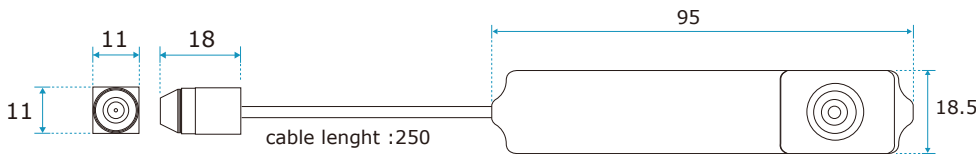


**Snake camera**



Unit : mm (± 0.5)

**Feature**

- Low-light Function :  
AGC Slow-shutter DNR  
(Noise Reduction) SENS-UP  
increase minimum illumination
- Slow Shutter
- SONY EFFIO-S DSP
- SONY EXview HAD CCD II

**Specification**

|                            |   |
|----------------------------|---|
| Model                      | ES-1971E-3C   |
| Pixel size                 | 5.0um x 6.25um  |
| Effective Image Area       | 5.58mm x 4.67mm   |
| Video system               | NTSC / PAL  |
| Number of effective pixels | 976x494 (NTSC) , 976x582(PAL)   |
| Image sensor               | 1/4" Color Exview HAD CCD II (OSD) Camera   |
| Resolution(TV Lines)       | 650 TV Lines  |
| S/N Ratio                  | 50 dB   |
| Sensor scan mode           | INTERLACE   |
| Minimum illumination       | 0.001Lux/F2.0   |
| Shutter Speed              | 1/50~1/100000 sec.  |
| Sensitivity                | 2450 mV   |
| Horizontal sync frequency  | NTSC -15.734kHz , PAL - 15.625kHz   |
| Vertical sync frequency    | NTSC - 60Hz , PAL - 50Hz  |
| Camera consumption         | 0.45  |
| Video output               | 1Vp-p , 75ohm composite   |
| Built - lens               | 3.7mm/ F2.0   |
| Storage temperature        | -30 to 60 Degree C  |
| Working temperature        | -10 to 45 Degree C  |
| Power source               | DC 6~12V  |
| Power current              | 80 mA-max(DC 12V)   |
| Dimension (mm)             | 11x11mm + 18.5x95x9.75mm,<br>25cm flexible cable between the mini lens and the slim camera Boar |

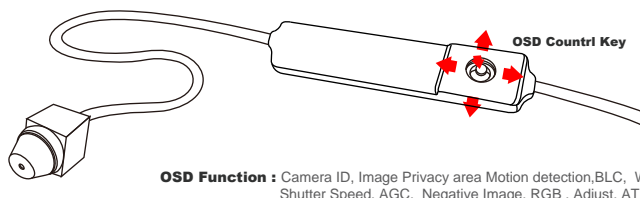


ES-1971-3C

**Ordering information**

| MODEL       | LENS         | TYPE | MIC. | NOTE                             |
|-------------|--------------|------|------|----------------------------------|
| ES-1971E-3C | 3.7mm / F2.0 | CONE | x    | ES-1971EYA-3C<br>▲:External Mic. |
| ES-1971E-4C | 4.3mm / F2.0 | CONE | x    |                                  |
| ES-1971E-3F | 3.7mm / F2.0 | FLAT | x    |                                  |
| ES-1971E-4F | 4.3mm / F2.0 | FLAT | x    |                                  |
| ES-1971E-3T | 3.1mm / F3.4 | SLIM | x    |                                  |
| ES-1971E-4T | 3.9mm / F3.9 | SLIM | x    |                                  |

**1/4" Color Exview HAD CCD II (OSD) Camera**



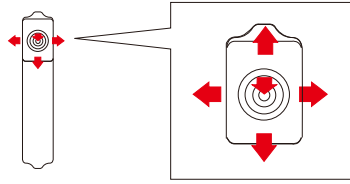
**Other information**

**1/3" Color Exview HAD CCD II (OSD) Camera**  
▶ **ME-1732E**



## OSD Control key

Internal osd consists of menu osd which, by pressing the enter button, displays the menu screen for setup and function toggle osd ( including motion icon display ) which assigns the main functions ( NR, BLC, ATR, Day & Night , AGC) to the five buttons (enter,up,down, left, right) as toggles.



## Using MENU

1. Using buttons(enter , down , left , right)to choose items and set it.
2. Press the MENU/ENTER button about 3 sec. to start MENU. The menu will display on the monitor.



| Function                             | Option   | Description   |
|--------------------------------------|--|---|
| <u>LENS</u>                          | MANUAL<br>AUTO   | This function is used to set the mechanical iris of the lens.   |
| <u>SHUTTER/AGC</u>                   | AUTO<br>MANUAL   | This function is used to set AUTO or MANUAL   |
| <u>PICT ADJUST</u>                   | MIRROR,<br>CONTRAST,<br>SHARPNESS,<br>HUE,<br>R-GAIN&<br>B-GAIN.     | This function is used to set the MIRROR, CONTRAST, SHARPNESS, HUE, R-GAIN&B-GAIN.   |
| <u>WHITE BAL</u>                     | ANTI CR,<br>MANUAL,<br>PUSH LOCK,<br>ATW, PUSH,<br>USER1 &<br>USER2. | This function is used to set the ANTI CR, MANUAL, PUSH LOCK, ATW, PUSH, USER1 & USER2.  |
| <u>ATR-EX</u>                        | MODE<br>CONTRAST   | This function is used to set the NORMAL&LIGHT in the MODE, and LOW, MIDLOW, MID, MIDHIGH&HIGH in the contrast   |
| <u>NR function</u>                   | ←↓   | In sub menu, you can select LEVEL mode to be OFF,LOW,MIDLOW,MIN,MIDHIGH&HIGH.   |
| <u>HLC/BLC</u>                       |  | In sub menu, you can select HLC mode to be OFF,ON&AUTO.<br>The CLIP LEVEL can be adjusted within the range 0~255<br>The SCALE can be adjusted within the range 0~15<br>When you select BLC mode to be OFF&ON. |
| <u>DAY/NIGHT</u>                     | EXT←↓<br>AUTO←↓  | This menu sets DAY/NIGHT function that switches camera working on the daytime or night-time conditions. You can select EXT&AUTO.  |
| <u>EZOOM</u>                         | ←↓   | In sub menu, you can set the MAG to be 0~255, and you also can press the LEFT/RIGHT button to adjust the image to PAN / TILT  |
| <u>DIS(Digital Image Stabilizer)</u> | OFF<br>ON  | Suppress shaking function.When you selected the DIS function.You can select OFF&ON.   |
| <u>PRIVACY</u>                       | ←↓   | This function is used to set the AREA SEL, MODE, POSITION, COLOR, TRANSP, MOSAIC  |
| <u>MOTION DET</u>                    | OFF<br>ON←↓  | This function is used to set the DETECT SENSE, MONITOR AREA   |
| <u>CAMERA ID</u>                     |  | Sets the camera title to appear on display with up to 52 characters.  |
| <u>LANGUAGE</u>                      |  | ENGLISH, JAPAN , SIMPLIFIED CHINESE, TRADITIONAL CHINESE  |
| <u>CAMERA RESET</u>                  |  | To reset to the default setting.  |
| <u>SAVE ALL &amp; EXIT</u>           |  | When you select SAVE ALL & EXIT to quit the menu after changing the setting, the system will be update with the settings.   |

## Advanced Features

Hight color Reproduction  
More excellent color reproduction  
Wide range ATW [1,800 K to 10,500 K]

Color chart (Machbeth)  
under halogen lamp



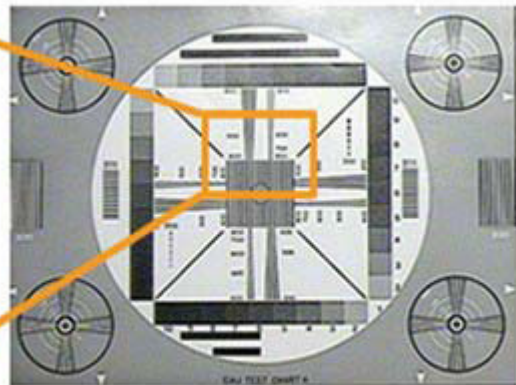
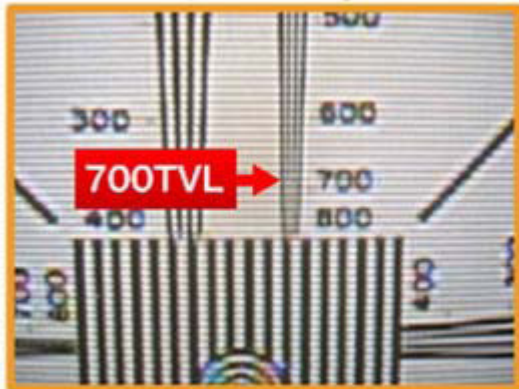
Still-life object  
under artificial sunlight



Conventional

ME-17 SERIES

Hight Resolution  
Confirmed maximum resolution to achieve the **700TVL**. !!



Resolution test chart

Present OSD Menu & Exposure Control for IR Light  
OSD function provides preset menus in 8 languages.(EN, FR, DE, ES, POR, CN, RU, JP)



Conventional



ES-19 SERIES

**Snake Camera**

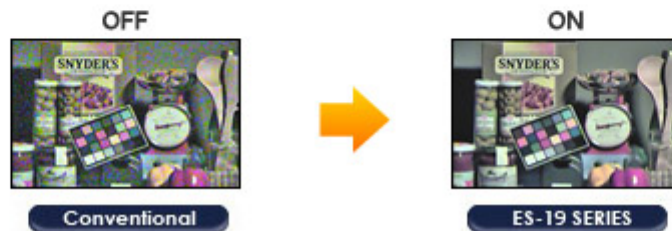
**Noise Reduction-OSD FUNCTION**

Effio-S" come with two noise reduction (NR) functions, one is space-based (2D-NR) and the time-based (3D-NR).

**2D-NR**



**2D+3D-NR**



Conventional

ES-19 SERIES

**ATR (Adaptive Tone Reproduction)-OSD FUNCTION**

Gradation compensation to improve image contrast  
Improvement of loss of dark detail and overexposure area



Conventional

ES-19 SERIES

**Low-light Function & Slow Shutter**

Low-light Function :AGC Slow-shutter DNR(Noise Reduction)SENS-UP increase minimum il



Conventional



ES-19 SERIES