



VITEK[®]
INDUSTRIAL VIDEO PRODUCTS, INC.

VTC-HOCRBD2812
2.1MP HD-SDI Compact Indoor/Outdoor
WDR True Day/Night Ball Camera



FEATURES:

- 1/2.9" Sony Progressive Scan CMOS
- 2.1MegaPixel with Full 1080p/720p HD-SDI Output (SMPTE292M)
- 35 IR LEDs with 120' Range
- Built in 2.8-12mm Megapixel lens
- Heavy Duty Vandal & IP67 Weather Resistance rating
- 16:9 Video Format
- Advanced OSD Functions: WDR, 3D-DNR, Motion Detection, Privacy/Highlight Masking, Digital Zoom, Flip, Mirror
- 100% Pure Digital Transmission of video data
- Up to 700' HD Transmission Range (depending on cable characteristics and integrity)
- 12VDC/24VAC Dual Voltage Operation



VITEK

MENU

SETUP MENU

EXPOSURE

SENS_UP BRIGHTNESS LENS AE MODE SHUTTER AGC DOUT SCALE FREQ
RETURN

WHITE BAL

AWB CHROMA RETURN

IMAGE

SHARPNESS DEFOG DZOOM MIRROR FLIP FREEZE PRIVACY SHADING HLM
ACE RETURN

WDR / BLC

OFF WDR BLC

DAY&NIGHT

MODE RETURN

DNR

OFF LOW MIDDLE HIGH

MOTION

OFF SET

SERIAL

CAM ID ID DISPLAY BAUDRATE RETURN

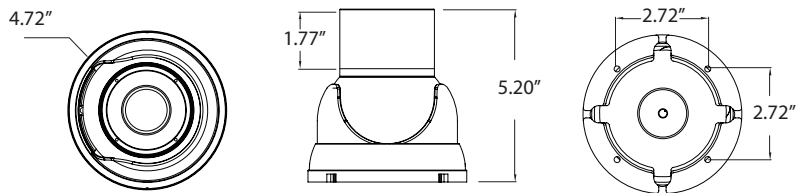
SYSTEM

DEFECT DET GAMMA IMAGE FORMAT CVBS FRAME FOCUS ADJ FACTORY SET
RETURN

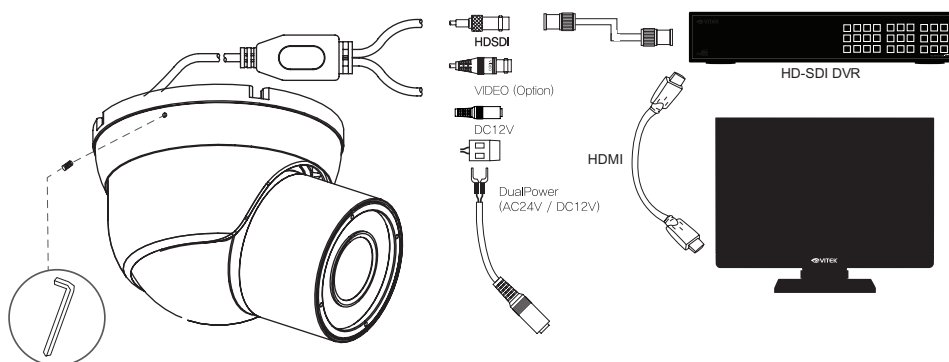
EXIT

Above specifications may be changed without any notice.

DIMENSION

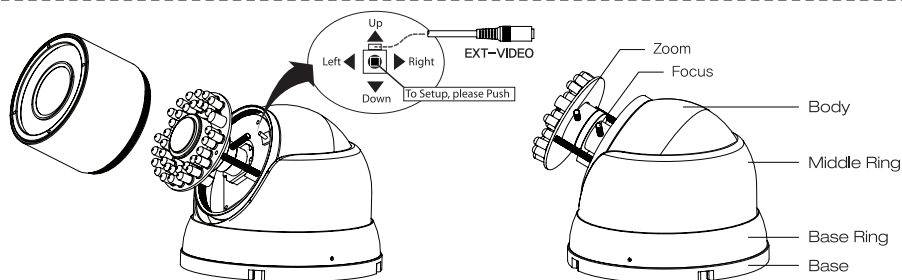


INSTALLATION

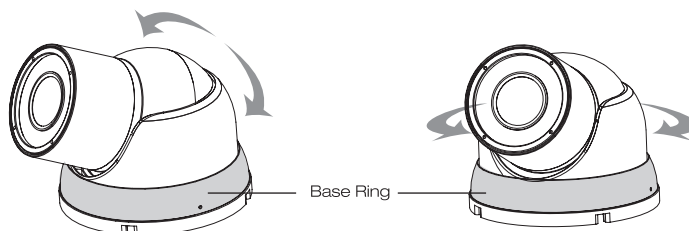


L-wrench

Tighten screws with L-wrench to fix the camera

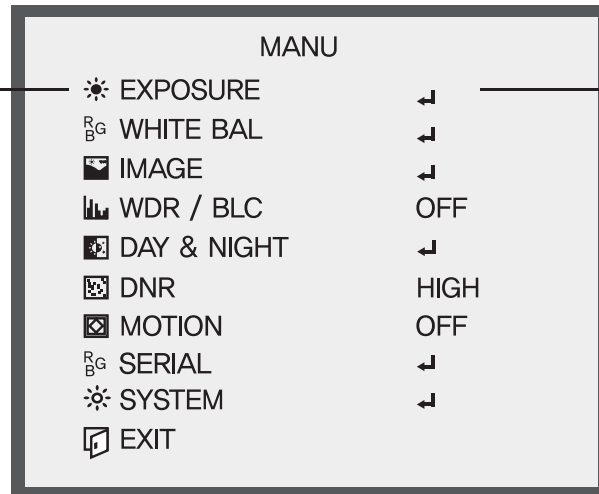


PAN / TILT CONTROL



MENU

Select any function you wish to operate by pushing the joystick Up or Down.



Modes can be changed pushing the joystick Right or Left.

3. Please press the button Right or Left if you wish to change mode.
 - When the button is pressed Right or Left, available values and mode are displayed in order. Please keep press the button until you get the mode you wish.
4. Please select "EXIT" and then press the button to finish the setting.

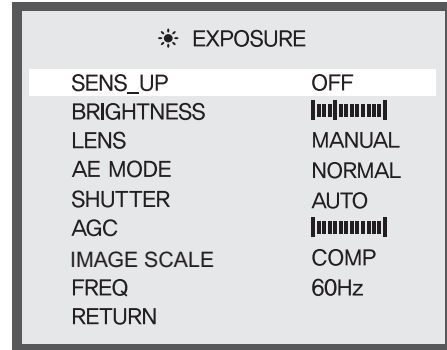
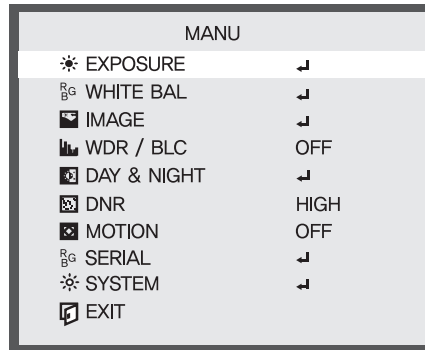
SETUP

EXPOSURE, WHITE BAL, IMAGE, WDR / BLC, DAY&NIGHT, DNR, MOTION, SERIAL, SYSTEM, EXIT control can be selected.

- When the MAIN MENU is on the screen, please position the cursor to SETUP by using the button. And then press the button.

☀ EXPOSURE

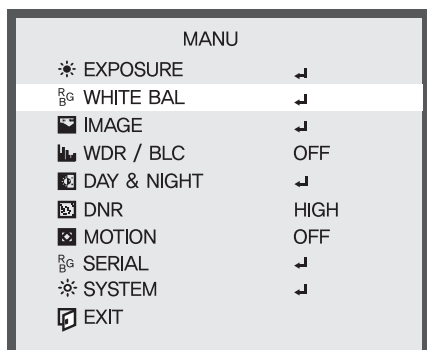
- When the SETUP menu screen is displayed, select EXPOSURE by using the Up and Down buttons so that arrow indicates EXPOSURE.
- Select a desired mode using the Right and Left buttons.



- SENS_UP : OFF / x2 / x3 / x4 / x5 / x6 / x7 / x8
 - Sens-up is realized in the most low illumination quality and it provides the image without a noise at the low illumination quality.
 - When it is night or dark, the camera automatically detects the light level and maintains a clear picture if this mode is activated.
 - When “SENS_UP” is on, shutter cannot be adjusted.
- BRIGHTNESS : Left Key (Level DECREMENT), Right Key (Level INCREMENT)
- LENS : When using BUILT -IN LENS, the type of the lens is able to fix. (DC / MANUAL)
- AE MODE : Manual Lens mode : you can select NORMAL / DEBLUR
DC Lens mode : you can select INDOOR / OUTDOOR / DEBLUR
- SHUTTER :
 - You can select either auto or manual shutter,
(1/30, 1/60, 1/120, 1/240, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/16000, 1/30000, 1/60000)
 - Shutter is set to “Manual” when DC Lens is selected
 - Shutter is set to “Auto” when Manual Lens is selected
- AGC (Auto Gain Control)
 - The higher the gain level, the brighter the screen - but the higher the noise.
- IMAGE SCALE :
 - You Can Select FULL / COMP / USER
 - The available image to level is (0~20)
- FREQ (AC Power Frequency Set)
 - You can select either 50Hz or 60Hz
 - Do the setting the frequency of the commercial power in a camera and prevent Flicker state.
- RETURN

WHITE BAL

- Use the White Balance function to adjust the screen color.
- When the SETUP menu screen is displayed, select 'White Bal.' by using the Up and Down buttons so that the arrow indicates 'White Bal.'
- Select a desired mode using the Right and Left buttons.



– AWB

- AUTO

: Default - This function continuously adjusts the white balance automatically to adapt to changes in lighting conditions.

- AUTOext

: It is a mode to do a halogen and the special lighting to White detection.

- PRESET

: This function adjusts the white balance regardless of the subject conditions.

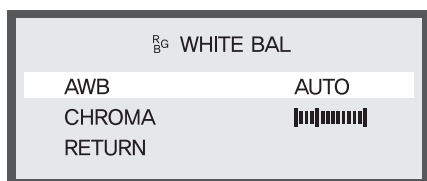
- MANUAL

KELVIN : LOW / MIDDLE / HIGH

R-GAIN : Left Key (Level DECREMENT), Right Key (Level INCREMENT)

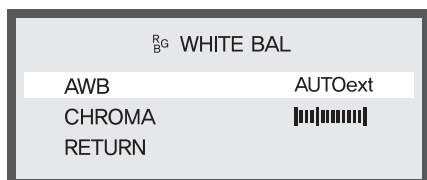
B-GAIN : Left Key (Level DECREMENT), Right Key (Level INCREMENT)

RETURN

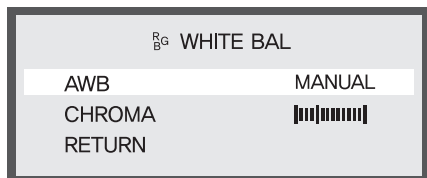
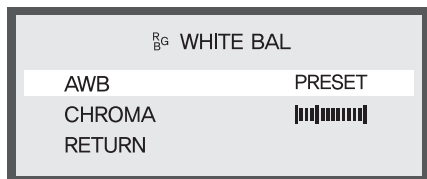


– CHROMA

: Left Key (Level DECREMENT), Right Key (Level INCREMENT)



– RETURN



NOTE

- Under the following conditions the WHITE BALANCE function may not operate properly. In such cases, please select the AWB mode.
 - ① When the object's surroundings have a very high color temperature (ex, a clear sky and sunset)
 - ② When the object's surroundings are dark
 - ③ If the camera directly faces a fluorescent light or is installed in a place where there are considerable changes in illumination, the WHITE BALANCE function may become unstable.

IMAGE

MANU	
☀ EXPOSURE	↓
☼ WHITE BAL	↓
📷 IMAGE	↓
📷 WDR / BLC	OFF
📷 DAY & NIGHT	↓
📷 DNR	HIGH
📷 MOTION	OFF
☼ SERIAL	↓
☀ SYSTEM	↓
📷 EXIT	

IMAGE	
SHARPNESS	6
DEFOG	SET ↓
D-ZOOM	0
MIRROR	OFF
FLIP	OFF
FREEZE	OFF
PRIVACY	OFF
SHADING	OFF
HLM	OFF
ACE	OFF
RETURN	

IMAGE	
SHARPNESS	6
DEFOG	OFF
D-ZOOM	0
MIRROR	OFF
FLIP	OFF
FREEZE	OFF
PRIVACY	SET ↓
SHADING	OFF
HLM	OFF
ACE	OFF
RETURN	

IMAGE	
SHARPNESS	6
DEFOG	OFF
D-ZOOM	0
MIRROR	OFF
FLIP	OFF
FREEZE	OFF
PRIVACY	OFF
SHADING	OFF
HLM	SET ↓
ACE	OFF
RETURN	

- SHARPNESS : Control 0 to 10 by right and left button.
- DEFOG : MODE (you can select AUTO / MANUAL)
LEVEL (you can select LOW / MIDDLE / HIGH)

DEFOG	
MODE	AUTO
LEVEL	MIDDLE
RETURN	

- DZOOM : You can use a digital zoom of 0 ~ x127
- MIRROR / FLIP : You can select function by using LEFT or RIGHT button.



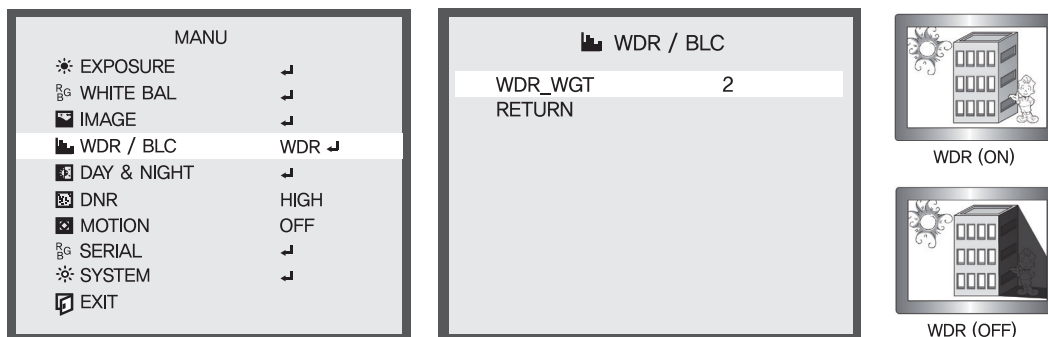
- FREEZE : The video can be stopped.
- PRIVACY : This modes conceals the areas you do not wish to appear on the screen.
- SHADING : When using wide angle lens, you can compensate darkness of corner on the screen.
- HLM (High Light Mask) : HLM function is being prevented against headlights of vehicle effectively. It is the most suitable function to see license plates at night

HLM	
LEVEL	
COLOR	BLK
RETURN	

- LEVEL : Left Key (Level DEC), Right Key (Level INC)
- COLOR : WHT / YEL / CYN / GRN / MAG / RED / BLU / BLK
- RETURN
- ACE (Adaptive Color & Contrast Enhancement) : OFF, LOW, MIDDLE, HIGH
ACE black performs an image Enhancement processing to enhance visibility of an image by changing the brightness values to the level that people can recognize the change. This processing technique is equivalent to the dynamic range reduction technique, Which converts the HDR (High Dynamic Range) into the restricted LDR (Low Dynamic Range)
- RETURN

WDR / BLC

- OFF : function does not operate.



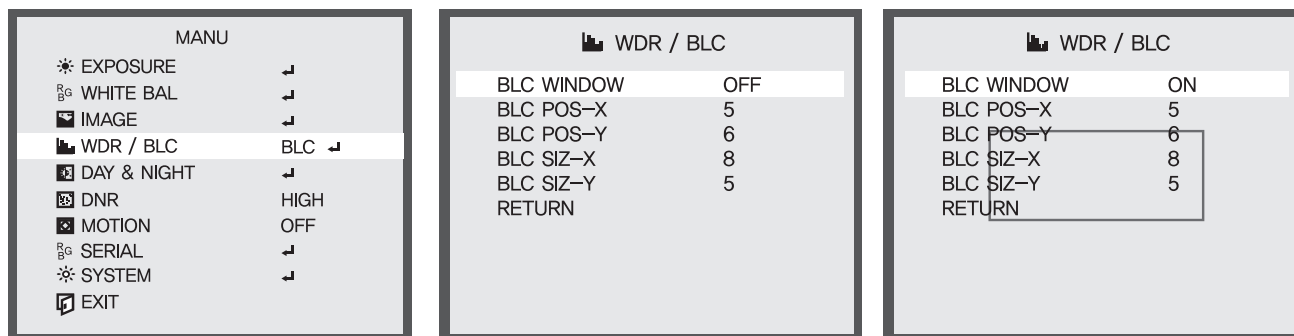
- WDR (Wide Dynamic Range)

Realize the improved backlight compensation function more than existed WDR (Wide Dynamic Range) with a fusion ratio of the optimum by pixel, when they composite both a shutter of high speed at the light area and the shutter of low speed at the dark area.

- WDR_WGT : The available range of level is 0 ~ 4
- RETURN

- BLC (Backlight Compensation)

When there is a strong backlight behind the object, clear images of the background as well as the object can still be obtained by using the BLC function.



- BLC WINDOW : You can choice ON or OFF
- BLC POS-X : The available range of level is 0 ~ 20
- BLC POS-Y : The available range of level is 0 ~ 20
- BLC SIZ-X : The available range of level is 0 ~ 20
- BLC SIZ-Y : The available range of level is 0 ~ 20
- RETURN

DAY&NIGHT

MANU	
☀ EXPOSURE	↓
⚙ WHITE BAL	↓
🖼 IMAGE	↓
📊 WDR / BLC	OFF
🌙 DAY & NIGHT	↓
🛡 DNR	HIGH
🚗 MOTION	OFF
⚙ SERIAL	↓
☀ SYSTEM	↓
🚪 EXIT	

- MDIR : (Motion Detection IR)

This camera(Search Camera) take turns the working the search light and IR LED by motion detection. Based on camera working characteristic, it's not working the search light when the motion detection right after the search light working release.

The search light is working by next motion detection after 3 ~ 4 seconds.

▶ May not work for some models

DAY & NIGHT	
MODE	MDIR ↓
RETURN	

MDIR ↓	
SEARCH ON	15SEC ↓
ANTI-SAT.	
DELAY	LOW
RETURN	

- AUTO : The camera will automatically show color image in high lux and black / white image in low lux.

DAY & NIGHT	
MODE	AUTO ↓
RETURN	

AUTO	
AGC THRS	
MARGIN	
DELAY	LOW
RETURN	

- EXTERN : Select this when the color is controlled by CDS sersor.

DAY & NIGHT	
MODE	EXTERN ↓
RETURN	

EXTERN	
ANTI-SAT.	
CDS D>>N	100
CDS D<<N	150
DELAY	LOW
RETURN	

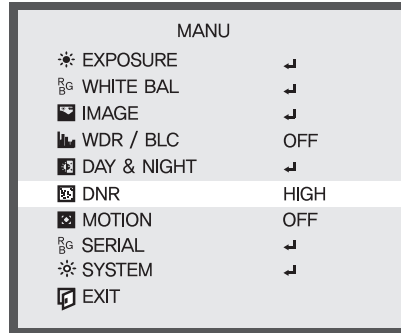
- COLOR : This picture is always displayed in color.

- B&W : The picture is always displayed in black and white.
You can turn on or off the burst signal on B/W mode.

DNR

DNR (Digital Noise Reduction)

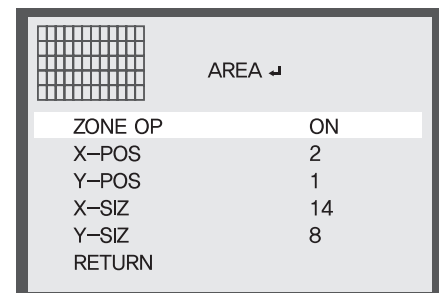
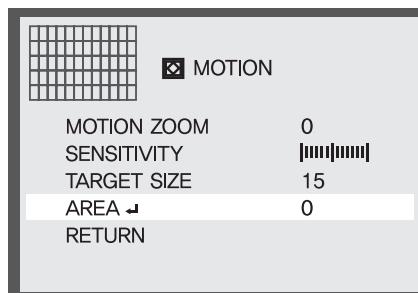
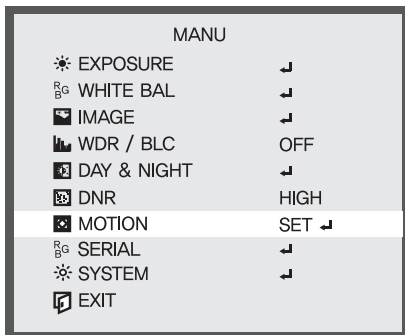
- Improve S/N ratio and more clean the low illumination quality and can be monitoring at night clearly without the image drag and noise phenomenon.



- OFF : DNR function does not operate.
- LOW / MIDDLE / HIGH : You can select 'LOW', 'MIDDLE' or 'HIGH' menu as DNR condition.

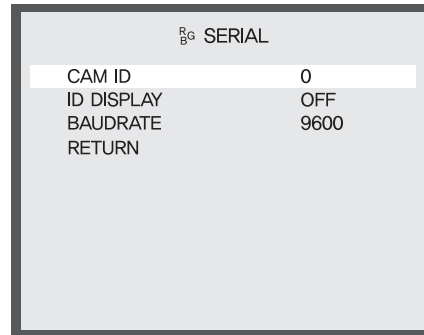
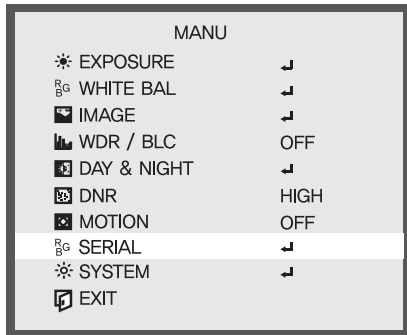
MOTION

This product has a feature that allows you to observe movement of objects in 3 different areas on the screen, and the words 'MOTION' appear on the screen when movement is detected. you can monitor activity more efficient.



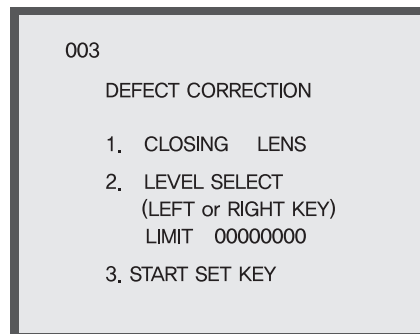
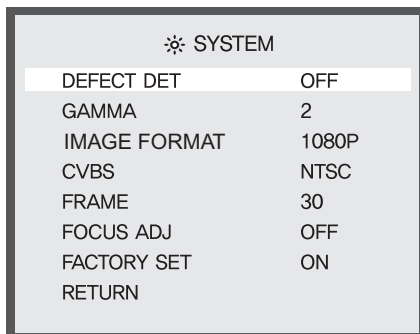
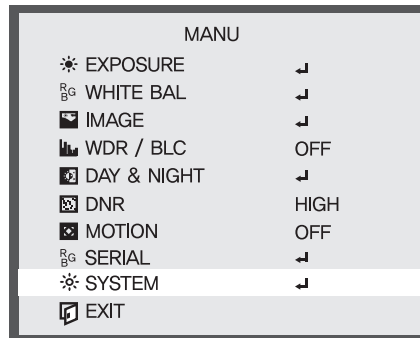
- OFF : MOTION mode is cancelled.
- SET : Any motion in the selected areas is observed.
 - MOTION ZOOM : You could set from "0" to "127" and D-Zoom is operated to the setting value when the moving is detected.
 - SENSITIVITY : Set the sensitivity of the moving detection.
 - TARGET SIZE : Set the target thing size to detect the moving. (0~50)
 - AREA : Set the size of the motion range.
 - RETURN

Ⓜ SERIAL

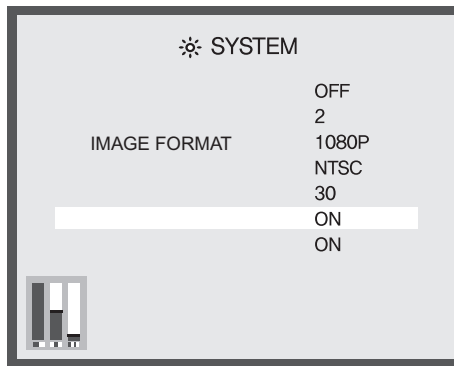


- CAM ID : You can select camera ID from 0 to 254 when using remote control.
- ID DISPLAY : You can select ID ON or OFF
- BAUDRATE : You can select 2400 / 4800 / 9600 / 19200 / 38400 / 57600 / 115200 bps. Support "pel-D protocol"

☀ SYSTEM



- DEFECT DET
 - OFF : DEFECT DET Mode is off.
 - ON : Close the lens to block the light.
 - Adjust left & right buttons and press “SET” button to automatically start the mode.
- GAMMA SET : You Can Select 0 / 1 / 2 / 3 / 4
- IMAGE FORMAT : You can select (1080P / 720P)
- CVBS : you can select (NTSC / PAL)
- FRAME: 1080P : Set output frame to 30 or 25. (Be set NTSC or PAL mode)
720P : Set output frame to 60 or 50. (Be set NTSC or PAL mode)



- FOCUS ADJ : - Menu > Focus Assist > On
 - You could see a green box when you move (control) the lens slowly.
 - When you move the lens to disappear the green box, the focus is fixed.
 - You could fix the one box in three boxes.
 - Left Box : Focus for Low contrast area
 - Middle Box : Focus for Middle contrast area
 - Right Box : Focus for high contrast area
- FACTORY SET : Factory initialize
- RETURN

Detailed Specifications

Sensor	1/2.9" Sony CMOS
Resolution	2.1 MegaPixel (1080p / 720p)
S/N	More than 52 dB (AGC Off)
Video Output	1x HD-SDI (BNC) / 1x SD CVBS (BNC)
IR Illuminators	35 IR LEDs
IR Color Temp.	850nm
IR Range	120'
Dynamic Intensity IR LEDs	YES
Lens	MegaPixel IR Corrected 2.8-12mm Varifocal
Digital Zoom	0 ~ x127
Minimum Illumination	1 Lux at F1.2 / 0.1 Lux (B/W) / 0 Lux at IR On
Day/Night	Mechanical IR Cut Filter (True Day/Night)
Electronic shutter speed	Auto / Manual (1/30sec ~ 1/30,000sec)
White Balance	Auto / Auto EXT / Pushing / Manual
Brightness	Adjustable (0 ~ 20 Steps)
DSS (Sens-Up)	OFF / X2 ~ X8
DNR	3D-DNR
WDR	YES
OSD Language	English
Privacy	YES (16 Zones)
Motion Detection	YES
ACE (Adaptive Color Enhancement)	YES
Advanced OSD Functions	HLM, Flip, Freeze, Sharpness, Mirror
Communication	RS-485 (PELCO-D)
HD Transmission Range	Up to 700' (Depending on cable characteristics and integrity)
Weather Resistance Rating	IP-67
Operating Conditions	14°-122°F (-10°-50°C) < 80% RH
Input Voltage	12VDC / 24VAC (Dual Voltage)
Power Consumption (24VAC)	260mA / 700mA (IR OFF/ON)
Power Consumption (12VDC)	170mA / 500mA (IR OFF/ON)
Dimensions	5.20" x 4.72" (H x Dia.)

Sony® and PELCO® are the registered trademarks of their independently owned and operated companies. These products have not been licensed or endorsed by the manufacturers of Sony® and PELCO® products.



OTHER PRODUCTS FROM VITEK *On Cue HD-SDI Video Recorders*



VT-HDOC Series

On Cue Series 4, 8, & 16 Channel HD-SDI Video Recorders

- 4, 8, or 16 Channel HD-SDI Inputs (Universal) with Full1080p, 720P, 960H & D1 Camera Support
- Simple plug and play, point-to-point connection from camera to DVR
- Pentaplex Operation (Multi-Channel Live-View, Playback, Recording, Backup, Network)
- VT-HDOC16: 480fps Live Display, Recording & Playback at 720p/1080p
- VT-HDOC8: 240fps Live Display, Recording & Playback at 720p/1080p
- VT-HDOC4: 120fps Live Display, Recording & Playback at 720p/1080p
- HDMI, VGA, and BNC Spot Output / Alarm In & Out / 4 Channel Audio In
- VT-HDOC 4 & 8 offer 2 Internal SATA2/SATA3 HDD Slots supporting up to 8TB (2 x 4TB HDD) using Advanced HDD Format (VT-HDOC16 Offers 5x SATA Slots for up to 20TB Internal Storage)
- External SATA Port (eSATA) supporting up to 5x External HDDs
- Remote Viewing via CVS Software, Web Browser, and Mobile Phones (iOS/Android)
- Viewing multiple Recorders with included CVS Software
- Adjustable Motion Detection Grid
- Thumbnail / Panorama Search



LIMITED LIABILITY WARRANTY

VITEK products carry a three (3) year limited warranty. 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 nontransferable and extends only to the original buyer or end user customer of a VITEK Authorized Reseller.

The product must have been used only for its intended purpose, and not been subjected to damage by misuse, willful or accidental damage, caused by excessive voltage or lightning.

The product must not have been tampered with in any way or the guarantee will be considered null and void.

This guarantee does not affect your statutory rights.

Contact your local VITEK Reseller should servicing become necessary.

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.



28492 CONSTELLATION ROAD VALENCIA, CA 91355
WWW.VITEKCCTV.COM