



VTC-IRM40 Premium 2.1 Megapixel Indoor/ Outdoor 6-in-1 HD/EX-SDI / TVI / AHD / CVI / CVBS Motorized Varifocal Bullet Camera with IR LED Illumination



FEATURES:

- 1/2.8" Sony® STARVIS 2.1 MegaPixel CMOS Sensor
- 2.1 MegaPixel with Full 1080p/720p HD/EX-SDI 1.0, 2.0 / TVI / AHD / CVI / CVBS Output
- Advanced Starlight Technology Offers Dramatically Higher Sensitivity to Light Producing Color Images in Very Dark & Night Scenes
- 5 MegaPixel IR Corrected 2.8~12mm or 5~50mm Motorized Varifocal Lens with 1 click focus for easy Configuration
- 40 Dynamic Infrared LEDs at 850nm enable viewing in total darkness up to 150 feet
- Dual Glass Compartments to Eliminate IR Reflection
- 3D-DNR Digital Noise Reduction
- True Day/Night by ICR - Dual Filter Switch
- Fully programmable True WDR (Dual Scan)
- ROI (Region of Interest) WDR achieves superior exposure compensation specifically in exact areas of interest while reducing HDD storage space
- Secondary Video Output & OSD Control Joystick are accessible inside a gasket sealed removable side panel
- Advanced OSD Functions: Motion Detection, Privacy Mask, Defog, Sens-up(~x32), Sharpness, Mirror/Flip, BLC/HLC, Deblur, Anti-Saturation, Title Set, D-WDR
- 3-Axis mount with Simple One Turn Positioning Lock for Ease of Installation
- IP-68 Rated Water Resistance
- 12VDC / 24VAC Dual Voltage Operation

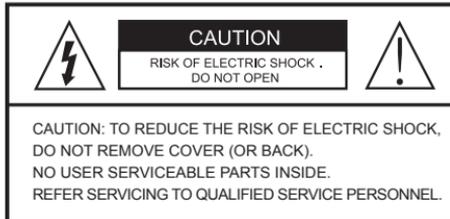


PREMIUM 6-IN-1

VITEK

Safety Precaution

To prevent electric shocks and risk of fire hazards, do NOT use other than specific power source.



The symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The symbol is intended to alert the user to the presence of important operating and maintenance(servicing) instructions in the literature accompanying the unit.

- **Warning :**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at the users own expense.

- **Caution :**

Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Main power quality should be that of a typical commercial environment. If the user of the model requires continued operation during power main interruption, it is recommended that the model be powered from an uninterruptible power supply (UPS).

Safety Precaution

NOTICE

- The image used in this instruction manual are processed to help comprehension and may differ from actual video of the camera.
- Avoid installing areas where has shock or vibration which results in the problems.
- Pay attention to safety when running the connection cable and observe that the cable is not subjected to heavy loads, kinks or damage and no moisture can get in.
- The warranty becomes void if repairs are undertaken by unauthorized persons. Maintenance and repair have to be carried out only by authorized service centers.
- Use only a mild detergent to clean the housing.
- The camera should never be operated beyond the technical specifications.
- This can lead to damage and void the warranty.
- The camera should never be operated in water.

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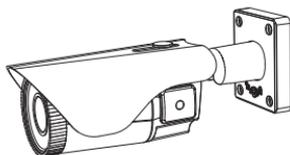
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Specifications

Composition



Camera

Plastic Anchor:
6 x 30mm (4pcs)



Mounting Screw:
4 x 30mm (4pcs)



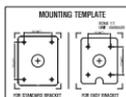
Assembly Screw:
4 x 15mm (4pcs)



Torque Wrench:
3mm (1pc)



Operating
Instruction



Mounting
Template

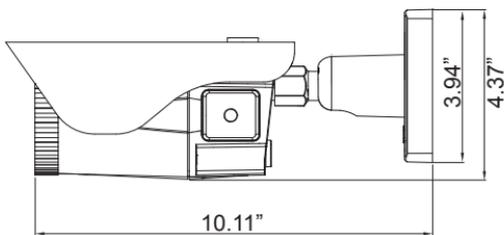
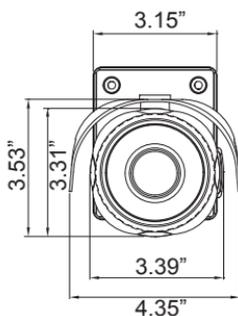


Easy
Bracket

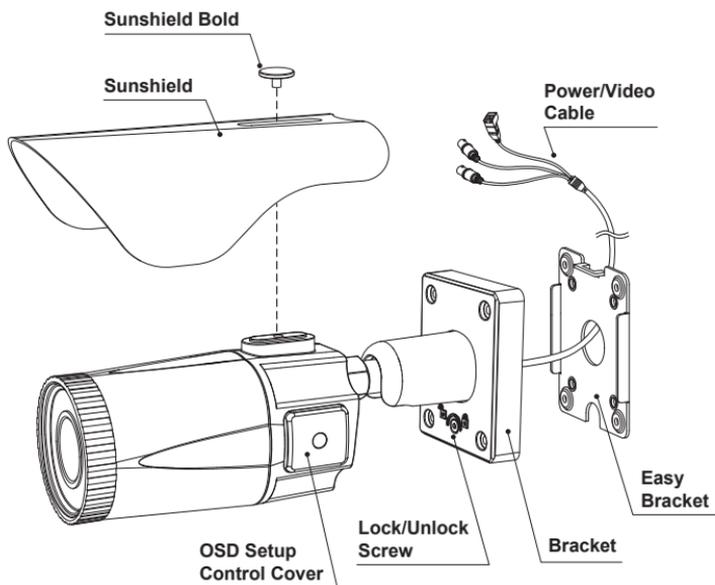


Video Sub-out
Cable (1pc)

Dimensions

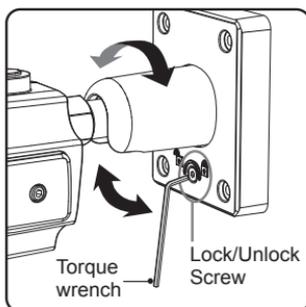


Part Names



CAUTION

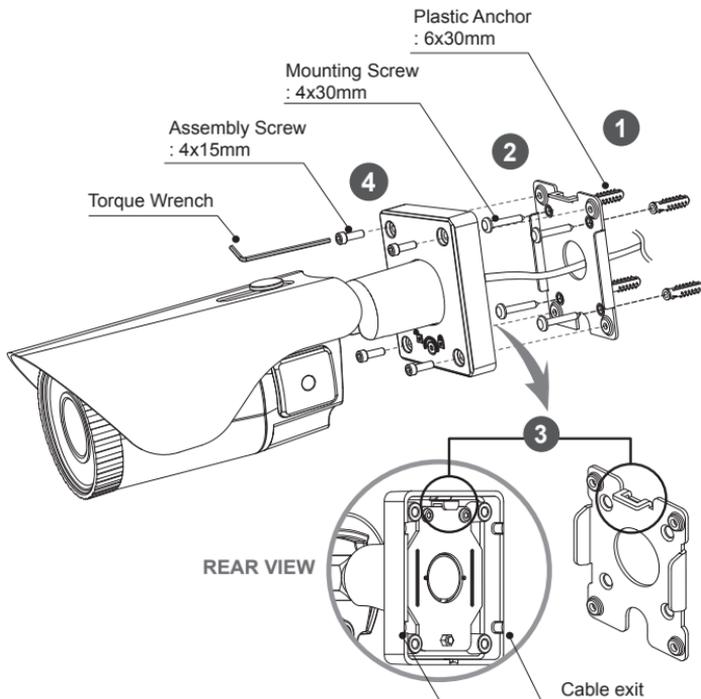
- Extreme care should be taken NOT to scratch the window in front of lens.
- Care should be taken that the cable is not damaged, kinked or exposed in hazardous areas.
- Do not expose the camera directly to a strong light source such as the sun or spotlight.



■ Adjustment of viewing angle with a bracket

Installation Instructions

1. Locate the mounting template at the installation position and drill the ceiling or wall if needed. (*The easy bracket can not be installed on the ceiling)
2. Place the easy bracket on pre-drilled position and attach it using mounting screws (4x30mm). Skip this step when an easy bracket is not installed.
3. Route the Power cable to the connecting place.
Hook up the camera bracket with the easy bracket as illustrated below.
4. Attach the camera bracket using assembly screws (4x15mm).
5. Set the camera's viewing angle.
6. Put the sunshield onto the camera unit and tighten the sunshield-bolts.



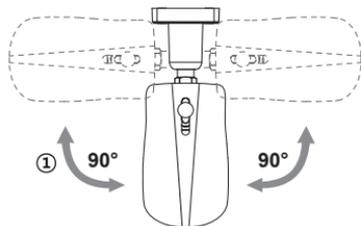
Installation Instructions

Pan & Tilt adjustments

- Unlock the screw on the camera bracket through using the torque wrench supplied
- Set the camera's viewing angle then lock the screw on the bracket.

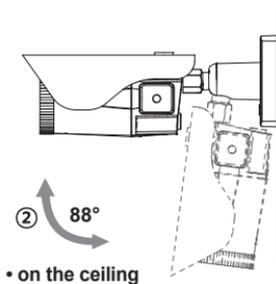
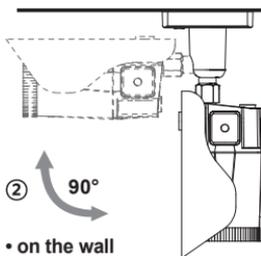
1) Pan limit:

Pan is limited to $\pm 90^\circ$.



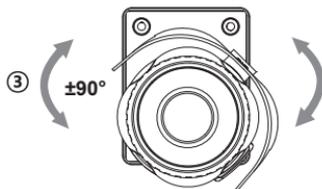
2) Tilt limit:

Tilt is limited to $0^\circ(2^\circ)$ min $\sim 90^\circ$ max.
for wall(ceiling) installation respectively
with reference to the wall(ceiling) when
the inclination of camera module is 0° ,
that is, the image is aligned horizontally.



3) Inclination limit

(Horizontal image alignment):
Inclination limited to $\pm 90^\circ$ max.



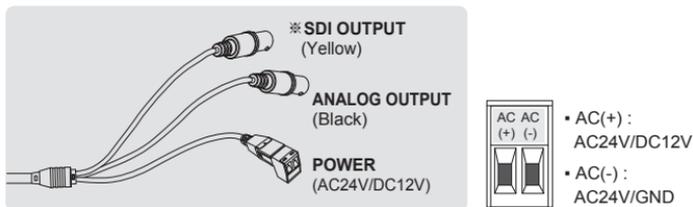
Installation Instructions

Installation Instructions

- Make sure power is removed before the installation.
- Follow the order for applying power:
Connect the power leads to the camera (observe polarity for DC power) then plug-in power. This will avoid damage to the camera from power surges and improper resetting .

Power Supply Connections

Camera can work with either 12VDC or 24VAC, dual voltage power. Primary and secondary grounds are completely isolated to avoid the possible ground-loop problems.

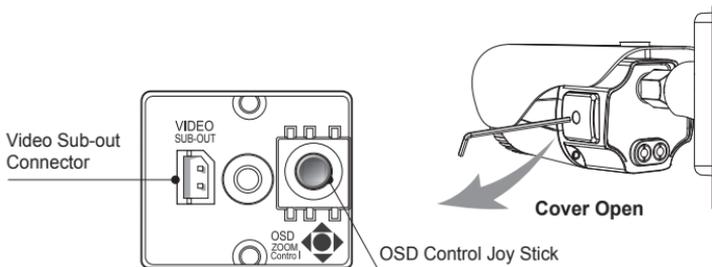


- ※ Please use the cable as provided with camera. If camera cable is cut and re-wired, the transmission distance of video can be reduced. Especially SDI cable should not be cut because it requires detailed wiring and affects the transmission distance.

Operating Instructions

Using OSD Controller

Setup menu can be accessed and controlled by OSD control joystick on the side of the camera. Five commands are available with the joy stick. The design of OSD could be different according to the Model.



◆ Description of the joystick operation

- 1) SET (●) : Access to the menu or enter the setting.
- 2) UP/DOWN (▲/▼) : Choose the desired sub-menu and to move the cursor up or down.
- 3) LEFT/RIGHT (◀/▶) : Set up the value of the selected menu.
Used to adjust the desired menu selection and to move the cursor left or right.
- 4) '⏏' denotes the long press down straightly for about 2 seconds

◆ Description of the Motorized ZOOM&FOCUS* adjustment

(*) Works only when OSD Menu is inactive.

- | | |
|-----------------|-------------------|
| 1) ▲ : Zoom In | 3) ◀ : Focus Near |
| 2) ▼ : Zoom Out | 4) ▶ : Focus Far |

※ ANALOG OUT0 should be set to TVI MODE, AHD MODE or CVI MODE to get CVBS video in sub-out. If it is set to CVBS, there is no CVBS video in sub-out port. (SYSTEM> OUTPUT> ANALOG OUTPUT0)

※ If CVBS video is enabled through ANALOG OUT or Sub-out port, WDR and 3D-NR functions are disabled in all video outputs.
It should be considered when installer adjusts the video with installation monitor via CVBS video signal.

Operating Instructions

OSD menu Table

MENU	SUB MENU	CONFIGURATION			
LENS	DC	MODE (INDOOOR, OUTDOOR, DEBLUR)			
	MANUAL				
ZOOM / FOCUS	AF MODE	ZOOMPUSH, MANUAL			
	MODE CHANGE	ENABLED, DISABLED			
	SCANNING	HALF, FULL			
	ONEPUSHAF	ON \downarrow			
	SYNC TDN	ON, OFF			
	INITIAL	ON \downarrow			
EXPOSURE	BRIGHTNESS	0~20			
	SHUTTER	AUTO			
		MANUAL (SPEED)	1/30(1/25), 1/60(1/50), 1/120(100), 1/250(200), 1/500(400), 1/1000(800), 1/2000(1600), 1/4000(3200), 1/8000(6400), 1/15000(12800), 1/30000(25600)		
		FLICKERLESS			
	SENS-UP	OFF, x2, x4, x8, x16, x32			
AGC	0~10				
BACKLIGHT	OFF				
	HLC	LEVEL, COLOR			
	BLC	H/V-POS, H/V-SIZE			
	WDR	MODE	ROI	WINDOW ZONE/USE, H/V-POS, H/V-SIZE	
			NORMAL		
		TARGET-BRT	LOW, MIDDLE, HIGH		
WEIGHT	LOW, MIDDLE, HIGH				
DAY & NIGHT	EXTERN	SMART IR, ANTI-SAT., DELAY, IR LED CTL (AUTO, OFF)			
	AUTO	SMART IR, ANTI-SAT., AGC THRES, AGC MARGIN, DELAY			
	COLOR				
	B&W	SMART IR, ANTI-SAT.			
COLOR	AWB	AUTO, AUTOext, PRESET, MANUAL (C-TEMP, R/B-GAIN)			
	COLOR GAIN	0~20			
3D-NR	OFF, LOW, MIDDLE, HIGH				
IMAGE	SHARPNESS	MAIN OUTPUT	ANALOG OUT0	ANALOG OUT0	TVI MODE, AHD MODE, CVBS, CVI MODE
				TVI MODE	0~10

Operating Instructions

IMAGE	SHARPNESS	MAIN OUTPUT	ANALOG OUT0	AHD MODE	0~10
				CVI MODE	0~10
			ANALOG OUT1	ANALOG OUT1	CVBS
				SDI&CVBS	0~10
		SDI OUTPUT	SDI OUT	HD-SDI, EX-SDI 1.0, EX-SDI 2.0, OFF	
		SDI&CVBS	0~10		
	GAMMA	0.45, 0.55, 0.65, 0.75			
	MIRROR	OFF, ON			
	FLIP	OFF, ON			
	D-WDR	OFF, LOW, MIDDLE, HIGH			
DEFOG	OFF, ON	MODE (AUTO, MANUAL)			
		LEVEL (LOW, MIDDLE, HIGH)			
PRIVACY	OFF, ON	ZONE NUM, ZONE DISP, H/V-POS, H/V-SIZE, Y LEVEL, CB/CR LEVEL, TRANS			
MOTION	OFF, ON	DET WINDOW	WINDOW ZONE, WINDOW USE, DET H/V-POS, DET H/V-SIZE		
		DET TONE	0~4		
		MDRECT FILL	OFF, ON		
		SENSITIVITY	0~10		
		MOTION OSD	OFF, ON		
		TEXT ALARM	OFF, ON		
SYSTEM	OUTPUT	SDI OUTPUT	HD-SDI, EX-SDI 1.0, EX-SDI 2.0, OFF		
		ANALOG OUT0	TVI MODE, AHD MODE, CVBS, CVI MODE		
	RESOLUTION	1080 30P(25P), 720 30P(25P), 720 60P(50P)			
	TV SYSTEM	US(NTSC), EU(PAL)			
	LANGUAGE	ENG, CHN(S), CHN, JPN, KOR, GER			
	CAM TITLE	OFF, RIGHT UP, LEFT DOWN			
RESET	ON 				
EXIT	SAVE, CANCEL				

Operating Instructions

OSD menu Startup

Press the 'OSD menu SET key' down to access the setup menu mode.

- EXIT : Enters 'EXIT' menu with save current setting or without save.
- RETURN : Returns to the previous menu.

MENU V0. XX	
1. LENS	DC ↓
2. ZOOM/FOCUS	↓
3. EXPOSURE	↓
4. BACKLIGHT	OFF
5. DAY&NIGHT	EXTERN ↓
6. COLOR	↓
7. 3D-NR	MIDDLE
8. IMAGE	↓
9. MOTION	OFF
A. SYSTEM	↓
B. EXIT	SAVE ↓

1. LENS

Lens can be selected either DC or MANUAL lens.

It should be selected according to lens type.

1-1. DC DC is for the best image when DC Auto iris lens is installed

- MODE : Selects MODE according to lighting condition.
- INDOOR: Optimized for indoor environment.
- OUTDOOR: Optimized for outdoor environment.
- DEBLUR: If enabled it will reduce motion blur in certain indoor environments but can cause more noise and color rolling.

1-2. MANUAL MANUAL is for the best image when a Fixed lens is installed.

2. ZOOM/FOCUS

2-1. AF MODE

- ZOOMPUSH: Focusing works steadily for sharp focusing on the object.
In the case of a Motor driven lens, focusing resumes in about 7~8 seconds to save the lens lifetime when the focus gets lost.
- MANUAL: Focusing can only be adjusted by ▲, ▼ of OSD control joystick.

Operating Instructions

2. ZOOM/FOCUS

AF MODE	ZOOMPUSH
MODE CHANGE	DISABLED
SCANNING	HALF
ONEPUSHAF	ON 
SYNC TDN	OFF
INITIAL	ON 
RETURN	

AF MODE Changes to MANUAL automatically after 3 hrs when MODE CHANGE is ENABLED.

2. ZOOM/FOCUS

AF MODE	MANUAL
MODE CHANGE	NOT USED
SCANNING	HALF
ONEPUSHAF	ON 
SYNC TDN	OFF
INITIAL	ON 
RETURN	

2-2. MODE CHANGE (Available only with AF MODE is ZOOMPUSH)

MODE CHANGE is activated to set ZOOMPUSH in AF MODE.

It is for locking of the lens control to prevent undesirable operation.

- **ENABLED** : Locks and disables the lens operation after 3 hours.
It is recommended to maintain the working-life of the motorized zoom lens.
- **DISABLED** : Disables the locking feature allowing lens operation at any time.

2-3. SCANNING

Lens scanning can be set to performs HALF or FULL on the screen.

Scanning checks the positions for zoom/focus at both of the end positions and saves them for reference.

2-4. ONEPUSHAF

Focusing is activated only when zoom in/out is working.

2-5. SYNC TDN

Compensates for IR correction when the camera switches to DAY or NIGHT.

It is recommended to set OFF except specific conditions.

2-6. INITIAL

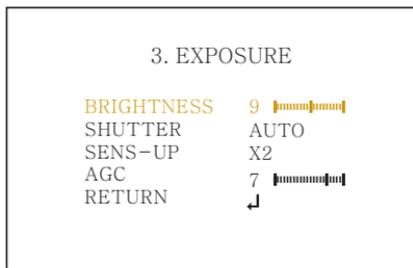
Lens initialization is necessary during the installation or the regular operation to align the position data with the mechanical positions whose lens elements may move and deviate from its calibrated position by shock or vibration, for example, during transportation. Lens initialization is automatically executed at power up.

INITIAL starts the lens initialization when pressing the joystick straight down for about 2 sec. It is strongly recommended to execute LENS INIT in cases below;

- At the final step of installation.
- When focus becomes out of control by shock or vibration.

Operating Instructions

3. EXPOSURE



3-1. BRIGHTNESS

Adjusts the brightness of video (0~20).

3-2. SHUTTER

Select AUTO or MANUAL.

If shutter is set to Manual mode, SENS-UP mode is deactivated.

3-2-1. AUTO: Optimizes the video level by controlling the iris and the shutter speed automatically.

3-2-2. MANUAL : 1/30(1/25), 1/60(1/50), 1/120(100), 1/250(200), 1/500(400), 1/1000(800), 1/2000(1600), 1/4000(3200), 1/8000(6400), 1/15000(12800), 1/30000(25600) Shutter can be set to fixed.

3-2-3. FLICKERLESS : Flicker is used to remove the flickering on screen due to differences in light and electric frequencies.

3-3. SENS-UP

A brighter video can be obtained by increasing the exposure time at night with SENS-UP. It can be set to Off, x2, x4, x8, x16 or x32.

A higher setting will have a brighter video but more noise will be in the image.

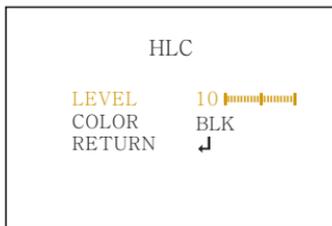
3-4. AGC

AGC(0~10) amplifies the video gain for brighter video but noise may occur.

Operating Instructions

4. BACKLIGHT

Compensates the video image by cutting out the bright areas with a mask or adjusting the contrast of the video.



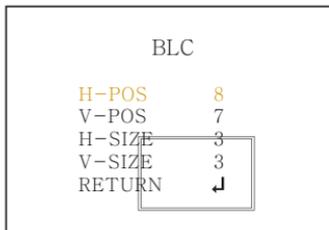
4-1. HLC (High Light Compensation)

Cuts out the bright area with a mask and excludes it from compensation.

4-1-1. LEVEL (0~20): Sets the HLC level. It determines the video level that starts cutting out. Lower setting starts the cut out at a lower light level. The cut out area is masked with selected color.

4-1-2. COLOR : Select mask color from 9 colors.

Black, White, Yellow, Cyan, Green, Magenta, Red, Blue and Customize.



4-2. BLC (Backlight Compensation)

This function is used to brighten an image in the foreground with a bright light area behind it such as sunlight, limiting the affect of silhouette.

BLC has a target window for compensation and its size and position can be set by H-POS, V-POS, H-SIZE and V-SIZE.

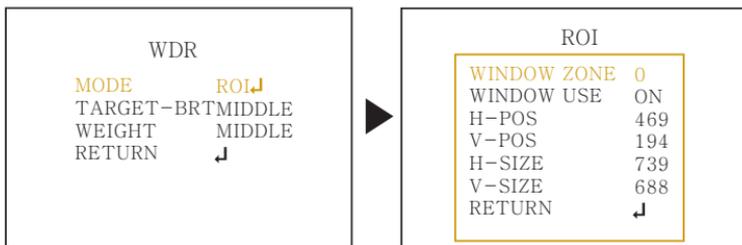
4-2-1. H-POS, V-POS :

Sets the position of BLC area to move vertically and horizontally.

4-2-2. H-SIZE, V-SIZE :

Sets the size of BLC area to move vertically and horizontally.

Operating Instructions



4-3. WDR (Wide Dynamic Range)

When part of an image is extremely dark but another part is so bright you can't see any details WDR will even the image out.

4-3-1. MODE : Selects WDR mode normal or ROI setting.

- NORMAL: WDR function applies full screen.
- ROI (Region Of Interest) : Sets specific area of WDR by window setting. Select window zone number from 0 to 3 and window use set to on. Then the window zone can be modified for position and size.

4-3-2. TARGET-BRT : LOW, MIDDLE, HIGH

Selects the brightness value of the target area in MODE.

4-3-3. WEIGHT : LOW, MIDDLE, HIGH

Selects the WDR value of the target area in MODE.

- ※ If CVBS video is enabled through ANALOG OUT or Sub-out port, WDR and 3D-NR functions are disabled in all video outputs. It should be considered when installer adjusts the video with installation monitor via CVBS video signal.

5. DAY & NIGHT

DAY/NIGHT is used to control the setting during day-time and night-time operation. Select the mode according to the light condition and the camera types.



5-1. EXTERN

DAY or NIGHT is determined by the built-in light photo sensor for cameras with built-in IR LEDs..

5-1-1. SMART IR

: SMART IR can be set to reduce the saturation of strong IR illumination at night in any menu of EXTERN, AUTO and B/W(NIGHT). Set to ON, SMART IR is enabled and ANTI-SAT. level is controlled.

5-1-2. ANTI-SAT. (Available only with the SMART IR is ON)

: Sets the anti saturation level 0~20. Setting high level avoids the saturation but the corners will be darker accordingly.

5-1-3. DELAY

: D→N DELAY is time in seconds while camera maintains its status before Day to Night switching. DELAY can avoid the unwanted/frivolous switching by short term lights such as light from a passing car. Set delay term to low, middle or high.

5-1-4. IR LED CTL

: IR LED Control(AUTO/OFF) is available with IR LED model only. If it is set to OFF, IR LED will be turned OFF but DAY or NIGHT is still determined by the built-in light photo sensor.

Operating Instructions

5-2. AUTO

Used when DAY or NIGHT is determined by light level through the lens and DAY from/to NIGHT is switched automatically by the scene brightness. It can be controlled by the AGC threshold level, AGC margin and delay time.

5. DAY&NIGHT	
SMART IR	ON
ANTI-SAT.	10
AGC THRES	10
AGC MARGIN	10
DELAY	MIDDLE
RETURN	↓

5-2-1. SMART IR

: SMART IR can be set to reduce the saturation of strong IR illumination at night in any menu of EXT, AUTO and B/W(NIGHT). Set to ON, SMART IR is enabled and ANTI-SAT. level is controlled.

5-2-2. ANTI-SAT. (Available only with the SMART IR is ON)

: Sets the anti saturation level 0~20. Setting high level of ANTI-SAT can make the corners darker

5-2-3. AGC THRES

: AGC(Auto Gain Control) is a threshold level which determines to switch DAY from/to NIGHT in AUTO mode. Higher value makes the camera switch DAY from/to NIGHT at brighter illumination.

5-2-4. AGC MARGIN

: Sets the gap level switching from/to DAY(color) or NIGHT(B/W).

5-2-5. DELAY

: D→N DELAY is time in seconds while camera maintains its status before Day to Night switching. DELAY can avoid the unwanted/frivolous switching by a short term light such as light from a passing car. Set delay term low, middle or high.

5-3. COLOR

The camera is always in COLOR mode.
DAY/NIGHT is disabled and outputs color video.

5-4. B/W

The camera is always in B/W mode.
Forcibly removes IR cut filter and switches to B/W regardless of light level.

Operating Instructions

6. COLOR



6-1. AWB (Auto White Balance)

Automatically tracks the changes of color temperature and continuously adjusts the white balance. AUTO, AUTOext, PRESET and MANUAL modes are available.

- 6-1-1. AUTO : Optimized for Indoor installation and compensates AWB for low color temperature such as incandescent lights.
- 6-1-2. AUTOext : Optimized for outdoor sunlight applications and compensates AWB for high color temperature such as sunlight.
- 6-1-3. PRESET : AWB is performed only whenever ● is pressed.
- 6-1-4. MANUAL : White balance is fixed to the settings by Color-Temperature Red-GAIN and Blue-GAIN. It can be used only when the color temperature does not vary.

6-2. COLOR GAIN

Sets the color gain control level 0~20.

Operating Instructions

8-1. SHARPNESS

Sets the Sharpness level 0~10. Increases or decreases the sharpness of the picture. Too much sharpness can make image harsh and show more noise as well as line flicker at the edge of object in the picture.

8-2. GAMMA

Adjust gamma level of video.

8-3. MIRROR

The Video is reversed left and right if turned ON.

8-4. FLIP

The Video is reversed upside down if turned ON. When the video is flipped Vertical, then the joystick directions are reversed accordingly. It is very useful when a camera is installed upside down.

8-5. D-WDR

Improves the visibility for the bright areas and the dark areas by compensating the video gain. Care should be taken to select low, middle or high level, because video may lose its quality in some environments by over compensation. Video noise can be increased in the dark area accordingly

8-6. DEFOG

Enhance foggy video according to status of scene. Video quality can be less in normal environments. Sets AUTO or MANUAL mode.

8-6-1. MODE :

- AUTO : Enhance foggy video automatically according to status of scene.
- MANUAL : Set to enhance foggy video manually regardless of status of scene.

8-6-2. LEVEL : Set Low, Mid or High.

Video quality can be less in normal environments.

8-7. PRIVACY

Set ON/OFF for enabling/disabling PRIVACY mask. 16 privacy areas are available and each area is programmable in size, color, position and transparency.

8-7-1. ZONE NUM : Selects mask zone number from 0 to 15 to be adjusted.

8-7-2. ZONE DISP: Displays OFF/ON for the mask area which you selected.

8-7-3. H-POS, V-POS :

Adjusts the mask area H, V position which you selected.

Operating Instructions

PRIVACY	
ZONE NUM	0
ZONE DISP	ON
H-POS	12
V-POS	2
H-SIZE	3
V-SIZE	3
Y-LEVEL	10 
CB LEVEL	10 
CR LEVEL	10 
TRANS	0
RETURN	↵

8-7-4. H-SIZE, V-SIZE :

Adjusts the mask size using H, V direction.

8-7-5. Y LEVEL : Adjusts the mask color by Y LEVEL. (0: black ~ 20: white)

8-7-6. CB LEVEL : Adjusts the mask color by CB LEVEL. (0: yellow ~20: blue)

8-7-7. CR LEVEL : Adjusts the mask color by CR LEVEL. (0: Green ~20: magenta)

8-7-8. TRANS.: Selects transparency rate for the mask area from 0 to 3

- 0 : Privacy mask is not transparent.
- 1 : Privacy mask is 25% transparent.
- 2 : Privacy mask is 50% transparent.
- 3 : Privacy mask is 100% transparent.

9. MOTION

4 motion detection areas are available and each area is programmable in size and location. Motion can be detected in the area and displays the results in blocks and/or a text message.

9-1. DET WINDOW : Sets the MOTION DETECTION areas on screen.

9-1-1. WINDOW ZONE : Set the detection zone number from 0 to 3.

9-1-2. WINDOW USE : Sets ON/OFF motion detection area which you selected. If set to ON, It can be adjusted position and size.

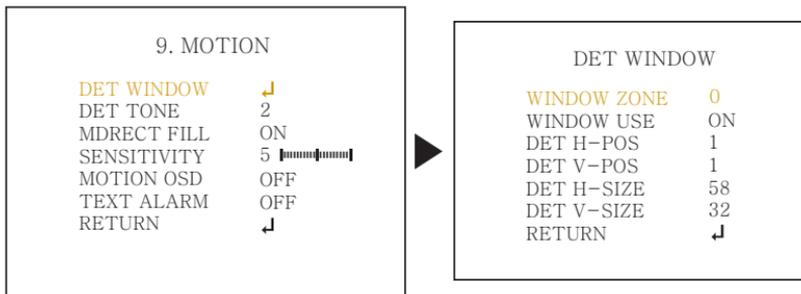
9-1-3. DET H-POS, V-POS :

Adjusts the detection area H, V position.

9-1-4. DET H-SIZE, V-SIZE :

Adjusts the area size using H, V direction.

Operating Instructions



9-2. DET ZONE

Sets the detection zone 0 to 4 display types which window use setting ON.

0 : Set 100% opacity level of video background except detection window zone.

1 : Set 50% opacity level of video background except detection window zone.

2 : Set 25% opacity level of video background except detection window zone.

3 : Video background image is same as detection window zone.

4 : Detection window zone is displayed with box line

9-3. MDRECT FILL

Sets the motion display type when motion is detected in video.

Setting ON will display a red solid box type.

Setting OFF will display a red outline box type.

9-4. SENSITIVITY

Sets the detection sensitivity for motion (0~10). Higher values increases the sensitivity to detect motion. Too low of a value will cause the erratic detection by tree leaves or light level changes.

9-5. MOTION OSD

Set ON or OFF to display motion results.

9-6. TEXT ALARM

Setting ON enables to display a text message 'WINDOWS MOVING!!' or icon when motion is detected.

Operating Instructions

A. SYSTEM

Sets the system related functions.

A. SYSTEM	
OUTPUT	↓
RESOLUTION	1080 30P
TV SYSTEM	US(NTSC)
LANGUAGE	ENG
CAM TITLE	OFF
RESET	ON 
RETURN	↓

OUTPUT	
SDI OUTPUT	HD-SDI
ANALOG OUTO	TVI MODE↓
RETURN	↓

HD-ANALOG	
MAIN OUTPUT	ANALOG OUTO
ANALOG OUTO	TVI MODE
Y GAIN	16 
CB GAIN	65 
CR GAIN	68 
POSITION	128 
BURST FREQ	128 
BURST GAIN	108 
B&W	BURST ON
UTC TYPE	Pelco-C
720 EX	OFF
RETURN	↓

A-1. OUTPUT : Selects the main video output.

A-1-1. SDI OUTPUT :

Selects the SDI output HD-SDI, EX-SDI 1.0, EX-SDI 2.0, OFF

A-1-2. ANALOG OUTO :

Selects HD-ANALOG modes TVI MODE, AHD MODE, CVI MODE or CVBS. It can be controlled Y-Gain, CB/CR-Gain, Position, Burst and etc.

Set ANALOG OUT to AHD MODE, TVI MODE or CVI MODE if CVBS video is necessary through sub-out port.

If ANALOG OUT is set to CVBS, there is no CVBS video through sub-out port.

Operating Instructions

※ If CVBS video is enabled through ANALOG OUT or Sub-out port, WDR and 3D-NR functions are disabled in all video outputs. It should be considered when installer adjusts the video with installation monitor via CVBS video signal.

A-2. RESOLUTION

Select the video resolutions, 1080P/720P are available. 1080P outputs 1920x1080 video at the frame rate of 30P/25P. 720P outputs 1280x720 video at the frame rate of 60P/50P.

A-3. TV SYSTEM

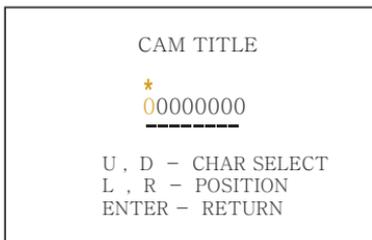
Selects HDTV standards for analog video, output switches to 60HZ, US(NTSC) or 50HZ, EU(PAL) accordingly.

A-4. LANGUAGE

6 languages are available for OSD menu. English, Korean, Japanese, Chinese(S), Chinese, German.

A-5. CAM TITLE

Camera title(name) can be set and edited with alphanumeric characters. Select the camera title position 'LEFT DOWN' or 'RIGHT UP' on the video. Then ◀, ▶ moves the cursor and ▲, ▼ choose a character to select it. The selected characters are added and displayed on the input line.



A-6. RESET : Resets camera to factory default.

B. EXIT : Exits SETUP MENU and returns to the normal display.

B-1. SAVE : Save all the settings and exit the setup menu.

B-2. CANCEL : Exit the setup menu without saving.

Detailed Specifications	VTC-IRM40-2812	VTC-IRM40-550
Imaging Sensor	1/2.8" Sony® STARVIS 2.1 MegaPixel CMOS Sensor	
Effective Pixels	1920(H) x 1080(V) x 30p	
Scan Frequency	30Hz(V), 22.5KHz(H) Progressive	
Video Format	HD: 16:9, 1080p@30fps / CVBS: 16:9 (NTSC)	
Video Output	HD/EX-SDI 1.0, 2.0 / TVI / AHD / CVI / CVBS	
Video Resolution	2.1 MegaPixel 1080p (1920x1080)	
Min.Illumination	Color: 0.08 Lux (LED Off), B/W: 0.005 Lux (LED Off)	
S/N Ratio	More than 50dB (AGC Off)	
Lens	5 MegaPixel 2.8~12mm @ F1.4 Motorized Varifocal	5 MegaPixel 5~50mm @ F1.6 Motorized Varifocal
Exposure	Brightness / Shutter / Sens-up / AGC	
Dynamic Intensity IR LEDs	Built-in 40pcs x 850nm IR-LED	
IR Range	150'	
DAY / NIGHT	TDN by Dual Filter Switch, EXTERN / AUTO / COLOR / B&W	
White Balance	AUTO / AUTOext / PRESET / MANUAL	
WDR	True Dual Scan WDR	
ROI (Region of Interest) WDR	Yes	
DNR	3D-NR	
MIRROR/FLIP	Off / On	
Functions	Motion Detection, Privacy Mask, Defog, Sens-up (~x32), Sharpness, Mirror/Flip, BLC/HLC, Deblur, Anti-Saturation, Title Set, D-WDR	
Remote Control	CoC (Control over COAX) via DVR HD-TVI / AHD	
Operating Power	12VDC / 24VAC (Dual Voltage)	
Weather Resistance	IP68	
Operating Temp.	-22° ~ 122°F (-30° ~ +50°C) @ 20-80% RH	
Weight	2.98lbs (1.35kg)	
Dimension (WxHxD)	4.35" x 4.33" x 10.11" (110.5 x 110 x 256.7mm)	



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- Alarm In/Out
- 2-way Full Duplex Audio
- Video Analytics with Search Feature (Camera Dependent)
- Remote Viewing via CMS Software, Internet Explorer, and Mobile Phones (iOS/Android)
- Web-based remote configuration
- Advanced Video Detection: Camera tampering, Camera lens blocking, Day&Night, Defocus
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- eSATA for storage extension of up to 5 more HDD
- Configurable Advanced Mirroring (Dual Recording, RAID1)
- RS-485 / CoC (Control Over Coax) PTZ Control

LIMITED PRODUCT WARRANTY

VITEK products carry a three (3) year limited warranty. Digital recording and storage products are also warranted for 3 years. * Per a special agreement with Western Digital, as of August 2016, VITEK also warrants factory installed Hard Drives for the full 3 year span of the recorder warranty provided that the recorder was purchased through an authorized VITEK distributor.

VITEK warrants to the purchaser that products manufactured by VITEK are free of any rightful claim of infringement or the like, and when used in the manner intended, will be free of defects in materials and workmanship for a period of three (3) years, or as otherwise stated above, from the date of purchase by the end user. This warranty is non-transferable and extends only to the original buyer or end user customer of a Vitek Authorized Reseller.

This warranty shall not apply to repairs or replacements necessitated by any cause beyond the control of VITEK, including but not limited to, acts of nature, improper installation, excess moisture, misuse, lack of proper maintenance, accident, voltage fluctuations, or any unauthorized tampering, repairs or modifications. This warranty becomes VOID in the event of alteration, defacement, or removal of serial numbers.

Within the first 6 months of purchase, VITEK will replace or credit any defective product returned at the request of the customer (subject to availability) with a new product that equals or exceeds the performance of the original product purchased.

Within the first 6 months of purchase, at its sole discretion, VITEK may issue an advance replacement for a defective product; however, all related costs including, but not limited to shipping and/or delivery charges will be the responsibility of the customer. If upon return inspection a product is determined to be in good working order or shows evidence of misuse, the customer will be responsible for full payment of the original product purchased as well as the replacement product.

Beyond the first 6 month period for the remainder of the warranty, VITEK'S responsibility shall be limited to repairing the defective product, including all necessary parts and related labor costs. At its sole discretion, VITEK may choose to either exchange a defective product or issue a merchandise credit towards future product purchases. Any replacement parts furnished in connection with this warranty shall be warranted for a period not to exceed the remaining balance of the original equipment warranty.

A Return Authorization number or "RA" number must be obtained prior to the return of any item for repair, replacement, or credit. VITEK requires that this "RA" number be clearly printed on the outside of the shipping carton to avoid refusal of said shipment. The Return Authorization number expires after 30 days. Products returned after the 30 day period will be subject to refusal. Shipping charges, if any, must be prepaid. A copy of the bill of sale (or invoice of purchase), together with a complete written explanation of the problem must accompany all returns.

Vitek makes no warranty or guarantee whatsoever with respect to products sold or purchased through unauthorized sales channels. Warranty support is available only if product is purchased through a Vitek Authorized Reseller.

*Limited Warranty means that VITEK reserves the right to repair or replace any product found defective within the warranty time period, prorated to the date of original purchase. If VITEK cannot repair the product, VITEK reserves the right to replace it with an equal or better product and grade at VITEK'S discretion.



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