

# IR WEATHER-PROOF WDR CAMERA

## PICO212WIR40

### MANUAL



#### FEATURE

1. Mechanical filter exchange(True Day & Night), built-in WDR function.
2. Supreme Resolution(700 TV-Line)
3. This camera is incredibly flexible to install with its 3-axis camera construction, which makes the camera ceiling, wall or slope mountable.
4. This product is weather-proof to resist rain, snow and other weather factors(IP66).
5. 120ft range visible in total darkness with 40pcs of IR LEDs.(Indoor)
6. Adopted DNR technology, It reduces noise efficiently in low light condition.
7. Support 12 different privacy zone
8. Provide Max. 4x digital zoom

#### CAUTION

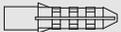
1. Please study the instruction manual before your applications and keep it for your future reference.
2. Do not flash LED light directly on the eyes when LEDs are on.
3. Do not install the camera on a unstable surface, It will cause falling or other hazards.
4. Do not use improper power, it could cause fire or electric shock. (Use the AC adaptor 12V DC regulated, 1A)
5. Do not disassemble or re-model the camera, it could cause fire, electric shock or other hazards.
6. Stop using the camera when you find a malfunction like smoke or unusual heat, it could cause fire or electric shock.
7. Due to the possibility of water leakage, do not cut or peel off the cable. In case you cut or peel off the cable, the warranty will be void.

8. Please use the camera unit within given temperature and electricity limit.
9. Please make sure that installation should be done by qualified service person only.
10. Do not disassemble the unit by yourself. When there is problem with the unit please contact after-sale service center or the shop where you bought.



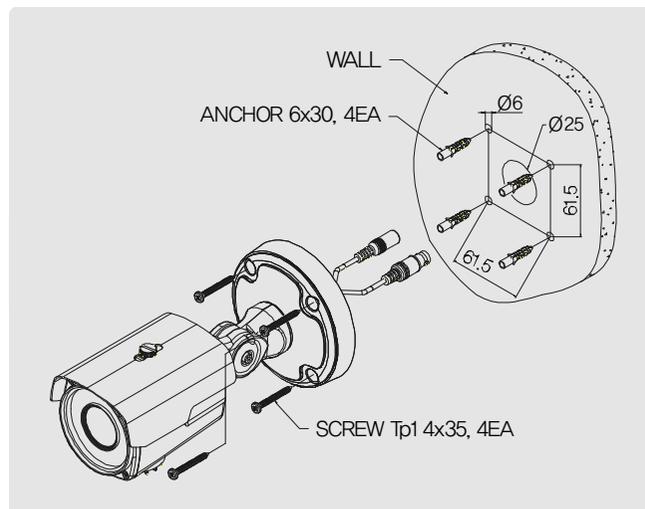
If the product is to be put out of operation definitively, take it to a local recycling plant for a disposal which is not harmful to the environment.

#### ACCESSORIES

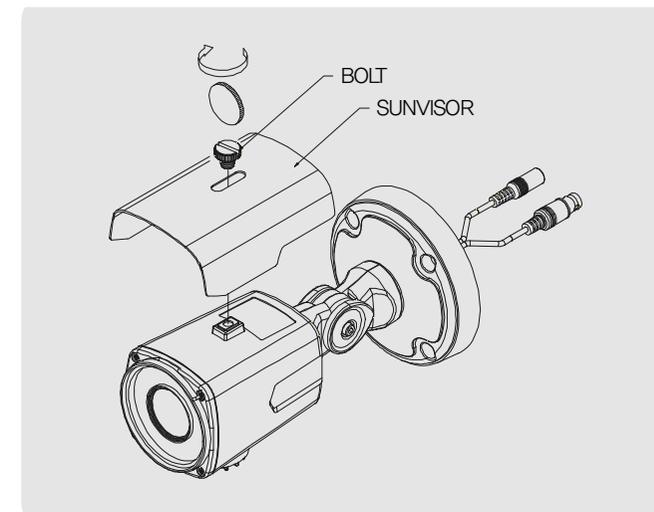
	→ ANCHOR 6x30, 4EA
	→ SCREW 4x35 TP1 PAN SJS, 4EA
	→ WRENCH 3mm L TYPE, 1EA
	→ SUNVISOR BOLT, 1EA
	→ Extra video output cable for installation, 1EA(option)

#### HOW TO INSTALL

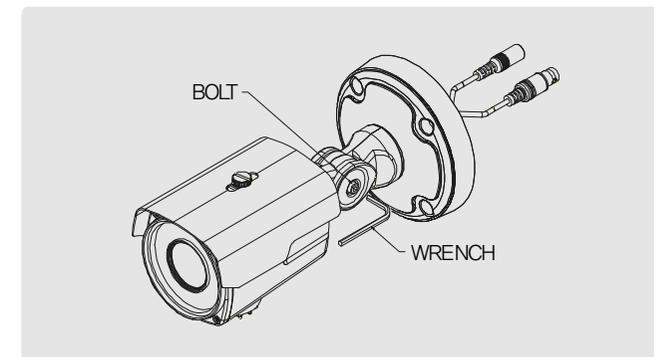
1. Make a hole of Ø25mm in diameter for passing cable.
2. Drill four holes on the wall or ceiling and insert the anchors.
3. Arrange the cables and fix the screws.



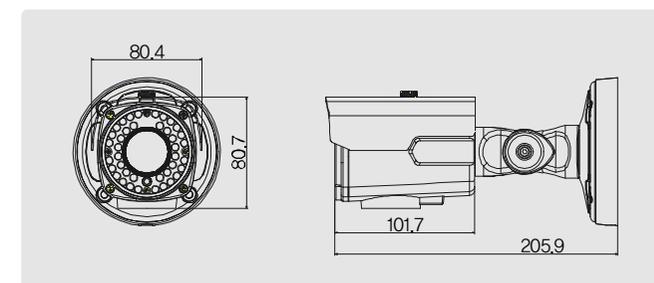
4. Attach the sunvisor and fix the sunvisor fixing bolt.



5. Loosen the bolt by using the 3mm wrench included.
6. Face the direction of the camera to monitor.
7. Tighten the bolt to complete adjustment.



#### DIMENSION

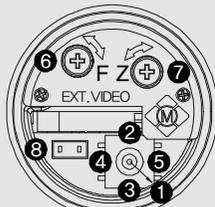


## SPECIFICATION

Model No.	PICO212WIR40
Image Sensor	1/3" Sony Super HAD CCD II
Effective Pixel	976(H) x 540(V) Pixel
Resolution	700 TV- Line
TV Type	NTSC
Sync. Type	Internal / External
Scanning System	Progressive scan
Video Output	1,0 Vp-p(Sync, Negative) Termination 75Ω ±10%
Gamma Characteristic	$\gamma = 0.45$ (Selectable)
White Balance	ATW / AWC / MANUAL(2,000 ~ 11,000K)
Min. Illumination	0.005Lux(Sense up X64), 0Lux(LEDs ON, Max. 120ft)
S/N Ratio	More 50 dB(AGC OFF)
SDNR	ON
Backlight	WDR / BLC / OFF
Day & Night	True D&N(AUTO / COLOR / BW)
LED Output	IR LED 40pcs
Gain Control	AUTO / MANUAL
Sense Up	Max. X64(X2, X4, X8, X16, X32, X64)
Test Illumination	Average test illuminance by front view
Power Supply	Regulated 12V DC or 24V AC
Current Consumption	Max. 600mA(at 12V DC, 24V AC) : LED ON
Reverse Polarity Protection	Yes
Lens	Vari focal auto iris lens
Operation Temp.	14°F ~ 122°F
Preservation Temp.	-4°F ~ 140°F
Dimension	80.4(W) x 80.7(H) x 101.7(D)mm
Weight	Approx. 1.98 lbs

## FUNCTION SETTING

### 1. How to use the jog lever



\*OSD menu & Focus/Zoom adjustment direction  
 1. Unfasten the screw of the bottom door  
 2. Adjust the jog lever & Focus/Zoom trimmers  
 3. Tighten the screw of the bottom door

- ① **ENTER** :  
 · Push the lever : Used to access the menu and confirm selection.  
 · Push the lever for one second : Used to return to previous menu from the motion detection setting section or privacy mask setting section.
- ② **UP**, ③ **DOWN** : Used to move the cursor to up or down.
- ④ **LEFT**, ⑤ **RIGHT** : Used to move the cursor to left or right and change the value.
- ⑥ **FOCUS**, ⑦ **ZOOM** : Use a '+' type driver for adjusting zoom and focus. (In case of operation Focus/Zoom, don't put stress excessively.)

⑧ **EXT. VIDEO** : Extra video output terminal for installation, Plug your test monitor in here. The cable is option.

### 2. OSD menu structure

OSD Menu	Select Menu	Sub Menu	Summary	
LENS SELECT	DC		Lens type selection (Fixed iris lens or Vari-focal auto iris lens)	
	MANUAL			
EXPOSURE...	PRESETS		*Preset mode for common application to speed up installation	
		CUSTOM	User setting value	
		INDOOR	For indoor	
		WINDOW	Maximizing WDR function	
	WDR	OUTDOOR	For outdoor	
		LOW		Although the subject had a bright light behind of it, you can see the subject clearly as well as background
		NORMAL		
		MEDIUM		
	HIGH			
	BLC	OFF		Determines that use BLC(Back Light Compensation) function or not
		ON		
	AGC	CUSTOM --		AGC level selectable (Custom -- Limit : 60)
LOW(24)				
MEDIUM(30)				
HIGH(36)				
SENSE-UP			Determines that use the SENSE-UP function or not and SENSE-UP level selectable	
	OFF		No use sense-up mode	
	AUTO --		Use sense-up mode automatically in low illumination(Limit : 2X ~ 64X)	
	MANUAL --		Sense-up level selectable between x2 ~ x64	
FLICKERLESS	OFF		Optimized mode for flicker(If user choose CRR2 mode, AWC mode is not available on the White Balance menu)	
	CRR			
	CRR2			
WHITE BALANCE	ATW		Balances the color automatically depending on the source of light from 2,000°K ~ 11,000°K	
	AWC		Move the camera lens toward to white paper then press the enter button to find the optimal white balance for current environment(User can not use this mode when Flickerless is CRR2)	
	MANUAL	R/B --	Adjust the Red or Blue values to shift the color of the object	
		KELVIN --	Adjust color temperature	
DAY&NIGHT	AUTO	INPUT DELAY (Sec)	The camera automatically detects lighting condition and selects the mode accordingly	
	COLOR		The picture is always displayed in Color	
	B/W		The picture is always displayed in Black and white	
IMAGE ADJUST...	GAMMA	25 ~ 45 ~ 100	Change the GAMMA of the screen (Default : 45)	
	SHARPNESS	MIN ~ MAX	Change the sharpness of the screen (Default : Max)	
	COLOR GAIN	-8 ~ 0 ~ 8	Change the color gain of the screen (Default : 0)	
	FLIP	OFF		Normal image(No image inversion)
		HORIZ		Set a horizontal image inversion
		VERT		Set a vertical image inversion
		BOTH		Set horizontal and vertical image inversion
	ZOOM	OFF		Normal image(No Zoom)
		ON		Max 4x digital zoom available
				PAN, TILT : Zoomed in image can be moved to horizontal and vertical

MOTION	OFF		No use motion detection function
	ON	AREA SELECT	Select motion detection area up to 4 area
		AREA 1 ~ 4	- Adjust position & size of motion detection area - Press the enter button to move into the motion area setting section, whenever you press the enter button, the mask color is changed. - When the mask color is white you can set the position of mask by up, down, left and right button. - When the mask color is green and red you can adjust the size by 4 buttons. - Press the enter button for a few second to escape.
PRIVACY	OFF		No use privacy mask function
	ON	MASK 1 ~ 12	- Allow you to mask certain areas of the screen, support 12 privacy zone - Press the set button to move into the privacy mask setting section, whenever you press the set button, the mask color is changed. - When the mask color is white(or black or red) you can set the position of mask by up, down, left and right button. - When the mask color is blue, you can adjust the size by 4 buttons. - Press the enter button for a few second to escape.
		MASK COLOR	Select mask color(White, Black, Red)
FUNCTION SETUP..	RS-485 SETUP*	CAMERA #	N/A
	CAMERA ID SETUP	ID DISPLAY	Display the camera ID on the screen
		CAMERA ID	Change the camera ID
		ID POSITION	Select the position to display the ID on the screen
SYNC	INT		Internal Sync with 12V DC power
	L.L.L		External Sync with 24V AC power (Dual power only)
		V-PHASE	

- The '↓' or '←' icon appeared with desired function, press the set button to move sub menu.
- The '---' icon appeared with function that is unavailable according to function setting.