to seal the gasket attached to the back of the mounting plate and create a waterproof seal.

CONNECT INPUT POWER

1. Connect the power to the transformer.
 - 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.

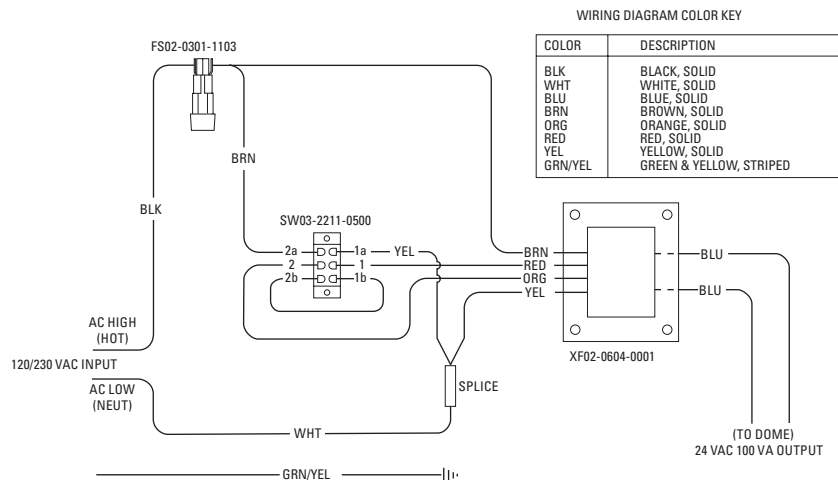


Figure 3. IWM24 Wiring Diagram

INSTALL DOME

1. Attach the dome back box to the mount and tighten the set screw.
2. Make all necessary electrical connections to dome. (Use the documentation provided with the dome.)



IMPORTANT: 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 what appears to be 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 enough to compress the gasket and create a waterproof seal.

Wiring Tables

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

The following are the recommended maximum distances for 24 VAC applications and are calculated with a 10 percent voltage drop. (Ten percent is generally the maximum allowable voltage drop for AC-powered devices.)

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)	

 **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.

 **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
Cable Entry	
IWM Series Mount	One 0.75-inch (1.91 cm) NPT opening on the bottom of the mount
IWM24 Series Mount	Two cable feedthrough holes on the mounting plate accommodate 0.50-inch (1.27 cm) conduit fittings or PG13.5 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 four fasteners of appropriate length (fasteners not supplied). Use fasteners up to 3/8-inch (0.95 cm) diameter.
Locking Method	6-32 Allen-head set screw to tighten pipe
Dome Mounting	Dome screws directly into mount.
Maximum Load	75 lb (34 kg)
ELECTRICAL	
IWM24 Series	
Input Power	Switchable 120/240 VAC, 50/60 Hz via an internal slide switch
Output Power	24 VAC, 100 VA transformer
Fuse	One 1.6 A, 120 VAC fast-acting 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

(Design and product specifications subject to change without notice.)

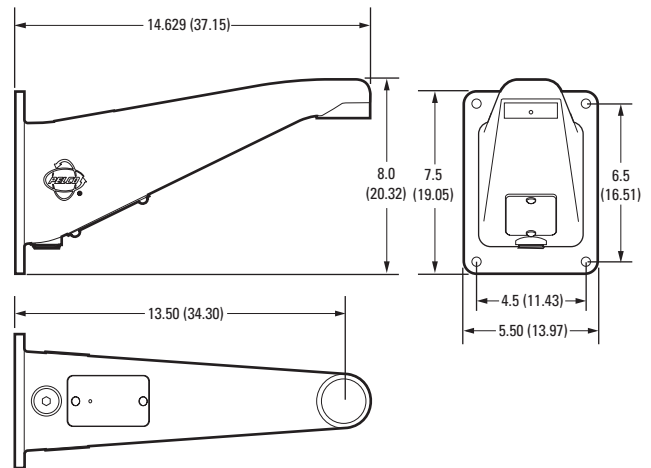


Figure 4. IWM and IWM24 Series Dimension Drawing

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 on FT/FR8000 Series fiber optic products.
- Three years on Genex® Series products (multiplexers, server, and keyboard).
- Three years on Camclosure® and fixed camera models, except the CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and MC3651H-2X camera models, which have a five-year warranty.
- Two years on standard motorized or fixed focal length lenses.
- Two years on Legacy®, CM6700/CM6800/CM9700 Series matrix, and DF5/DF8 Series fixed dome products.
- Two years on Spectra®, Esprit®, ExSite™, and PS20 scanners, including when used in continuous motion applications.
- Two years on Esprit® and WW5700 Series window wiper (excluding wiper blades).
- Two years (except lamp and color wheel) on Digital Light Processing (DLP™) displays. The lamp and color wheel will be covered for a period of 90 days. The air filter is not covered under warranty.
- Eighteen months on DX Series digital video recorders, NVR300 Series network video recorders, and Endura™ Series distributed network-based video products.
- One year (except video heads) on video cassette recorders (VCRs). Video heads will be covered for a period of six months.
- Six months on all pan and tilts, scanners or preset lenses used in continuous motion applications (that is, 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 Pelco, Clovis, California. 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 which 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

In order to expedite parts returned to the factory for repair or credit, please call the factory 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).

All merchandise returned for credit may be subject to a 20% 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. Ship to the appropriate address below.

If you are located within the continental U.S., Alaska, Hawaii or Puerto Rico, send goods to:

Service Department
Pelco
3500 Pelco Way
Clovis, CA 93612-5699

If you are located outside the continental U.S., Alaska, Hawaii or Puerto Rico and are instructed to return goods to the USA, you may do one of the following:

If the goods are to be sent by a COURIER SERVICE, send the goods to:

Pelco
3500 Pelco Way
Clovis, CA 93612-5699 USA

If the goods are to be sent by a FREIGHT FORWARDER, send the goods to:

Pelco c/o Expeditors
473 Eccles Avenue
South San Francisco, CA 94080 USA
Phone: 650-737-1700
Fax: 650-737-0933



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.

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