

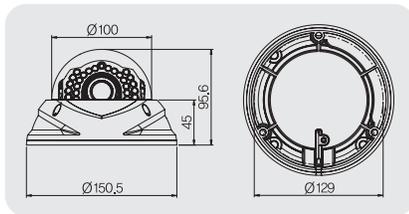
◆NOTES

1. You can install the camera indoors or outdoors.
2. Be careful not to scratch the lens or dome cover.
3. Use 1Amp power supply at 12V DC or 24V AC.

◆FEATURES

1. IP67 (Waterproof)
2. Construction
Body : Aluminum, Dome : Polycarbonate
3. (Optional) Wall, Ceiling and pole mounts available
4. 25M range visible in total darkness with 24pcs of IR LEDs (depends upon scene reflection)
5. Side control board for easy function adjustment
6. Dual power (12V DC or 24V AC) operation

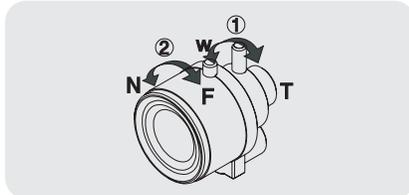
◆DIMENSION



◆HOW TO INSTALL

1. Camera installation

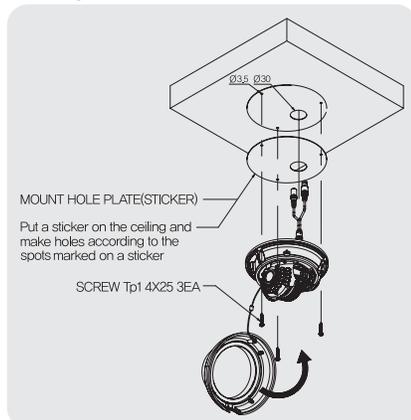
- (1) Fix the camera with the supplied screws on ceiling or wall mount.
- (2) Please refer to '3. Camera angle adjustment' regarding adjust camera angle.
- (3) Lens adjustment



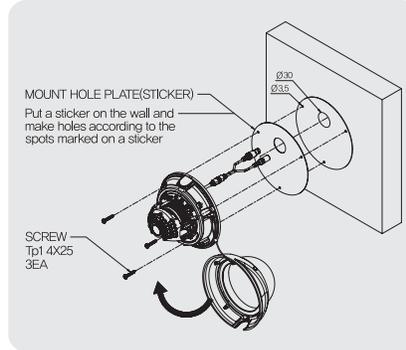
After opening the LED cover,

- ① By turning the "Tele-Wide" knob, you can access a range of focal lengths within specified limits.
- ② By turning the "Near-Far" knob, you can set the focus toward an object.
- (4) Reassemble the camera.

<Ceiling mount>



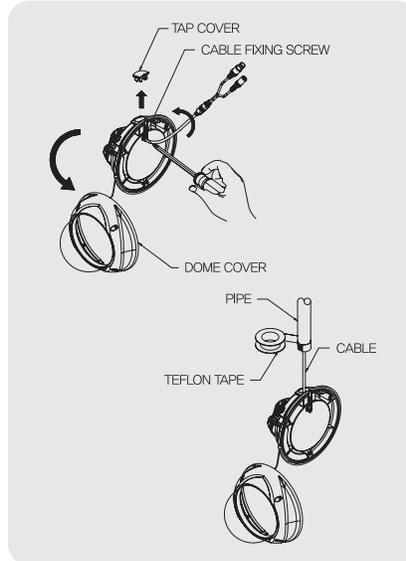
<Wall mount>



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) Attach the pipe to the base.

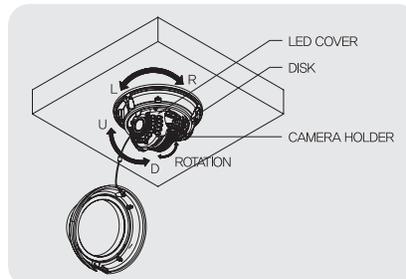
<Caution> If you don't wipe TEFLON tape on pipe, it might cause water intrusion issues.



3. Camera angle adjustment

- (1) Pan adjustment : Grasp the disk of camera and adjust direction to the right or left(-160° ~ 190°)
- (2) Tilt adjustment : Grasp the LED cover of camera and adjust direction to 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 damage to camera.



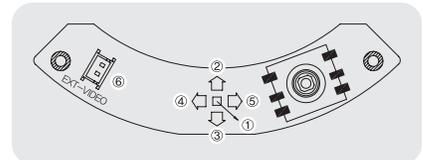
◆SPECIFICATION

Model No.	HTINT650S, HTINT650W
Image Sensor	1/3" SONY SUPER HAD CCD II
Effective Pixel	768(H) X 494(V) PIXEL
Cell Size	6.35µm(H) X 7.4µm(V)
Scanning System	2 : 1 Interface
Sync. Type	Internal / Line lock(24V AC)
OSD	Multi-language
WDR Set	SSDR / BLC / HLC / OFF
Resolution	Color : 600 TV-Line, B/W : 700 TV-Line
S/N Ratio	52dB(AGC OFF, Weight ON)
Min. Illumination	LED ON : 0 Lux(25M Range) LED OFF : 0.0005 Lux(Color Sense-up), 0.0002 Lux(B/W Sense-up)
Color Temp.	ATW(1,700°K ~ 11,000°K) / AWC / MANUAL / OUTDOOR / INDOOR
Shutter	1/60 ~ 1/120,000sec
Intensifier	AUTO / FIXED / OFF(x2 ~ x512 selectable)
Gain Control	LOW / HIGH / OFF
Speco DNR	OFF / ON(1 ~ 32 Level adjustable)
V Motion	ON / OFF(8 Zone, Alarm output)
Privacy	ON / OFF(12 Zone)
Mirror	H / V / BOTH / OFF
Clarity	ON / OFF(Level adjustable)
D&N	ICR(COLOR / Black&White / AUTO)
Stabilize	ON / OFF
Digital Zoom	ON(x16) / OFF
DPC	256 point(Even 128 point, ODD 128 point)
Power Supply	Regulated 12V DC or 24V AC
Current Consumption	150mA(LED OFF), 500mA(LED ON)
Operation Temp.	-20° to 122°
Dimension	Ø150 x 98.6(H)mm
Weight	1.76lbs

※The specification is subject to change without any prior notice to improve the quality.

◆FUNCTIONS

1. Setup for camera functions



①ENTER :

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

②Up, ③Down :

Used to move the cursor to up or down.

④Left, ⑤Right :

Used to move the cursor to left or right and change the value.

⑥EXT-VIDEO :

Extra video output terminal for installation. Plug your test monitor in here. The cable is option.

2. Camera function setting

Page 1			
Function setting menu	Select menu	Sub menu	Summary
ADJUST LENS	DC IRIS	BRIGHTNESS, IRIS SPEED, FOCUS ADD.	Adjust the brightness of the screen (Range : 1~70, Default : 25) Adjust the Iris speed of the DC lens (Range : 1~50, Default : 3) Focus addition : To adjust the lens focus correctly
		MANUAL	Manual mode is not recommended using built-in the DC Lens(Default : 25)
EX-POSURE	BRIGHTNESS		Brightness ADJ. : Adjust the brightness of the screen when using the DC lens(Range : 1~70, Default : 25)
	E-SHUTTER	MANUAL ↵ FLK, ---	Auto setting is not selectable when selected DC Lens
	AUTO GAIN	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~x512 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.			
COLOR TEMP	ATW		Color temperature 1,700~11,000°K
	OUT-DOOR		Color temperature 1,700~11,000°K
	INDOOR		Color temperature 4,500~8,500°K
	MANUA L ↵		Adjust the Red or Blue values to shift the color of the screen
	AWC → SET		Find the optimal white balance for current luminance environment (The camera focus must towards to white paper)
WDR SET	OFF		Deactivates function
	ON		Wide dynamic range function(1~15 level selectable, Default : 8)
SLC SET	OFF		Deactivates function
	SLC ↵	LEVEL, TOP, BOTTOM, LEFT, RIGHT	User programmable SLC zone and compensation level
	HLC ↵	LEVEL, LIMIT, MASK COLOR, MASK TONE, TOP, BOTTO M, LEFT, RIGHT	Removed HIGH LIGHT, It enable us to watch license plate clearly
SPECO DNR	ON ↵	Level	Reduce noise in low illumination (Reduction level is selectable, Default : 20)
	OFF		Deactivates function
*Notes : If the AGC is off, the DNR function is not available			
DAY & NIGHT	AUTO ↵	BURST MODE COLOR → B/W, B/W → COLOR, RETURN	Day : Color→Night : B/W (Switching time & speed adjustable)
	EXT		Change the color→B/W by external signal (Not available)
	COLOR		Fixed at color(LED OFF)
	B/W ↵	BURST MODE (OFF/ON), RETURN	Fixed at B/W(LED ON)
*Notes : If the AGC is off, this function is unavailable			
Page 2			Please refer to "Page 2"
EXIT	SAVE		Save the value and exit menu
	NOT SAVE DE-FAULTS		Exit the main menu without save Reset the camera setup value to the factory default

Page 2			
Special setting menu	Select menu	Sub menu	Summary
ADJUST	V-REV		Set a vertical image inversion
	H-REV		Set a horizontal image inversion
	DIGI-ZOOM ↵		Max 16x digital zoom available (Default : X1.0)
	FONT COLOR		Change the color of OSD (Default : Blue, 5 color is available)
	CLARITY ↵		The image outline will be strong and clear according to sharpness level increasing(Default : 13) If this function is Off, it may looks like un-focused
RETURN			Save the value then move back to previous menu
MONITOR	LCD ↵	GAMMA, PED LEVEL, COLOR GAIN, DEFAULT SET	You can change the settings value of video appropriate to your monitor
	USER ↵	GAMMA, PED LEVEL, COLOR GAIN, DEFAULT SET	
	CRT	PED LEVEL, COLOR GAIN, DEFAULT SET	
CAM TITLE	OFF		No title displays on the screen
	ON ↵		Display the camera's title on the screen(Max. 15character, position adjustable)
SYNC TYPE	INT		Internal Sync with 12V DC power
	LL		Setting the phase is selectable when used 24V AC(Dual power only)
V MOTION	SENSITIVITY	AREA1~AREA8	When sensitivity number is high, also motion detection sensitivity will increase
	AREA MODE	OFF, ON	Determines whether to use the MD area selected in SENSITIVITY
	SEL POS	L_TOP, R_TOP, L_BOT-TOM, R_BOT-TOM	Determines which of the 4 vertices of each MD area is to be used
	XPOS		Determines the coordinate of the horizontal axis for SEL_POS
	YPOS		Determines the coordinate of the vertical 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			
PRIVACY	AREA SEL	AREA1~AREA12	Make a zone for your privacy You can select privacy zone up to 12 area
	AREA MODE	ON, OFF	
	MASK COLOR	GREEN, RED, BLUE, BLACK, WHITE, GRAY	
	MASK TONE	1~10	
	TOP		
	BOTTOM		
	LEFT		
	RIGHT		
RETURN			Save the value then move back to previous menu
STABI-LIZE	ON, OFF		This function can be mitigates image movement from external factors
LAN-GUAGE			Select language
PAGE 1			Select this to save the special menu settings and return to the main menu

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Rev. 7/7/10.

• The "↵" icon appeared with desired function, press the set button to move sub menu.
• The "---" icon appeared with function that is un-available according to function setting.