

# VANDAL-PROOF & WATERPROOF IR D&N DOME CAMERA DOME51R25VH-H2ID DOME51R25VH-H2WID MANUAL



## FEATURES

1. IP67(Waterproof)
2. Durable MATERIAL : Body – Aluminum, Dome – Polycarbonate
3. This camera is incredibly flexible to install with its 3-axis camera construction, which makes the camera ceiling, wall or slope mountable.
4. 25M range visible in total darkness with 24pcs of IR LEDs.
5. Adopted DNR technology, It reduces noise efficiently in low light condition.
6. Advanced High Resolution(580 TV-Line)
7. Day & Night function(ICR)
8. Support 8 different privacy zone
9. Provide Max. 10x digital zoom
10. WDR(Wide dynamic range) : SK-V2511R(D)/M945A1 only
11. DIS(Digital Image stabilizer) relieves any picture tremble due to external factor such as wind.
12. Multi-language full OSD support

## PRECAUTION

1. You can install the camera indoors or outdoors.
2. Choose an ideal location for the camera, since a camera unit must be protected against vibration.
3. Be careful not to scratch the camera unit, especially lens or dome cover.
4. Use the camera within the temperature(-25°C ~ +50°C).  
[W/HEATER(option)]
5. Avoid any direct sun light toward the lens.
6. Use the AC adaptor 12V DC, 1A regulated.  
Dual voltage product can use 24V AC, 1A adaptor.(option)

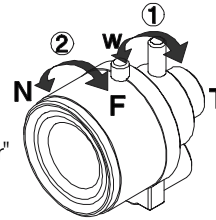


If the product is to be put out of operation definitively, take it to a local recycling plant for a disposal which is not harmful to the environment.

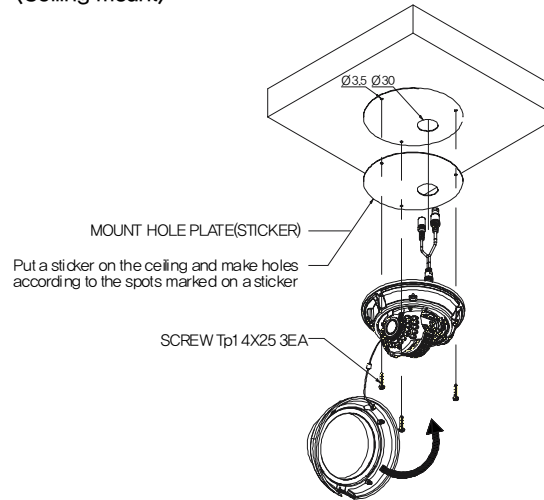
## HOW TO INSTALL

### 1. Camera installation

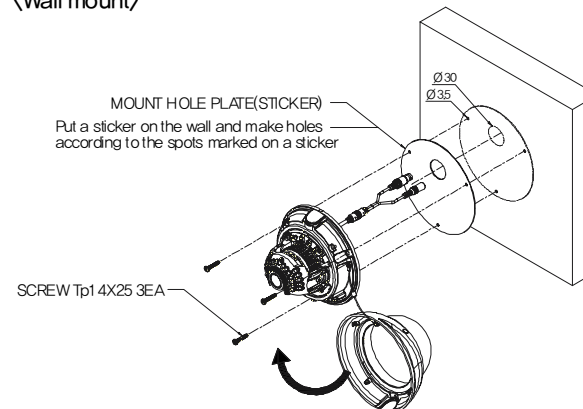
- (1) Fix the camera set with the supplied screws on ceiling or wall mount.  
If you don't use supplied screws, the camera may fall off.
- (2) Please refer to '3. Camera angle adjustment' regarding adjust camera angle.
- (3) Lens adjustment(Vari-focal Lens only)  
After opening the LED cover,  
① By turning the "Tele-Wide" knob, you can access a range of focal lengths within specified limits.  
② Since then, by turning the "Near-Far" knob, you can set the focus toward the wanted object.
- (4) Re-assemble the camera.



### <Ceiling mount>

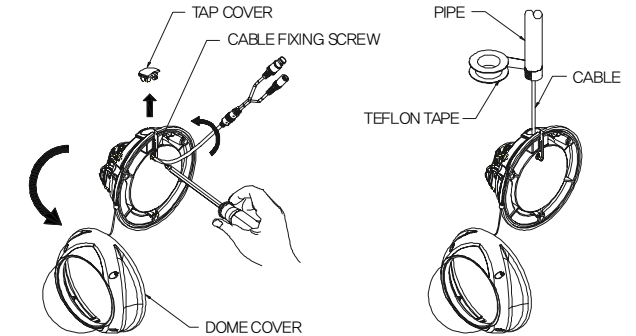


### <Wall mount>



### 2. Pipe application

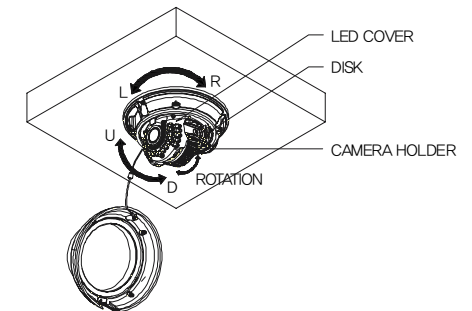
- (1) Remove the screw for fixing a cable on the bottom of the base.
  - (2) Open the DOME COVER.
  - (3) Remove the TAP COVER and place the cables there.
  - (4) After distributing cables, use the TEFLON tape to wipe the pipe.
  - (5) Combine the pipe to the base.
- <Caution> If you don't wipe TEFLON tape on pipe, it might cause troubles on water-resistant.



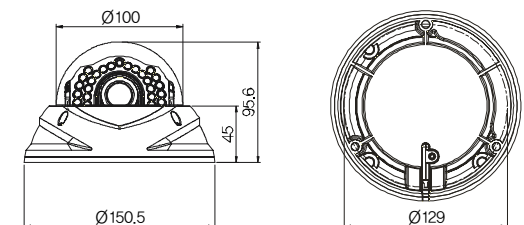
### 3. Camera angle adjustment :

- (1) Pan adjustment : Grasp the disk of camera and then adjust direction to the right or left(-160° ~ 190°)
- (2) Tilt adjustment : Grasp the LED cover of camera and then adjust direction to the up or down(6° ~ 90°)
- (3) Roll adjustment : Grasp the camera holder and then rotate (-178° ~ 178°)

<Caution> If you try to adjust the camera out of limited angle, it might cause troubles and damage to camera.



## DIMENSION



## ● SPECIFICATION

Model No.	DOME51R25VH-H2ID	DOME51R25VH-H2WID
Image Sensor	1/3" SONY SUPER HAD CCD II	1/3" SONY DS CCD
Effective Pixel	768(H) X 494(V) PIXEL(NTSC), 752(H) X 582(V) PIXEL(PAL)	
Cell Size	6.35μm(H) X 7.4μm(V) (NTSC), 6.5μm(H) X 6.25μm(V) (PAL)	
Scanning System	2 : 1 Interlace	
Sync. Type	Internal / Line lock(Optional)	
OSD	Multi-language	
Backlight	BLC / HLC / OFF	BLC / HLC / WDR / OFF
Resolution	Color : 580 TV-Line, B/W : 700 TV-Line	
S/N Ratio	52 dB(AGC OFF, Weight ON)	
Min. Illumination	LED ON : 0 Lux(25 Range) LED OFF : 0.001 Lux(Color Sense-up), 0.0004 Lux(B/W Sense-up)	
White Balance	ATW / AWC / MANUAL / OUTDOOR(1800°K ~ 10,500°K)/ INDOOR(4,500°K ~ 8,500°K)	
Shutter	1/60(1/50) ~ 1/120,000sec	
Sense Up	AUTO / FIXED / OFF(x2 ~ x256 selectable)	
Gain Control	LOW / HIGH / OFF	
DNR	OFF / ON(1 ~ 32 Level adjustable)	
Motion Detection	ON / OFF(8 Zone, Alarm output)	
Privacy	ON / OFF(8 Zone)	
Mirror	H / V / BOTH / OFF	
Freeze Image	ON / OFF	
Sharpness	ON / OFF(Level adjustable)	
D&N	COLOR / Black&White / AUTO / EXT(Optional)	
DIS	ON / OFF	
Digital Zoom	ON(x10) / OFF	
DPC	256 point(Even 128 point, ODD 128 point)	
Communication (Option)	RS-485(PELCO-D Protocol)	
Power Supply	12V DC ±10%(24V AC : Option)	
Current Consumption	150mA(LED OFF), 500mA(LED ON)	
Operation Temp.	-10 ~ 50°C / 30% to 80% RH	
Preservation Temp.	-20 ~ 60°C / 20% to 90% RH	
Dimension	∅150.5X 95.6(H)mm	
Weight	Approx. 800g	

※ All specification is subject to change without notice to improve the quality.

## ● FUNCTION SETTING

· OSD menu structure

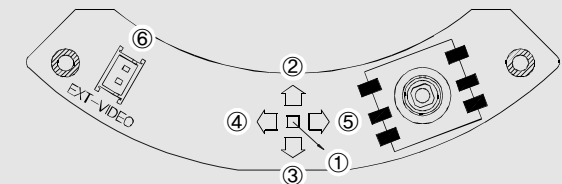
Function setting menu	Select menu	Sub menu	Contents
1. LENS	DC	BRIGHTNESS	Adjust the brightness of the screen(Range : 1~70, Default value : 25)
	MANUAL		Manual mode is not recommended using built-in the DC Lens
2. EXPOSURE	SHUTTER	--, FLK, AUTO, MANUAL	Auto, Manual setting is not selectable when selected DC Lens
	AGC	OFF, LOW↵, HIGH↵	OFF : Deactivates function LOW : Auto selection between 5.3dB and 32dB HIGH : Auto selection between 5.3dB and 37dB (You can not use the DIS, Day&Night when AGC is off)
	SENS-UP	OFF, AUTO↵	OFF : Deactivates function AUTO : Using sense up when it is low luminance (x2~x256 selectable)
	RETURN		Save the value then move back to previous menu
*Notes : If the AGC is off, the sense-up function is not available As the sense-up level increases, an after-image will appear			
3. WHITE BAL.	ATW		Color temperature 1800 ~ 10500°K
	INDOOR		Color temperature 4500 ~ 8500°K
	OUTDOOR		Color temperature 1800 ~ 10500°K
	AWC -- SET		Find the optimal white balance for current luminance environment(The camera focus must towards to white paper)
MANUAL		Adjust the Red or Blue values to shift the color of the object	
4. BACKLIGHT	OFF		Deactivates function
	BLC	TOP, BOTTOM, LEFT, RIGHT, LEVEL	User programmable BLC zone and compensation level
	HLC	MASK COLOR	Removed HIGH LIGHT, It enable us to watch license plate clearly
	WDR	MAX. VALUE, LEVEL	Select WDR to adjust WDR sensitivity and brightness
*Note that the function of WDR supported on SK-V251R(D)/M945A1 only			
5. DNR	ON	LEVEL	Reduce noise in low illumination(Reduction level is selectable)
	OFF		Deactivates function
*Notes : If the AGC is off, the DNR function is not available			
6. DAY/NIGHT	AUTO	DWELL TIME	Day : Color -- Night : B/W(Switching time adjustable)
	COLOR		Fixed at color(LED OFF)
	B/W		Fixed at B/W(LED ON)
*Notes : If the AGC is off, this function is unavailable			
7. IMAGE ADJ	FREEZE	OFF, ON	You can get a still image
	V-REV	OFF, ON	Set a vertical image inversion
	H-REV	OFF, ON	Set a horizontal image inversion
	D-ZOOM	OFF, ON↵	Max 10x digital zoom available(Default value is 0)
	SHARPNESS	OFF, ON↵	The image outline will be strong and clear according to sharpness level increasing(Default is 12) If this function is Off, it may looks like unfocused
	RETURN		Save the value then move back to previous menu
8. SPECIAL			Please refer to "Special setup"
9. EXIT			Save the value and exit menu

- The '↵' 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.

Special setting menu	Select menu	Sub menu	Contents
1. CAM TITLE	OFF		No title displays on the screen
	ON	CAMERA TITLE SETUP	Display the camera's title on the screen(Max. 15character, position adjustable)
2. SYNC	INT		Internal Sync with 12V DC power
	LL		Setting the phase is selectable when used 24V AC(Dual power only)

3. MOTION DET : OFF/ON	SENSITIVITY	AREA 1 ~ AREA 8	When sensitivity number is high, also motion detection sensitivity will increase (Area 1 ~ Area 8)
	AREA MODE	OFF, ON	Determines whether to use the MD area selected in SENSITIVITY
	SEL POS	L_TOP/R_TOP/ L_BOTTOM/R_BOTTOM	Determines which of the 4 vertices of each MD area is to be used
	YPOS		Determines the coordinate of the vertical axis for SEL POS
	XPOS		Determines the coordinate of the horizontal axis for SEL POS
FILL → SET			Fill the color in selected area(The color of filling is sequentially selected as brown, orange, blue, cyan, yellowish green, yellow, magenta and red)
RETURN			Save the value then move back to previous menu
*Notes : If the camera detected motion, "MOTION DETECTED" will appear on the screen			
4. PRIVACY : OFF/ON	AREA SEL	AREA 1 ~ AREA 8	Select privacy zone up to 8 area
	AREA MODE	ON↵, OFF	Determines use the area or not, and setting the size and position of the area
	MASK COLOR		Fill the color in selected area(Gray, Green, Blue, Black, White)
	TRANSP	0 ~ 3	Setting transparency of selected area (0 : opacity ~ 3 : transparency)
	RETURN		
5. DIS	ON		This function can be mitigates image movement from external factors(This function uses digital zoom)
	OFF		Deactivates function
6. COMM ADJ (option)	CAM ID		Setting the camera ID(0 ~ 255, Default!)
	BAUD RATE		Selects baud rate(2400 ~ 57600bps, Default : 2400)
	UART MODE		Parity bits selectable(NONE, EVEN, ODD)
	RET PKT	OFF, ON	Determines whether to send a command back to the controller device when a communication control command is sent to the camera
	DISP ID	OFF, ON	Display the camera ID on the screen
*Notes : PELCO-D protocol only			
7. LANGUAGE			Select language
8. RESET			To reset your camera to factory default condition(Notice : COM ADJ and Language is not changed)
9. RETURN			Save the value then move back to previous menu

· How to use the jog lever



① ENTER

- Push the lever : Used to access the menu and confirm selection.
- Push the lever for one second : Open the menu or close the menu.

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 EXT-VIDEO : Extra video output terminal for installation. Plug your test monitor in hear. The cable is option.