

HD-SDI Camera Manual

1 FERTURE

- Video output: 1920*1080_30fps.
- HLC: High Light Compensation, Suppression all of brightness of the high light areas and masked, makes other low light area turn and gets more brightness. So that other objects can be seen clearly.
- OSD (menu) Operation System: Powerful DSP memory, the memory data is not lost when power off.
- BLC: Back Light Compensation, usually used for the image of strong contrast of brightness and darkness, to lets the darkness areas become more brightness.
- WDR: Digital wide dynamic function,, shiny dark side in the same picture or in indoor window area. Light perfectly balanced, the details visible.
- DNR、 SEN-UP.
- OSD: By providing convenience for the users, OSD menu shown on the screen easy to operate the camera function, Press the OSD button at the back to enter menu, move left, right, up and down to choose, press button to confirm.

2. SPECIFICATION



Lens:2.8-12mm



Lens:5-50mm

3. OSD MENU INTRODUCTION

3.1 OSD Instruction

1. IRIS

IRIS	ELC
EDGE DET	←
EXPOSURE	←
BACKLIGHT	OFF
DAY&NIGHT	←
COLOR	←
DNR	LOW
IMAGE	←
MOTION	OFF
SYSTEM	←
EXIT	

IRIS

▶According to use environment choice model, using automatic aperture lens choosing the ALC.

▶According to use environment choice model, using automatic aperture lens choosing ALC.

EDGE DET

▶ON: Edge Detect Effect Normals.

LEVEL: 0-10

COLOR:

YEL/CYN/GRN/MAG/RED/BLU/BLK/WHT

2. EDGE DET

IRIS	ALC
EDGE DET	←
EXPOSURE	←
BACKLIGHT	OFF
DAY&NIGHT	←
COLOR	←
DNR	LOW
IMAGE	←
MOTION	OFF
SYSTEM	←
EXIT	

LEVEL	[.....] 1
COLOR	YEL
RETURN	←

3. EXPOSURE



EXPOSURE

► BRIGHTNESS: 0-20 selectable.

► SHUTTER :

AUTO/FLICKER/MANUAL, three kinds of choice model.

► MANUAL MODE :

1/25、1/50、1/100、1/200、1/400、1/800、1/1600、1/3200、1/6400、1/12800、1/25600、1/30000, selectable.

AUTO : DEBLURE/NORMAL, selectable.

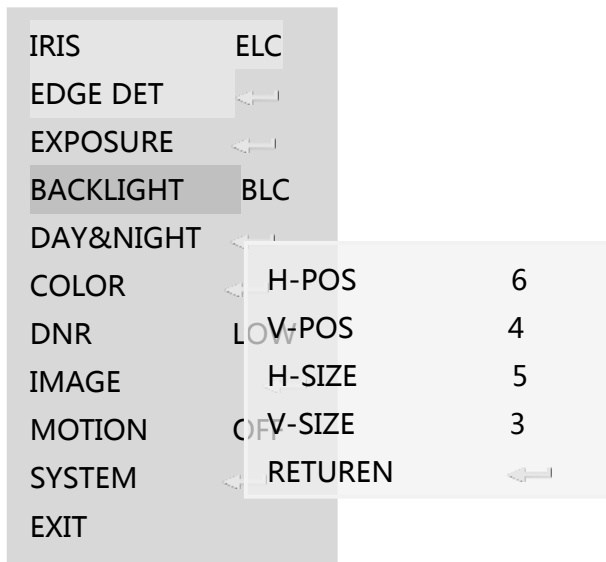
► SENS-UP: OFF、X2、X4、X8、X16、X32 selectable.

► AGC : 0-20 selectable



NOTE: video system different and the shutter will different. The manual electronic shutter PAL is 1/25, when NTSC is 1/30.

4. BACKLIGHT



BACKLIGHT

► BACKLIGHT : OFF/HLC/BLC/WDR, used in different environment.

HLC: strong light inhibition.

0-20 , 8 kinds of highlight color, respectively black, customize/white, yellow, cyan, green, purple, red, blue.

► BLC:

H-POS: 0-20 horizontal starting point;

V-POS: 0-20 vertical ending point;

H-SIZE: 0-20 horizontal ending point;

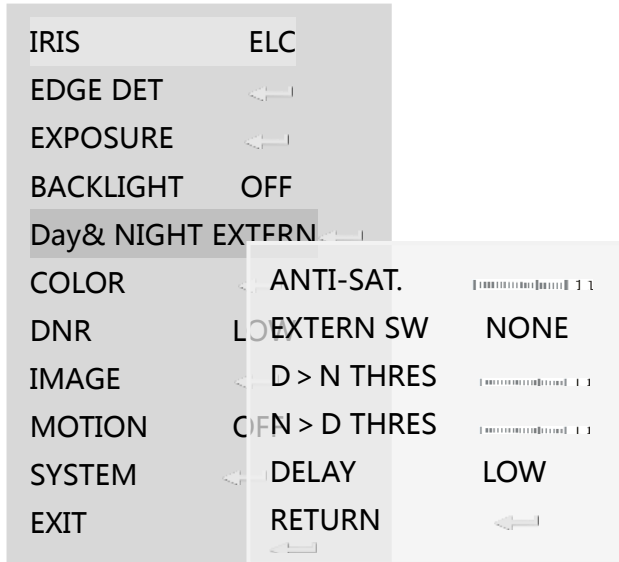
V-SIZE: 0-20 vertical ending point;

► WDR: HIGH/ MIDDLE/ LOW level , selectable, 30fps.

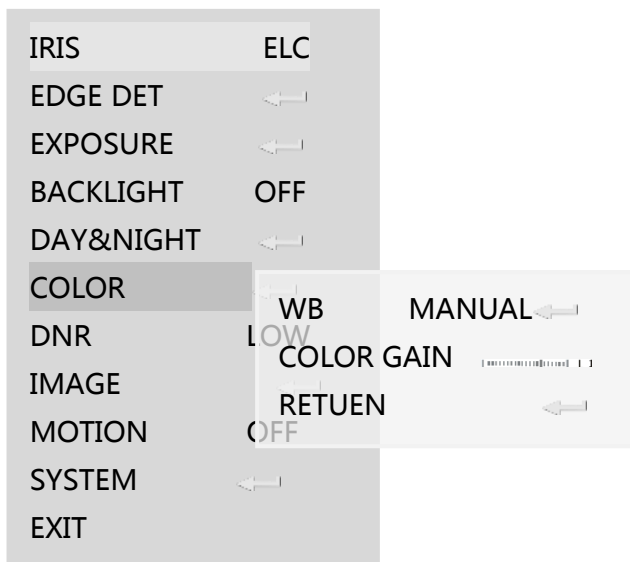


NOTE: CVBS video signal will be stopped output, when WDR is ON.

5. DAY&NIGHT



6. COLOR



DAY & NIGHT

- ▶ Switch settings of Day and Night mode.
- ▶ AUTO : automatically switch to day mode or night mode by camera module reflecting to the external light.
- ▶ COLOR : stay Day mode all the way.
- ▶ B&W : stay Night mode all the way.
- ▶ EXTERN : automatically switch to day mode or night mode by the IR illuminator reflecting to the external light.
- ▶ ANTI-SAT.: 0-20 smart IR overexposure control, the bigger the value is, the slighter the overexposure. 0-20 selectable.
- ▶ D > N THRES & N > D THRES : setting the day and night mode threshold for switching each other, 0-20 selectable.
- ▶ DELAY : setting the switching time of day and night mode (Only available when mode is AUTO or EXTERN).

COLOR

- ▶ AWB : MANUAL, AUTO, AUTOext, preset selectable.
 - ▶ MANUAL : setting C-TEMP (color temperature) and R/B (red/blue) GAIN value, 0-20 selectable.
- C-TEMP: 3000K/5000K/8000 selectable.
 - ▶ AUTO: automatic white balance.
 - ▶ AUTOext: automatic tracking white balance.
 - ▶ PRESET: put the camera lens to one special environment, the camera will choose this environment as basic white balance.
- ▶ COLOR GAIN : 0-20 selectable.

7. DNR

IRIS	ELC
EDGE DET	←
EXPOSURE	←
BACKLIGHT	OFF
DAY&NIGHT	←
COLOR	←
DNR	LOW
IMAGE	←
MOTION	OFF
SYSTEM	←
EXIT	

8. IMAGE

IRIS	ELC
EDGE DET	←
EXPOSURE	←
BACKLIGHT	OFF
DAY&NIGHT	←
COLOR	←
DNR	LOW
IMAGE	SHARPNESS [.....]
MOTION	GAMMA 0.55
SYSTEM	MIRROR OFF
EXIT	FLIP OFF
	D-ZOOM 1.0X
	ACE OFF
	DEFOG ON ←
	SHADING OFF
	PRIVACY ←
	RETURN ←

DNR

▶ 3D-DNR: It can improve image roughness in low-light level environment, OFF/LOW/MIDDLE/HIGH.

IMAGE

▶ SHARPNESS: 0~10.

▶ GAMMA: Used to adjust the monitor GAMMA value
0.45/0.55/0.65/0.75 selectable.

▶ MIRROR : ON/OFF.

▶ FLIP : ON/OFF.

▶ ACE : D-WDR, OFF、LOW/MIDDLE/HIGH.

▶ DEFOG : ON-enter , processing fog in image, makes the image clear. ATUO and MANUAL options choices , HIGH/MIDDLE/LOW.

▶ PRIVACY :ON-enter , setting the mask area position and size ; Can setting 16 boxes mask area (NO. 0-15) , BOX: ON-enter, ON/OFF hide the numbered mask.

Mask setting :

H-POS: 0-60 horizontal starting point;

V-POS: 0-34 vertical ending point;

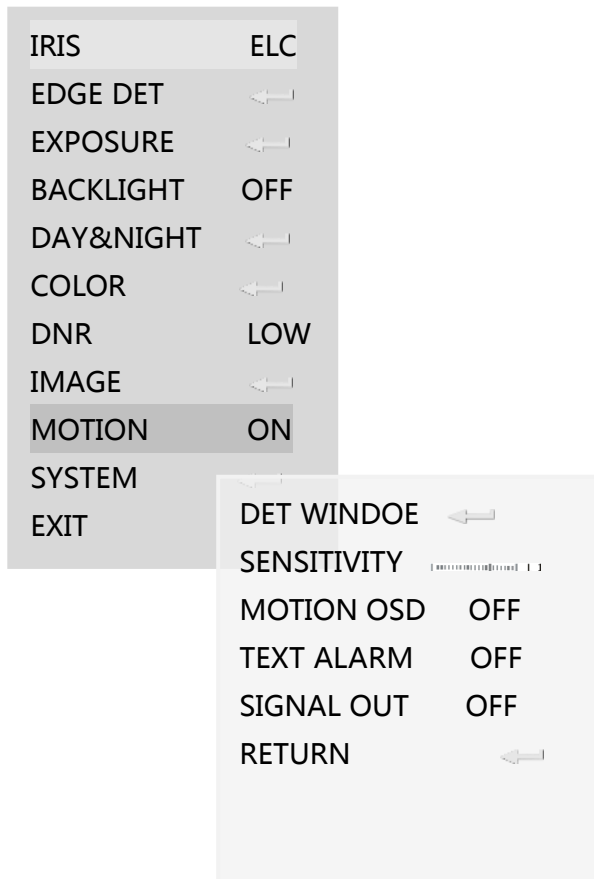
H-SIZE: 0-60 horizontal ending point;

V-SIZE: 0-34 vertical ending point;

Mask brightness& color range: U&V: 0-20

TRANS: 0-3 levels transparency setting.

9. MOTION



MOTION

Setting the alarm area in the image to let the camera give out alarm signal when objects in alarm area is moving.

▶ DET WINDOW: 0-3area selectable , (WINODW ZOOM). Each area is independent programmable.

H-POS: 0-60 horizontal starting point;

V-POS: 0-34 vertical ending point;

H-SIZE: 0-60 horizontal ending point;

V-SIZE: 0-34 vertical ending point;

▶ DET TONE: 5 kinds of border settable.

▶ MORECT FILL: OFF/ON

▶ sensitivity : 0-10 level selectable, the smaller value is, the more sensitive the camera is.

▶ MOTION OSD : ON/OFF, display red box in the monitor when detecting moving objects.

▶ TEXT ALARM: display text "MOTION" in the monitor when detecting moving objects.

▶ SINGNAL OUT: ON/OFF, give out 3.3V alarm signal when detection moving objects.



NOTE :

The options will be displayed in the WINDOW DET, when the "MOTION OSD" is on.

10. SYSTEM

IRIS	ELC
EDGE DET	←
EXPOSURE	←
BACKLIGHT	OFF
DAY&NIGHT	←
COLOR	COM. ←
DNR	OUTPUT ←
IMAGE	IMAGE RANGE USER ←
MOTION	OFF
SYSTEM	COLOR SPACE HD-CbCr
EXIT	COLOR BAR ←
	LANGUAGE CHN[S]
	CAM TITLE OFF
	RESET ON
	RETURN ←

SYSTEM

► COM. : RS-485

Communication setting ID: 0-255,

BAUDRATE:

2400/4800/9600/57600/115200

selectable.

► IMAGE RANGE : USER/FULL/COMP, the OFFSET of USER: 0-32.

► COLOR SPACE: HD-CbCr 、 YUY 、 SD-CbCr.

► FRAME RAGE : 1080P/720P_ (25fps/30fps), selectable.

► Monitor : 0-3, choose a different screen style.

► FREQ: NTSC/PAL.

► CVBS : ON/OFF.

► LAUGUAGE : multiple languages CHN [S], CHN , EN、 JPN、 KOR、 ITA

► COLOR BAR : OFF/ON , used in color contrast test (color bar on screen).

► CAM TITLE : ON through up、 down、 left、 right keys to set up letters or numbers, after been set editor is displayed in the upper right corner of the screen.

► RESET : Long press to restore factory settings.

4. PARAMETER

Function & Parameter

MODEL	SV-SDI2812, SV-SDI0150
Image Sensor	1/2.8" SONY CMOS(IMX291)
Total Pixels	1956(H) × 1266(V)Approx. 2.47M pixels
Effective Pixels	1944(H) × 1092(V)Approx. 2.12M pixels
Resolution	Digital:1080P(30fps),720P(60fps)
Min-illumination	Color:DSS:0.00008LUX, BW DSS: 0.00008 LUX
Shutter Speed	AUTO/MANUAL(1/50\60 ~ 1/30,000 sec)
S/N Ratio	42dB
Color (AWB)	Auto/Auto ext/Preset/Manual
ACE&WDR	Off/Low/Middle/High: WDR SNR: 120Db
BLC	Off/BLC
HLC	Off/HLC
Defog	Off/On, Low/Middle/High
3D DNR	Off/Low/Middle/High
Mirror	Left/right/Flip upside down
Sens-Up	Off/X2/X4/X8/X16/X32
AGC	0-10 steps
Video Output	HD-SDI
Power supply	DC12V
Operation temperature	-20°C~80°C
Power consumption	4.0W
Size	90*44*44mm, 126*44*44mm
weight	195g, 313g