SONY EFFIO-A Security Camera
With On-Screen Display

Model CSP-750SE

FEATURES:

- 1/3 Sony Ex-View HAD II CCD
- Sony Effio-A DSP
- 750TVL High Resolution
- 42 Infrared LEDs’
- IR Distance up to 120ft / 40m
- 2.8~12.0mm Varifocal Lens
- On-Screen Display (OSD)
- IP66 Rating
- 3-AXIS Cable Management Bracket
- 1AMP
- 12V DC

The CSP-750SE is a “New Generation” camera with SONY EFFIO-A DSP. It was designed to provide the user with stunningly clear images in both day and night. The camera has a Day/Night auto-switch which automatically produces a black and white/infrared image in low light. This camera is an excellent choice for low light or complete darkness. The camera is also equipped with many advanced features including a digital on-screen display (OSD) menu which enables the user to adjust camera settings in order to achieve the highest quality image.
CAUTION:

- Do not attempt to service this video product by yourself as taking apart camera may expose you to dangerous voltage or other hazards.
- Please comply with all electrical safety standards during installation and operation.
- In order to prevent damage caused by fire or electric shock, please do not submerge camera in water or expose any open parts to liquid.
- Make sure to use the appropriate power supply and that the power is plugged into the camera correctly and securely. Do not switch on power until after camera connection is complete. This camera requires 12volt DC power.
- Do not expose the lens directly to the sun or to strong light as this may damage the pick-up device.
- There are some sophisticated parts inside this camera, therefore, always handle with care in order to avoid any internal damage to the camera.
Frequently Asked Questions:

No Image?

- Check the power cable to the power box or wall outlet. Make sure video and power connections are secure. Do not switch on power until camera connection is complete.

- If using a multiple output power box, make sure the power switch is in the “ON” position & all of the fuses are illuminated.

- If using a multiple output power box, make sure the POSITIVE (+) and NEGATIVE (-) wires are connected correctly.

- If using a spool of cable (not premade), make sure outer copper wire is not touching the center pin.

- Make sure the BNC video from connection from the camera is plugged into the video input on the DVR or display.
**Interface**

1. **ENTER**
   - Use this button to display the Main Menu and to Enter the Submenus when they are available.

2. **UP/DOWN**
   - Select the desired feature by using Joystick with Up / Down direction

3. **LEFT/RIGHT**
   - Change the status of the selected feature by using Joystick with Left / Right direction

4. **VIDEO TEST/VIDEO OUT**
   - Additional video out for Test Monitor

5. **LED LEVEL**
   - Adjusts brightness of the IR LEDs
**III OSD**

Press “Enter” button for 2 seconds, the Camera screen will display the OSD Main menu.

Users can select different options according to the camera environment, including Automatic, Indoor, Outdoor, Backlight, Traffic Monitoring, user-defined.
3.1.1 Shutter/AGC

Move the cursor to the main menu function "Scene Select", press the " Enter " button to display the " Advanced Settings" sub-menu, move the cursor to " Shutter / AGC " item, this function can be divided into "Automatic" control, "Manual" control, and "Fixed" control. The user can use the "Left and Right” button to adjust the Settings.

![Advanced Menu]

Select "Auto”, press the “Confirm” button to enter the sub-menu of Automatic Control. Inside Auto Iris setting submenu, there have “AE LEVEL”, “AGC MAX ”, “SENS UP” three settings.

“AGC” can adjust the peak value, the bigger the value, the brighter the picture, but the noise will be much greater.
In “Sens Up”, there is “On” and “Off” as an option.

Manual Setup, user can adjust the Shutter Mode Shutter Speed and AGC

3.1.2 WHITE BAL

White Balance can restore the authenticity of the color when it is affected by the change of temperature. The user can choose different white balance mode accordingly,

ATW/PUSH/USER1/USER2/ MANUAL/PUSH LOCK.
Normally, only when you choose “user defined” setting you can adjust the mood, otherwise the white balance is fixed.

3.1.3 HLI/BLC

In the main menu, press the cursor to “Scene Selection”, press “Enter” button to enter “advanced settings” sub-menu. In the “HLI/BLC” menu, press “left” “right” key to select “off” “HLI” “BLC”, only the “Scene Selection” is “user defined”, you can select “BLC”.
3.1.4 Adaptive Tone Reproduction

The ATR (Adaptive Tone Reproduction) function provides gradation compensation to improve the contrast of subjects whose gradation has been lost in cases where, for instance, both low-luminance areas and high-luminance areas exist in the same picture.

“Clear Face” and “contrast” values can be chose between the “low, medium, high”, User can choose an appropriate value to achieve the best image quality.
3.1.5 DNR
In the main menu, press the cursor to “Scene Selection”, press “Enter” button to enter “advanced settings” sub-menu. In the "noise reduction" menu press "enter" button to enter the "noise reduction" sub-menu. You can adjust the level of noise reduction, the bigger the value, the higher the noise reduction level.

3.1.6 DAY/NIGHT
Day/night switching function is mainly for the user to use the camera for different occasions. There are three modes for day/night: Day mode, Night mode and auto mode.

In the main menu, press the cursor to “Scene Selection”, press “ENTER” button to enter “advanced settings” sub-menu. In the “Day/Night”, use “left” “right” key to select “white mode”, “black mode”, “auto mode”.
A. Auto mode

In the “Day/Night” menu, press “left” “right” key to select “Auto mode” and press “ENTER” button to “Auto mode” sub-menu, this function controls the camera output color or black and white image according to the strength of the light. User can set the parameter according to the environment.

B. Day mode

Image will always be color

C. Night

Image will always be black and white

![D/N AUTO SETUP](image)

3.1.7 DEFOG

You can choose the Defog function according the environment, Defog can be used to help improve the captured image in poor weather conditions that display smog, fog, or smoke. The visibility of the cameras can be enhanced in any weather condition.

Select Off/Low/Middle/High to display the best picture.
3.2 PICT ADJUST

Select to bring up the PICT ADJUST sub-menu for further settings.

<table>
<thead>
<tr>
<th>Function</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRIGHTNESS</td>
<td>000-255</td>
</tr>
<tr>
<td>CONTRAST</td>
<td>000-255</td>
</tr>
<tr>
<td>SHARPNESS</td>
<td>000-255</td>
</tr>
<tr>
<td>HUE</td>
<td>000-255</td>
</tr>
<tr>
<td>COLOR GAIN</td>
<td>000-255</td>
</tr>
</tbody>
</table>
3.3 EZOOM

In the OSD main menu to choose "EZOOM", Press “ENTER” button to bring up the setup sub-menu, in the EZOOM SETUP, users can setup according to the needs of area size and position.

3.4 DIS (Digital image stabilization)

Digital image stabilization (DIS) is a family of techniques used to reduce blurring associated with the motion of a camera during exposure. Specifically, it compensates for pan and tilt (angular movement, equivalent to yaw and pitch) of a camera or other imaging device. It is used in image-stabilized binoculars, still and video cameras, and astronomical telescopes. With still cameras, camera shake is particularly problematic at slow shutter speeds or with long focal length (telephoto) lenses.
3.5 Privacy

15 areas optional, user can adjust the size, position, color, transparency of the chosen area.

Privacy shield can be setup for 1-15 areas, when mode is set to open, users can press the “up” “down” “left” “right” “ENTER” to select the parameter of areas’ DISPLAY, POSITION, COLOR, TRANSP.
3.6 Motion detection

In the OSD main menu to choose “MOTION DETECTION "press the "left" "right" to select "On", and press “ENTER” button to bring up the MOTION DETECTION sub-menu.

In the motion detection sub-menu, users can do setup according to the needs of detection sense, interval, mask area, monitor area.

- **The detect sense**: 0-127.
- **Interval**: 0-127
- **Block DISP**: there is on/off two choices. There is a diagram displaying when you choose on, otherwise, there is not diagram.
- **Mask area**: Set whether to participate in the relevant area motion detection, when the block selected area, this area will be involved in motion detection.
- **Monitoring area**: Four visual surveillance area and users can adjust the parameter value to adjust the surveillance area location.
3.7 SYS Setting

Move the cursor to “system setting” press “enter” to set the submenu.

3.7.1 Sync Camera

The system default is "Internal synchronization" mode

3.7.2 Lens

Lens Type can be set to "Auto” lens, "manual" Lens 2 types, the user can select the type of lens by the menu “left and right”. When using the optional auto iris lens can select "DC / VIDEO" lens type, the user can adjust the "speed" value to adjust the speed of the auto iris open. The smaller the value, the slower the aperture opens, the greater the value, the faster the aperture opens. Auto iris lens adjustment function, move the cursor to “adjust “item, press the enter button, the camera will automatically set the relevant parameters to match the different types of lenses.
3.7.3 Image Flip Function

Move the cursor to "flip" item, press left and right to select "off" to "flip" turn "vertical" "horizontal vertical flip" option.

3.7.4 Communication

In the System Settings sub-menu, move the cursor to the "Communication", press "ENTER" to enter the communication settings sub-menu, the user can set up "address", "baud rate" and other settings according to their needs.
3.7.5 Camera ID

In system settings submenu, move the cursor to "CAMERA ID SETUP" option, press the "ENTER" key to enter into the camera set up submenu. You can now set the camera name.

You can set the camera code as numbers, uppercase letters, and related symbols.

“←↑↓→” Cursor for left and right

“CLR” Clear camera name

“POS” for position.

“RETURN” return to the upper menu.

3.8 Language

Move to the first line of the main menu, press left or right to enter the next page to set.

The “Language” function were designed for the Surveillance camera’ menu, there are eight Languages “English, Chinese, Japanese, German, French, Russian, Portuguese, Spanish”, user can press left or right bottom to choose.
3.9 MAINTENANCE

Maintenance is for WHITE PIXEL MASK and CAMERA RESET

3.9.1 White Pixel Mask

When used in high-temperature environment, there might be dead pixel on CCD sensor. With this function on, the dead pixel is to be masked so as to improve the picture quality.

There are three options--- Manual, Auto and clear data

3.9.2 Camera Reset

“Camera Reset” designed to delete all the configuration that was set before, please confirm before this operation, or it will restore factory setting.
3.10 EXIT / SAVE ALL

Press to restore all the settings to the default values.

SAVE ALL

Press to save all the settings made.

NOTE:

There will be no prompt windows while the settings are being saved.

EXIT

Press to exit the OSD menu.

NOTE:

Before exiting the OSD menu, please press SAVE ALL<↓ to save all the settings made. If you fail to do this, all the settings will not take effect once the power is reconnected.
## Technical Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imaging Sensor</td>
<td>1/3“ SONY EXVIEW CCD II + Sony Effio-A DSP</td>
</tr>
<tr>
<td>Pixel</td>
<td>PAL: 976 (H) x 582 (V); NTSC: 976 (H) x 494 (V)</td>
</tr>
<tr>
<td>Signal System</td>
<td>PAL/ NTSC</td>
</tr>
<tr>
<td>Syn. System</td>
<td>Internal Synchronization</td>
</tr>
<tr>
<td>Shutter speed</td>
<td>PAL: 1/50 ~ 1/100000s; NTSC: 1/60 ~ 1/100000s</td>
</tr>
<tr>
<td>S/N Ratio</td>
<td>More than 50dB (AGC OFF)</td>
</tr>
<tr>
<td>Video Output</td>
<td>1.0Vp-p, 75 ohms</td>
</tr>
<tr>
<td>Horizontal resolution</td>
<td>750TV Lines Of Resolution</td>
</tr>
<tr>
<td>Minimum Illumination</td>
<td>Color 0.1Lux (F1.2, 50IRE, AGC ON) B/W: 0.001Lux (F1.2, 50IRE, AGC ON)</td>
</tr>
<tr>
<td></td>
<td>0 Lux when IR on</td>
</tr>
<tr>
<td>D/N Switch</td>
<td>Auto/Color/B/W/External Control</td>
</tr>
<tr>
<td>Brightness Switch</td>
<td>Color to B/W &amp; B/W to Color for option</td>
</tr>
<tr>
<td>D/N Switching Time</td>
<td>0 ~ 255</td>
</tr>
<tr>
<td>IR Leds’</td>
<td>42 IR Leds’</td>
</tr>
<tr>
<td>IR Distance</td>
<td>40M = 120 FEET</td>
</tr>
<tr>
<td>Image Brightness</td>
<td>0 ~ 255 adjustable</td>
</tr>
<tr>
<td>OSD</td>
<td>CHINESE/ENGLISH/JAPANESE/PYCCNNN/PORTUGUESE/ESPANOL/DEUTSCH/FRANCAIS</td>
</tr>
<tr>
<td>PRIVACY</td>
<td>1 ~ 4 Zones</td>
</tr>
<tr>
<td>Privacy Zone Color</td>
<td>Color 1 ~ Color 8 optional</td>
</tr>
<tr>
<td>Motion Detection</td>
<td>On / Off (multi-sensitivity settings, alarm time optional)</td>
</tr>
<tr>
<td>Alarm Display</td>
<td>Icon</td>
</tr>
<tr>
<td>AWB</td>
<td>ATW, PUSH, USER1, USER2, ANTI CR, MANUAL or PUSH LOCK</td>
</tr>
<tr>
<td>Sharpness</td>
<td>0 ~ 255 adjustable</td>
</tr>
<tr>
<td>DNR</td>
<td>2D DNR</td>
</tr>
<tr>
<td>Power Supply</td>
<td>DC12V ± 10%</td>
</tr>
<tr>
<td>Power consumption</td>
<td>1AMP Power Supply &lt; 100FT Cable. 2AMP Power Supply &gt; 100FT Cable.</td>
</tr>
<tr>
<td>Operation Temperature</td>
<td>-10°C ~ + 50°C Camera Housing has a Rating of IP66</td>
</tr>
<tr>
<td>Operation Humidity</td>
<td>20 ~ 80%</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40°C ~ -60°C</td>
</tr>
<tr>
<td>Storage Humidity</td>
<td>20 ~ 95%</td>
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</tbody>
</table>