



HIGH DEFINITION SERIAL DIGITAL INTERFACE
OSD CONTROL – USER' S GUIDE

CAMERA OPERATIONS

MENU

SETUP MENU

EXPOSURE

SENS_UP BRIGHTNESS LENS AE MODE SHUTTER AGC 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 DOUT SCALE DOUT FORMAT CVBS FRAME FOCUS ADJ
FACTORY SET RETURN

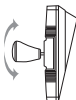
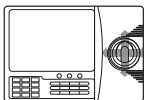
EXIT

Above specifications may be changed without any notice.

CAMERA OPERATIONS

SETTINGS

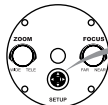
Settings can be made using the 5 buttons located on the back of the camera.



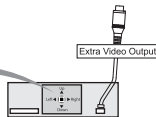
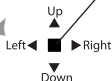
- Call OSD MENU : 1. Call #95
2. Open button
- Zoom in : Tele button or Joystick
- Zoom out : Wide button or Joystick



To Setup, turn the cover counter-clockwise.



To Setup, please Push



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

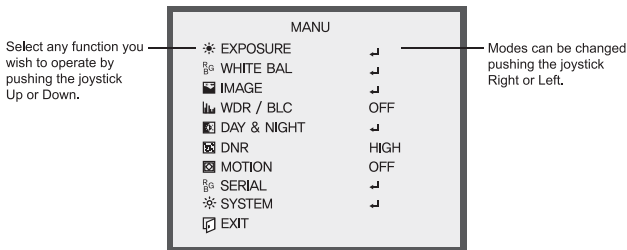
- Settings can now be made. The SET menu is displayed on the monitor.

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

MANU



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

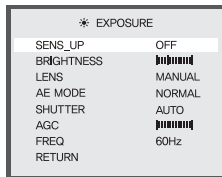
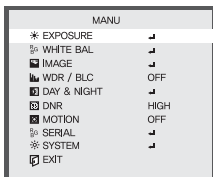
EXPOSURE, WHITE BAL, IMAGE, WDR / BLC, DAY&NIGHT, DNR, MOTTION, SERIAL, SYSTEM, EXIT control can be selected.

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

CAMERA OPERATIONS

* 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 Up and Down buttons.

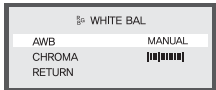
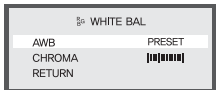
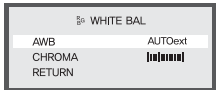
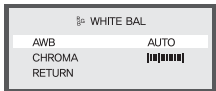
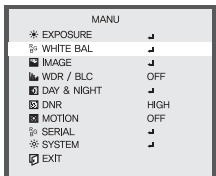


- SENS_UP : OFF / x2 / x3 / x4 / x5 / x6 / x7 / x8
 - Sens-up is realized in the most low illumination quality and it provides the image without a noise at the low illumination quality.
 - When it is night or dark, the camera automatically detects the light level and maintains a clear picture if this 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.
- 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

CAMERA OPERATIONS

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 Up and Down 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

CAMERA OPERATIONS

IMAGE

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

- 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,



OFF



MIRROR (ON)



FLIP (ON)

- 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

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	

HLM	
LEVEL	High
COLOR	BLK
RETURN	

- LEVEL : Left Key (Level DEC), Right Key (Level INC)
- COLOR : WHT / YEL / CYN / GRN / MAG / RED / BLU / BLK
- RETURN

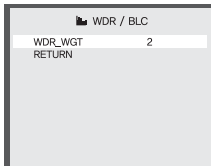
IMAGE	
SHARPNESS	6
DEFOG	OFF
D-ZOOM	0
MIRROR	OFF
FLIP	OFF
FREEZE	OFF
PRIVACY	OFF
SHADING	OFF
HLM	SET ↓
ACE	OFF
RETURN	

- 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 recognise 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

CAMERA OPERATIONS

WDR / BLC

- OFF : function does not operate.



WDR (ON)



WDR (OFF)

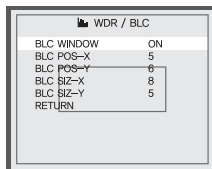
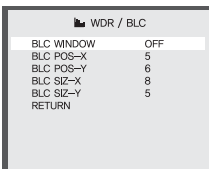
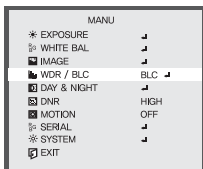
- WDR (Wide Dynamic Range)

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)

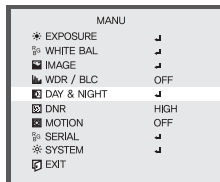
When there is a strong backlight behind the object, clear images of the background as well as the object can still be obtained by using the BLC function.



- 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

CAMERA OPERATIONS

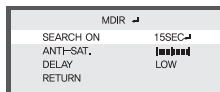
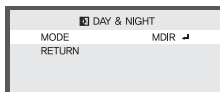
2 DAY&NIGHT



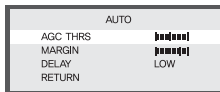
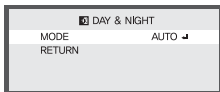
- MDIR : (Motion Detection IR)

IR LED is normally off at Night mode, As soon as it detects any motion, IR LED will be operated automatically, When detecting motion is finished, it will be off again,

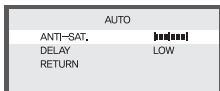
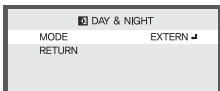
► May not work for some models



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



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



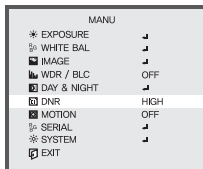
- COLOR : This picture is always displayed in color,
- B&W : The picture is always displayed in black and white,
You can turn on or off the burst signal on B/W mode,

CAMERA OPERATIONS

DNR

DNR (Digital Noise Reduction)

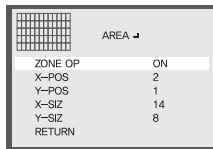
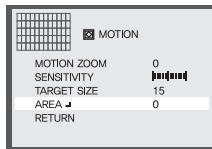
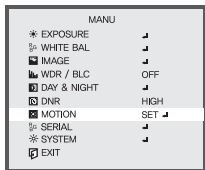
- Improve S/N ratio and more clean the low illumination quality and can be monitoring at night clearly without the image drag and noise phenomenon.



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

MOTION

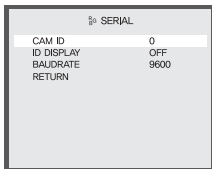
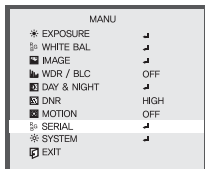
This product has a feature that allows you to observe movement of objects in 3 different areas on the screen, and the words 'MOTION' appear on the screen when movement is detected. you can monitor activity more efficient.



- 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

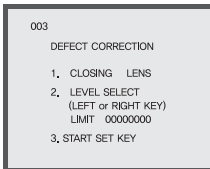
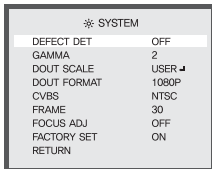
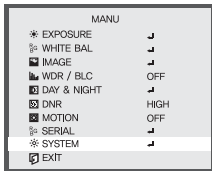
CAMERA OPERATIONS

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

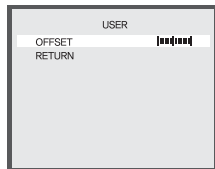
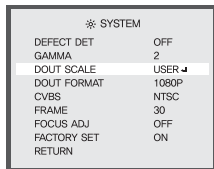


CAMERA OPERATIONS

- 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



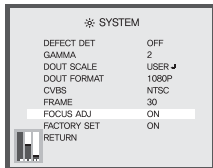
- DOUT SCALE : The available image to level is (0~20)

- DOUT FORMAT : You can select (1080P / 720P)

- CVBS : you can select (NTSC / PAL)

- FRAME : 1080P : Set output frame to 25 or 30, (Be set NTSC or PAL mode)

720P : Set output frame to 50 or 60, (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

CAMERA OPERATIONS

Above specifications may be changed without any notice.

