

# SUPER RESOLUTION CAMERA

Please read this manual thoroughly before operation and keep it handy for further reference.

## 1. Specifications

ITEM	SR (Super Resolution) Series
Power Source	DC 12V & AC 24V ( Option )
Image Sensor	1/3", SONY SUPER HAD CCD, 410,000 pixels
Total Pixels	811(H) x 508(V) , 1/3" CCD
Effective Pixels	768(H) x 494(V) , 1/3" CCD
Maximum Aperture Ratio	1 : 1.3 ~2.0
Scanning System	2 : 1 Interlaced 525 Lines / 60Fields / 30Frames
Video Output	1.0V [p-p] Composite, 75Ω
Resolution	540 TV Line
Back Light Compensation	ON / OFF / AUTO
Gain Control	AGC-L, AGC-H, OFF selectable
Electric Shutter Speed	1/60 ~ 1/200,000 sec
INTENSIFIER	Built-in ( selectable limit ~ X128)
WHITE BALANCE	W-ATW / S-AWC / AWC / MANUAL
Min. Illumination	0.002Lux (intensifier) 0.3Lux (F1.3)
S/N ( Y signal)	50dB (Weight On)
Digital Noise Reduction	ON / LOW / MIDDLE / HIGH
Motion Detection	MD1 / MD2 / OFF
On Screen Display	Built - in
PRIVACY Function	ON / OFF (4 Programmable Zone)
Operational Temperature	-10°C ~ +50°C (14°F ~122°F)
Operational Humidity	30% ~90% RH

## 2. Features

### 1) SUPER BLC

When the image is in front of strong background lighting, your camera allows you to get the clear image.

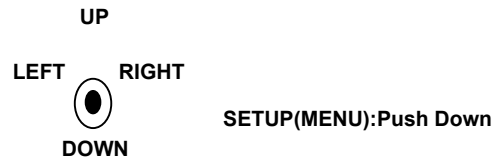
### 2) SENS UP(Fine Picture Condition Under Very Low Illumination)

1/3"inch density CCD and digital processor permit high quality pictures to be captured in very low light condition.

### 3) High Resolution

The horizontal resolution of 540TVL lines can be achieved by using a SONY CCD having Double Speed 410,000pixels noiseless and reliable pictures.

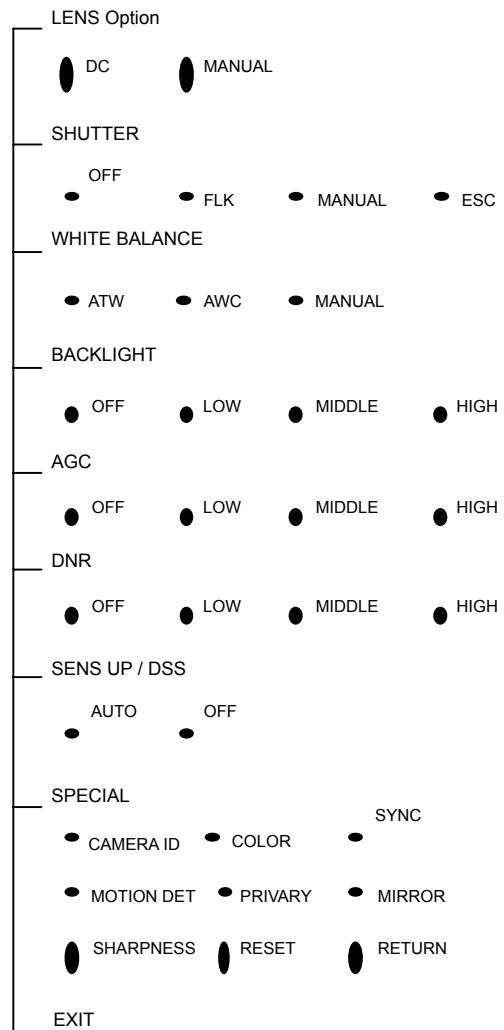
## 3. Camera OSD Control



Press this control	To do this
UP, DOWN	Select a new item
LEFT, RIGHT	Select a menu item
SETUP(MENU)	Access a submenu

## 4. OSD Menu Structure

### SETUP MENU



## 5. SETUP Menu Functions

Process and render pictures.

#### 4) Motion Detection

Your Camera detects motion of object without sensor outside.

#### 5) OSD

You can control a lot function on the screen.

#### 6) DNR (Digital Noise Reduction) CHIP

It has an assistant DSP chip that can remove image noise efficiently and it shows clean and obvious image in low luminance.

#### 7) ELECTRONIC DAY/NIGHT (OPTION)

In normal or high luminance, camera maintains color mode. On the contrary, it get changed into B/W mode in low luminance.

#### 3) WHITE BAL.

<Option : ATC / AWC / MANUAL>

Controls color on the screen.  
Select Auto Tracking White Balance(ATW) when the color temp. is 2400°K~12000°K (for example when under a fluorescent light or outdoors).  
Manual mode allows you to increase or decrease the red or blue factor on screen.  
Auto White Balance Control(AWC) automatically adjusts the white balance to your specific environment.

#### 4) BACKLIGHT

<Option : OFF / LOW / MIDDLE / HIGH>

Provides light level control to overcome severe backlighting conditions.

#### 5) AGC

<Option : OFF / LOW / MIDDLE / HIGH>

Adjusts value of AGC gain.  
Increase the GAIN level to brighten the picture.  
(noise / distortion may develop)

#### 6) DNR

<Option : OFF / LOW / MIDDLE / HIGH>

Reduces noise/distortion on the screen, Increasing the DNR level reduces noise but may introduce video artifacts. DNR is deactivated if AGC is turned off.

#### 7) SENS-UP / DSS

<Option : OFF / LOW / MIDDLE / HIGH>

### 3) SETUP MENU FUNCTIONS

#### 1) LENS

<Option : DC / MANUAL>

Selects Lens Type.

#### 2) SHUTTER

<Option : OFF / FLK / MANUAL/ ESC>

Adjusts shutter settings.  
Flickerless mode(FLK) reduces on-screen flickering.  
Electronic Shutter Control(ESC) adjusts brightness level on screen.  
Manual mode allows you to adjust the shutter speed from 1/60~1/120,000 of a second(NTSC), or 1/50~1/120,000 (PAL).  
FLK is the only option available when the camera lens is set to the recommended DC mode.

#### 2) COLOR

<Option : AUTO / ON>

AUTO = Automatically detect color or black/white.  
ON = Full-time color mode.

#### 3) SYNC

<Option : INT / L/L>

```
<SYNG. CONTROL>
SYNC INT (L/L)
RETURN↵
```

INT = Synchronize the vertical interval sync pulse of your camera with other equipment to reduce the effect of picture roll on the monitor.  
L/L (Line Lock) = Adjust the phase from 0° ~ 359°.

INTERNAL = When line lock is not required.  
LINELOCK = Adjust the vertical phase(VPH) from 000 - 359 (factory default is 0). Line line is only available with 24VAC power.  
RETURN = Press MENU to return to the SETUP menu.

#### 4) MOTION DET

<Option : OFF / ON>

```
MOTION DETECTION
AREA SEL AREA 1
AREA STATE ON
TOP ..... 10
DOWN ..... 25
LEFT ..... 20
RIGHT ..... 40
Press SET to Return
```

Detect moving objects on screen;  
Displays MOTION DETECTED along with the number of movements counted. Select the area on screen you want to observe.

AREA SEL = Select a motion detection grid(top left, top right, bottom left, bottom right) to modify.  
AREA STATE = Activate or deactivate the selected grid.  
TOP/DOWN/ = Press LEFT or RIGHT menu control left or LEFT/RIGHT right to alter the dimensions of the selected grid.

Automatically provides a clear image under low-light conditions. You can control the maximum low-light magnification from 2x to 128x (increasing magnification may cause noise/distortion). DSS is deactivated when SHUTTER is set to FLK mode.

## 8) SPECIAL

See SPECIAL Menu Functions.

## 9) EXIT

Exit the SETUP menu and returns to video monitoring.

## 6. SPECIAL Menu Functions

On the SETUP menu, press the menu control UP or DOWN and then select SPECIAL.  
Press the SETUP(MENU) control to access the SPECIAL MENU.

### 1) CAMERA ID

<Option : OFF / ON>

```

CAMERA ID
A B C D E F G H I J K L M
N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m
n o p q r s t u v w x y z
- . 0 1 2 3 4 5 6 7 8 9
← → CLR POS END
-----

```

Display a name and/or number on the monitor.  
To add a camera title:

UP, DOWN, LEFT, RIGHT menu control = Select a character, then press (SETUP)MENU to accept it. The character is saved and the title cursor at the bottom of the screen moves to the next position.  
← → = Go back or forward in the title name to make changes.  
CLR = Delete the entire name and start again.  
POS = Position the camera title on the screen.  
Press (SETUP)MENU to confirm the position.  
END = Accept the new name.

### 5) PRIVACY

<Option : OFF / ON>

```

PRIVACY
AREA SEL  AREA 1
AREA STATE ON
AREA TONE .....| 80
TOP .....| 10
DOWN .....| 25
LEFT .....| 20
RIGHT .....| 40
Press SET to Return

```

Mask up to 4 areas of the screen from video monitoring.

AREA SEL = Select a motion detection grid (top left, top right, bottom left, bottom right) to modify.  
AREA STATE = Activate or deactivate the selected grid.  
TOP/DOWN/ = Press LEFT or RIGHT menu control left or LEFT/RIGHT right to alter the dimensions of the selected grid.

### 6) MIRROR

<Option : OFF / ON>

Produce a horizontal mirror image on screen.

### 7) SHARPNESS

<Option : OFF / ON>

Sharpen the image on screen.  
Excessive sharpening may cause picture noise.

### 8) RESET

Restore all factory default settings.

### 9) RETURN

Return to the main SETUP menu.

This manual is based on the date as shown in the right and specifications are subject to change without notice for quality improvement.