



by Schneider Electric

INSTALLATION

13ZD Series Motorized Zoom Lenses

C749M-D (10/11)

Important Safety Instructions

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

1. Servicing should be done only by qualified service personnel.
2. Only use replacement parts recommended by Pelco.

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

Description

Pelco's 13ZD Series motorized zoom lenses offer a selection of imager format optics in various focal length ranges. These ranges include wide angle to short telephoto, wide angle to medium telephoto, and wide angle to long telephoto.

The entire series of 1/3-inch imager lenses come with CS-type mounts; however, CS-type lenses are not compatible with C-mount cameras.

All 13ZD Series motorized zoom lenses feature high-resolution power in a compact body.

The 13ZD Series motorized lenses have a direct drive auto iris and motorized focus. In addition, all auto iris lenses include a spot filter. The 13ZD Series lenses have an industry-standard square 4-pin connector that plugs directly into the camera receptacle. Some lenses in the 13ZD Series are available with preset positioning capability.

Table A. 13ZD Series Motorized Zoom Lenses

Models	Focal Length	Zoom Ratio	Relative Aperture
13ZD6X8	6 ~ 48 mm	8X	1.6 ~ 360
13ZD6X10/13ZD6X10P*	6 ~ 60 mm	10X	1.6 ~ 360
13ZD6X15P*	6 ~ 90 mm	15X	1.6 ~ 360
13ZD5.6X20/13ZD5.6X20P*	5.6 ~ 112 mm	20X	1.6 ~ 360
13ZD5.5X30/13ZD5.5X30P*	5.5 ~ 165 mm	30X	1.8 ~ 360

*Models containing a "P" suffix are motorized with preset capability.

Installation

1. Remove the dust covers from the lens.
2. Remove any dust with a soft brush or clean compressed air.
3. Install the lens by carefully threading it clockwise onto the camera mount until fully seated. If the lens has a coupling ring, tighten the ring against the camera.
4. Plug the 4-pin electrical connector into the camera auto iris DC drive socket. Figure 2 shows the wiring diagram for the connector.
5. Follow the camera operating instructions for iris and focus adjustments.
6. Perform the following back focus adjustment procedure after the lens is installed or if your camera system does not maintain sharp focus throughout the lens zoom range:
 - a. Select an object as a focusing target at a distance of 23 to 31 m (75 to 100 ft) from the camera system.
 - b. Set the lens focus for extreme distance (infinity).
 - c. Open the iris (aperture) to the fully opened position.
 - d. Zoom out the lens to the extreme wide angle and adjust the camera imager for the best focus. Refer to the camera manufacturer's instructions for the imager adjustment procedure.
 - e. Zoom in the lens to the extreme telephoto and adjust the lens focus (do not adjust the camera imager) for the sharpest picture.
 - f. Zoom out the lens to the extreme wide angle and check for sharp focus.
 - g. Repeat steps d through f until the focus is sharp throughout the entire zoom range.

LIGHT METER/IMAGE SIGNAL ADJUSTMENTS

Lenses having ALC and LEVEL variable resistors may need the following adjustments:

1. **ALC (light metering):** This function allows a variable selection of light metering between average (A) and peak (P). Turn the variable resistor that is located in the lens body with a precision screwdriver (not provided) until suitable exposure is obtained (refer to Figure 1).
2. **LEVEL (image signal):** This feature helps adjust the brightness of images projected on the monitor. When necessary to make a correction due to camera characteristics or lighting conditions, adjust the variable resistor on the lens body with a precision screwdriver (not provided) until an optimum level is obtained (refer to Figure 1).



Figure 1. ALC and Level Adjustment Screws

Lens and Connector Wiring Diagrams

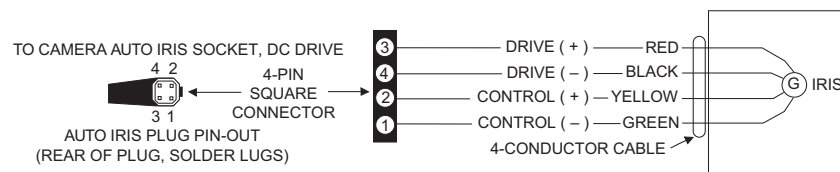


Figure 2. 4-Pin Lens Connector

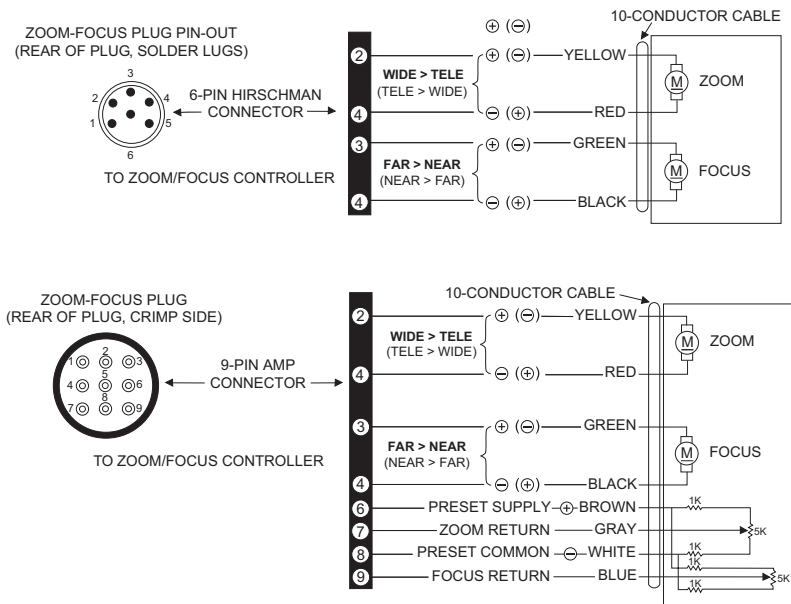


Figure 3. 6-Pin and 9-Pin Connectors

NOTE: Unless customer specified, Pelco no longer supplies 6-pin Hirschmann or 9-pin AMP connector assemblies.

Routine Servicing

Periodically, you might need to clean the 13ZD Series lens to maintain optimum performance. Be sure to observe the following cleaning instructions to avoid damaging the lens:

- Never touch the surface of either lens.
- Remove dust from the lens using a soft brush or clean compressed air. Avoid touching the lens surface.
- To remove fingerprints or oil stains from the lens surface, use lens cleaning paper or a clean, soft cotton cloth with a little cleaning liquid. Beginning from the center of the lens and using a light circular motion, wipe the lens surface.
- Wipe the lens body with a silicon cloth. Do not use any organic solvents such as thinner or benzene.

Specifications

For technical specifications, please refer to the Product Specification Book, the most recent B.O.S.S.[®] update, or the Pelco Web site at www.pelco.com.

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:
 - Fixed network cameras and network dome cameras with Sarix® technology
 - Sarix thermal imaging products (TI and ESTI Series)
 - Fixed camera models (CCC1390H Series, C10DN Series, C10CH Series, and IP3701H Series)
 - EH1500 Series enclosures
 - Spectra® IV products (including Spectra IV IP)
 - Spectra HD dome products
 - Camclosure® Series (IS, ICS, IP) integrated camera systems
 - DX Series 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
 - PMCL5xxF Series and PMCL5xxNB Series LCD 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®, ExSite IP, 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.

- 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.

Revised 5-6-11

REVISION HISTORY

Manual #	Date	Comments
C749M-C	9/09	Removed obsolete models as well as reference to PMCA40 adapter.
C749M-D	10/11	Revised Table A to reflect the relative aperture change for model 13ZD6X8.

 The materials used in the manufacture of this document and its components are compliant to the requirements of Directive 2002/95/EC.

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