



## C761M-A (4/08) 13VDIR Series Day/Night Lenses

### Important Safety Instructions

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

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

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

### Description

The purpose of these lenses is to compensate for the focus shift that results from the different wavelengths of visible and IR light. IR corrected lenses focus light energy on the same plane. The result is better focus, sharper contrast, and better overall image quality.

IR corrected lenses are particularly of benefit to Pelco's day/night cameras, which "see" both visible and IR light. IR corrected lenses allow a camera's imager to take in visible and IR illumination in "night" conditions (when the IR cut filter is not deployed), while eliminating the problem of IR focus shift.

The 13VDIR Series lenses are appropriate for indoor and outdoor lighting situations. The lenses will fit all 1/3-inch CS mount cameras requiring DC drive auto iris lenses. Lenses in the 13VDIR Series come with a standard square 4-pin plug installed for ease of installation and convenience.

Lenses in this series are available in 2.8X (13VDIR3-8.8), 3.9X (13VDIR2.8-11), and 6.7X (13VDIR7.5-50) zoom with varying focal lengths.

Maximum and minimum apertures for these lenses are: 1.4-2.6 (13VDIR2.8-11), 1.0-1.6 (13VDIR3-8.5), and 1.3-1.8 (13VDIR7.5-50). This allows for excellent performance characteristics across a wide range of lighting conditions. These lenses have aspheric elements, which provide crisper, optimized images at all focal lengths.

### MODELS

13VDIR2.8-11	2.8 to 11 mm varifocal lens with direct drive auto iris, manual focus, and manual zoom
13VDIR3-8.5	3 to 8.5 mm varifocal length lens with direct drive auto iris, manual focus, and manual zoom
13VDIR7.5-50	7.5 to 50 mm varifocal length lens with direct drive auto iris, manual focus, and manual zoom

### Installation

1. Remove the dust cover from the lens. Remove any dust with a soft brush or clean compressed air.
2. Install the lens by carefully threading it clockwise on the mount of the camera until fully seated. If the lens has a coupling ring, tighten it against the camera. Use a C/CS mount adapter if attaching a C-type lens to a CS-type camera. The PMCA40 adapter is available from Pelco.
3. Plug the electrical connector directly into the camera's DC drive.
4. Follow the camera operating instructions for iris and focus adjustments.

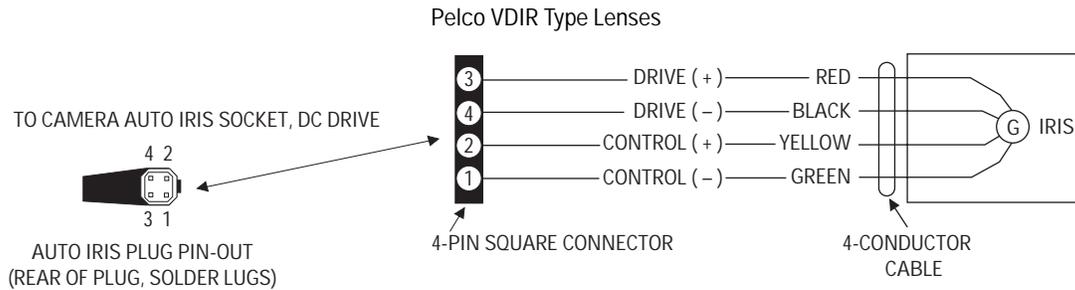
## Routine Servicing

Never touch the surface of the lens.

Remove dust from the lens using a soft brush or clean compressed air. Avoid touching the lens surface during handling.

To remove fingerprints or oil stains from the lens surface, use lens cleaning paper or a clean cotton cloth with a little cleaning liquid. Then, wipe off the stains using a light circular motion, starting from the center of the lens surface. Wipe the lens body with a silicon cloth. Do not use any organic solvents such as thinner or benzene.

## Lens and Connector Wiring Diagrams



## Specifications

	<b>13VDIR2.8-11</b>	<b>13VDIR3-8.5</b>	<b>13VDIR7.5-50</b>
Type	Varifocal Infrared	Varifocal Infrared	Varifocal Infrared
Format Size	1/3-inch	1/3-inch	1/3-inch
Mount Type	CS	CS	CS
Focal Length	2.8-11mm	3-8.5 mm	7.5-50 mm
Zoom Ratio	3.9X	2.8X	6.7X
Relative Aperture (F)	1.4-2.6	1.0-1.6	1.3-1.8
Operation			
Iris	Auto (Direct Drive)	Auto (Direct Drive)	Auto (Direct Drive)
Focus	Manual	Manual	Manual
Zoom	Manual	Manual	Manual
Angle of View			
Diagonal	32.7°~123.2°	41.9°~114.1°	7.00°~46.2°
Horizontal	26.2°~97.4°	33.6°~90.5°	5.64°~36.6°
Vertical	19.7°~72.4°	25.2°~67.2°	4.26°~27.4°
Minimum Object Distance	0.3 m	0.2 m	0.4 m
Back Focal Length	8.66~18.69 mm	7.94~13.96 mm	9.61~11.96 mm
Operating Temperature	-4° to 140°F (-20° to 60°C)	14° to 122°F (-10° to 50°C)	14° to 122°F (-10° to 50°C)
Unit Weight	0.18 lb (0.08 kg)	0.12 lb (0.05 kg)	0.15 lb (0.07 kg)
Shipping Weight	1 lb (0.45 kg)	1 lb (0.45 kg)	1 lb (0.45 kg)

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

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



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
C761M	11/06	Original version.
C761M-A	4/08	Added 13VDIR2.8-11 lens and specifications for all the lenses.

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