

VIDEOLOGY®

IMAGING SOLUTIONS INC.

Instruction Manual

DW5V9TVB, DW5V9TVB-1 5" Outdoor Dome With True Day/Night Gen III IR Filter Retraction

Information may change without notice.

This document provides technical information for the user. Videology reserves the right to modify the information in this document as necessary. The customer should make sure that they have the most recent manual version. Videology holds no responsibility for any errors that may appear in this document.

Videology Imaging Solutions, Inc. USA
37M Lark Industrial Parkway
Greenville, RI 02828
Tel: 401-949-5332
Fax: 401-949-5276



Videology Imaging Solutions, B.V. Europe
Neutronenlaan 4
NL-5405 NH Uden, Netherlands
Tel: +31 (0) 413-256261
Fax: +31 (0) 413-251712

Doc # INS-DW5V9TVB	Issue Date: 12/13/2007
Revision: A	Page 1 of 11

Table Of Contents

1.	Warning	3
1.1.	Regulatory Notice	3
2.	Precautions	4
3.	Features	5
4.	Installation	5
4.1.	Camera Settings Dip Switch	5
4.2.	TDN (True Day/Night Feature)	5
4.3.	Camera Functions	5
4.4.	Wall Mount Assembly	6
4.5.	Ceiling Mount Assembly	7
4.6.	Accessories	7
5.	Connections.....	8
5.1.	24VAC Power/ 1Amp Input Non-polarized.....	8
6.	Specifications.....	9
7.	Trouble Shooting.....	10
8.	Contact.....	11

1. Warning



Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of non-insulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

1.1. Regulatory Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and use in accordance with the instructions, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause interference, in which case the user will be required to correct the interference at his own expense.

WARNING - Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

CAUTION : To prevent electric shock and risk of fire hazards:
Do NOT expose this appliance to rain or moisture.
Do NOT use other than specified power source.

Doc # INS-DW5V9TVB	Issue Date: 12/13/2007
Revision: A	Page 3 of 11

2. Precautions

Do not install the camera in extreme temperature conditions.

Use the camera under conditions where temperatures are within -20°C to 55°C .
Especially be careful for ventilation under high temperature.

Do not install or use the camera in an environment where the humidity is high.

Do not install the camera under unstable lighting conditions.
It can cause the image quality to be poor.
Severe lighting change or flicker can cause the camera to work improperly.

Never use the camera close to a gas or oil leak.

Do not disassemble the camera.
It can cause malfunctions to occur.
There are no user-serviceable parts inside it.

Do not drop the camera or subject it to physical shocks.
It can cause malfunctions to occur.

Never keep the camera face in direct light.
It can damage CCD.

Do not expose the camera to rain or spill beverages on it.
If it gets wet, wipe it dry immediately. Liquids can contain minerals that corrode the electronic components.

Note

If the camera is exposed to a spotlight or an object reflecting strong light, smear or blooming may occur.

Please check the power whether it satisfies the normal specification before connecting the camera.

Doc # INS-DW5V9TVB	Issue Date: 12/13/2007
Revision: A	Page 4 of 11

3. Features

- Wall or ceiling mounting through internal 3-axis camera bracket
- IP67 rating, Aluminum Die-casting Rugged Vandal Proof Camera
- Recessed or Surface mounting using the supplied surface mount adapter box
- Safety strap holds dome cover in place while making adjustments
- Fits over a standard 2-gang box
- New DSP CHIP (Built-in Micom)
- SONY 1/3" Super HAD High-Resolution Color CCD
- High Resolution of 550 TVL
- Day & Night Capability with High Sensitivity of 0.04 Lux
- Varifocal Lens (4.0-9.0mm)
- Excellent Auto Tracking White-Balance
- Extra Video out – For Setup (Requires Test Monitor Interface Cable Sold Separately)
- Built-in Heater

4. Installation

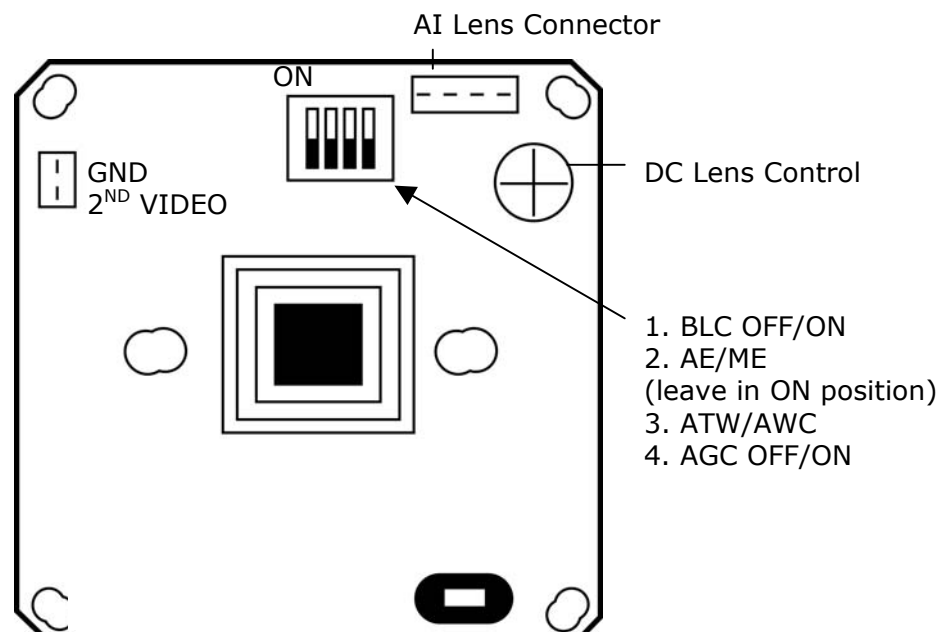
4.1. Camera Settings Dip Switch

No	Function	Off	On
1.	BLC	BLC Off	BLC On
2.	AE/ME		Leave on for Auto Iris
3.	ATW/AWC	ATW	AWC
4.	AGC	AGC Off	AGC On

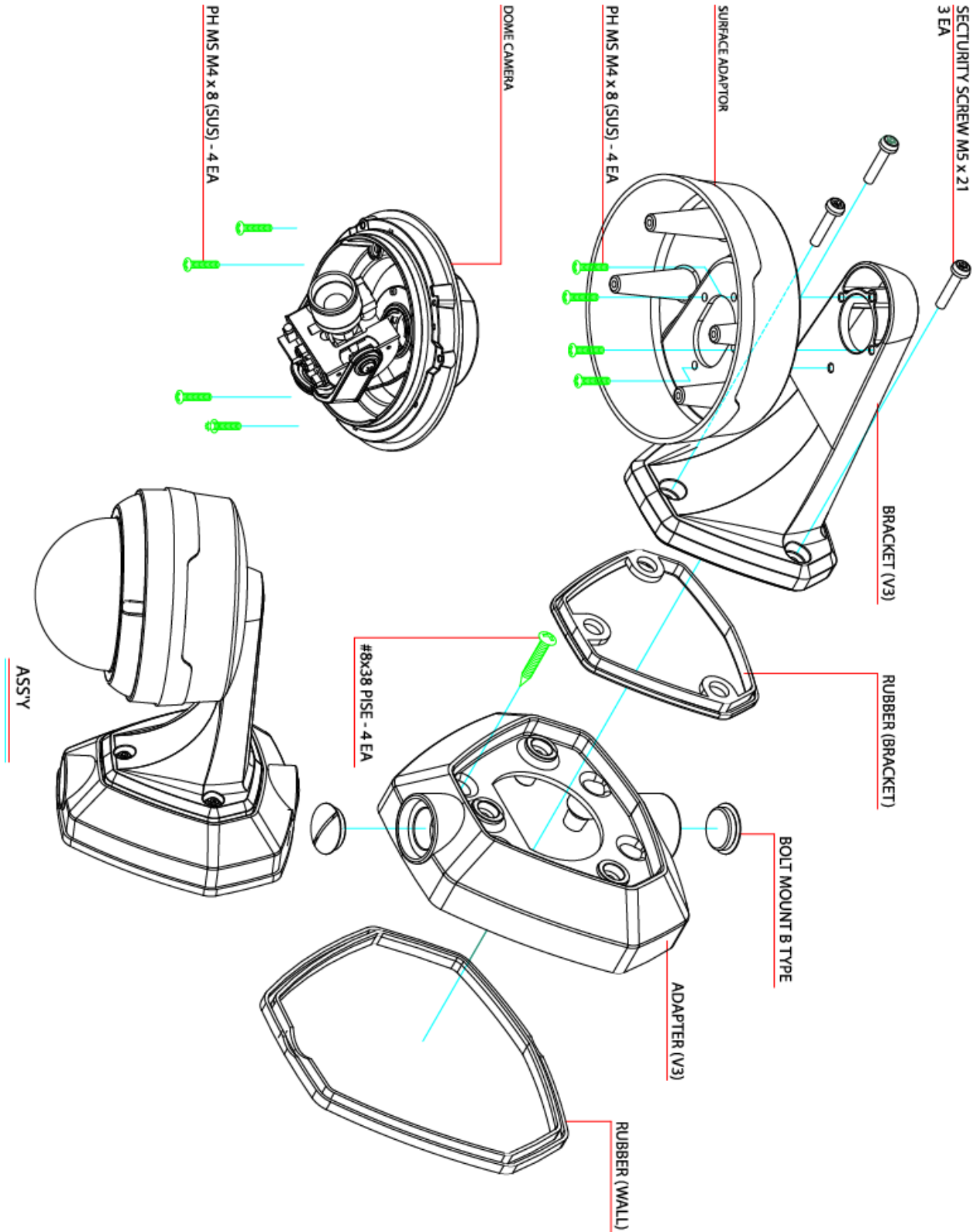
4.2. TDN (True Day/Night Feature)

The TDN feature functions automatically to reduce noise and add sensitivity at low light levels. A worm drive triggers to remove the IR cut filter. The color camera switches to a monochrome mode to optimize low light level performance.

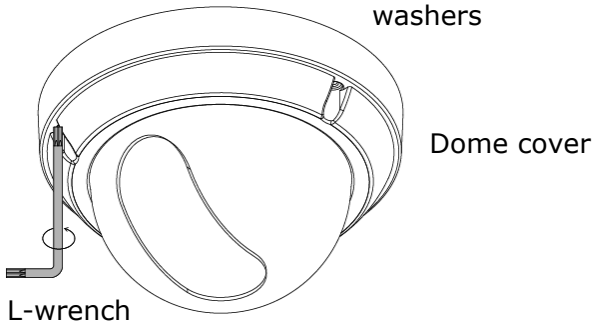
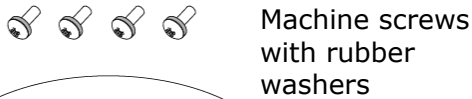
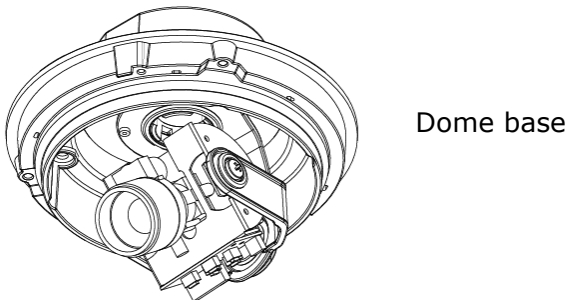
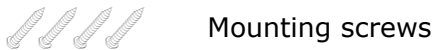
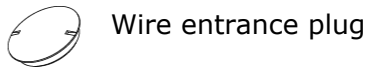
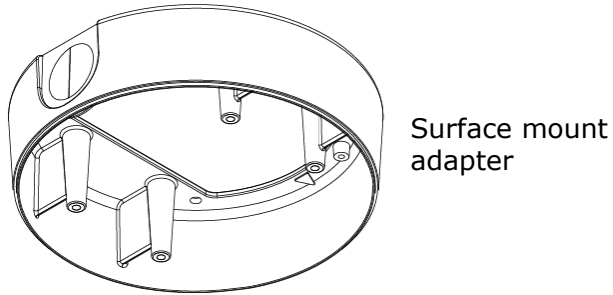
4.3. Camera Functions



4.4. Wall Mount Assembly



4.5. Ceiling Mount Assembly



L-wrench

The camera can be installed on a junction box or directly on the wall/ceiling.

1. Secure the surface mount bracket.
2. Connect the power/video wires.
3. Fasten the dome base to the surface mount bracket with the machine screws.
4. Connect the test monitor (Use test monitor interface cable - Sold Separately)
5. Adjust to the desired scene by turning and moving the hemisphere by hand. Then adjust zoom and focus as desired
6. Put the dome cover over the base and adjust to the desired direction (Leave loose to adjust viewing slot).
7. Tighten screws to lock the dome cover on the base with the L-wrench.

4.6. Accessories

Plug Tool



Mounting screws



Machine screws with rubber washers



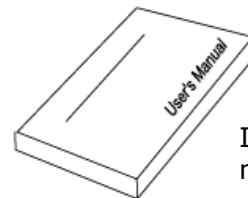
Wire entrance plug



L-wrench

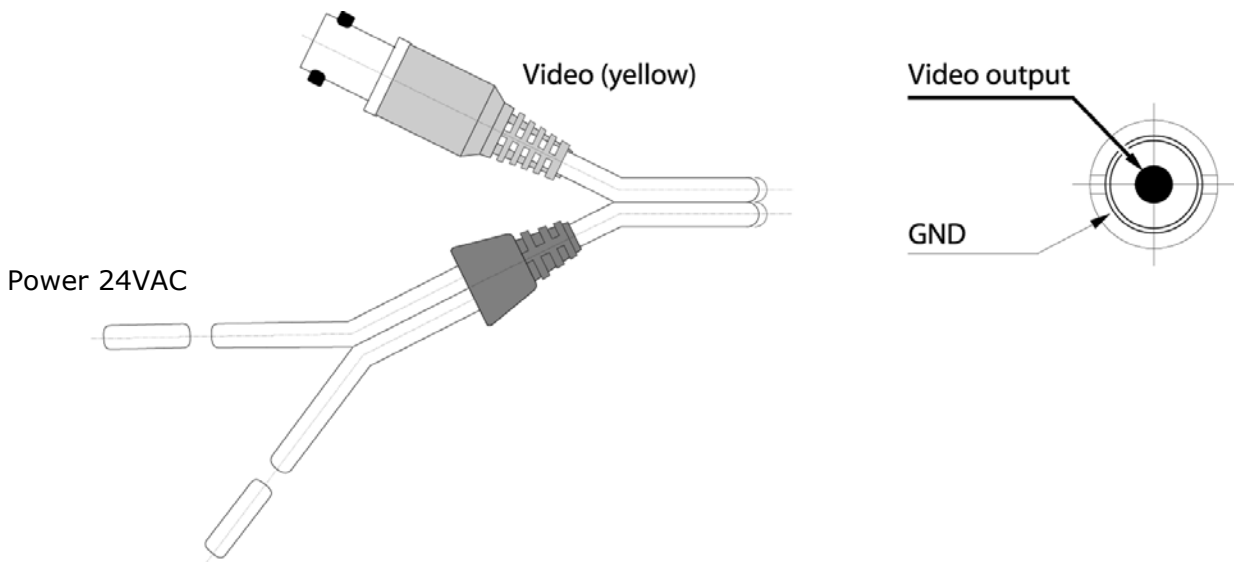


Instruction manual



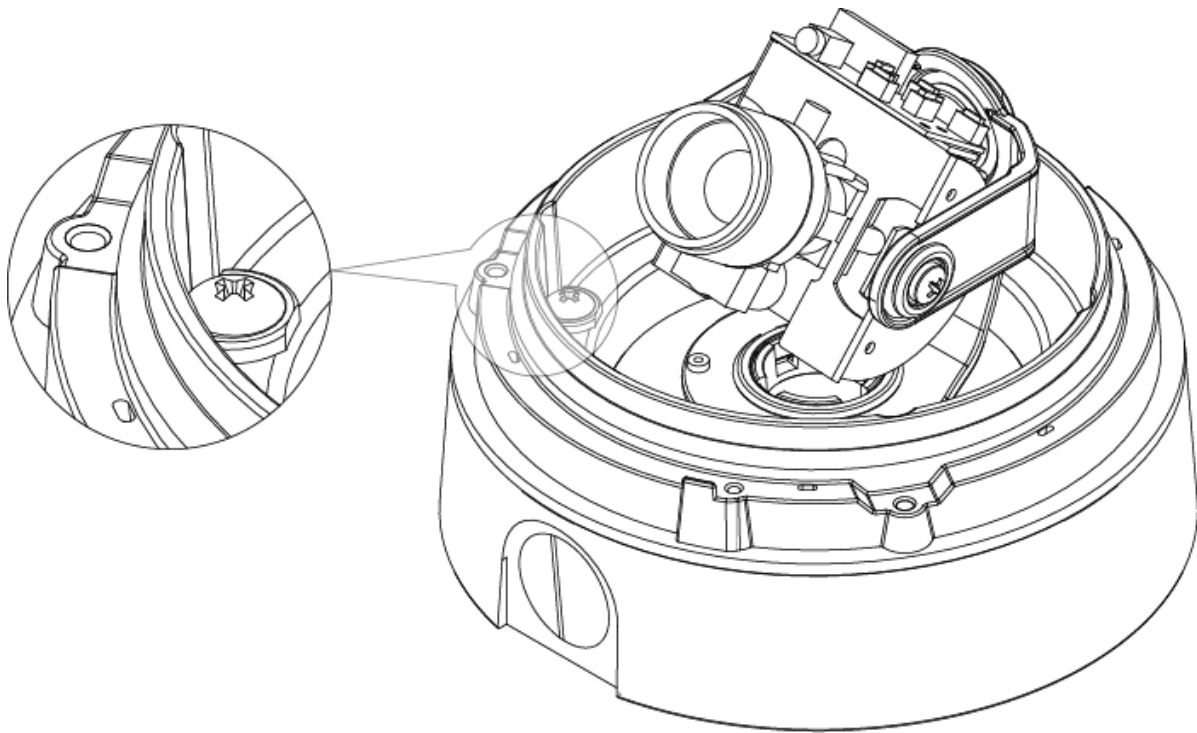
5. Connections

5.1. 24VAC Power/ 1Amp Input Non-polarized



IMPORTANT REMINDER:

For outdoor applications, use rubber washers (4 enclosed) to secure dome base to mount.



6. Specifications

Electrical	DW5V9TVB / DW5V9TVB-1	
CCD Sensor	1/3" Sony CCD imager	
Active Pixels (HxV)	768 x 492 (NTSC)	768 x 585 (PAL)
Horizontal Resolution	550 TVL	
Sensitivity	30 IRE 0.3 lux (F1.2) (Color) 30 IRE 0.01 lux (F1.2) (B&W) IR filter is removed by gen III lens mount mechanism at preset light level	
Signal To Noise Ratio	46 dB or more (AGC off)	
Gamma	0.45	
Synchronization	Internal, line lock	
Iris Control	DC iris	
Video Output	1V p-p composite 75 Ohms	
Power Supply	24VAC	
Power Consumption	1 Amp w/ heater	

Environmental

Ambient Operating Temp.	-20°C ~ 55°C (-4°F ~ 122°F)
Ambient Operating Humidity	90% non-condensing
Storage Temp.	-20° ~ 70° Celsius (-4°F ~ 158°F)
Storage Humidity	95% non-condensing

Mechanical

DW5V9TVB

Dimensions (L x H)	Ø143.64mm x 119mm (5.65" x 4.68")
Weight	1.08kg (2.24 lb)
Lens Options	4~9mm DC iris, F1.4

DW5V9TVB-1

Dimensions (L x H)	Ø142.98mm x 135.48mm (dome only) Ø5.6" x 5.33" (dome only) Ø172.88mm x 178.5mm (wall mount) Ø6.5" x 7" (wall mount)
Weight	2.26kg (5.0 lb)
Lens Options	4~9mm DC iris, F1.4

Accessories

DW5V9TVB Includes	20E407T3 32V0409P-12 60C1093 78V0140 78V0020	camera lens cable exterior dome covering surface mount
DW5V9TVB-1 Includes	20E407T3 32V0409P-12 60C1093 78V0140 78V0019	camera lens cable exterior dome covering wall arm mount

7. Trouble Shooting

If there are problems in operation, please refer to the items below.

If the problem persists, please contact the agent you purchased this product from.

Problem	Trouble Shooting
Nothing appears on the screen.	Please check the power connection. Please check the video signal line connection. Please check and make sure the auto lens switch is set to AE (on).
The video image is not clear.	Please clean the lens with a clean cloth. Please adjust the camera so it is not looking directly at a bright light. Please relocate the camera if necessary. Please readjust the back focus of the camera.
The picture is dark or poor quality.	Please adjust the contrast feature of the monitor. If you have an intermediate device, set the 75/ Hi-z properly and check the terminal setting (AE) is on. Please check auto iris lens and adjust the brightness level. Ensure last monitor or device is set to 750hm and that all looping devices are set to Hi-Z (Do not t-tap video cable).
Colors are not quite right.	Please check the connection of the lens connector cable.
Water getting into the camera.	Ensure rubber washers are on the machine screws and are properly seated. Add additional sealant if necessary.

DOME/WINDOW CARE

Handle the dome carefully to prevent scratching. If a scratch appears over the lens you can turn the dome to move the scratch out of view.

POWER SUPPLY

To avoid fire or shock hazard, must use a UL listed power supply.

MONITOR IMPEDANCE

Set the impedance switch to a 75Ω standard position on last monitor only. All looping devices must be set to Hi-Z. When the last monitor or device is set to high impedance mode, the picture can become blurred. In this case, just check the impedance switch position of all monitor and looping devices. Ensure all devices are wired in series (looping). Do not t-tap cable.

Caution!

* Please keep dome cover and camera lens clean for better picture.

To avoid smear, do not expose the camera directly to any strong light such as the sun or a spot light.

Doc # INS-DW5V9TVB	Issue Date: 12/13/2007
Revision: A	Page 10 of 11

8. Contact

To contact Videology Imaging Solutions:

North / South America:

Videology Imaging Solutions Inc.
37M Lark Industrial Parkway
Greenville, RI 02828
USA
Tel: (401) 949-5332
Fax: (401) 949-5276

Europe:

Videology Imaging Solutions Europe
Neutronenlaan 4
NL-5405 NH Uden,
Netherlands
Tel: +31 (0) 413 256 261
Fax: +31 (0) 413 251 712

Please also visit our WEB-site at:

<http://www.videologyinc.com/>

Please note that data in this application note is subject to change without notification!

VIDEOLOGY IMAGING SOLUTIONS is an ISO 9001 registered video camera developer and manufacturer serving industrial, machine vision, biometric, security, and specialty OEM markets. Videology designs, develops, manufactures, and distributes video, image acquisition, and display technologies and products to OEMs worldwide.

Doc # INS-DW5V9TVB	Issue Date: 12/13/2007
Revision: A	Page 11 of 11