

# Owner's Manual



MODEL  
**VCB-HD602S**

Please read this manual carefully before operating.  
 You set and retain it for future reference.

## Important Safety Instructions

1. Read these instructions. - All these safety and operating instructions should be read before the product is operated.
2. Keep these instructions. - The safety, operating and use instructions should be retained for future reference.
3. Heed all warnings. - All warnings on the product and in the operating instructions should be adhered to.
4. Follow all instructions. - All operating and use instructions should be followed.
5. Do not use this apparatus near water. - For example: near a bath tub, wash bowl, kitchen sink, laundry tub, in a wet basement; near a swimming pool; etc.
6. Clean only with dry cloth. - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions. - Slots and openings in the cabinet are provided for ventilation, to ensure reliable operation of the product, and to protect it from over-heating. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided and the manufacturer's instructions have been adhered to.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with apparatus. When a cart is used, use caution when moving the cart / apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as powersupply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

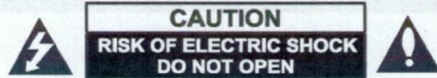


## Disposal of your old appliance

1. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
2. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

CE This product is manufactured to comply with the EMC DIRECTIVE 2004/108/EC and 2006/95/EC.

To disconnect power from the mains, pull out the mains cord plug. When install the product, ensure that the plug is easily accessible.



**CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.**



This lightning flash with arrowhead symbol within an equilateral triangle 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 exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

**FCC WARNING:** This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

## Regulatory Notices For U.S.A

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 his own expense.

- A suitable conduit entries, knock-outs or glands shall be provided in the cable entries of this product in the end user.
- Caution: Danger of explosion if battery is incorrectly replaced. Replaced only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.
- Holes in metal, through which insulated wires pass, shall have smooth well rounded surfaces or shall be provided with brushings.

**Warning:** Do not install this equipment in a confined space such as a bookcase or similar unit  
**Warning:** Wiring methods shall be in accordance with the National Electric Code, ANSI/NFPA 70.

**Warning:** This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

**Warning:** To reduce a risk of fire or electric shock, do not expose this product to rain or moisture  
**Caution:** This installation should be made by a qualified service person and should conform to all local codes.

**Caution:** To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

**Caution:** The apparatus should not be exposed to water (dripping or splashing) and no objects filled with liquids, such as vases, should be placed on the apparatus.

## CAUTIONS FOR SAFE OPERATION - POWER SUPPLY

This camera must operate at DC12V Certified / Listed, Class 2 Power supply.

## SPECIFICATIONS

### FEATURE

1/2.8" Sony Exmor CMOS Sensor ( 2.43megapixel)

\* Video output : 1080P AHD (Default) / HD-TVI / CVI / CVBS (1280H)\_1000TVL

( You can change to video output by UTC function or OSD Key )

\* SENS-UP(-x30), D.WDR, Privacy mask, Motion Detection

\* CS mount

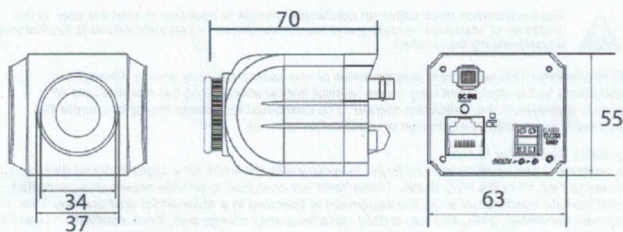
\* 3D-DNR/AHD, 2D-DNR/CVBS

\* Support UTC function

\* Power Source : DC 12V (±30%)

SPECIFICATION	NTSC	PAL
Image Device	1/2.8" Sony Exmor CMOS Sensor ( 2.43megapixel)	
Effective Pixel	1984 (H) x 1225 (V)	
Scanning System	Progressive	
Resolution	AHD(1080P), CVBS(1280H) 1000TVL	
minimum illumination	Color : 0.08 Lux, B/W : 0.008 Lux , Sens-up : 0.0008 Lux (B/W)	
Video Output	1080P AHD (Default) / HD-TVI / CVI / CVBS (1280H)_1000TVL	
S/N Ratio	More than 52dB	
Mount Type	Board Type	
AGC	Off / 0-15	
Shutter Speed	AUTO / FLK, ( 1/25(30) ~1/50,000 sec)	
Sens-up	off / X2 - X30	
Brightness	0-100	
Backlight	Off / BLC / HSBLC	
Image Enhancement	D-WDR	
Defog	On/ Off	
Day & Night	Auto / color / B&W / EXT	
White Balance	ATW /AWC / INDOOR / OUTDOOR / Manual / AWB	
Sharpness	Adjustable	
Mirror	Adjustable	
Dimension	55 X 63 (mm)	

Dimensions



\*\* Video output Conversions are below;  
 - push the OSD key during the 5 seconds.  
 (LEFT- CVBS / RIGHT-AHD / DOWN-HD-TVI / UP-HD-CVI)

OSD MENU - General Operation



This camera utilizes an On-Screen user MENU. To set items on the menu, use the following switch.

- \* UP  
Used to move upper direction on the menu screen. Use this button to select an item or adjust the parameters.
  - \* DOWN  
Used to move lower direction on the menu screen. Use this button to select an item or adjust the parameters.
  - \* RIGHT  
Moves the cursor to the right. Used to increment the value selected in the menu. The parameter changes each time this button is pressed to the right.
  - \* LEFT  
Moves the cursor to the left. Used to decrement the value selected in the menu. The parameter changes each time this button is pressed to the left.
  - \* SET  
Executes selections and displays a submenu for an item with the mark.
- RET : Return to the Previous Menu  
 - TOP: Return to the CAMEA SETTING menu screen.  
 - END : Exit the setup ment.

OSD control by UTC function

MAIN MENU		SUB MENU 1		SUB MENU 2			
LENS	DC ✓	MODE	INDOOR/OUTDOOR(MIN SHU./MAX SHU.)				
		IRIS SPEED	0~15				
EXPOSURE	✓	SHUTTER	AUTO ✓ 1/60(1/50), FLK ~ 1/50000, x2,...x30				
		AGC	0 ~ 15				
		SENSE-UP	AUTO ✓(OFF) : SENS-UP (x2,x4,...x30)				
		BRIGHTNESS : 1 ~ 100					
		D-WDR	ON/OFF	LEVEL	0 ~ 8		
	BLC ✓	DEFOG	AUTO ✓	POS / SIZE/GRADATION/DEFAULT			
		LEVEL	LOW / MIDDLE / HIGH				
		AREA	POSITION , SIZE , RET/AGAIN, DEFAULT				
		SELECT	AREA1 ~ AREA 4				
		DISPLAY	ON ✓(OFF) : POSITION, SIZE, RET/AGAIN				
HSBLC ✓	BLACK-LEVEL : ON / OFF						
	LEVEL	0~100					
	MODE	ALL DAY/NIGHT ✓(AGC LEVEL)					
	DEFAULT ✓						
WHITE BAL	ATW / AWC->SET ✓ / INDOOR / OUTDOOR / AWB						
	MANUAL ✓	BLUE(0~100) / RED(0~100)					
DAY & NIGHT	AUTO ✓	D->N(AGC) : 0~255, D->N(DELAY) : 0~60 N->D(AGC) : 0 ~ 255, N->D(DELAY) : 0~60					
	COLOR						
	BURST	ON / OFF					
	B/W ✓	IR SMART	ON ✓(OFF)	LEVEL	0~15		
			AREA ✓	POS/SZ/RET.AGAIN			
EXT ✓	D->N(DELAY) : 0~60, N->D(DELAY) : 0~60						
NR ✓	3DNR	OFF / LOW / MIDDLE / HIGH - ** ONLY ON AHD.					
	2DNR	OFF / LOW / MIDDLE / HIGH					
SPECIAL	CAM TITLE	ON ✓(OFF)					
	D-EFFECT	FREEZE/MIRROR/V-FLIP/ROTATE/N.IMAGE					

MAIN MENU		SUB MENU 1		SUB MENU 2			
MOTION	ON ✓(OFF)	SELECT	AREA1~4				
		AREA	ON ✓(OFF):				
		DISPLAY	POSITION,SIZE,RET/AGAIN				
		SENSITIVITY : 0 ~ 100					
		COLOR	WHITE / RED / GREEN / BLUE				
		TRANS.	0.25 ~1.00				
		ALARM ✓	VIEW TYPE: OFF/BLOCK/OUTLINE/ALL OSD VIEW/ALARM OUT/ALARM SIG.TIME				
		DEFAULT ✓					
		PRIVACY	ON ✓(OFF)	AREA	AREA1~4		
				DISPLAY	INV ✓	POSITION, SIZE, RET/AGAIN	
MOSAIC ✓							
COLOR ✓							
COLOR	USER/WHITE/BLACK/RED/ BLUE/YELLOW/GREEN/CYAN						
TRANS.	0.25~1.00						
DEFAULT ✓							
LANGUAGE	ENG/CHN1/CHN2/GER/FRA/ITA/SPA/POL/RUS/POR/NED/TUR						
DEFECT ✓	LIVE DPC	AGC LEVEL(0~255)/LEVEL(0~100)					
		WHITE	POS / SIZE ✓, START, DPC VIEW, LEVEL, AGC, SENS-UP				
		BLACK	POS / SIZE ✓, START, DPC VIEW, LEVEL, AGC, SENS-UP				
RS485 (OPTION)	✓	CAM ID : 0 ~ 255 ID DISPLAY : ON ✓(OFF) BAUDRATE : 2400 ~ 38400					
ADJUST ✓	SHARPNESS	OFF/AUTO ✓	LEVEL / START AGC / END AGC				
	MONITOR	CRT ✓	BLACK LEVEL/BLUE GAIN/RED GAIN				
		LCD ✓	BLACK LEVEL /GAMMA /BLUE G / RED G				
	LSC	OFF / ON					
VIDEO. OUT	NTSC / PAL						
EXT	RESET ✓ / NOT SAVE ✓						
**3D-DNR IS ONLY AVAIL ON AHD.							