

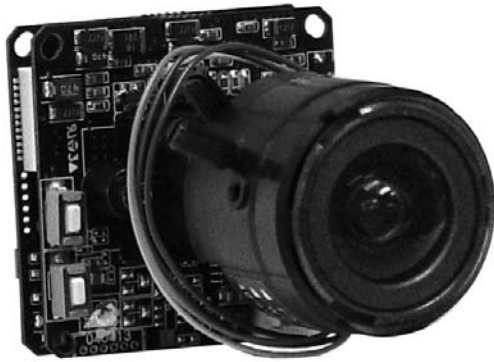
# VIDEOLOGY®

IMAGING SOLUTIONS INC.

## Operation Manual

20E407W (NTSC) / 21E407W (PAL)  
M14 Board Mount Lens

20E409W\* (NTSC) / 21E409W (PAL)  
CS Mount Lens



### BOX CONTENTS

1. Camera module
2. Connection cable
3. User manual

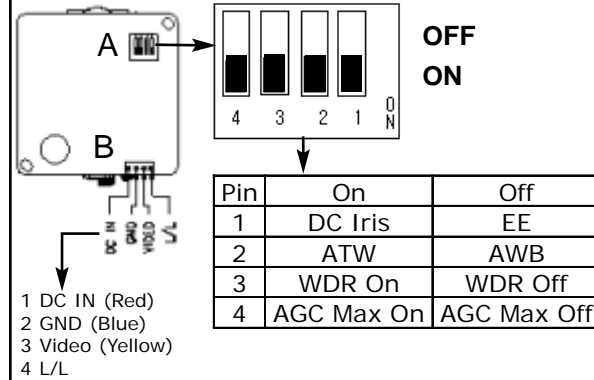
### SAFEGUARDS & WARNINGS

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

1. Installation and servicing should only be done by Qualified Service and Installation Personnel.
2. Installation shall be done in accordance with all local and national electrical and mechanical codes.
3. Use only installation methods and materials capable of supporting four (4) times the maximum specified load.

*\*Only engineering samples have classic 4-pin DC iris pinout connector for evaluation ease.*

### Camera Board Controls (Back)



### Dip Switch Selections (A)

#### 1) DC Iris/EE

Select DC Iris If a DC Iris lens is used. If a fixed lens is used (no Iris) then select EE (electronic Iris).

#### 2) ATW/AWB

Select ATW for fast white balance. If a slower white balance is desired due to temporary scene change, then select AWB.

#### 3) WDR On/WDR Off

Select WDR On for the highest dynamic range operation. This will optimize the image and make video detail visible in both light and dark areas. Use WDR Off if the scene has even lighting conditions.

#### 4) AGC Max On/AGC Max Off

Use AGC Max on for best video in dark areas. AGC Max Off can be selected if the scene is well lit.

### Power/Video Connector (B)

#### 1) DC In

Apply +12VDC (8~18VDC), minimum 500mA supply to power camera.

#### 2) GND

Power and video ground.

#### 3) Video

Video out-1Vp-p, CVBS signal, terminated at 75 ohms.

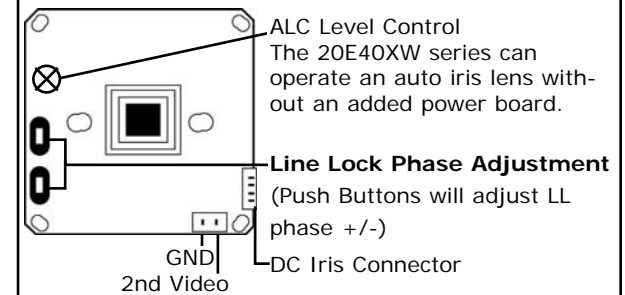
#### 4) L/L

Line-lock pulse input. Apply a +5VDC pulse at 60Hz (NTSC) or 50Hz (PAL) to line-lock the camera.

### Camera Board Controls (Front)

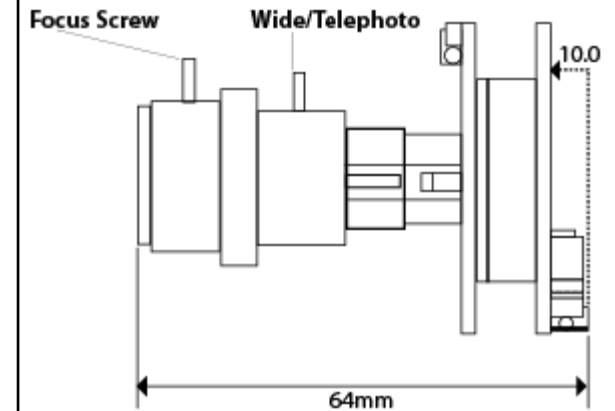
### ALC & Line Lock Function

Camera Front 20E40xW



**Note:** In dome enclosures the camera may be connected to a 24VAC/12VDC power board.

### Lenses



This model accepts a variety of fixed or varifocal lenses. The varifocal lens (shown above) has been pre-focused to a wide angle setting.

To adjust to a telephoto mode:

1. Adjust the innermost thumbscrew (Wide/Telephoto) to give the required field of view.
2. Refocus by adjusting the outermost thumbscrew (Focus Screw).

**TECHNICAL SPECIFICATIONS**

<b>Electrical</b>	<b>20E407W (NTSC)</b>	<b>21E407W (PAL)</b>
CCD Sensor	1/3" Sony double speed CCD imager	
Active Pixels (HxV)	768 x 492	768 x 585
Horizontal resolution	450 TVL	
Sensitivity	30 IRE 0.3 lux (F1.2)	
Signal to Noise Ratio	46 dB or more (AGC off)	
Gamma	0.45	
Dynamic Range	64 dB	
Synchronization	Internal, line lock	
Iris Control	DC iris + electronic shutter	
Video Output	1V p-p composite 75 Ohms	
Power Supply	12VDC (8VDC-18VDC)	
Power Consumption	<3W or less	

**Environmental**

Operating Temp	-10° C ~ 55° C (14° F ~ 131° F)
Storage Temp	-4° C ~ 70° C (-22° F ~ 158° F)
Operating Humidity	90% non-condensing
Storage Humidity	95% non-condensing

**Mechanical**

Dimensions (LxWxD)	38mm x 38mm x 30mm (without lens)
Weight	33g (without lens)
Lens options	20E407W-WB
	2.6~6mm lens DC iris, F1.4
	20E407W-VB
	4~9mm DC iris, F1.4
	20E409W
	CS mount fits most commercially available lenses

**Accessories**

60PB24V	24VAC power board
---------	-------------------

**Complementary Models**

20E407T3	True day/night
20E407TW3	WDR & True day/night