



SDNVD-F63AI-OSD
SDNVD-F63AI-OSDP

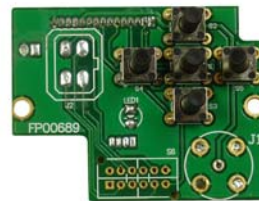
SUPER LOW LUX DNR DAY & NIGHT OSD VANDAL PROOF DOME CAMERA

1/3" Sony Super HAD CCD Sensor
630 TV Lines
Dual Voltage 12V DC / 24V AC

OPERATIONAL MANUAL



OSD Control Module



DNR dramatically reduces both random and fixed noise.
It also reduces DVR disk space usage by up to 70%.

P = PAL Version

Copyright © 2010 by OKINA USA
www.okinausa.com

FEATURES

- 1/3" Sony Super HAD CCD
- 630 TV Lines
- DNR DSP
- 2.9mm~10.0mm Auto Iris Lens / F1.4
- **0.001 Lux @ F1.2**
- **Digital Noise Reduction (DNR)**
- OSD with Day & Night
- High Quality with Multi-function High Pixel
- IP66 Rating
- 12V DC 160mA / 24V AC 80mA

The Digital Noise Reduction (DNR) technology is built into the camera to eliminate any noise associated with low light environment. Ghost and blooming effects are reduced dramatically, leaving the image clean and vivid. An added benefit is that the hard drive required capacity for DVR recording is substantially reduced by up to 70%, due to the DNR technology.

The Day & Night digital control function is embedded within the camera to enhance picture quality. Day & Night digital control technology automatically detects day or night time to keep full color in day time and turn to B/W at night. It also detects the environmental brightness automatically. Star Lighting mode will be working while the brightness is low. This ensures the picture brightness which can reach to 0.001 lux.

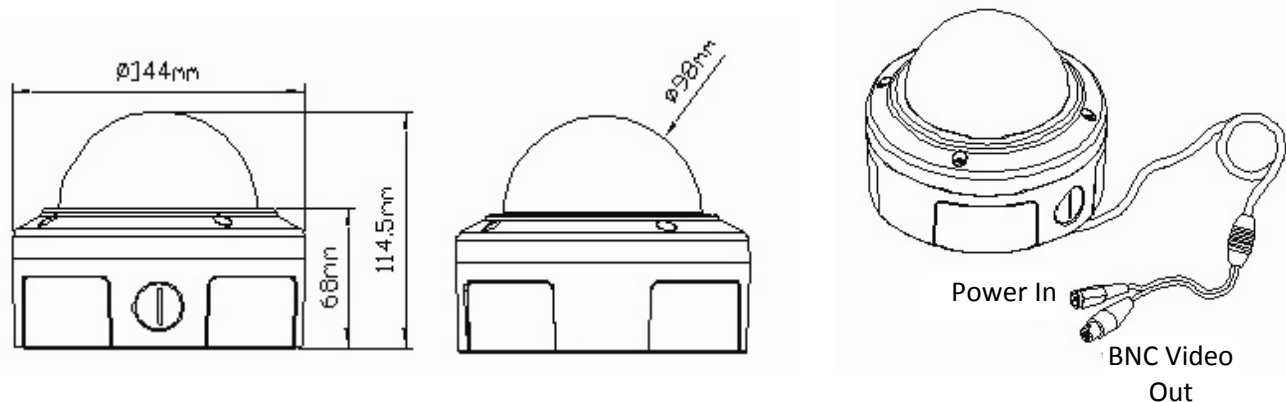
The camera can easily set up any function through the on-screen display menu. The privacy masking function enables you to select and record only chosen coverage among 4 areas. Up to 4 motion detection areas are available for setting. It is adjustable on location or size and an alarm will be alerted on screen.

PACKAGE CONTENTS

- One (1) SDNVD-F63AI-OSD/SDNVD-F63AI-OSDP Camera with power/video cable
- One (1) OSD Control Module
- Four (4) Mounting Screws
- Four (4) Wall Anchors
- Four (4) Washers
- One (1) Allen Wrench
- One (1) Mounting Sticker Template
- One (1) Operational Manual

* For any returns, please include all components listed above with original packaging in **Resalable Condition**. **Absolutely No Returns** will be accepted if any component is missing/damaged.

DIMENSIONS



1. On-Screen Display

Setup Menu	Function	Summary
Lens (Selection)	Manual: Manual Iris DC/Video: Auto Iris	Lens Type
Shutter (Condition and Speed Control)	ESC: Electronic Shutter Manual: Manual FLK: Flickerless	Manual: 1/60(50)~1/120,000sec x2 ~ x128
WHITE BAL (White Balance)	ATW: Auto White Balance AWC: Auto White Balance Control Manual: Manual	ATW: 1,800~10,500K AWC: Auto Detection on White Balance (One Push) Manual: Red/Blue Switch
BLC (Back Light Compensation)	Off, Low, Middle, High	Back Light Compensation
AGC (Auto Gain Control)	Off, Low, Middle, High	Brightness Adjustable (1~70)
DNR (Digital Noise Reduction)	Off, Low, Middle, High	DNR Off When AGC Off
SENS-UP (Low Illumination)	Off, Low, Middle, High	Sens-up Off When AGC Off
SPECIAL	Off, Auto	Other Function
EXIT	Special Functions Setup	Save & Exit

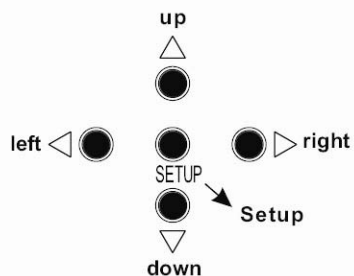
Special	Function	Summary
CAMERA ID	English Letter / Number 0~9 / -, Empty	Up to 15 letter or numbers can be used
COLOR	AUTO: AUTO ON: ON	Auto: Digital Control on D/N Mode Switch
SYNC (Synchronization)	INT: Internal	Sync is default to Internal
MOTION DETECTION	OFF / ON	ON: The motion detection function enables you to select and display motion notification
PRIVACY	OFF / ON	ON: The privacy function enables you to select and record only chosen coverage among 4 areas
MIRROR	OFF / ON	Mirror Mode Switch
SHARPNESS	OFF / ON	Adjustable 0 ~ 31
RESET	All Setting	Return to Default Value
RETURN		Save & Return to Setup Menu

Default Setting

Basic Functions Setup			
Menu Item	Menu Choice	Function	Default setting
Lens Type	DC/Video	Auto Iris	DC
	Manual	Manual Iris	
Shutter	ESC: Electronic Shutter	Shutter Speed Control	Auto (---)
	Manual: Manual Adjust	1/60(50) ~ 1/120,000sec	
	FLK: Flicker less	Indoor fluorescent Light	
White Bal	ATW: Auto Track White Bal	1,800°K ~ 10,500°K	ATW
	AWC: Auto White Bal Control	Auto Detection	
	Manual: Manual Adjust	Red and Blue Settings	
Back Light	Off, Low, Middle, High	Back Light Compensation	Off
AGC	Off, Low, Middle, High	Brightness Adjustable (1 ~ 70)	Middle
DNR	Off, Low, Middle, High	Digital Noise Reduction	Middle
Sens-Up	Off, Auto	Low Illumination Setting	Auto (x4)
Special	鈞	Additional Functions Setup	
Exit	鈞	Exit OSD	
Additional Functions Setup			
Menu Item	Menu Choice	Function	Default setting
Camera ID	Off, On	Show Camera ID on Screen	Off
Color	On	Stay in Color Mode	On
	Auto	Digital Control D/N Mode	
SYNC	INT	Internal Synchronization	INT
Motion Det	Off, On	Show Motion Area Screen	Off
Privacy	Off, On	Block up to 4 Sensitive Areas	Off
Mirror	Off, On	Mirror Image Setting	Off
Sharpness	Off, On	Adjust Image Sharpness	On (15)
Reset	Off, On	Reset to System Default	
Return	鈞	Return to Basic Setup Menu	

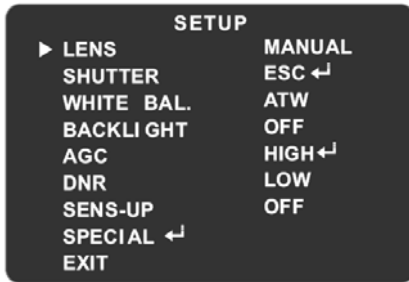
2. Setup

Below are 5 setup buttons on the rear of the camera.



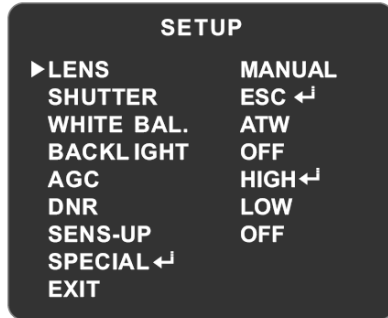
Button	Main Function
Up	Turn Up
Down	Turn Down
Right	Turn Right & Modify
Left	Turn Left & Modify
Button Setup	Enter Menu & Setup

Setup: Menu



Press SETUP to have On-Screen Display
Press UP/DOWN to select Setup
Press LEFT/RIGHT to select Setup

Setup: Lens Selection

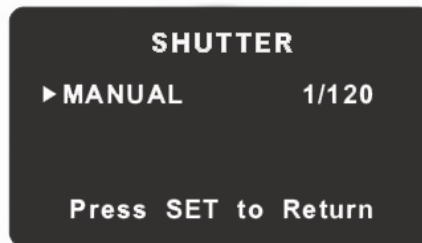
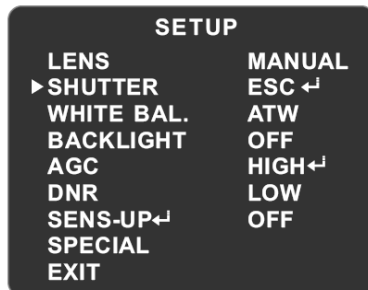


1. Position the arrow to LENS in setup menu by UP/DOWN button.
2. Press LEFT/RIGHT to select lens type
Manual: Setup when using manual iris lens
Manual Mode: Internal electronic shutter (IES) is on and brightness is controlled by IES
DC: Setup when using auto iris lens which controls the iris automatically

When selecting DC mode, the brightness of the lens is adjustable after pressing SETUP. Select LEFT/RIGHT to adjust auto iris and to modify brightness. Return to last menu by pressing SETUP while finishing modification.

Setup: Shutter

1. Position the arrow to SHUTTER in setup menu by pressing UP/DOWN button
2. Press LEFT/RIGHT to select shutter mode



ESC: Electronic Shutter Control
When selecting ESC, system will automatically adjust the shutter speed to control brightness. When selecting ESC mode, the brightness of the screen is adjustable after pressing SETUP. Select LEFT/RIGHT to adjust the brightness. Return to the last menu by pressing SETUP while finishing modification.

FLK: Flickerless

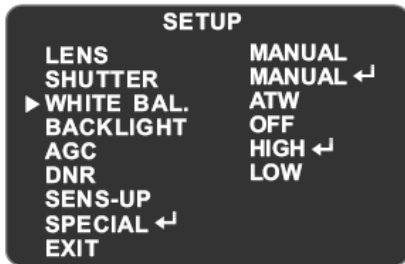
Flicker is usually caused by non-synchronizing frequency. When selecting FLK mode, the speed of electronic shutter for NTSC is 1/100s and for PAL, it is 1/120s.

Manual Control

When in MANUAL mode, press SETUP to enter into shutter menu. Set up the shutter speed by LEFT/RIGHT button. NTSC: x128~x2, 1/60~1/120,000s; PAL: x128~x2, 1/50~1/120,000s. Return to last menu by pressing SETUP while finishing modification.

NOTE: When selecting DC DRIVE, the shutter speed will be fixed at 1/60 (NTSC), 1/50 (PAL) which the shutter mode is not selectable. When the shutter is set as FLK or MANUAL, SENS-UP will not work.

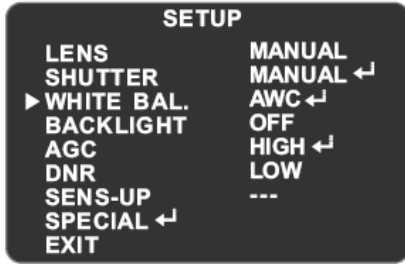
Setup: White Balance



1. Position the arrow to WHITE BAL in setup menu by UP/DOWN button.
2. Press LEFT/RIGHT to select WHITE BAL mode.

ATW: Auto Tracking White Balance

The camera will track the color temperature at a range between 1800°K~10500°K and keep white balance automatically.



AWC: Auto White Balance Control

AWC adjusts the white balance.

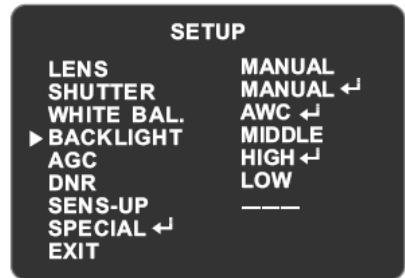
1. Select AWC
2. Place a white sheet of paper in front of the camera to obtain the optimum state under current illumination.
3. Press SETUP, the white balance is adjusted.



MANUAL

1. Select MANUAL and press SETUP to enter into menu.
2. Choose RED/BLUE by UP/DOWN and increase or decrease the red and blue values thru LEFT/RIGHT buttons.
3. Return to last menu by pressing SETUP while finishing modification.

Setup: Back Light Compensation (BLC)



The function works when there is a strong back light behind the object.

1. Position the arrow to BACKLIGHT in setup menu by pressing UP/DOWN button.
2. Select the mode you wish to operate by pressing LEFT/RIGHT button.

HIGH: The gain increases from 0dB up to 42dB

MIDDLE: The gain increases from 0dB up to 30dB

LOW: The gain increases from 0dB up to 18dB

OFF: BLC function is disabled

Setup: Auto Gain Control (AGC)



Turn on AGC when the light source is low to amplify the image signal and to enhance the brightness in low illumination.

1. Position the arrow to AGC in setup menu by pressing UP/DOWN button.
2. Select the mode you wish to operate by pressing LEFT/RIGHT button.

HIGH: The gain increases from 6dB up to 42dB

MIDDLE: The gain increases from 6dB up to 30dB

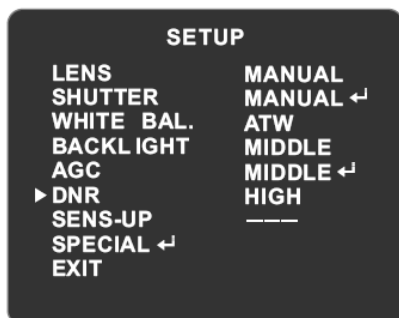
LOW: The gain increases from 6dB up to 18dB

OFF: The gain is fixed at 6dB



NOTE: When selecting HIGH/MIDDLE/LOW, press LEFT/RIGHT to adjust brightness in setup menu. Return to last menu by pressing SETUP while finishing modification. When the AGC is on, the noise will be caused by magnification on the signal of image brightness. The noise depends on the level of AGC, so there will be more noise when AGC is higher.

Setup: Digital Noise Reduction (DNR)



The DNR technology increases S/N ratio for enhancing the image in low illumination, raising DVR recording efficiency and storage capacity.

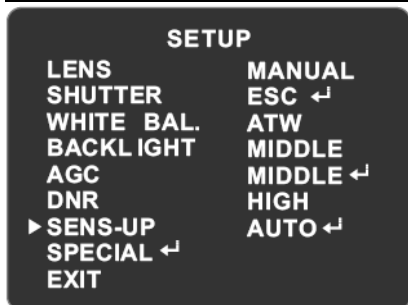
1. Position the arrow to DNR in setup menu by pressing UP/DOWN button.
2. Select the mode you wish to operate by pressing LEFT/Right button.

OFF: DNR function is disabled
 LOW: Suggested Level – The level has a basic control on noise reduction with almost no ghost image.
 MIDDLE: The level is applied when the noise is obvious. A ghost image would appear in low illumination.
 HIGH: Noise is greatly reduced while ghost images are increasing.

NOTE: DNR works with AGC. When AGC is off, DNR will be disabled.



Setup: Sens-up (Low Illumination)

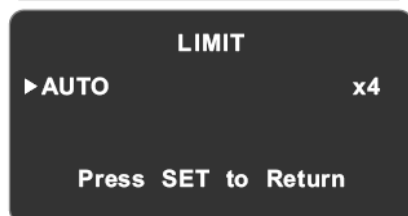


Sens-up helps maintain a bright, clear screen image by automatically detecting changes of the level of light in low illumination.

1. Position the arrow to SENS-UP in setup menu by pressing UP/DOWN button.
2. Select the mode you wish to operate by pressing LEFT/RIGHT button.

OFF: SENS-UP is disabled
 AUTO: SENS-UP will be on by auto light detection

NOTE: When selecting AUTO, press SETUP to enter into menu. Adjust the mode from x2~x128. Return to last menu by pressing SETUP while finishing modification. When AGC is off, SENS-UP will be disabled. When SHUTTER is in MANUAL, FLK mode, SENS-UP will be disabled.

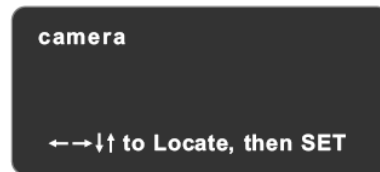


Setup: Special



1. Position the arrow to SPECIAL in setup menu by pressing UP/DOWN button.
2. Select the mode you wish to operate by pressing LEFT/RIGHT button.

A) Camera ID



1. Position the arrow to CAMERA ID in setup menu by pressing UP/DOWN button.
2. Select the mode you wish to operate by pressing LEFT/RIGHT button.

OFF: ID does not appear on monitor
ON: ID appears on monitor

Enter into CAMERA ID by pressing SETUP when in ON mode

1. Move the cursor to the letter to choose by positioning UP/DOWN/LEFT/RIGHT button.
2. Enter the letter by selecting SETUP button
3. While modifying the letters in the CAMERA ID, select [→] or [←] and press SETUP button to move the cursor to the letters that need to be corrected.
4. CLR is to clear letters.
5. Position the cursor to POS and press SETUP when the ID is completed.
6. The modified ID will be shown on the top left corner. Position the ID to the place where you would like it to be displayed by moving UP/DOWN/LEFT/RIGHT. Return to last menu by pressing SETUP while finishing modification.
7. Select END and press SETUP to complete ID.

NOTE: Up to 15 letters or numbers can be used for CAMERA ID.

B) Color



1. Position the arrow to COLOR in setup menu by pressing UP/DOWN button.
2. Select the mode you wish to operate by pressing LEFT/RIGHT button.

AUTO: The camera has a function which automatically switches to the appropriate mode for daytime or night time. The camera displays a color image in day and it converts to B/W mode at night.

ON: Default value. It is fixed to color mode and the image does not switch to B/W at night.

NOTE: When AGC is off, COLOR function will be fixed to ON which cannot be modified.

C) Sync



The camera is fixed to INT in SYNC mode that cannot be modified by the user.

D) Motion Detection



When there is a moving object, the camera will detect it and an on-screen alert will pop up. The user can set up the detected coverage area by selecting the 4 areas individually on the monitor.

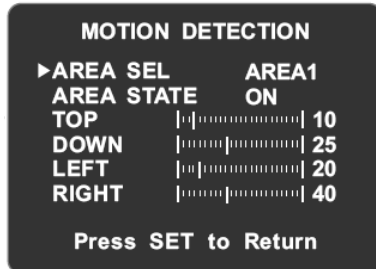
1. Position the arrow to MOTION DET in setup menu by pressing UP/DOWN button.

2. Select the mode you wish to operate by pressing LEFT/RIGHT button

OFF: Motion Detection is off

ON: Motion Detection is on

When selecting ON, enter into MOTION DETECTION by pressing Setup



1. Position the arrow to AREA SEL by pressing UP/DOWN button. The chosen area including AREA1 ~ AREA4 can be set up by LEFT/RIGHT button.

2. Position the arrow to AREA STATE by pressing UP/DOWN button. The detection of the chosen area can be turned on/off by LEFT/RIGHT button.

3. Position the arrow to TOP/DOWN/LEFT/RIGHT by UP/DOWN button. The detected place and coverage of the chosen area can be set up by pressing LEFT/RIGHT button.

4. Return to last menu by pressing SETUP while finishing modification.

NOTE: Motion detection only shows alert on the monitor without additional alarm output.

E) Privacy



This mode conceals the areas you do not wish to show on the screen.

1. Position the arrow to PRIVACY in setup menu by pressing UP/DOWN button.

2. Select the mode you wish to operate by pressing LEFT/RIGHT button.

OFF: This will cancel the Privacy

ON: This will activate the Privacy

When selecting ON, enter into PRIVACY by pressing Setup.



1. Position the arrow to AREA SEL by pressing UP/DOWN button. The chosen area including AREA1 ~ AREA4 can be set up by LEFT/RIGHT button.

2. Position the arrow to AREA STATE by pressing UP/DOWN button. The privacy area can be canceled/activated by pressing LEFT/RIGHT button.

3. Position the arrow to TOP/DOWN/LEFT/RIGHT by pressing UP/DOWN button. The privacy place and coverage can be set up by LEFT/RIGHT button.

4. Return to last menu by pressing SETUP while finishing modification.

F) Mirror



The MIRROR function inverts the image.

1. Position the arrow to MIRROR in setup menu by pressing UP/DOWN button.
2. Select the mode you wish to operate by pressing LEFT/RIGHT button.
OFF: To turn off Mirror
ON: To turn on Mirror

G) Sharpness



This is to enhance the quality of the image.

2. Position the arrow to SHARPNESS in setup menu by pressing UP/DOWN button.
3. Select the mode you wish to operate by pressing LEFT/RIGHT button.
OFF: To turn off SHARPNESS
ON: To turn on SHARPNESS

When selecting ON, enter into SHARPNESS by pressing setup. Adjust sharpness level by pressing LEFT/RIGHT button. Return to last menu by pressing SETUP while finishing modification.

H) Reset



Return to Default Value.

1. Position the arrow to RESET by pressing UP/DOWN button.
2. Press setup and all settings will return to default value.

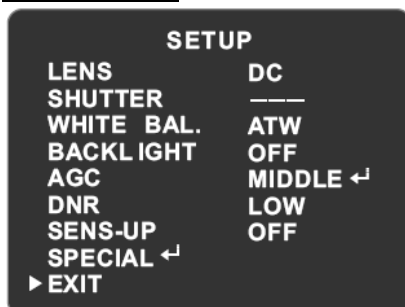
I) Return



Return to Main Menu.

1. Position the arrow to RETURN by pressing UP/DOWN button.
2. Press setup to return to main menu.

Setup: Exit



Exit from OSD menu.

1. Position the arrow to EXIT by pressing UP/DOWN button.
2. Press setup to exit from OSD menu.

SPECIFICATIONS

Model	SDNVD-F63AI-OSD	SDNVD-F63AI-OSDP
Signal Format	NTSC	PAL
Image Sensor	1/3" Sony Super HAD CCD	
DSP	DNR DSP	
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Picture Elements	Approximately 380K	Approximately 440K
Resolution	630 TV Lines	
Synchronization	Internal	
Scanning System	2:1 Interlace	
Minimum Illumination	0.001 Lux @ F1.2	
S/N Ratio	Max. 66dB	
OSD	Built-in	
Electronic Shutter Speed	Auto: 1/60~1/120,000sec	Auto: 1/50~1/120,000sec
Auto White Balance	1800°K~10500°K	
Back Light Compensation	Off	
Auto Gain Control	On	
Digital Noise Reduction	On	
Sens-up	Auto	
Sharpness	On	
Auto Iris	DC Drive	
Output	1 Vp-p Composite Video Output, 75 Ohms	
Lens	2.9mm~10.0mm Auto Iris Lens / F1.4	
Power	12V DC / 24V AC	
Power Consumption	160mA / 80mA	
IP Rating	IP66	
Operating Temperature	23°F ~ 104°F / -5°C ~ 40°C	
Humidity	Less than 70%	
Dimensions	5.67"(W) x 4.51"(H) / 144mm(W) x 114.5mm(H)	
Weight	2.13 lbs / 966g	

* Specifications are subject to change without notice



CAUTIONS

1. Never point the camera toward the sun

Do not expose the lens directly to the sun or to strong light as this may damage the pick-up device.

2. Handle this camera with care

Avoid any shock or bumping of the camera. Improper handling could damage the camera.

3. Requires a proper operating environment

This camera is designed for outdoor or indoor use. The allowable temperature range for operation of this camera is between 23°F ~ 104°F / -5°C ~ 40°C.

4. Clean the front face to the pick-up device

It is recommended that the pick-up device surface be cleaned before lens installation or whenever the lens is changed. Cleaning should be done by using a chamois, a very fine soft cloth, lens tissue, or cotton tipped applicator and ethanol to carefully remove any fingerprint or dust.

5. Check the power source voltage

The power source voltage should be within the specified range. (Camera must meet the specifications). Camera must be connected to a surge protector at all times.

6. Objects and liquid entry

Never push objects of any kind into this camera as this may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill any kind of liquid on the video product.

7. Servicing

Do not attempt to service this video product by yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all service to qualified servicing personnel.

8. Damage requiring service

Unplug this video product from the wall outlet and refer service to qualified servicing personnel under the following conditions:

- a. When the power supply cord or plug is damaged.
- b. If liquid has been spilled, or objects have fallen into the video product.
- c. If the video product has been dropped or the cabinet has been damaged.
- d. When the video product exhibits a distinct change in performance.



WARRANTY

OKINA USA products are covered under warranty for one year from the date of purchase. The warranty will automatically be voided if any of the following occurs:

1. Camera sticker is removed

If the camera sticker is removed, we will not be able to confirm any information regarding when and where the product was purchased. We have no other way to verify the purchase record without the serial number on the camera sticker; therefore, it should not be removed.

2. Camera is modified in any way

If the camera is scratched, damaged, or modified in a manner not described in this manual, the warranty will be voided immediately. It is the customer's responsibility to keep the camera in good condition.

3. Video or power cable is cut

The video cable and the power cable should not be tampered with. Cutting or modifying of the cables will result in termination of the warranty.