



DF5S Series Fixed Mount Dome



C1475M-C (9/08)

Important Safety Instructions

Prior to installation and use of this product, the following **WARNINGS** should be observed.

1. Installation and servicing should be done only by qualified service personnel and conform to all local codes.
2. 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.
3. Only use replacement parts recommended by Pelco.
4. After replacement/repair of this unit's electrical components, conduct a resistance measurement between line and exposed parts to verify the exposed parts have not been connected to line circuitry.
5. The installation method and materials should be capable of supporting four times the weight of the enclosure, pan/tilt, camera and lens combination.

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

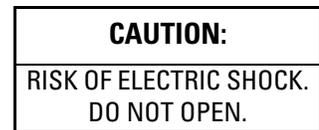
Please thoroughly familiarize yourself with the information in this manual prior to installation and operation.



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.



Description

The DF5S Series fixed mount dome is designed for indoor use where there is limited space above the ceiling. The dome can be installed in hard ceilings or standard 2 x 2 ft (61 x 61 cm) suspended ceilings. The back box requires only 2.75 inches (7 cm) of room.

When there is not enough room to install the DF5S Series back box in the ceiling, the back box can be attached to the surface of the ceiling. A special trim ring, the DF5S-SMKIT, hides the back box. The entire assembly (back box and dome) hangs down only 6 inches (15.24 cm) from the ceiling.

MODELS

DF5S-0* DF5S Series indoor dome with 2.75-inch (7 cm) back box and smoked lower dome (f/0.5 light loss)

DF5S-1* Same as DF5S-0 except has clear lower dome (virtually no light loss)

* The DF5S-SMKIT surface mount adapter kit is required to attach DF5S Series back box to the surface of a ceiling.

Installation

CONTENTS

The DF5S shipping carton contains two boxes. Inspect each box to make sure all parts are present.

BACK BOX

- 1 Back box with tilt table assembly installed (includes camera and lens if specified with order)
- 1 Parts bag
 - 1 Safety chain bracket
 - 1 3-inch (7.6 cm) miniature coaxial cable assembly
 - 1 Compass tool
 - 1 Flat washer (models without camera)
 - 1 Split lock washer (models without camera)
 - 1 Screw (models without camera)

LOWER DOME

- 1 Acrylic lower dome with trim ring

Hard Ceiling Installation

1. Locate the center point of the mounting location. Drill a hole in the ceiling using a 3/32-inch drill. Insert the compass tool into the hole. Use a pencil and the compass tool to draw a circle on the ceiling. Carefully cut out the circle.

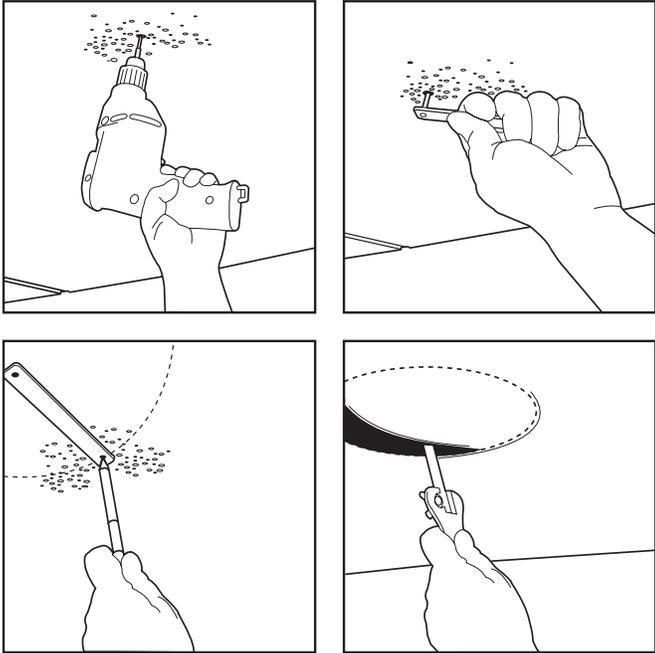


Figure 1. Preparing the Ceiling

2. Attach a conduit fitting (not supplied), safety chain bracket, and lock nut (not supplied). Install a safety chain/cable (not supplied) that will support up to 16 pounds (7.3 kg). Install one end of the safety chain/cable to the safety chain bracket and the other end to a support structure in the ceiling.
3. Prepare the wiring for camera and lens power; refer to Table A and Table B on page 8 for wiring distances. Pull the wiring into the back box through the conduit fitting.
4. Compress the spring clips on the back box and push it through the hole until the clips spring back. Tighten the screws until you hear a clicking noise.

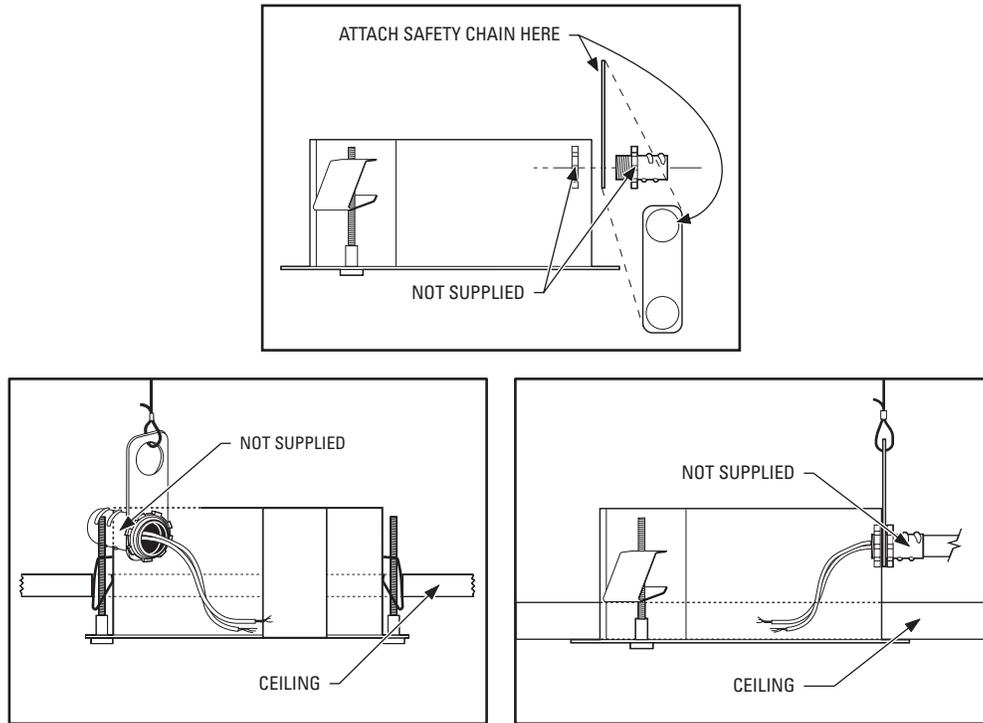


Figure 2. Installing the Back Box

Suspended Ceiling Installation

1. Remove the ceiling tile from the ceiling. Insert the compass tool (supplied) into the center of the tile. (If necessary, use a 3/32-inch bit to drill a hole.)

NOTE: The ceiling tile cannot be thinner than 0.50-inch (1.27 cm) or thicker than 1.75 inches (4.45 cm).

2. Draw a circle on the tile using the compass tool and a pencil. Carefully cut out the circle.

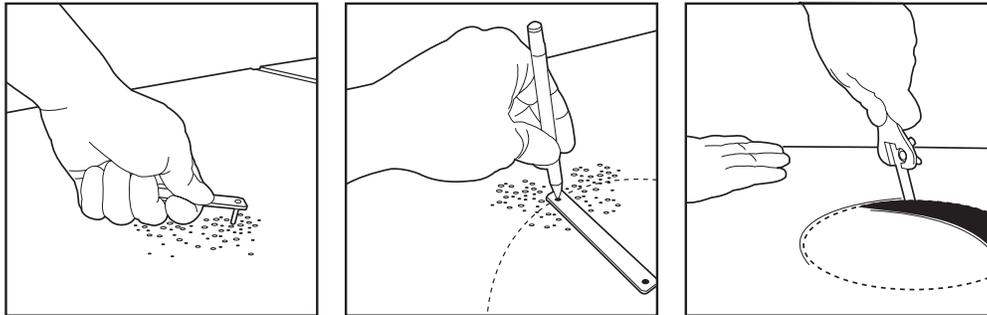


Figure 3. Preparing the Ceiling Tile

3. Attach a conduit fitting (not supplied), safety chain bracket, and lock nut (not supplied). Attach one end of a safety chain/cable (not supplied) to the bracket, which will support up to 16 pounds (7.3 kg). Do not attach the other end at this time.
4. Compress the spring clips on the back box and push it through the hole until the clips spring back. Tighten the screws until you hear a clicking noise. Reinstall the ceiling tile.
5. Remove an adjacent ceiling tile. Prepare the wiring for camera and lens power; refer to Table A and Table B on page 8 for wiring distances. Pull the wiring into the back box through the conduit fitting. Attach the safety chain to a support structure. Replace the adjacent ceiling tile.

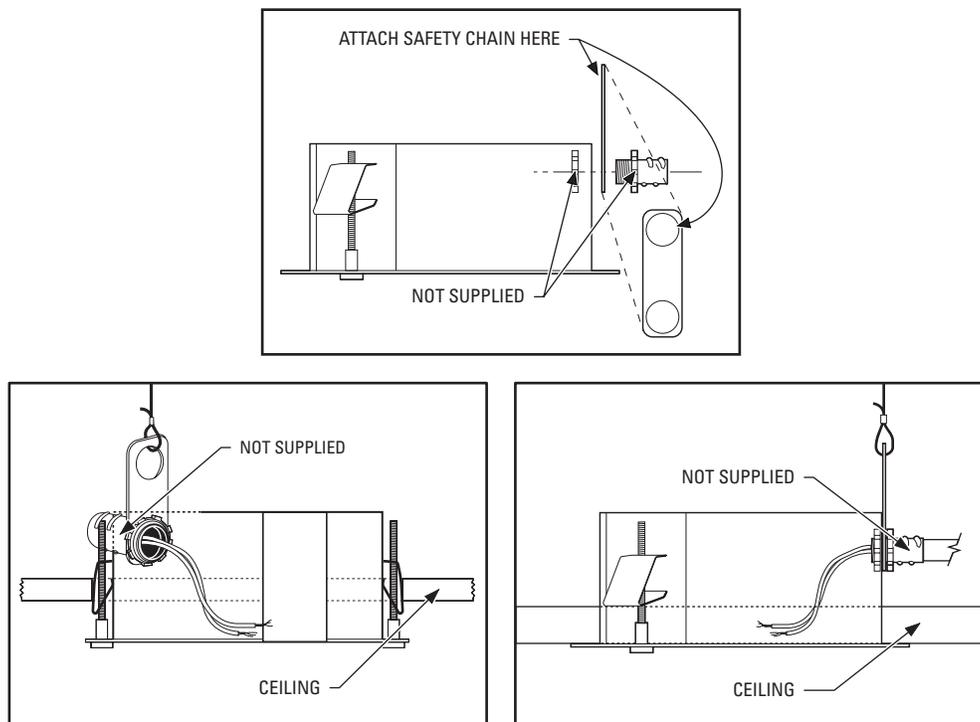


Figure 4. Installing the Back Box

Table A. Video Coaxial Wiring Distances

Cable Type*	Maximum Distance
RG59/U	750 ft (299 m)
RG6/U	1,000 ft (305 m)
RG11/U	1,500 ft (457 m)

*Cable requirements:

75-ohm impedance

All-copper center conductor

All-copper braided shield with 95% braid coverage

Table B shows the recommended maximum distances for 24 VAC 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

Wire Gauge						
Total VA	20	18	16	14	12	10
10 VA	283 ft (86)	451 ft (137)	716 ft (218)	1142 ft (348)	1811 ft (551)	2880 ft (877)

NOTE: Distances are calculated in feet; values in parentheses are meters.

Surface Mount Installation

The DF5S-SMKIT surface mount adapter kit is required to attach DF5S Series back box to the surface of a ceiling. Refer to the installation manual for the DF5S-SMKIT.

Camera and Lens Installation

NOTE: If the camera and lens are already installed, refer to the camera and lens manuals for information on wiring and operating your equipment.

Use only *fixed focal length lenses* with the DF5S dome. To install the camera and lens:

1. Install the miniature coaxial cable on the camera. Attach the camera and lens to the tilt table with the 1/4-20 screw and washers (supplied).

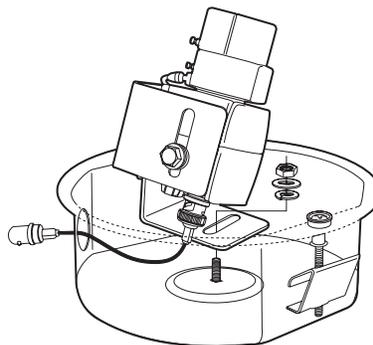


Figure 5. Installing the Camera and Lens

2. To ensure that the lens will not hit the lower dome:
 - Place the lower dome over the back box with the camera and lens installed (do not attach dome).
 - If the lens touches the lower dome, adjust the tilt table assembly.
3. Refer to the manual supplied with the camera and lens for the following information:
 - How to connect power and video wiring
 - How to make camera and lens adjustments

Lower Dome Installation

1. Snap the clip, located on the end of the trim ring leash, into the hole on the lip of the back box.
2. Line up the snaps on the trim ring with the mounting screws on the back box. Snap the trim ring into the plastic snap washers on the mounting screws.

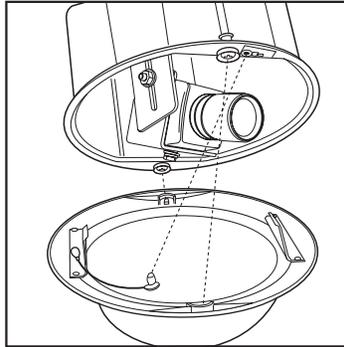


Figure 6. Installing the Lower Dome

Maintenance

Clean the acrylic dome as needed. Be careful not to scratch the surfaces of the dome.

Exterior surface: Clean the dome's exterior surface with a nonabrasive cleaning cloth and agent that is safe for acrylic plastic. Either liquid or spray cleaner/wax suitable for fine furniture is acceptable.

Interior surface (except chrome or gold): Clean the same as the exterior surface.

Interior surface (chrome or gold): The inside surface of a chrome or gold dome is easily scratched. Use the following precautions to maintain the dome's surface.

- a. Always handle the dome from the outside of its circular flange.
- b. Never touch the coated inside surface. The acid in your fingerprints will eventually etch the coating if the fingerprints are not carefully removed according to the recommended cleaning procedure in item e.
- c. If dust or other contaminants accumulate on the dome's interior, remove the debris with compressed air. Compressed air cans are available from photographic equipment or electronic supply dealers.
- d. If heavy residue accumulates and cannot be removed with air pressure, rinse with water and immediately dry with air pressure so that water spots will not remain. Avoid wiping the coated surface with direct hand pressure; it will easily abrade unless extreme care is taken. Once scratched, the dome cannot be repaired.
- e. If internal wiping is necessary, avoid hand rubbing. Instead, make a wick as follows:

Use a very soft paper towel. Roll a section into a tightly wound tube. Tear the tube in half, and wet the fuzzy end of the wick with a solution of isopropyl alcohol diluted with water. Hold the dome with its opening facing downward and wipe the interior of the dome with the wet end of the wick. Use a circular motion, starting from the outside and spiraling into the center. Use a new wick for each two passes over the dome.

Specifications

MECHANICAL

Construction	
Back Box	Aluminum
Mounting Bracket	Steel
Lower Dome	Acrylic
Trim Ring	Eggshell white molded plastic, UL94V0

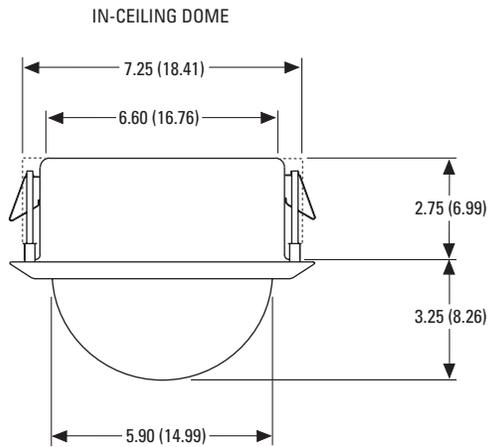
GENERAL

Environment	Indoor
Operating Temperature	32° to 122°F (0° to 50°C)
Weight (without camera)	1.75 lb (0.80 kg)

CAMERA

Maximum Camera and Lens Size	5.00" L x 2.75" W x 2.75" H (12.70 x 6.99 x 6.99 cm)
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(Design and product specifications subject to change without notice.)



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 on fiber optic products and TW3000 Series unshielded twisted pair (UTP) transmission products.
- Three years on Spectra® IV products.
- Three years on Genex® Series products (multiplexers, server, and keyboard).
- Three years on DX Series digital video recorders, DVR5100 Series digital video recorders, Digital Sentry® Series hardware products, DVX Series digital video recorders, NVR300 Series network video recorders, and Endura® Series distributed network-based video products.
- Three years on Camclosure® and Pelco-branded 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.
- Three years on PMCL200/300/400 Series LCD monitors.
- 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 III™, Spectra Mini, 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.
- Two years on Intelli-M® eIDC controllers.
- 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 (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.



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
C1475M	2/98	Original version.
C1475M	4/98	Added models to the chart under Section 2.1, Models. Revised the procedures under Section 3.5, Lower Dome Installation. Added material for cleaning gold and chrome domes under Section 4.0, Maintenance. Changed the maximum camera size under Section 5.0, Specifications.
C1475M-A	5/00	Revised installation instructions and illustrations. Revised camera installation instructions, removed references to obsolete camera models. Updated manual to new format.
C1475M-B	8/05	Updated manual format. Revised <i>Models</i> section. Added information about DF5S.SMKIT. Revised dimension drawing callout from 7.25 (18.13) to 7.25 (18.41).
C1475M-C	8/08	Updated manual to indicate that conduit fittings and lock nuts are no longer supplied.



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