

AHD 22series OSD Manual

Thanks for purchasing our product. Before operating the unit, please read the instructions carefully and keep this manual for future reference.

Safety Warning

1. Read this manual carefully before installing the unit

Please read this manual first for correct installation and operation.

2. Never install the camera on a ceiling that cannot hold its weight

The product may fall down and cause damages.

3. Never install the camera near electric or magnetic fields

Install the camera away from TV, radio transmitter, magnet, electric motor, transformer, audio speakers since the magnetic fields generate from above devices would distort the video image.

4. Never install or use the camera in areas exposed to water, oil or gas

The water, oil or gas may result in operation failure, electric shock or fire. Do not use this unit near water-for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, near a swimming pool, in an unprotected outdoor installation, or any area which is classified as a wet location.

5. Never face the camera toward the sun

Direct sunlight or severe ray may cause fatal damage to sensor and internal circuit.

6. Power Cord Protection

Touching the wet power cord with hands or touching the power cord with wet hands may result in electric shock. Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.

7. Attachments

Do not use attachment not recommended by the product manufacturer as they may cause hazards.

8. Object and Liquid Entry

Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind onto the product.

9. Do not operate the camera in environments where the temperature, humidity or power source is beyond the specified ones

Use the camera in suitable environments where the temperature is within -10°C~50°C and humidity below 80%. Use the input power source as this instruction indicated.

10. Cleaning

Unplug the unit from the outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

11. Never disassemble the camera nor put impurities in it

Disassembly or impurities may result in trouble or fire.

12. Stop using when the product emits smoke or abnormal heat

13. Servicing

Do not attempt to repair this unit yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

14. Retain Instructions

THE SAFETY AND OPERATING INSTRUCTIONS SHOULD BE RETAINED FOR FUTURE REFERENCE.

NOTE:

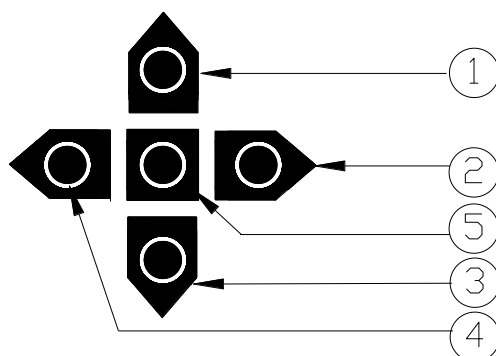
The information in this manual was current when published. The manufacturer reserves the right to revise and improve its products. All specifications are therefore subject to change without notice.

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1. OSD Operation

1.1 OSD Control Buttons



Please note the **control buttons vary depending on models**.

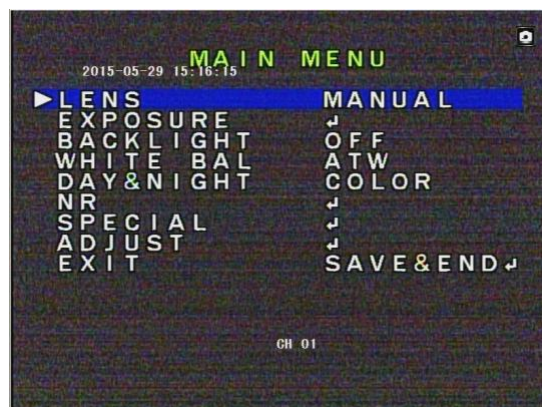
They might be at side or back of the camera. For dome type, either you need to open the case to find them or they are simply not available to the camera.

- ① **UP**
Use this button to move the cursor upwards to the desired item.
- ② **RIGHT**
Use this button to move the cursor to the right to select or to adjust the parameters of the selected item. The parameter increases when the right button is pressed. (**Long press to switch to HD/Digital signal Output**)
- ③ **DOWN**
Use this button to move the cursor downwards to the desired item.
- ④ **LEFT**
Use this button to move the cursor to the left to select or to adjust the parameters of the selected item. The parameter decreases when the left button is pressed. (**Long press to switch CVBS/Analog signal Output**)
- ⑤ **ENTER**
Use this button to display the main menu, to confirm and to enter the submenus when they're available. Items with "<┘" symbol in the end contain sub-menus. For further settings of those items, select the desired item with the button ▲ or ▼ and press the **ENTER** button to bring up the sub-menu and edit.

2. Camera OSD

To operate the camera OSD setting, use the control key pad to control it. For some models, you might need to open the control panel case to access the control key panel. Press the **Enter** button which in the center of the control panel to bring up the "MAIN MENU" on the TV/Monitor screen as below. Please check the OSD content tables to find out the function you need.

***Note: Function Names and Default Values may vary depending on models.**



MAIN MENU

MAIN MENU

MAIN MENU	Default Value	Alternative Options
LENS	DC<↵	MANUAL
EXPOSURE	<↵	See Exposure Table
BACKLIGHT	OFF	BLC<↵ , HSBLC<↵
WHITE BAL	ATW	AWC->SET<↵ , MANUAL<↵ , INDOOR, OUTDOOR, AWB
DAY&NIGHT	AUTO<↵ or EXT<↵	B/W<↵ , AUTO<↵ , EXT<↵ , COLOR
NR	<↵	See NR Table
SPECIAL	<↵	See SPECIAL Table
ADJUST	<↵	See ADJUST Table
EXIT	SAVE&END<↵	RESET<↵ , NOT SAVE<↵

SUB MENU

DC

DC LENS MODE	Settings
MODE	INDOOR, OUTDOOR<↵
IRIS SPEED	8
RETURN	SAVE&END<↵ , RET<↵

EXPOSURE

EXPOSURE	Settings
SHUTTER	AUTO, 1/30, 1/60, FLK, 1/240, 1/480, 1/1000, 1/2000, 1/5000, 1/10000, 1/50000, x2, x4, x6, x8, x10, x15, x20, x25, x30
AGC	15
SENS-UP	OFF, AUTO<↵
BRIGHTNESS	40
D-WDR	OFF, AUTO, ON<↵
DEFOG	OFF, AUTO<↵
RETURN	SAVE&END<↵ , RET<↵

BACKLIGHT

BLC	Settings
LEVEL	MIDDLE, LOW, HIGH
AREA	<↵

DEFAULT	<↵
RETURN	SAVE&END<↵ , RET<↵

BACKLIGHT

HSBLC	Settings
SELECT	AREA1/2/3/4
DISPLAY	OFF, ON<↵
BLACK MASK	ON, OFF
LEVEL	20
MODE	ALL DAY, NIGHT<↵
DEFAULT	<↵
RETURN	SAVE&END<↵ , RET<↵

DAY&NIGHT

B/W	Settings
BURST	OFF, ON
IR SMART	OFF, ON<↵
RETURN	SAVE&END<↵ , RET<↵

DAY&NIGHT

D&N AUTO	Settings
D->N (AGC)	200
D->N (DELAY)	1
N->D (AGC)	80
N->D (DELAY)	1
RETURN	SAVE&END<↵ , RET<↵

DAY&NIGHT

D&N EXT	Settings
D->N (DELAY)	3
N->D (DELAY)	3
RETURN	SAVE&END<↵ , RET<↵

NR

NR	Settings
2DNR	LOW, MIDDLE, HIGH, OFF
3DNR	LOW, MIDDLE, HIGH, OFF
RETURN	SAVE&END<↵ , RET<↵

SPECIAL

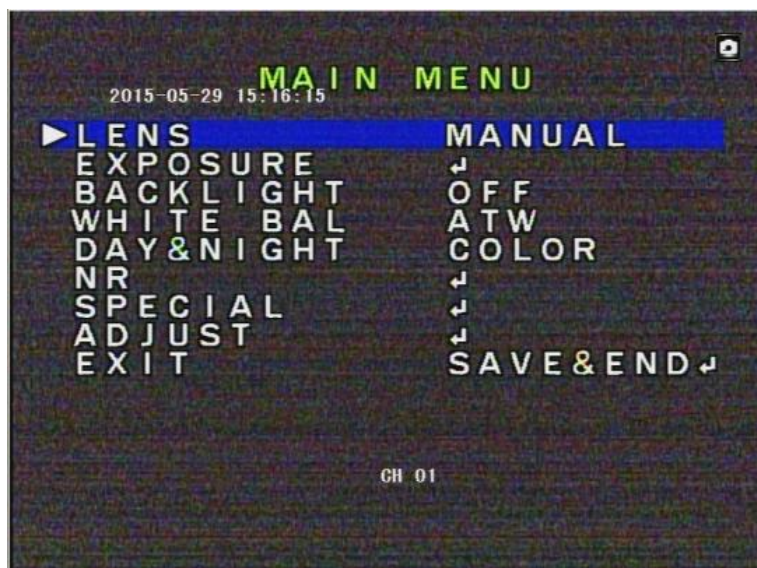
SPECIAL	Settings
CAM TITLE	OFF, ON<↵
D-EFFECT	<↵
MOTION	OFF, ON<↵
PRIVACY	OFF, ON<↵
LANGUAGE	ENG<↵ , CHN1<↵ , CHN2<↵ , GER<↵ , FRA<↵ , ITA<↵ , SPA<↵ , POL<↵ , RUS<↵ , POR<↵ , NED<↵ , TUR<↵ , KOR<↵ , JPN<↵ , HEB<↵ , ARB<↵ ,
DEFECT	<↵
RS485	<↵
RETURN	SAVE&END<↵ , RET<↵

ADJUST

ADJUST	Settings
SHARPNESS	OFF, AUTO<↵
MONITOR	LCD<↵ , CRT<↵
LSC	ON, OFF
NTSC / PAL	NTSC, PAL
COMET	OFF, ON
RETURN	SAVE&END<↵ , RET<↵

2.1 MAIN MENU

In the "MAIN MENU" of camera OSD, there are several sub-menus and items can be selected to modify the settings.



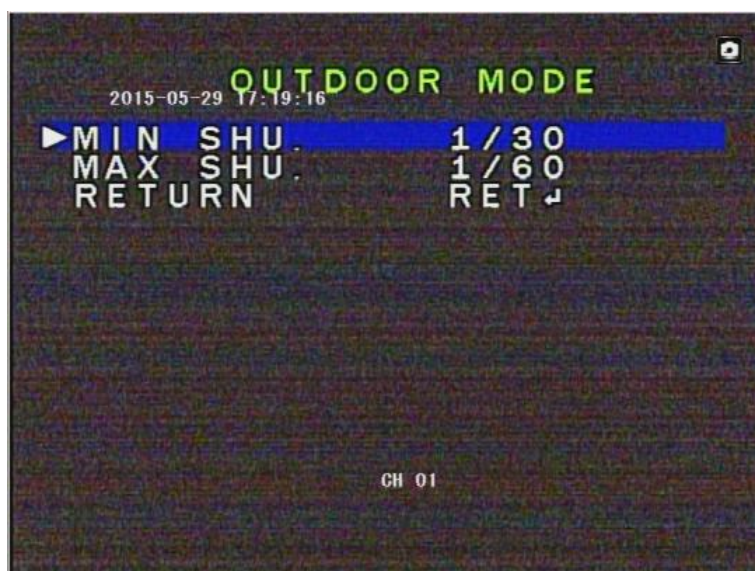
- **LENS:**
To select the lens is on DC or on MANUAL mode.
- **EXPOSURE:**
This is a sub-menu for exposure setting. Please check the details in its section.
- **BACKLIGHT:**
To adjust the settings of different Backlight modes.
- **WHITE BAL:**
To select the mode of white balance.
- **DAY&NIGHT:**
To select the mode of day/night and adjust the related settings.
- **NR:**
This is a sub-menu for noise reduction setting. Please check the details in its section.
- **SPECIAL:**
This is a sub-menu for special setting. Please check the details in its section.
- **ADJUST:**
This is a sub-menu for adjust setting. Please check the details in its section.
- **EXIT:**
After finishing all the settings, select "**SAVE&END**", "**RESET**" or "**NOT SAVE**" to exit OSD.

2.2 LENS

In "LENS" section, there are **MANUAL** and **DC** modes selectable. Descriptions and screenshots below mainly focus on **DC mode**.



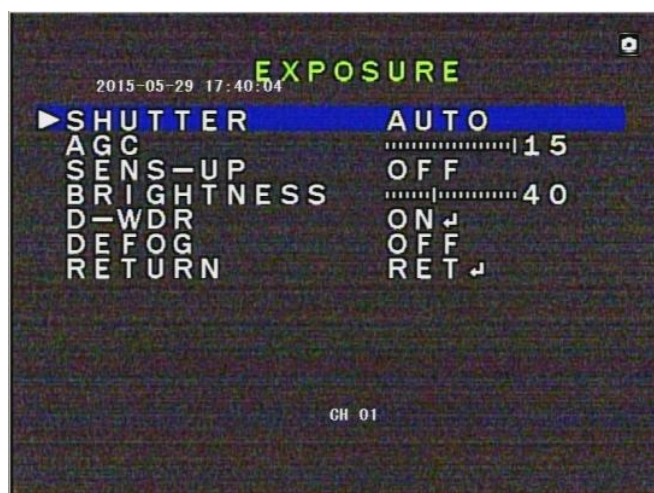
- **MODE:**
To adjust the lens mode: there are indoor and outdoor modes selectable as show above. The **housing of models decides the default mode** here.
- **IRIS SPEED:**
To adjust the value of the IRIS SPEED.
- **RETURN:**
Select RET to go back to the previous page; or select SAVE&END to save the settings and then exit OSD.



- **OUTDOOR MODE:**
Enter Outdoor mode to adjust the shutter settings accordingly. There are **MIN** and **MAX Shutter** two options with separate defaults 1/25(30) and 1/2000 adjustable.

2.3 EXPOSURE

In the “EXPOSURE” of camera OSD, there are some items can be selected to modify the settings. The main function of this page is about the optical settings.



■ SHUTTER:

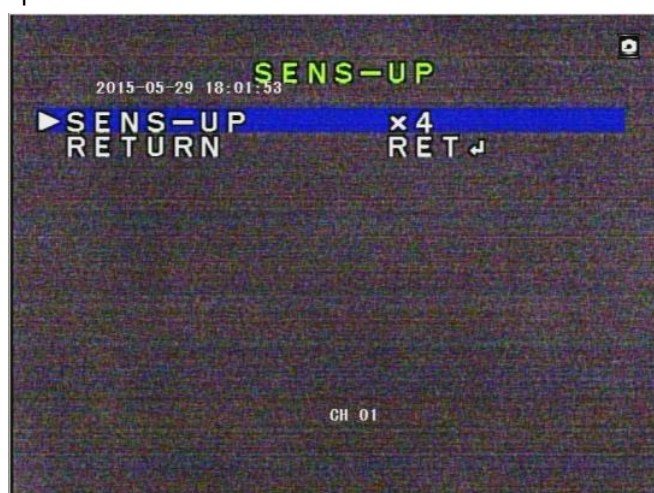
To adjust the value of shutter speed and time: AUTO, 1/30, 1/60, FLK, 1/240, 1/480, 1/1000, 1/2000, 1/5000, 1/10000, 1/50000, x2, x4, x6, x8, x10, x15, x20, x25, x30.

■ AGC:

To modify the value of AGC (Automatic Gain Control).

■ SENS-UP:

To modify the “sense up” speed setting: OFF/AUTO. Selecting “AUTO” can further adjust the speed as shown below.

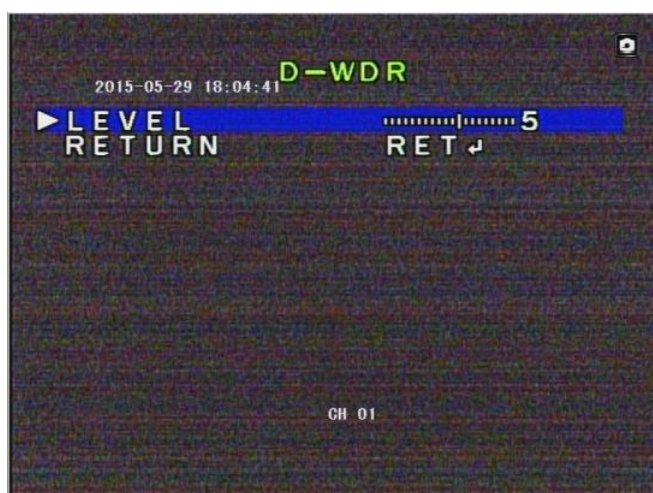


■ BRIGHTNESS:

To adjust the value of Brightness.

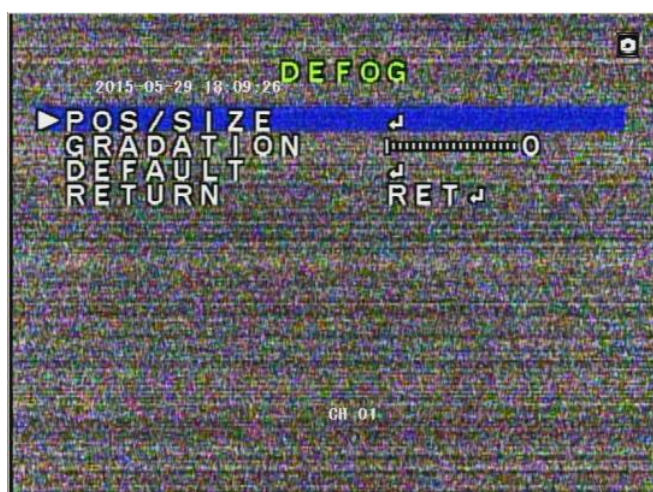
■ D-WDR:

To select the mode of D-WDR: OFF/ON. Selecting “ON” can further adjust the level as shown below.



■ DEFOG:

To enable or disable DEFOG function: OFF/AUTO available. Selecting "AUTO" can further adjust the advanced settings such as POS/SIZE of DEFOG as shown below.



NOTE: To enable DEFOG function, please turn off the D-WDR accordingly.

■ RETURN:

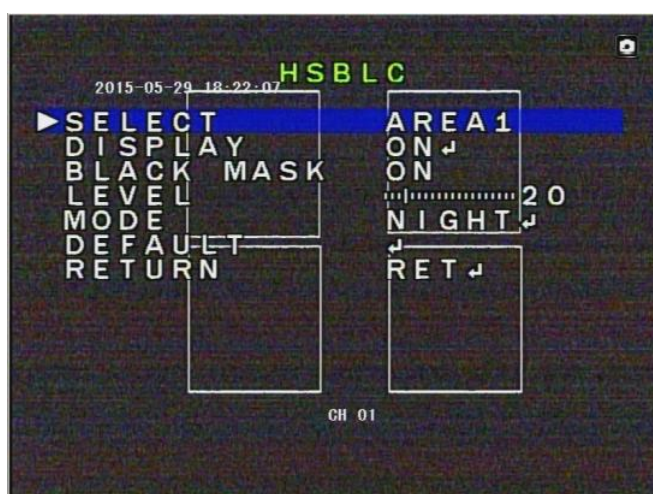
Select RET to go back to the previous page; or select SAVE&END to save the settings and then exit OSD.

2.4 BACKLIGHT

In the “**BACKLIGHT**” of camera OSD, **BLC** and **HSBLC** modes can be selected to modify the settings. The main function of this page is about the optical settings.



- **LEVEL:**
To adjust the level of BLC: MIDDLE/LOW/HIGH selectable.
- **AREA:**
To select the area applying the BLC function.
- **DEFAULT:**
To restore the changed settings of this section.
- **RETURN:**
Select RET to go back to the previous page; or select SAVE&END to save the settings and then exit OSD.



- **SELECT:**
To select the area applying the HSBLC function. AREA1/2/3/4 available.
- **DISPLAY:**
To enable or disable the display of the area applying HSBLC function.

■ **BLACK MASK:**

To enable or disable the Black Mask of the area applying HSBLC function.

■ **LEVEL:**

To adjust the value of HSBLC function.

■ **MODE:**

To select the mode applying HSBLC function: ALL DAY/NIGHT available. Selecting "NIGHT" mode can further adjust the AGC level as shown below.



■ **DEFAULT:**

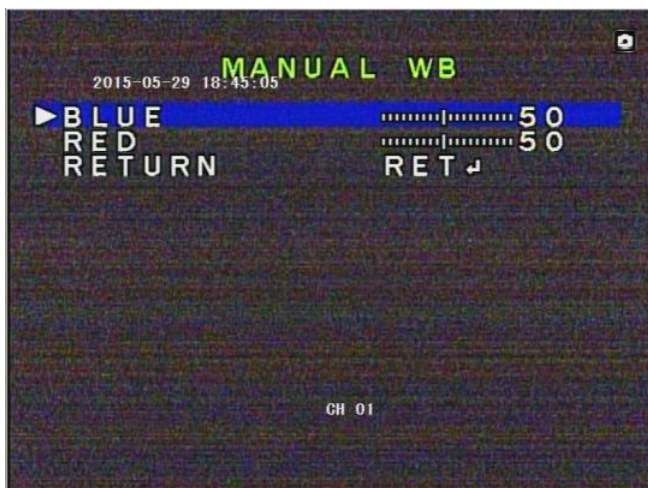
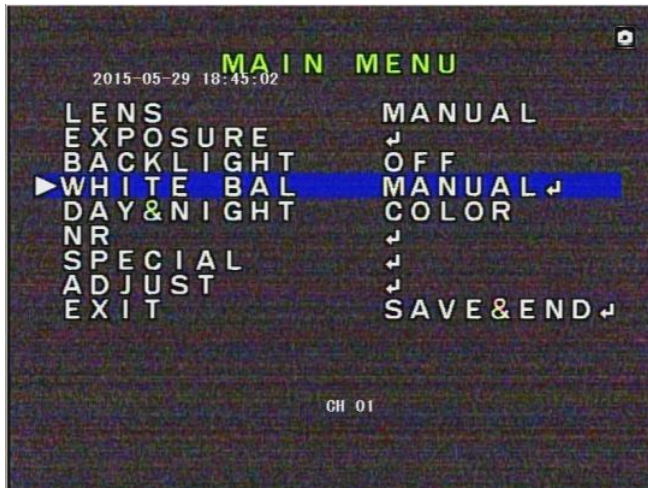
To restore the changed settings of this section.

■ **RETURN:**

Select RET to go back to the previous page; or select SAVE&END to save the settings and then exit OSD.

2.5 WHITE BAL

In the “**WHITE BAL**” section, descriptions and screenshots below will focus on the **MANUAL WB** mode accordingly.



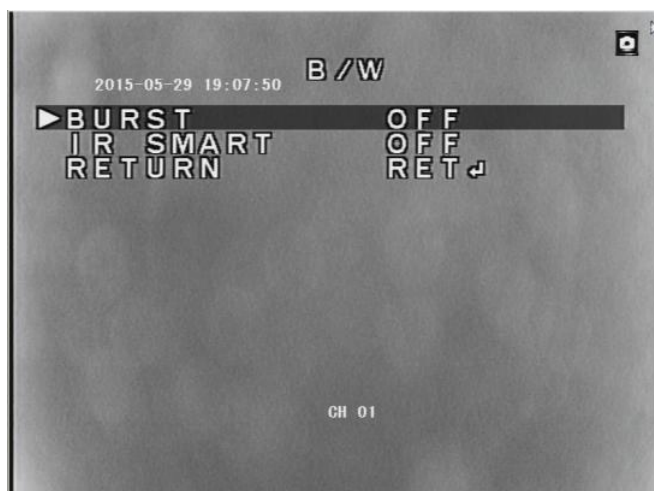
- **BLUE:**
To adjust the value of BLUE of Manual WB.
- **RED:**
To adjust the value of RED of Manual WB.
- **RETURN:**
Select RET to go back to the previous page; or select SAVE&END to save the settings and then exit OSD.

2.6 DAY&NIGHT

In the “DAY&NIGHT” section, descriptions and screenshots below will focus on the **AUTO, B/W, EXT** modes accordingly. **Models with or without LED is the key to the defaults of D&N here.**



- **D->N (AGC):**
To adjust the setting value of Day to Night (AGC).
- **D->N (DELAY):**
To adjust the setting value of Day to Night (DELAY).
- **N->D (AGC):**
To adjust the setting value of Night to Day (AGC).
- **N->D (DELAY):**
To adjust the setting value of Night to Day (DELAY).
- **RETURN:**
Select RET to go back to the previous page; or select SAVE&END to save the settings and then exit OSD.

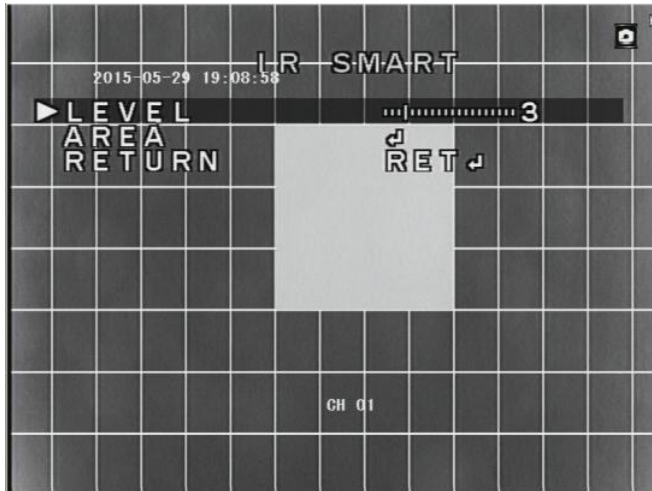


■ BURST:

To enable or disable the Burst function.

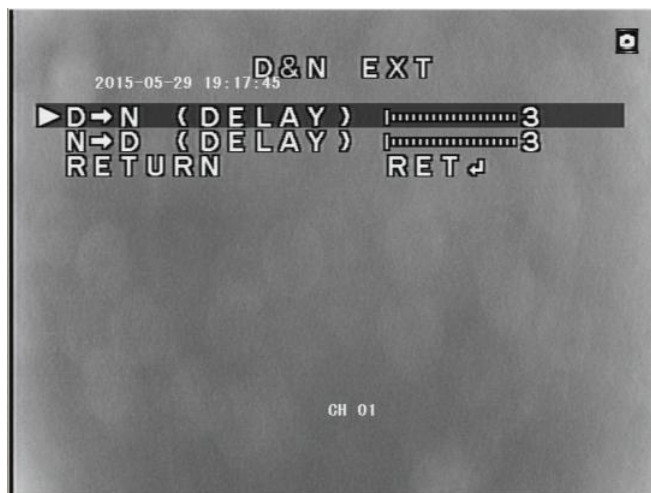
■ IR SMART:

To enable or disable the IR Smart function. Turning it on can further adjust the level and area as shown below.



■ RETURN:

Select RET to go back to the previous page; or select SAVE&END to save the settings and then exit OSD.



■ D->N (DELAY):

To adjust the setting value of Day to Night (DELAY).

■ N->D (DELAY):

To adjust the setting value of Night to Day (DELAY).

■ RETURN:

Select RET to go back to the previous page; or select SAVE&END to save the settings and then exit OSD.

2.7 NR

Entering this section can adjust the setting of 2DNR/3DNR function for noise reduction under night or low light environment.



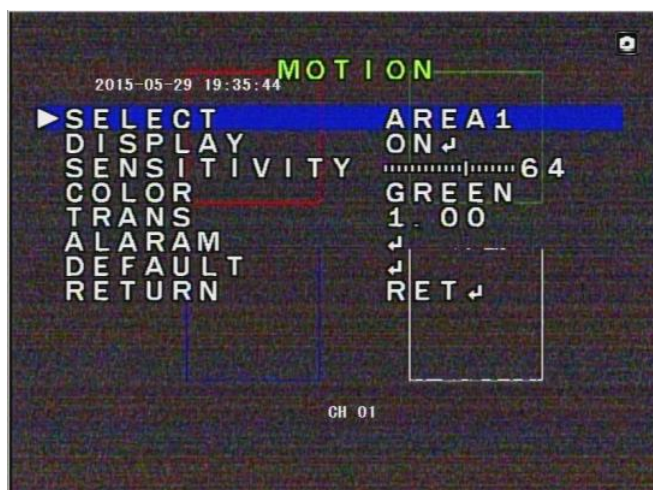
- **2DNR:**
2DNR function has LOW/MIDDLE/HIGH/OFF, 4 levels adjustable.
- **3DNR:**
3DNR function has LOW/MIDDLE/HIGH/OFF, 4 levels adjustable.
- **RETURN:**
Select RET to go back to the previous page; or select SAVE&END to save the settings and then exit OSD.

2.8 SPECIAL

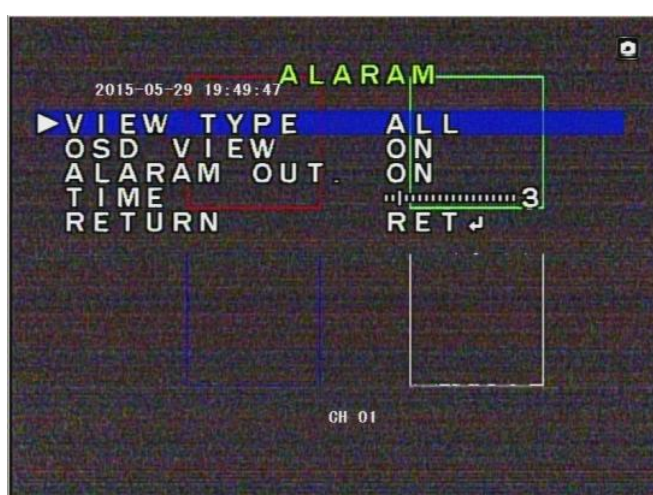
In the “**SPECIAL**” section, lots of items can be adjusted. The following descriptions and screenshots mainly focus on the settings of **D-EFFECT**, **MOTION**, **PRIVACY**, **DEFECT**, and **RS485**.



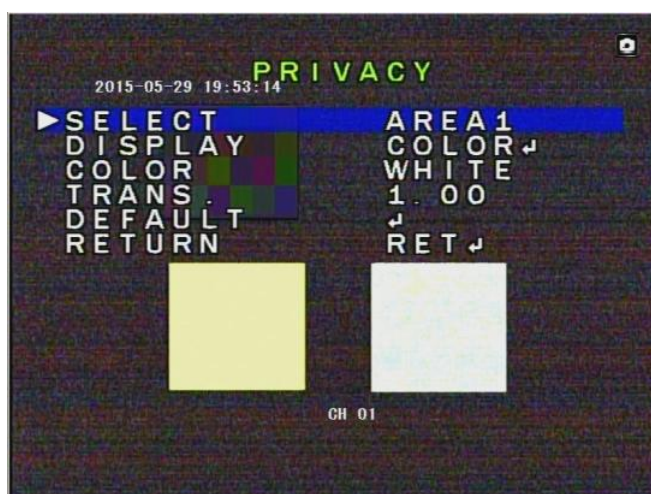
- **FREEZE:**
To enable or disable the Freeze function.
- **MIRROR:**
To enable or disable the Mirror function.
- **NEG. IMAGE:**
To enable or disable the NEG. Image function.
- **RETURN:**
Select RET to go back to the previous page; or select SAVE&END to save the settings and then exit OSD.



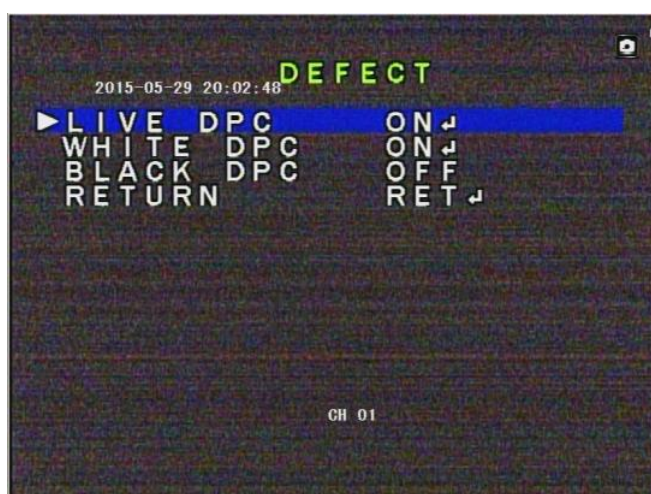
- **SELECT:**
To select the Area (1/2/3/4) applying Motion Detect function.
- **DISPLAY:**
To enable or disable the Display area applying Motion Detect function.
- **SENSITIVITY:**
To adjust the value of Sensitivity applying Motion Detect function.
- **COLOR:**
To select the Color from Green, Red, Blue, and White to apply to the Motion Detect area.
- **TRANS:**
To adjust the Transparency value for Motion Detect function.
- **ALARM:**
To set the corresponding operations when the alarm is triggered as shown below.



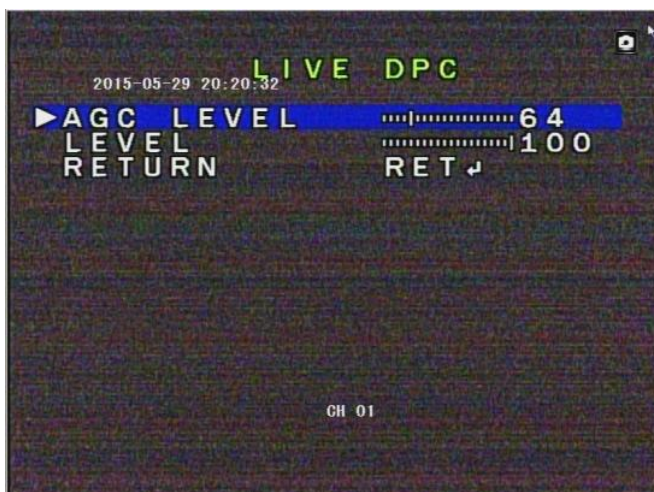
- **DEFAULT:**
To restore the changed settings of this section.
- **RETURN:**
Select RET to go back to the previous page; or select SAVE&END to save the settings and then exit OSD.



- **SELECT:**
To select the Area (1/2/3/4) applying Privacy Mask function.
- **DISPLAY:**
To select the Display mode for Privacy Mask Area from: COLOR, INV., MOSAIC, OFF.
- **COLOR:**
To select the Color for Privacy Mask Area from: Green, Yellow, Red, Blue, White, Black, Cyan, and USER.
- **TRANS.:**
To adjust the Transparency value for Privacy Mask Area.
- **DEFAULT:**
To restore the changed settings of this section.
- **RETURN:**
Select RET to go back to the previous page; or select SAVE&END to save the settings and then exit OSD.

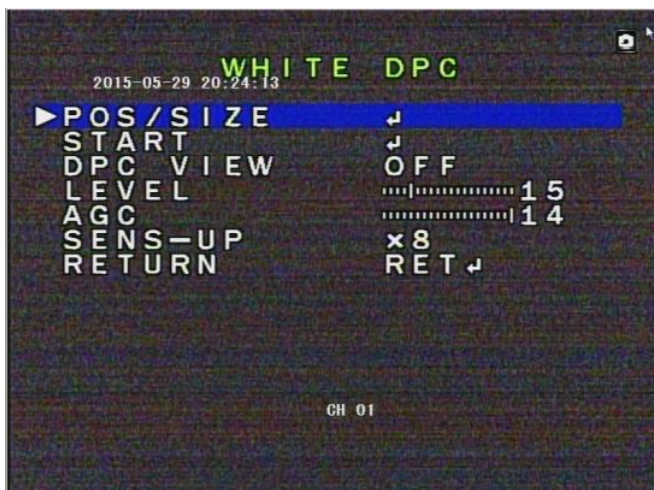


- **LIVE DPC:**
To enable or disable Auto Dead Pixel Compensation. Turning it on can further adjust the AGC and Level setting values as shown below.



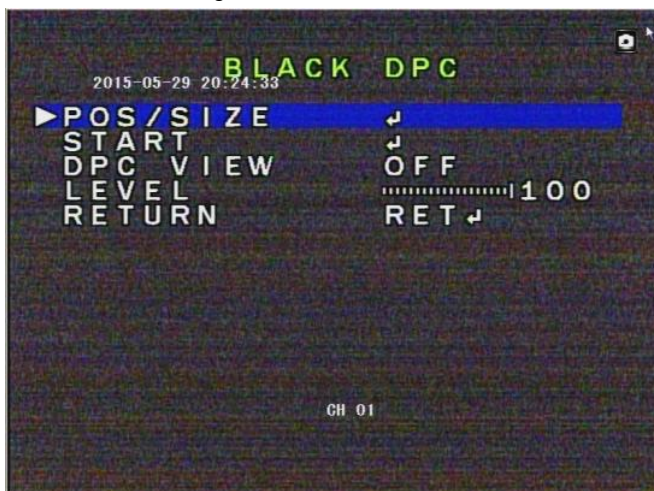
WHITE DPC:

To enable or disable White DPC function. Turning it on can further adjust the POS/SIZE and other related setting values as shown below.



BLACK DPC:

To enable or disable Black DPC function. Turning it on can further adjust the POS/SIZE and other related setting values as shown below.



RETURN:

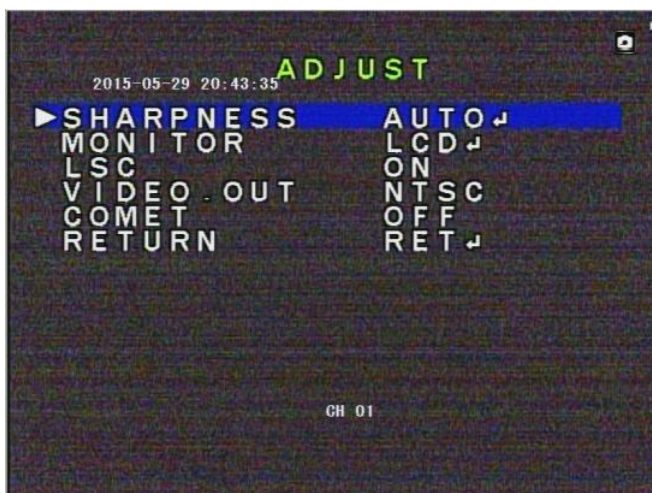
Select RET to go back to the previous page; or select SAVE&END to save the settings and then exit OSD.



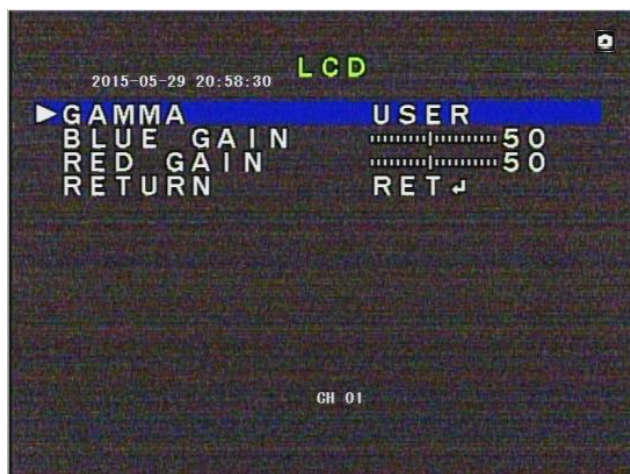
- **CAM ID:**
To select the Camera ID value from 0 to 255.
- **ID DISPLAY:**
To enable or disable the ID Display function.
- **BAUDRATE:**
To adjust the Baud rate value from: 38400/19200/9600/4800/2400.
- **RETURN:**
Select RET to go back to the previous page; or select SAVE&END to save the settings and then exit OSD.

2.9 ADJUST

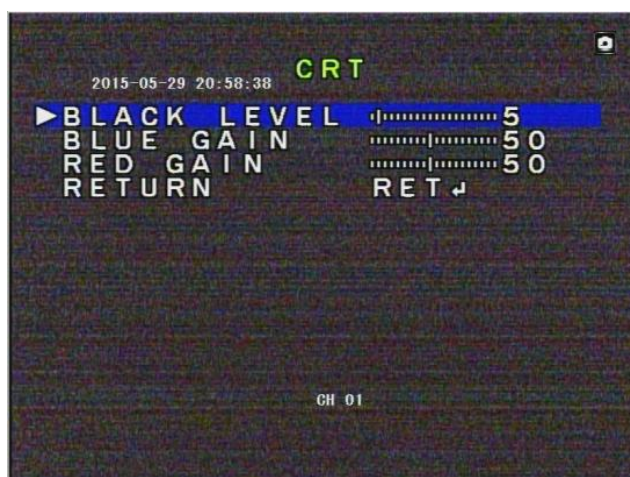
In the “**ADJUST**” section, lots of items can be adjusted. The following descriptions and screenshots mainly focus on the settings of **SHARPNESS** and **MONITOR**.



- **LEVEL:**
To adjust the value of Sharpness Level.
- **START AGC:**
To adjust the value of Start AGC.
- **END AGC:**
To adjust the value of End AGC.
- **RETURN:**
Select RET to go back to the previous page; or select SAVE&END to save the settings and then exit OSD.



- **GAMMA:**
To adjust the Gamma value of the LCD Monitor.
- **BLUE GAIN:**
To adjust the Blue Gain value of the LCD Monitor.
- **RED GAIN:**
To adjust the Red Gain value of the LCD Monitor.
- **RETURN:**
Select RET to go back to the previous page; or select SAVE&END to save the settings and then exit OSD.



- **BLACK LEVEL:**
To adjust the Black Level value of the CRT Monitor.
- **BLUE GAIN:**
To adjust the Blue Gain value of the CRT Monitor.
- **RED GAIN:**
To adjust the Red Gain value of the CRT Monitor.
- **RETURN:**
Select RET to go back to the previous page; or select SAVE&END to save the settings and then exit OSD.

2.10 EXIT

In the "EXIT" section, the following descriptions and screenshot focus on the settings of **SAVE&END**, **RESET**, and **NOT SAVE**.



- **SAVE&END:**
To Save the settings and then exit OSD.
- **RESET:**
To Restore all settings to the Factory Defaults. Please note that **CAMERA TITLE** and **LANGUAGE will not be restored**.
- **NOT SAVE:**
To exit OSD without saving the settings.

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