

User Manual for Effio-A Double

Standard Version CAMERA

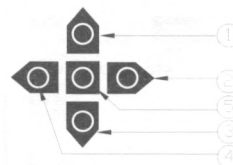
Thanks for purchasing our product. Before operating the unit, please read the instructions carefully and keep this manual for future reference.

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1. OSD Operation

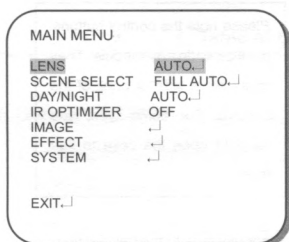
1.1 OSD Control Buttons



Please note the control buttons' position varies by models. They might be at side or back of the camera. For dome type, you need to open the case to find them.

- 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.
- 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.
- ⑤ **ENTER**
Use this button to display the main menu, to confirm and to enter the submenus when they're available. Items with "<J" 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.

1.2 OSD Operation



1. Start to operate the OSD menu

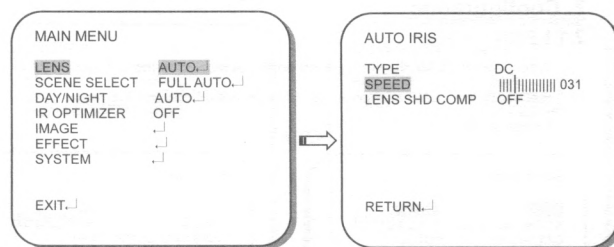
Press the **ENTER** button to bring up the OSD main menu to start operating OSD menus.

2. Select items with the cursor buttons

- Use buttons **▲** and **▼** to move the cursor up and down.
- Use buttons **◀** and **▶** to switch the modes or to adjust the parameters or the values of the settings.

3. Switch to the sub-menu

Items with "<" symbol in the end contains 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.



Main Menu

Sub Menu

4. Return to the previous page

Select **RETURN** and press the **ENTER** button to return to the previous page.

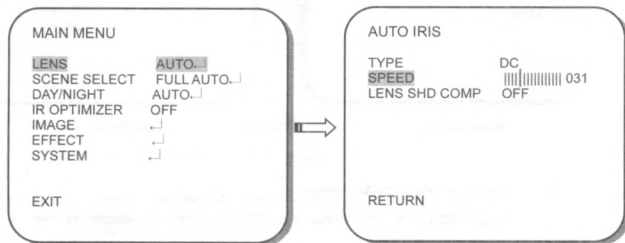
5. Exit the OSD menu

Select **EXIT** with the button **▲** or **▼** and press the **ENTER** button to exit the OSD menu.

2. Configuration

2.1 LENS

When the MAIN MENU is displayed on the screen, use the UP and DOWN buttons to the **LENS** and press the ENTER button into the sub menu to do further setup.



Main Menu

Sub-Menu

*TYPE

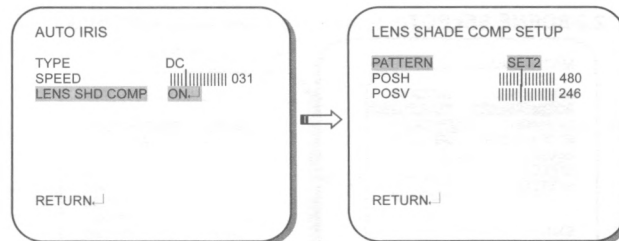
- When the DC LENS is in use, push IRIS SWITCH on the control board to DC, and the TYPE on the menu will be displayed as DC.
- When the VIDEO LENS is in use, push IRIS SWITCH on the control board to VIDEO, and the TYPE on the menu will be displayed as VIDEO.

*SPEED

The speed of DC Lens is in direct ratio to the number you set. The range of the SPEED can be set from 000~255.

NOTE:

The **SPEED** function will not work when the TYPE of LENS set to VIDEO.



*LENS SHADE COMP SETUP

Here you can set brightness compensation pattern and position around the lens. The default setting of this function is OFF, switch it to ON and into the sub menu, there are three options below:

PATTERN:

SET1, SET2, SET3

POSH:

The range of the **POSH** can be set from 000~1023.

POSV:

The range of the **POSV** can be set from 000~511.

2.2 SCENE SELECT

MAIN MENU	
LENS	AUTO.]
SCENE SELECT	FULL AUTO.]
DAY/NIGHT	AUTO.]
IR OPTIMIZER	OFF
IMAGE	.]
EFFECT	.]
SYSTEM	.]
EXIT.]	

Please use the UP and DOWN buttons to **SCENE SELECT** on the MAIN MENU and press ENTER button to enter. There are six options: FULL AUTO, INDOOR, OUTDOOR, BACKLIGHT, ITS, and CUSTOM. Taking CUSTOM option for setting example below.

MAIN MENU	
LENS	AUTO.]
SCENE SELECT	CUSTOM.]
DAY/NIGHT	AUTO.]
IR OPTIMIZER	OFF
IMAGE	.]
EFFECT	.]
SYSTEM	.]
EXIT.]	

ADVANCED MENU	
SHUTTER/AGC	AUTO.]
WHITE BAL	ATW.]
HLC/BLC	OFF
WDR	ON.]
DNR	.]
DEFOG	OFF
FLK LESS	AUTO.]
ANTI CR	AUTO
RETURN.]	

Press LEFT and RIGHT buttons to select CUSTOM and then press ENTER for further settings:

*SHUTTER/AGC

There are three options for SHUTTER/AGC settings: AUTO, MANUAL, and, DAY/NIGHT.

AUTO: There are five options, BRIGHTNESS, SHUTTER MIN, SHUTTER MAX, AGC MAX, and SENS UP.

ADVANCED MENU	
SHUTTER/AGC	AUTO.]
WHITE BAL	ATW.]
HLC/BLC	OFF
WDR	ON.]
DNR	.]
DEFOG	OFF
FLK LESS	AUTO.]
ANTI CR	AUTO
RETURN.]	

AUTO SETUP	
BRIGHTNESS	100
SHUTTER MIN	1/60 (S)
SHUTTER MAX	1/100000(S)
AGC MAX	36.0 DB
SENS UP	OFF
RETURN.]	

BRIGHTNESS -

The range of the BRIGHTNESS can be set from 000~255.

SHUTTER MIN -

The range of the SHUTTER MIN can be set from 1/60~1/2000(sec).

SHUTTER MAX -

The range of the SHUTTER MAX can be set from 1/1000~1/100000(sec).

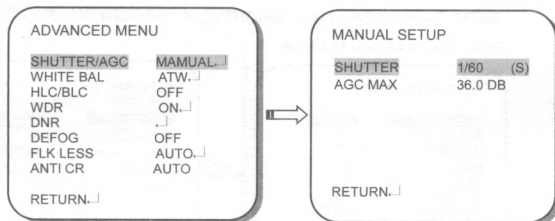
AGC MAX -

The range of the AGC MAX can be set from 0~44.8 DB.

SENS UP -

There are ten options, OFF, x2, x4, x8, x16, x32, x64, x128, x256, x512.

MANUAL: There are two options, SHUTTER and AGC MAX.



SHUTTER --

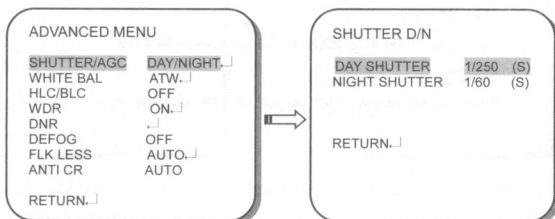
The range of the SHUTTER can be set from 1/60~1/100000(sec), and 256 FLD, 128 FLD, 64 FLD, 32 FLD, 16 FLD, 8 FLD, 4 FLD, and 2 FLD.

AGC MAX --

The range of the AGC MAX can be set from 0~44.8 DB.

DAY/NIGHT:

There are two options, DAY SHUTTER and NIGHT SHUTTER.



DAY SHUTTER --

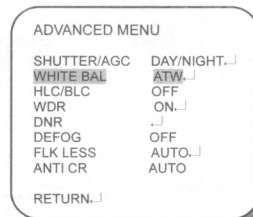
The range of the DAY SHUTTER can be set from 1/60~1/100000(sec).

NIGHT SHUTTER --

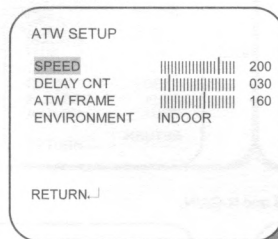
The range of the NIGHT SHUTTER can be set from 1/60~100000(sec).

*WHITE BAL

The screen color can be adjusted by using the WHITE BALANCE function. There are six options for white balance settings: ATW, AWB, 3200K, 6300K, MANUAL and, PUSH LOCK.



ATW -- There are four options, SPEED, DELAY CNT, ATW FRAME, and ENVIRONMENT.



SPEED: The range of the SPEED can be set from 0~255. Select to adjust the speed of ATW(Auto Tracking White Balance).

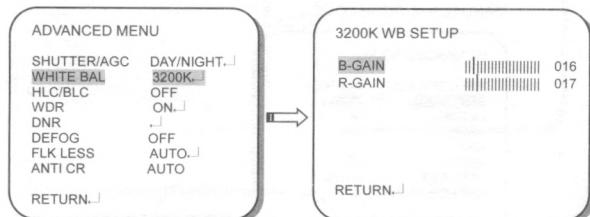
DELAY CNT: Level-- 1~255. Select to adjust the level of delay control.

ATW FRAME: Level-- 1~255. Select to adjust the value of ATW frame.

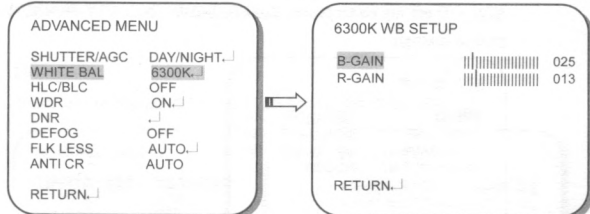
ENVIRONMENT: There are four options, INDOOR, SHADE, AUTO, and SUNNY.

AWB- AUTO WHITE BALANCE.

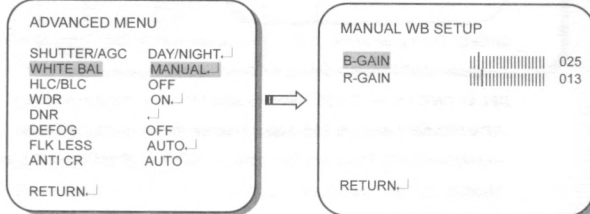
3200K – You can adjust the B and R-GAIN.



6300K – You can adjust the B and R-GAIN.



MANUAL – You can adjust the B and R-GAIN.



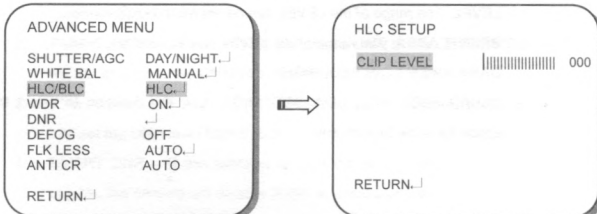
PUSH LOCK – Holds the all pull-in frame.

*HLC/BLC

There are three options: HLC, BLC, OFF.

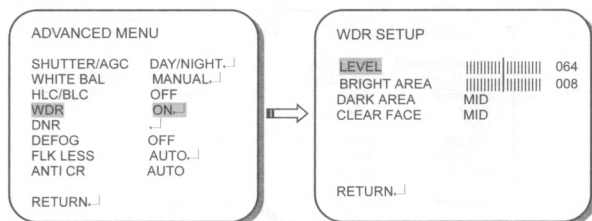


HLC -- Adjust the value of the HLC clip level from 000 to 255.



*WDR

When there are both bright and dark areas at the same time, selecting this mode makes both areas distinctive. There are two options for WDR: ON and OFF.



WDR SETUP

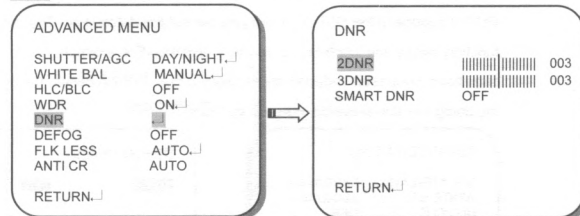
LEVEL: The range of the LEVEL can be set from 0~127.

BRIGHT AREA: The range of the LEVEL can be set from 0~15.

DARK AREA: LOW, MID, HIGH

CLEAR FACE: OFF, LOW, MID, HIGH. Use this function to select the option for show face clearly.

*DNR



1. When the noise level is reduced, the camera performance can apparently be improved. When recording digitally, the image file size can be lessened by selecting the noise reduction. As the level of gain changes, the background noise in the low light level decreases automatically.
2. Please use the UP and DOWN buttons to **DNR** on the ADVANCED MENU and press the ENTER button to do further setups.
3. Please press LEFT and RIGHT buttons to adjust the DNR level. You can set the DNR level from 0 to 6.
4. **SMART DNR** – If this function is enabled, when there are moving objects, the camera will disable 3DNR to avoid blur images.

*DEFOG

Go to the ADVANCED MENU displayed on the screen, use the UP and DOWN buttons to the *DEFOG*. Here you can set the defog level. The defog function raises the contrast to improve visibility. For example, in foggy conditions, contrast is reduced and visibility drops. In such cases, enabling the defog function prevents a drop in contrast.

ADVANCED MENU	
SHUTTER/AGC	DAY/NIGHT.┘
WHITE BAL	MANUAL.┘
HLC/BLC	OFF
WDR	ON.┘
DNR	┘
DEFOG	OFF
FLK LESS	AUTO.┘
ANTI CR	AUTO
RETURN.┘	

DEFOG LEVEL	
LEVEL	LOW
RETURN.┘	

*FLIK LESS

Go to the ADVANCED MENU displayed on the screen, use the UP and DOWN buttons to the *FLK LESS*. Here you can set the FLK LESS mode. Enable this function, you will not see lighting flicker of fluorescent lamps.

ADVANCED MENU	
SHUTTER/AGC	DAY/NIGHT.┘
WHITE BAL	MANUAL.┘
HLC/BLC	OFF
WDR	ON.┘
DNR	┘
DEFOG	OFF
FLK LESS	AUTO.┘
ANTI CR	AUTO
RETURN.┘	

AUTO.┘ -

MODE: SHUTTER FIX, GAIN CTNL

FLK LESS SETUP	
MODE	SHUTTER FIX
RETURN.┘	

ON.┘ -

MODE: SHUTTER FIX, GAIN CTNL

FLK LESS SETUP	
MODE	SHUTTER FIX
RETURN.┘	

*ANTI CR

Go to the second page of ADVANCED MENU displayed on the screen, use the UP and DOWN buttons to the *ANTI CR*. There might be frequency inconsistency between the camera and the environment light. It caused color rolling, in other words, you might see color keep changes on the monitor. Enable *ANTI CR* could solve this problem. Here you can set this function on, off, or auto.

ADVANCED MENU

SHUTTER/AGC	DAY/NIGHT.↵
WHITE BAL	MANUAL.↵
HLC/BLC	OFF
WDR	ON.↵
DNR	↵
DEFOG	OFF
FLK LESS	AUTO.↵
ANTI CR	AUTO
RETURN.↵	

2.3 DAY/NIGHT

The camera can be set in *Color* or *B/W* mode in the *Day/Night* function.

NOTE:

1. *EXT* function is **not** available for *OC* version.
2. Communication Connectors (including RS485) are **not** available for all cameras.

MAIN MENU

LENS	AUTO.↵
SCENE SELECT	FULL AUTO.↵
DAY/NIGHT	AUTO.↵
IR OPTIMIZER	OFF
IMAGE	↵
EFFECT	↵
SYSTEM	↵
EXIT.↵	

The modes under the function

are: *AUTO*, *EXTERNAL*, *SCHEDULE*,
COLOR, *B/W*

1. Please use the UP and DOWN buttons to *DAY/NIGHT* on the MAIN MENU and press the ENTER button to enter.
2. Please select the desired item and press LEFT and RIGHT buttons to adjust the settings.

***AUTO**

AUTO SETUP	
LIVE LEVEL	129
DAY→NIGHT	070
NIGHT→DAY	100
DELAY CNT	005
BURST	OFF
STATUS	
DAY/NIGHT	COLOR
RETURN.]	

The camera will switch to *DAY/Color* mode or *NIGHT/B&W* mode according to the set value.

•*LIVE LEVEL*: The level will change according to the environment automatically.

•*DAY→NIGHT*: When the camera detects the current light level is lower than the set value, it'll switch from *DAY* mode to *NIGHT* mode. Value: 0~231.

•*NIGHT→DAY*: When the camera detects the current light level is higher than the set value, it'll switch from *NIGHT* mode to *DAY* mode. Value: 024~255.

NOTE:

1. The setting differences between *DAY →NIGHT* and *NIGHT→DAY* should be more than 5, or the camera will keep switching from *DAY →NIGHT* and *NIGHT→DAY* constantly.
2. The infrared illuminator is not recommended to use under *AUTO* mode.

•*DELAY CNT*: Sometimes there's only a sudden and short light level change. Delay time can be set to avoid switching too fast. The camera will switch the mode after the set *DELAY CNT* passed. *DELAY CNT* can be set from 0 to 255 seconds.

•*BURST* : Turn the *BURST* function off to reduce the color noise under B&W mode. However, not every DVR machines can receive video signals without the color burst signals. If the camera cannot switch back to *COLOR* mode from B&W mode, please turn the *BURST* function on.

NOTE:

The *BURST* function is adjustable under *B&W*, *EXTERNAL* and *SCHEDULE* mode.

***EXTERNAL**

EXTERNAL SETUP	
NIGHT INPUT	HIGH
BURST	OFF
STATUS	
DAY/NIGHT	B/W
RETURN.]	

NIGHT INPUT: LOW, HIGH
BURST: ON, OFF

	OUTPUT	GND	5V
DNO			
SYSTEM			
COLOR		5V	GND
B&W		GND	5V

•NIGHT OUTPUT



When the camera switches modes, the external components will be alerted, via DNO pin of the communication connector.

*SCHEDULE

DAY/NIGHT SCHEDULE

DAY>NIGHT 18:00
 NIGHT>DAY 06:00
 BURST OFF
 STATUS TIME 14:31
 DAY/NIGHT COLOR

RETURN.]

DAY>NIGHT: Set the time for DAY>NIGHT mode.

NIGHT>DAY: Set the time for NIGHT>DAY mode.

BURST: ON, OFF

*COLOR

MAIN MENU

LENS AUTO.]
 SCENE SELECT FULL AUTO.]
 DAY/NIGHT COLOR
 IR OPTIMIZER
 IMAGE
 EFFECT
 SYSTEM

EXIT.]

Set DAY/NIGHT in COLOR mode.

*B/W

B/W SETUP

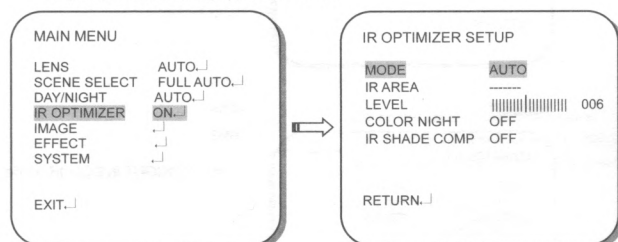
BURST OFF

RETURN.]

BURST: ON, OFF

2.4 IR OPTIMIZER

The default setting is OFF, switch it to ON to enter the setup menu. When the Night operation mode of the Day/Night function is established, the mode is used together with an infrared LED light source, and excessive front lighting may be generated, resulting in overexposure. The IR optimizer function makes it possible to minimize this overexposure by optimizing the exposure control during Night operations.

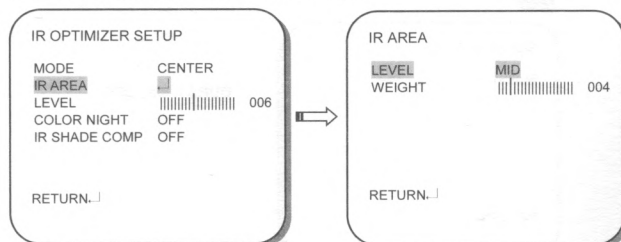


*MODE

There are two options, AUTO, CENTER

*IR AREA

If you select AUTO MODE, it's no need to set IR AREA. If you select CENTER MODE, there are two options, LEVEL and WEIGHT.



LEVEL: Three levels, LOW, MID, HIGH.

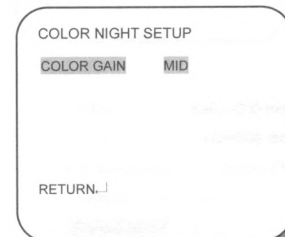
WEIGHT: The range of the WEIGHT be set from 000-015. The image would more clear if the WEIGHT was higher under CENTER mode..

*LEVEL

The range of the LEVEL could be set from 000-012.

*COLOR NIGHT

The default setting is OFF, switch it to ON to enter the sub menu. Setting the color gain level to get better brightness at night.



COLOR GAIN: Three options, LOW, MID, HIGH.

*IR SHADE COMP SETUP

The default setting is OFF, switch it to ON to enter the sub menu. This function could compensate for shading using infrared LED light exposure.

IR SHADE COMP SETUP		
PATTERN	SET2	
POSH		480
POSV		246
LEVEL	MID	
RETURN.		

PATTERN: Three options, SET1, SET2, SET3.

POSH: The range of the LEVEL could be set from 000~1023.

POSV: The range of the LEVEL could be set from 000~511.

LEVEL: Four options, OFF, LOW, MID, HIGH.

2.5 IMAGE

MAIN MENU		IMAGE	
LENS	AUTO.	SHARPNESS	128
SCENE SELECT	FULL AUTO.	SATURATION	128
DAY/NIGHT	AUTO.	CONTRAST	000
IR OPTIMIZER	OFF	HUE	000
IMAGE		FLIP	OFF
EFFECT		W.PIX COMP	
SYSTEM		TVL GAIN	X1.0
EXIT.		RETURN.	

Sub-Menu under the IMAGEtion

1. Please use the UP and DOWN buttons to *PICT ADJUST* on the SETUP MENU and press ENTER button to enter.
2. Please select the desired item and press LEFT and RIGHT buttons to adjust the settings.

*SHARPNESS

Level: 000~255. The contour of the video image becomes cleaner and more distinguished as the level of SHARPNESS increases. If the level goes up extremely, it may affect the video image and cause noise.

*SATURATION

Level: 000~255. The contour of the video image becomes warmer and more colorful as the level of SATURATION increases. If the level goes up extremely, it may affect the video image and cause abnormal color tone

*CONTRAST

Level: -128~127 Select to adjust the value of the contrast.

*HUE

Level: -016~015. Select to adjust the value of the hue.

***FLIP:**

Four options, OFF, V, H, HV

***W.PIX COMP (WHITE PIXEL COMPENSION)**

LEVEL – It can be set from 000~010. The level gets higher, the camera would compensate more white pixel.

WHITE PIXEL COMP

LEVEL ||||| 001
START |

PLEASE CLOSE LENS
WHEN USING MANUAL LENS

RETURN. |

***TVL GAIN**

Five options, x1.0, x1.5, x2.0, x2.5, x3.0

2.6 EFFECT

MAIN MENU		EFFECT	
LENS	AUTO.	MOTION DET	OFF
SCENE SELECT	FULL AUTO.	PRIVACY MASK	
DAY/NIGHT	AUTO.	DIS	OFF
IR OPTIMIZER	OFF	EZOOM	OFF
IMAGE			
EFFECT			
SYSTEM			
EXIT.		RETURN.	

1. Please use the UP and DOWN buttons to select options on the SETUP MENU and press ENTER button to enter.
2. Please select the desired item and press LEFT and RIGHT buttons to adjust the settings.

***MOTION DETECTION**

Options are ON/OFF. Set to ON and click ENTER to bring up submenu for further settings.

MOTION DETECTION

DETECT SENSE ||||| 111
INTERVAL ||||| 000
BLOCK DISP OFF |
MASK AREA |
MONITOR AREA |

RETURN. |

- **DETECT SENSE**

Sensitivity can be set from 0 to 127. The higher the number, the more sensible the camera can be.

- **INTERVAL**

Set the interval from 000~127.

- **BLOCK DISP**

Set to display the block or not.

- **MASK AREA**

Press SET to enter the sub-menu, and set the mask area.

- **MONITOR AREA**

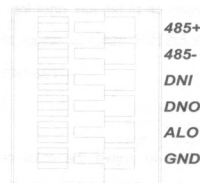
Press SET to enter the sub-menu, and set the detect area.

MONITOR AREA

AREA SEL	1/4<	
AREA MODE	OFF	
TOP		002
BOTTOM		006
LEFT		002
RIGHT		010

RETURN<

Connect the alarm device to the ALO of the communication port on the rear panel so that the alarm can be output. Be sure to turn off all the power before connecting.



***PRIVACY MASK**

Click ENTER to bring up submenu for further settings.

PRIVACY MASK SETUP

AREA SEL	1/15	
DISPLAY	OFF	
POSTION	---	
COLOR	---	
TRANSP	---	
MOSAIC	---	

RETURN<

- **AREA SEL**

There're 1-15 areas which can be masked.

- **DISPLAY**

Options are ON/OFF. Choose ON to show the protected area on the screen, OFF to hide the protected area on the screen.

- POSITION

Press ENTER button for further settings. Adjust the area size and shape by dragging the vertices of the quadrilateral. Push ENTER to switch the vertices in the sequence of left top, right top, left bottom and right bottom, and push ENTER again to return to PRIVACY MASK submenu.

- COLOR

Use LEFT and RIGHT buttons to adjust the color of PRIVACY MASK. The options are BLACK, RED, GREEN, BLUE, YELLOW, CYAN, MAGENTA and WHITE.

- TRANSP

Use LEFT and RIGHT buttons to adjust the transparency of PRIVACY MASK. The options are 0.00, 0.50, 0.75 and 1.00. Note that the MOSAIC will be disabled when the transparency set to 1.00.

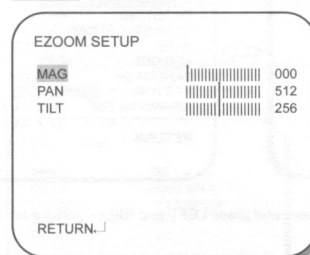
- MOSAIC

Options are ON/OFF. Use LEFT and RIGHT buttons to display the block in mosaic or not. Please note if transparency was set to 1.00, MOSAIC would not be adjustable.

*DIS (Digital Image Stabilizer)

Options are OFF and ON. When set to ON, the DIS function will help to prevent vibration, and the E-Zoom function will be disabled.

*E-ZOOM



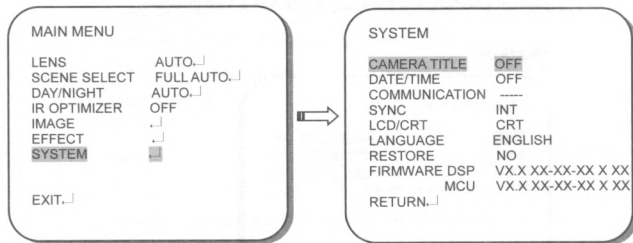
Sub-Menu under the E-ZOOM mode

Select ON and press ENTER button to do further setups.

Options are **MAG** 001~255 (zoom in 1 to 255 times), **PAN** -000~1023 (Please note if **MAG** was set to 0.00, MOSAIC would not be adjustable) (horizontal zoomed-in viewing), and **TILT** 001~256 (vertical zoom-in viewing).

2.7 SYSTEM

1. Please use the UP and DOWN buttons to **SYSTEM** on the MAIN MENU.



2. Please select the desired item and press LEFT and RIGHT buttons to adjust the settings.

NOTE:

The version of FIRMWARE shown on the above is for reference only. The actual version varies by the production.

*CAMERA TITLE

CAMERA TITLE SETUP

ABCDEFHIJKLMNOPQRSTUVWXYZ
0123456789-! " # \$ % & ' () _ , ; : < = > ? @ \ ^ * . x + /

← → ↑ ↓ CLR POS
RETURN

- Select ←, →, ↑ or ↓ with the character selection cursor, and click the **ENTER** button to move the cursor in the direction of the arrow.
- **CLR**
Select to clear one letter of the input.
- **POS**
Adjust the position of the camera ID.

*DATE/TIME

DATE/TIME

TIME XX:XX:XX
DATE XX/XX/XX
FORMAT YY:MM:DD
SAVE SETTING NO
POSITION

RETURN

*COMMUNICATION

COMMUNICATION

CAMERA ID 001
BAUD RATE 2400
PROTOCOL PELCO D
SAVE SETTING NO

RETURN

- **Camera ID** - Set from 001~255.
- **BAUD RATE** - Five options, 2400, 4800, 9600, 19200, 38400.

- **PROTOCOL** – Two options, PELCO D, PELCO P.

***SYNC:** INT(INTERNAL)

***LCD/CRT:** Select LCD or CRT by your monitor.

***LANGUAGE:** You can select ENGLISH or SIMPLIFIED CHINESE

***RESTORE:** The default setting is NO. Switch it to YES and press to restore the settings.

***FIREWARE DSP:** DSP version

***FIREWARE MCU:** MCU version

2.8 UTC Function

With the UTC function, you can connect the camera with UTC controller as Figure 2 below. Then you can remote control the camera OSD with the UTC controller.

Figure 1.

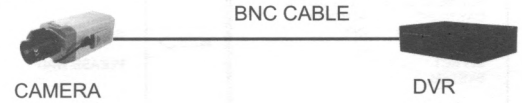
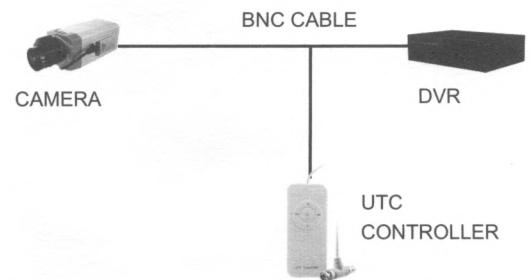


Figure 2.



2.9 EXIT

Select EXIT and press it will save the settings automatically and exit the OSD menu.

