

TECHNICAL SPECIFICATION

MODEL NUMBER : WW310 (DOME/BOX)

Caution for Installation

1. Avoid places where there is direct sunlight. When using the camera outside.
2. Be careful, never let any water in this equipment.
3. Do not directly touch the CCD element. If necessary, use a soft cloth moistened with alcohol to wipe off the dust.
4. When the camera installs in dust or wet environment, please puts into the camera housing.
5. Be extra careful not to shake the camera.
6. Avoid places where temperatures exceed 50 °C or more.
7. Be extra careful not to mistake plug in connect.
8. Recommend using auto iris lenses under the environments of the type of 50/60Hz fluorescent lights for better image results.

SPECIFICATION

TV SYSTEM	NTSC		PAL
IMAGE SENSOR	1/3-inch I.L. CCD Image Sensor		
CCD TOTAL PIXELS	~410K		~470K
SYNC SYSTEM	Internal		
MINIMUM ILLUMINATION	0.01 lux F1.2 β 0 IRE AGC(24dB)Color 0.0014Lux F1.2 / 40 IRE SENS-UP (32X)		
LENS & VIEW ANGLE	*TABLE-1		
RESOLUTION	540 TVL		
WHITE BALANCE	Mode	ATW / AWC	
	Range	3200 ~ 10000 μ K	
S/N RATIO TYPICAL	50dB (MIN) / 58dB (TYP) (Gamma, Aperture, AGC, OFF)		
FRAME INTEGRATION	Select by OSD (Max.64X)		
H - MIRROR FUNCTION	Select by OSD or SW		
V - MIRROR FUNCTION	Select by OSD or SW		
B.L.C. FUNCTION	Select by OSD or SW(ON/OFF)		
ZOOM FUNCTION	Select by OSD		
FLICKLESS	Select by OSD		
ENHANCE	Select by OSD		
GAMMA CORRECTION	0.45		
GAIN CONTROL	AGC Auto / Manu Select by OSD (Auto 24dB MAX)		
AUTO IRIS	A.E.S. / DC-IRIS		
DNR	Built-in 3D_DNR (Digital Noise Reduction)		
ELECTRONIC SHUTTER	A.E.S.	1/60(50) ~ 1/120,000 sec.	
	FIX.	1/100, 1/120, 1/180, 1/350, 1/500, 1/750, 1/1000, 1/2000, 1/4000, 1/10000 sec	
VIDEO OUTPUT	1.0V p-p composite video at 75 ohm		
OPERATION TEMPERATURE	-20°C TO 50°C		
OPERATIONAL HUMIDITY	within 85% RH		
POWER SUPPLY	DC12V & AC24V / 5W		

*The specifications and appearance of the product may changed without notice.

TABLE -1

DOME /IR DOME/BOX						ORDER INFORMATION
Mode Name	Sensor/Resolution	Voltage	Remote Pelco	Lens (*1)	Housing (*2)	
83WW310-DBL	1/3" 540TVL	DC12V	N/A	3.6mm(*1)	Plastic STD	DOME
83WW310-DVF	1/3" 540TVL	DC12V	N/A	2.8~12mm(*1)	Plastic STD	
83 WW310-ABL	1/3" 540TVL	Dual Power	Optional	3.6mm(*1)	Plastic STD	
83 WW310-AVF	1/3" 540TVL	Dual Power	Optional	2.8~12mm	Plastic STD	
83WW310-DBL-IR	1/3" 540TVL	DC12V	N/A	3.6mm (*1)	Plastic STD	IR DOME
83WW310-ABL-IR	1/3" 540TVL	Dual Power	Optional	3.6mm(*1)	Plastic STD	
63 WW310-D	1/3" 540TVL	DC12V	N/A	C/CS-DC-Lens	Alloy STD	BOX
63 WW310-A	1/3" 540TVL	Dual Power	Optional	C/CS-DC-Lens	Alloy STD	
53 WW310	1/3" 540TVL	DC12V	UART	Fixed or DC-Lens	PCB: 38mm*38mm	MODULE
Material Numbers		Descriptions				ACCESSORIES
6-100-0033-02		4-pin Cable (300mm) for OSD Control				
5-012-5201		Cable of y-type for Video with Power				

(*1) Board Lens Type : 3.6 mm is standard type

Available options: 2.2, 2.5, 3.0, 4.0, 6.0, 8.0, 12.0, 16.0 mm

Varifocal Lens Type: 2.8mm-12mm is standard type

(*2) Housing Type:

Note: When you want to place orders

If your interested WW310 series models with the details are listed in **TABLE-1** as above, please notify the **Model Name**.

If your interested models with the details are not listed in **TABLE-1**, please notify your requirements (**Model Name, Lens and Housing**) to salespersons.

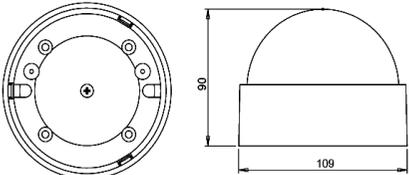
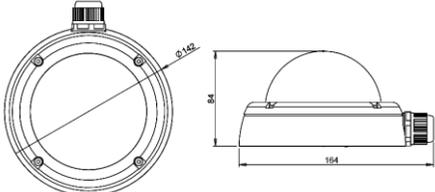
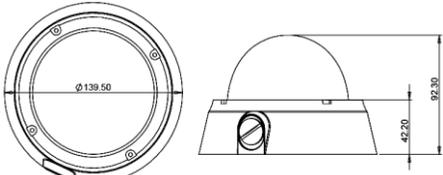
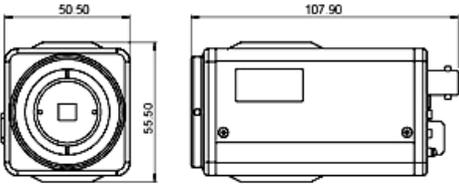
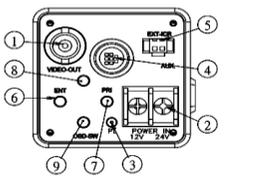
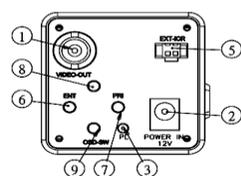
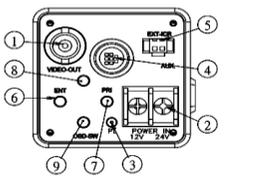
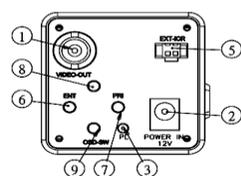
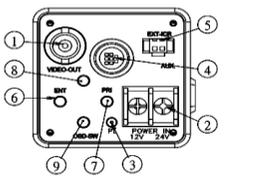
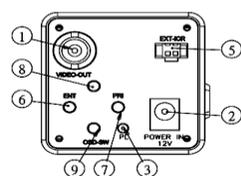
Name	PICTURES	DIMENSIONS																										
STD DOME	Plastic Dome 																											
TD2 DOME	Amore Dome 																											
WD4 DOME	3 Axis Dome Vandal Proof 																											
STD BOX	Alloy Box  <table border="1" data-bbox="185 1038 460 1417"> <tr> <td>1</td> <td>VIDEO OUTPUT</td> </tr> <tr> <td>2</td> <td>POWER INPUT</td> </tr> <tr> <td>3</td> <td>POWER ON INDEX LED</td> </tr> <tr> <td>4</td> <td>AUX for Make an appointment Pelco or Connector Port</td> </tr> <tr> <td>5</td> <td>EXT. DAY/NIGHT CONTRAL INPUT</td> </tr> <tr> <td>6</td> <td>OSD-SW "ENTER"</td> </tr> <tr> <td>7</td> <td>OSD-SW "PRIDIAN"</td> </tr> <tr> <td>8</td> <td>OSD-SW "UP"</td> </tr> <tr> <td>9</td> <td>OSD-SW "DOWN"</td> </tr> </table>	1	VIDEO OUTPUT	2	POWER INPUT	3	POWER ON INDEX LED	4	AUX for Make an appointment Pelco or Connector Port	5	EXT. DAY/NIGHT CONTRAL INPUT	6	OSD-SW "ENTER"	7	OSD-SW "PRIDIAN"	8	OSD-SW "UP"	9	OSD-SW "DOWN"	 <table border="1" data-bbox="510 1038 1031 1230"> <tr> <td colspan="2">  </td> <td colspan="2">  </td> </tr> <tr> <td colspan="2" style="text-align: center;">Rear Side for Dual Power</td> <td colspan="2" style="text-align: center;">Rear Side for Single Power</td> </tr> </table> <div data-bbox="600 1302 925 1406" style="text-align: center;"> <p>1. DUMP- AUTO IRIS 3. DRIVE</p>  <p>2. DUMP+ 4. GND</p> </div> <p style="text-align: center;">IRIS CONNECTOR</p>					Rear Side for Dual Power		Rear Side for Single Power	
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TABLE-2: VIEW ANGLES OF LENS

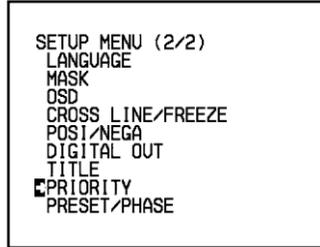
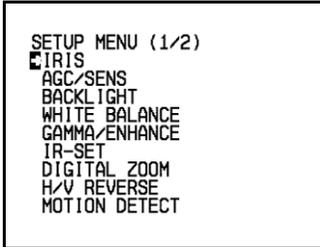
1/3" CCD	LENS(mm)	2.2	2.5	3	3.6	4	4.3	6	8	12	16
	H-View	120°	104°	80°	68°	60°	58°	43°	34°	22°	17°
	D-View	150°	130°	120°	92°	80°	78°	56°	45°	25°	20°

OSD MENUAL

There are connected to 4 direction switch [UP],[DOWN],[ENT],[PRI],push the [ENT] switch up to 1~2 second, a pretty menu will be pop-up on your screen.

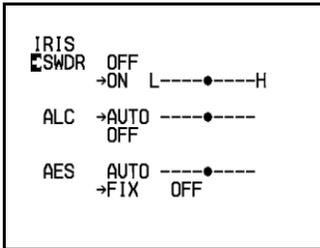
You may now push [UP] or [DOWN] switch to browse around menu.

1. SETUP MENU



You may now push "UP" or "DOWN" bottom to browse around two page menu.

2. IRIS



This is used to control the iris & shutter speed of the lens. It included 3 items "SWDR", "ALC", "AES".

「SWDR」： SWDR mode ON/OFF select, at ON mode can be adjust SWDR level.

「ALC」： ALC is used to select AUTO or FIX. Adjust IRIS level

「AES」： AES is used to select electronic shutter be AUTO or FIX function, at AUTO mode can be adjust AES level, at FIX mode can be selector shutter speed at below,

[OFF] · [1/100sec] · [1/120sec] · [1/180sec] · [1/350sec] · [1/500sec] · [1/750sec] · [1/1000sec] · [1/2000sec] · [1/4000sec] · [1/10000sec].

After setting, push [ENT] memory set state, After push [PRI] key to go back to the main menu page.

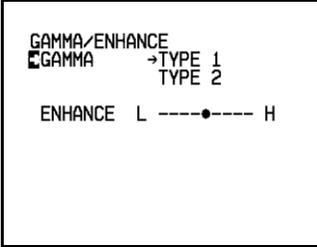
「WB」 : White balance control,ATW is Auto trace white balance,can be adjust offset level.

Move arrow from ATW to AWB it will lock the current color temperature at the same time,
can be adjust offset level.

「GAIN」 : The gain rate of R-Y & B-Y can be adjusted separately.

After setting, push [ENT] memory set state, After push [PRJ] key to go back to the main menu page.

6. GAMMA/ENHANCE



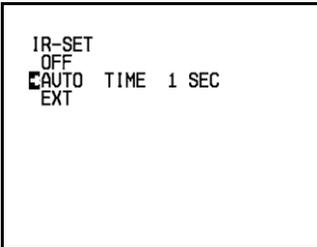
This is used to select the camera gamma correction.

「GAMMA」 : Select TYPE-1 gamma is 0.45, TYPE-2 gamma is 1.0

「ENHANCE」 : Adjust enhance level.

After setting, push [ENT] memory set state, After push [PRJ] key to go back to the main menu page.

7. IR-SET



This is used to select the IR-CUT Filter operation mode.

「OFF」 : Select this mode ICR control is no operation

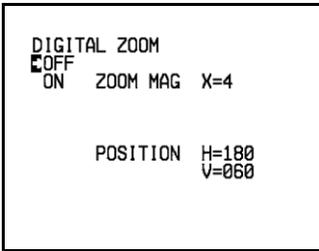
「AUTO」 : Select this mode ICR control is by AGC-LEVEL decide output.

Can be select switch delay time at the 1, 5, 10, 20, 30, 40, 50, 60sec.

「EXT」 : Select this mode ICR control is by external signal decide output.

After setting, push [ENT] memory set state, After push [PRJ] key to go back to the main menu page.

8. DIGITAL ZOOM

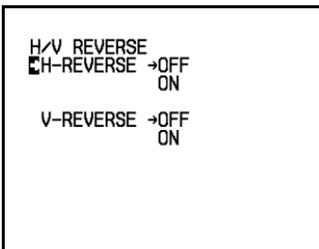


This is used to select the DIGITAL ZOOM & DIGITAL PAN / TITEL operation mode.

「OFF」: Select this mode digital zoom is off.

「ON」: Select this mode digital zoom is two times. At the this mode can be move "ZOOM POSITION" use [UP] & [DOWN] key. After setting, push [ENT] memory set state, After push [PR] key to go back to the main menu page.

9. HV REVERSE



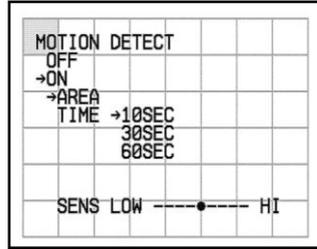
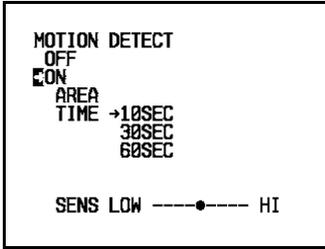
This is used to select image 「Horizontal Reverse」 and 「Vertical Reverse」 function.

「H-REVERSE」: Horizontal Reverse (Mirror) ON/OFF

「V-REVERSE」: Vertical Reverse (Up-side down) ON/OFF

After setting, push [ENT] memory set state, After push [PR] key to go back to the main menu page.

10. MOTION DETECT



This is used to select the motion detect function.

「OFF」: Motion detect function is OFF.

「ON」: Motion detect function is ON.

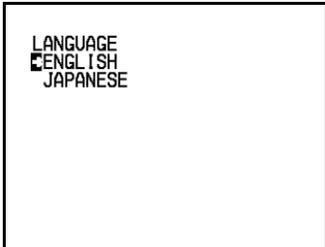
「AREA」: At the this mode can be select motion detect area, use [UP] & [DOWN] key move gray block to detect position push[ENT] set the position repeat the operation still all detect position is mask by gray block, push [PR] leave this setting.

「TIME」: Select motion detects output time.

「SENS」: Motion detect sensitive adjust.

After setting, push [ENT] memory set state, After push [PR] key to go back to the main menu page.

11. LANGUAGE



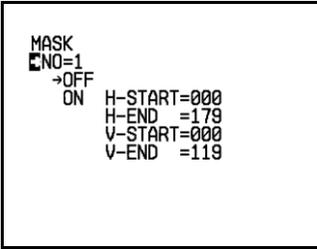
This is used to select the OSD manu language.

「ENGLISH」: English mode

「JAPANESE」: Japanese mode

Push [PR] key to go back to the main menu page.

12. MASK



This is used to select mask area size and position and mask area display ON or OFF.

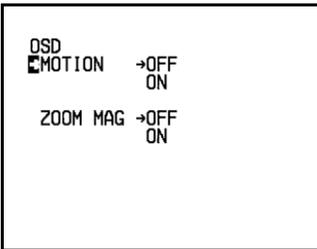
「NO」: Select 1~4 mask area number.

「OFF」: Mask area display is off.

「ON」: Mask area display is on, can be use [UP] & [DOWN] key set mask area size and position .

After setting, push [ENT] memory set state, After push [PR] key to go back to the main menu page.

13. OSD



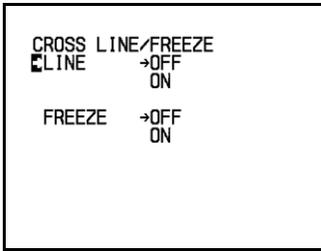
This is used to select on screen display ON / OFF select.

「MOTION」: Motion action display ON / OFF select.

「ZOOM MAG」: Zoom times display ON / OFF select.

After setting, push [ENT] memory set state, After push [PR] key to go back to the main menu page.

14. CROSS LINE/FREEZE



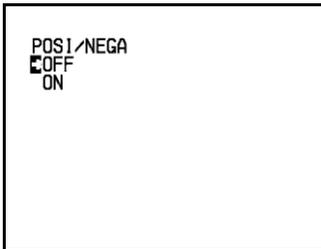
This is used to select display a cross line on screen ON or OFF.

「LINE」: Cross line display ON/OFF select.

「FREEZE」: Image freeze ON/OFF select.

After setting, push [ENT] memory set state, After push [PRI] key to go back to the main menu page.

15. POSI/NEGA



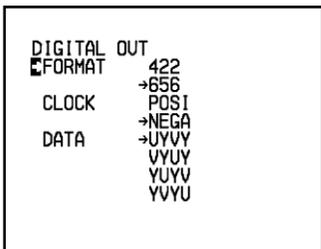
This is used to select image positive and negative.

「OFF」: Image Display is normal image.

「ON」: Image Display is negative image.

After setting, push [ENT] memory set state, After push [PRI] key to go back to the main menu page.

16. ITALOUT



This is used to select digital output format.

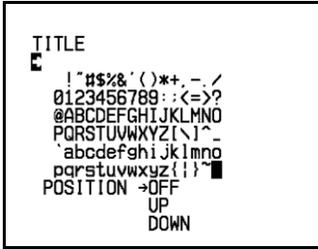
「FORMAT」: Select digital output format is [YUV4.2.2] or [ITU656].

「CLOCK」: Select digital output clock active is positive or negative.

「DATA」: Select digital output data sequency is [UYVU] or [YUYU] or [YVYU].

After setting, push [ENT] memory set state, After push [PRI] key to go back to the main menu page.

17. TITLE



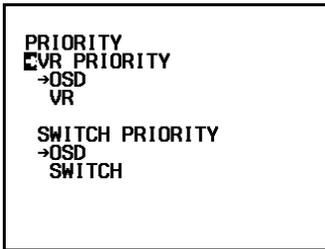
This is used to set up the ID figures & position on the screen. (Title setting)

「→」: Horizontal start position selector, use [UP] & [DOWN] key move cursor to select position, push [ENT] set the position after use [UP] & [DOWN] move cursor to select character, push [ENT] set the character to select position.

「POSITION」: Select character display is OFF or display position UP or DOWN selector.

After setting, push [ENT] memory set state, After push [PRI] key to go back to the main menu page.

18. PRIORITY



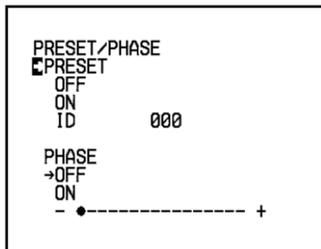
This is used to select control priority is OSD manu or hardware VR & SWITCH.

「VR PRIORITY」: Select iris lever control priority is osd manual or hardware VR.

「SWITCH PRIORITY」: Select function control priority is osd manual or hardware SWITCH.

After setting, push [ENT] memory set state, After push [PRI] key to go back to the main menu page.

19. PRESET / PHASE



This is used to select PRESET on/off and lin lock on/off & phase adjustment.

「PRESET」: Select preset ON/OFF mode.

「ID」: RS-485 connection ID number select.

「PHASE」: Select line lock ON/OFF mode, at ON mode can be adjust line lock phase.

After setting, push [ENT] memory set state, After push [PRI] key to go back to the main menu page.