

720p AHD CCTV Camera OSD User Manual

The 720p HD CCTV cameras (AHD CCTV) that this manual applies to can be found on this page.

<http://www.cctvcamerapros.com/720p-HD-Security-Cameras-s/985.htm>

CVBS, AHD mode selection

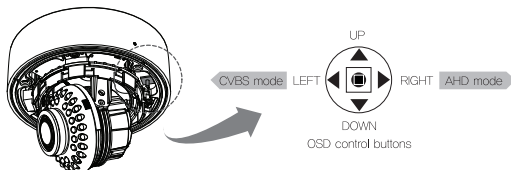
1. You need to select the CVBS / AHD mode according to the specifications of DVT.
 2. Before selecting the CVBS / AHD mode, please check the direction and position of the OSD operation buttons of the product.
 3. CVBS / AHD mode cannot be selected in a state in which to turn on the OSD setting screen. So, you need to set them after closing the OSD setting screen.
- If pressing the OSD button for 3 seconds to the left, it is set up (CVBS) output mode of the Analog.
 - If pressing the OSD button for 3 seconds to the right, it is set for n, it is set up output mode of the AHD.

Methods of operation by Product Type (Please check the position and direction of the OSD operation buttons)

PLASTIC DOME



VANDAL DOME



CVBS, AHD mode selection

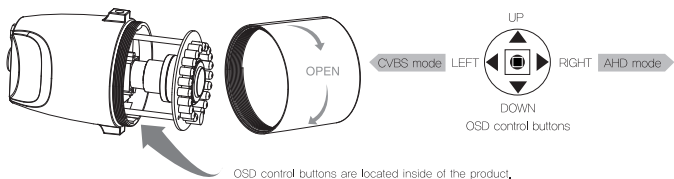
1. You need to select the CVBS / AHD mode according to the specifications of DVT.
2. Before selecting the CVBS / AHD mode, please check the direction and position of the OSD operation buttons of the product.
3. CVBS / AHD mode cannot be selected in a state in which to turn on the OSD setting screen. So, you need to set them after closing the OSD setting screen.

※ There are two types of controlling OSD. One is control button type in product, the other type is to control the OSD after opening the CAP of OSD.

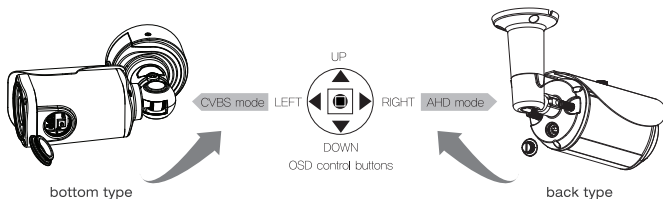
- If pressing the OSD button for 3 seconds to the left, it is set up (CVBS) output mode of the Analog.
- If pressing the OSD button for 3 seconds to the right, it is set for n, it is set up output mode of the AHD.

Methods of operation by Product Type (Please check the position and direction of the OSD operation buttons)

BULLET (Open) ㉔



BULLET (OSD cap) ㉕



CAMERA OPERATIONS

MENU

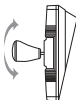
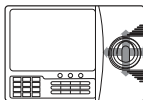
SETUP MENU						
LENS	MANUAL	DC				
EXPOSURE	SHUTTER DEFOG	AGC RETURN	SENS-UP	BRIGHTNESS	D-WDR	
BACKLIGHT	OFF	BLC	HSBLC			
WHITE BAL	ATW	AWC-SET	INDOOR	OUTDOOR	MANUAL	AWB
DAY&NIGHT	COLOR	B/W	EXT	AUTO		
NR	2DNR	3DNR	RETURN			
SPECIAL	CAM TITLE DEFECT	D-EFFECT RS485	MOTION RETURN	PRIVACY	LANGUAGE	
ADJUST	SHARPNESS COMET (AHD : X / CVBS : O)	MONITOR	LSC	VIDEO, OUT RETURN		
EXIT	SAVE&END	NOT SAVE	RESET			

Above specifications may be changed without any notice.

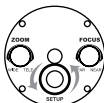
CAMERA OPERATIONS

SETTINGS

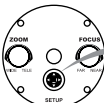
Settings can be made using the 5 buttons located on the back of the camera.



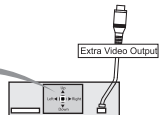
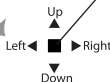
- Call OSD MENU : 1, Call #95
2, Open button
- Zoom in : Tele button or Joystick
- Zoom out : Wide button or Joystick



To Setup, turn the cover counter-clockwise.



To Setup, please Push



<Stick type>

Note

- 'MANUAL' menu for fixed lens models, 'DC' menu for auto iris models.
- Box type camera have both Lens menu.

1. Please press the SET button

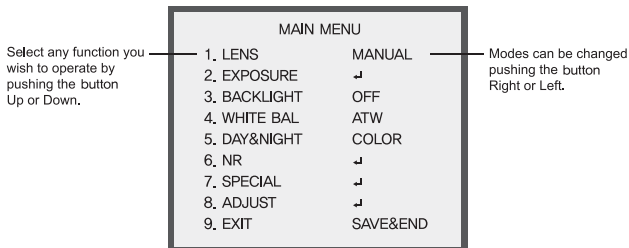
- Settings can now be made. The SET menu is displayed on the monitor.

2. Please select any function you wish to activate by pushing the button Up or Down

- The cursor position will appear green on your screen.
You can push the button Up or Down to change function you wish to change.

CAMERA OPERATIONS

MENU



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

LENS, EXPOSURE, BACKLIGHT, WHITE BAL, DAY&NIGHT, NR, SPECIAL, ADJUST, 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.

CAMERA OPERATIONS

1. LENS

- When the 'MAIN MENU' menu is displayed on the screen, please position the arrow to point to 'LENS' by using the UP and DOWN buttons.
- Please select the type of the lens you wish to use by pressing the LEFT or RIGHT button.

MAIN MENU	
1, LENS	MANUAL
2, EXPOSURE	↓
3, BACKLIGHT	OFF
4, WHITE BAL	ATW
5, DAY&NIGHT	AUTO
6, NR	↓
7, SPECIAL	↓
8, ADJUST	↓
9, EXIT	SAVE&END

MAIN MENU	
1, LENS	DC ↓
2, EXPOSURE	↓
3, BACKLIGHT	OFF
4, WHITE BAL	ATW
5, DAY&NIGHT	AUTO
6, NR	↓
7, SPECIAL	↓
8, ADJUST	↓
9, EXIT	SAVE&END

- DC : Auto iris lens selection
- MANUAL : Manual lens selection
- Please press thr SETUP button if you wish to return to the previous menu,

2. EXPOSURE

- When the 'MAIN MENU' menu screen is displayed, select 'EXPOSURE' by using the UP and DOWN buttons so that the arrow indicates EXPOSURE.
- Select a desired mode using the UP and DOWN buttons.

CAMERA OPERATIONS

MAIN MENU	
1, LENS	MANUAL
2, EXPOSURE	↓
3, BACKLIGHT	OFF
4, WHITE BAL	ATW
5, DAY&NIGHT	AUTO
6, NR	↓
7, SPECIAL	↓
8, ADJUST	↓
9, EXIT	SAVE&END

EXPOSURE	
1, SHUTTER	AUTO
2, AGC	■■■■■■ 15
3, SENS-UP	OFF
4, BRIGHTNESS	■■■■■■ 50
5, D-WDR	OFF
6, DEFOG	OFF
7, RETURN	RET ↓

- **SHUTTER** (Fixed the shutter speed in Manual mode.)

- AUTO : Default-Users set the brightness of the scene and the shutter speed is controlled automatically.
- MANUAL : The shutter speed is controlled by users.
 - AHD (1/30(25) ~ 1/50,000, x2, ~ x30) / CVBS (1/60(50) ~ 1/50,000, x2, ~ x30)
- FLK : Select this when you experience picture flicker, which can happen when there is a clash with the frequency of the installed lighting

- **AGC (Auto Gain Control)**

- The higher the gain level, the brighter the screen - but the higher the noise.
- AGC : Auto Gain Control level set 0~15

EXPOSURE	
1, SHUTTER	AUTO
2, AGC	■■■■■■ 15
3, SENS-UP	AUTO ↓
4, BRIGHTNESS	■■■■■■ 50
5, D-WDR	OFF
6, DEFOG	OFF
7, RETURN	RET ↓

SENS-UP	
1, SENS-UP	x6
2, RETURN	RET ↓

- **SENS-UP**

- SensUP 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.
- AUTO : Auto level control (x2 ~ x30)

CAMERA OPERATIONS

- **BRIGHTNESS** : Brightness level control (0~100)

EXPOSURE	
1, SHUTTER	AUTO
2, AGC	15
3, SENS-UP	OFF
4, BRIGHTNESS	50
5, D-WDR	ON ↴
6, DEFOG	OFF
7, RETURN	RET ↴

D-WDR	
1, LEVEL	8
2, RETURN	RET ↴

- **D-WDR (Digital Wide Dynamic Range)**

Realize the improved backlight compensation function more than existed DWDR (Digital 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

EXPOSURE	
1, SHUTTER	AUTO
2, AGC	15
3, SENS-UP	OFF
4, BRIGHTNESS	50
5, D-WDR	OFF
6, DEFOG	AUTO ↴
7, RETURN	RET ↴

DEFOG	
1, POS/SIZE	↴
2, GRADATION	0
3, DEFAULT	↴
4, RETURN	RET ↴

POSITION

↑

↓

←

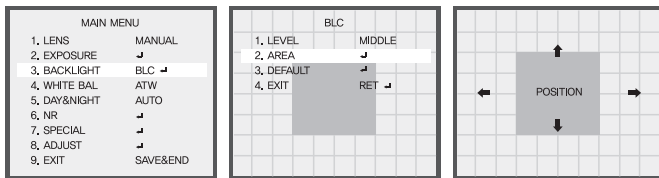
→

- **DEFOG** : Brighten the image when it is foggy or cloudy

1. POS/SIZE : Select the region to apply DEFOG.
2. GRADATION : You can set the level of DEFOG from 0 to 2
3. DEFAULT : The set point in PRIVACY TAB gets initialized.

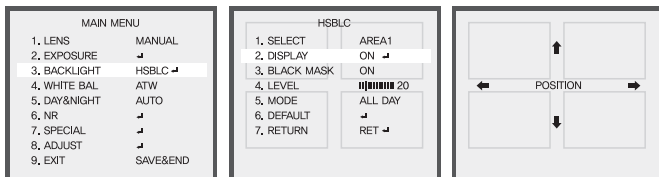
CAMERA OPERATIONS

3. BACKLIGHT



- BLC (Back Light Compensation)

Possible to select two areas at AREA SEL and can control GAIN, Expand or reduce a length area by HEIGHT and the width area by WIDTH, Move to a width direction by LEFT/RIGHT and the length direction by TOP/BOTTOM.



- HSBLC : Sets HSBLC area of separate way from HLC mode.

1. SELECT : You can adjust 4 direction
2. DISPLAY : You can select (ON, OFF)
3. BLACK MASK : The transmission range of light in HSBLC is shown in Black.
4. LEVEL : You can set the level of Black Mask from 0 to 100,
5. MODE : You can select, (ALL DAY, NIGHT)
6. DEFAULT : The set point in HSBLC TAB gets initialized,

CAMERA OPERATIONS

4. WHITE BAL

The screen color can be adjusted by using the WHITE BALANCE function.

1. Please position the arrow to point to 'WHITE BAL' on the SETUP menu by using the UP and DOWN buttons.
2. Please select the mode you wish to operate by pressing the LEFT or RIGHT button.

MAIN MENU	
1. LENS	MANUAL
2. EXPOSURE	⬇
3. BACKLIGHT	OFF
4. WHITE BAL	ATW
5. DAY&NIGHT	AUTO
6. NR	⬇
7. SPECIAL	⬇
8. ADJUST	⬇
9. EXIT	SAVE&END

- ATW : Select this when the color temperature is between 2300° K and 9500° K
- AWB : Select this when the color temperature is between 2500° K and 10500° K
- AWC → SET : To find the optimal setting for the current luminance environment in this mode, set the point the camera towards a sheet of white paper and press the SET button.
If the environment changes, readjust it.

MAIN MENU	
1. LENS	MANUAL
2. EXPOSURE	⬇
3. BACKLIGHT	OFF
4. WHITE BAL	MANUAL ⬇
5. DAY&NIGHT	AUTO
6. NR	⬇
7. SPECIAL	⬇
8. ADJUST	⬇
9. EXIT	SAVE&END

MANUAL WB	
1. BLUE	▯▯▯▯▯ 50
2. RED	▯▯▯▯▯ 50
3. RETURN	RET ⬇

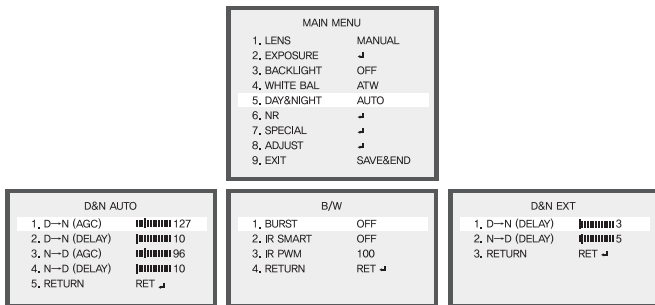
- MANUAL : Select this to fine-tune White Balance manually. Set White Balance first by using the ATW or AWC mode. After that switch to MANUAL mode, fine-tune the White Balance and then press the SET button.
- INDOOR : Select this when the color temperature is between 4500° K and 8500° K
- OUTDOOR : Select this when the color temperature is between 1800° K and 10500° K (sodium light inclusion)

CAMERA OPERATIONS

5. DAY&NIGHT

You can display pictures in color or black and white.

- When the SETUP is on the screen, please position the cursor to 'DAY & NIGHT' by using the button. And then press the button.



- AUTO** : The camera will automatically show color image in high lux and black / white image in low lux.
 - DAY → NIGHT: Color to B/W mode slide, 0 to 255
 - NIGHT → DAY: B/W to Color mode slide, 0 to 255
- EXT** : It is a mode to convert Day & Night by received external input signal.

IR camera does not have this feature. Instead, it detects lux using CDS, and turn on IR LEDs. Then, the video of the camera changes to B/W mode.

- COLOR** : This picture is always displayed in color.
- B&W** :
 - BURST** :
 - OFF : You can see clear picture without color noise when BURST function is off.
 - ON : When using some monitor or DVR system, color noise can be seen on the screen. In that case You can select the 'BURST' function 'ON'.
 - IR SMART** : Can adjust the display saturation as ON or OFF.
 - IR PWM** : Can adjust the display saturation as 0 to 100

CAMERA OPERATIONS

6. NR (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.

MAIN MENU	
1, LENS	MANUAL
2, EXPOSURE	⬇
3, BACKLIGHT	OFF
4, WHITE BAL	ATW
5, DAY&NIGHT	AUTO
6, NR	⬇
7, SPECIAL	⬇
8, ADJUST	⬇
9, EXIT	SAVE&END

NR	
1, 2DNR	MIDDLE
2, 3DNR	MIDDLE
3, RETURN	RET ⬇

- 2DNR / 3DNR

OFF : DNR function does not operate,

LOW / MIDDLE / HIGH : You can select 'LOW', 'MIDDLE' or 'HIGH' menu as NR condition.

7. SPECIAL

CAM TITLE, D—EFFECT, MOTION, PRIVACY, LANGUAGE, DEFECT, RS485, RETURN control can be selected.

MAIN MENU	
1, LENS	MANUAL
2, EXPOSURE	⬇
3, BACKLIGHT	OFF
4, WHITE BAL	ATW
5, DAY&NIGHT	AUTO
6, NR	⬇
7, SPECIAL	⬇
8, ADJUST	⬇
9, EXIT	SAVE&END

CAMERA OPERATIONS

1. CAM TITLE

If you enter a title, the title will appear on the monitor.

SPECIAL		
1, CAM TITLE	ON	↵
2, D-EFFECT	↵	↵
3, MOTION	OFF	
4, PRIVACY	OFF	
5, LANGUAGE	ENG	↵
6, DEFECT	↵	
7, RS485	↵	
8, RETURN	RET	↵

CAM TITLE	
0123456789	
ABCDEFGHIJK	
LMNOPQRSTU	
VWXYZ▶◀◀◀()	
~_■/=:~.,	
↔ CLR POS END	
EAGLET	-----

- ◀, ▶ : When it modify, user can move revision text,
- CLR: User can remove all text,
- POS: The text move to the position,
- RET : After finishing USER TITLE to the upper menu.

2. D-EFFECT

SPECIAL		
1, CAM TITLE	OFF	
2, D-EFFECT	↵	↵
3, MOTION	OFF	
4, PRIVACY	OFF	
5, LANGUAGE	ENG	↵
6, DEFECT	↵	
7, RS485	↵	
8, RETURN	RET	↵

D-EFFECT	
1, FREEZE	OFF
2, MIRROR	OFF
3, NEG.IMAGE	OFF
4, RETURN	RET ↵

- FREEZE : When using 'FREEZE' function on, you can see the negative picture on the screen.
- MIRROR : You can select function by using LEFT or RIGHT button.



OFF



MIRROR



V-FLIP



ROTATE

- NEG. IMAGE : When using 'NEG.IMAGE' function on, you can see the negative picture on the screen,

CAMERA OPERATIONS

3. MOTION (Detects a moving object)

This product has a feature that allows you to observe movements of objects in selected areas on the screen, and the shape '✕' appear on the screen when movement is detected; hence a single individual can conduct supervision efficiently. The camera detects an object's movement by sensing disparity of outline, and level of brightness and color.

SPECIAL	
1, CAM TITLE	OFF
2, D-EFFECT	⬇
3, MOTION	ON ⬇
4, PRIVACY	OFF
5, LANGUAGE	ENG ⬇
6, DEFECT	⬇
7, RS485	⬇
8, RETURN	RET ⬇

MOTION	
1, SELECT	AREA1
2, DISPLAY	ON ⬇
3, SENSITIVITY	000000 64
4, COLOR	GREEN
5, TRANS	1,00
6, ALARAM	⬇
7, DEFAULT	⬇
8, RETURN	RET ⬇

1. SELECT : Select the region to apply Privacy
2. DISPLAY : You can select (OFF / ON)
3. SENSITIVITY : The available range of level is 0~100
4. COLOR : You can change color of motion range in SELECT(green, blue, white, red)
5. TRANS : You can set the color lever of motion region selected in SELECT
6. ALARAM : Set the output system
7. DEFAULT : The set point in MOTION TAB gets initialized,

4. PRIVACY

The mask controls about the zone where the privacy is necessary. The total mask is 4 zones. The each mask color can control .

SPECIAL	
1, CAM TITLE	OFF
2, D-EFFECT	⬇
3, MOTION	OFF
4, PRIVACY	ON ⬇
5, LANGUAGE	ENG ⬇
6, DEFECT	⬇
7, RS485	⬇
8, RETURN	RET ⬇

PRIVACY	
1, SELECT	AREA1
2, DISPLAY	COLOR ⬇
3, COLOR	WHITE
4, TRANS	1,00
5, DEFAULT	⬇
6, RETURN	RET ⬇

CAMERA OPERATIONS

- 1, SELECT : Select the region to apply Privacy
- 2, DISPLAY : You can apply 4 types (MOSAIC, INV., COLOR, OFF) in PRIVACY selected
- 3, SENSITIVITY : The available range of level is 0~100
- 4, COLOR : You can change color of Privacy range in SELECT(green, blue, white, red)
- 5, TRANS : You can set the level of Privacy range in SELECT
- 6, DEFAULT : The set point in PRIVACY TAB gets initialized.

5. LANGUAGE

You can select language, (Default is ENG)

6. DEFECT

SPECIAL	
1. CAM TITLE	OFF
2. D-EFFECT	↕
3. MOTION	OFF
4. PRIVACY	OFF
5. LANGUAGE	ENG ↕
6. DEFECT	↕
7. RS485	↕
8. RETURN	RET ↕

DEFECT	
1. LIVE DPC	OFF
2. WHITE DPC	OFF
3. BLACK DPC	OFF
4. RETURN	RET ↕

- DPC control mode

You can set the level point of DPC, (LIVE DPC / WHITE DPC / BLACK DPC)

7. RS485

SPECIAL	
1. CAM TITLE	OFF
2. D-EFFECT	↕
3. MOTION	OFF
4. PRIVACY	OFF
5. LANGUAGE	ENG ↕
6. DEFECT	↕
7. RS485	↕
8. RETURN	RET ↕

RS485	
1. CAM ID	00000001
2. ID DISPLAY	OFF
3. BAUDRATE	9600
4. RETURN	RET ↕

- 1, CAM ID : You can select camera ID from 0 to 255 when using remote control
- 2, ID DISPLAY : You can move title by using UP, DOWN, LEFT, RIGHT button
- 3, BAUDRATE : You can select 2400 / 4800 / 9600 / 19200 / 38400 bps,

CAMERA OPERATIONS

8. ADJUST

SHARPNESS, MONITOR, LSC, VIDEO, OUT, COMET, RETURN control can be selected.

MAIN MENU		ADJUST	
1. LENS	MANUAL	1. SHARPNESS	AUTO ▾
2. EXPOSURE	▾	2. MONITOR	CRT ▾
3. BACKLIGHT	OFF	3. LSC	OFF
4. WHITE BAL	ATW	4. VIDEO, OUT	NTSC
5. DAY&NIGHT	AUTO	5. COMET	OFF
6. NR	▾	6. RETURN	RET ▾
7. SPECIAL	▾		
8. ADJUST	▾		
9. EXIT	SAVE&END		

1. SHARPNESS : Sharpness level control (LEVEL / START AGC / END AGC)

2. MONITOR : You can select (CRT / LCD)

3. LSC : When using wide angle, you can compensate darkness of corner on the screen

4. VIDEO, OUT : You can select (NTSC / PAL)

5. COMET : You can select (OFF / ON : DVR without COMET outputs B/W image)

9. EXIT

MAIN MENU	
1. LENS	MANUAL
2. EXPOSURE	▾
3. BACKLIGHT	OFF
4. WHITE BAL	ATW
5. DAY&NIGHT	AUTO
6. NR	▾
7. SPECIAL	▾
8. ADJUST	▾
9. EXIT	SAVE&END

1. SAVE&END : Save the set of OSD

2. RESET : Factory initialize

3. NOT SAVE : Do not save the set of OSD

MEMO