Full-HD (3G-SDI) Compact Broadcast POV Camera (CS mount)



Precautions



Do not use the camera if fumes, smoke or a strange odor is emitted from the unit, or if it seems to not function correctly. Disconnect the power source immediately and consult your supplier.



Always follow the instructions in the installation guide when applying power. Fire and equipment damage can occur if power is applied incorrectly. For the correct power supply, refer to the specification sheet.



Do not install or operate in small, unventilated areas. Heat build up can significantly reduce the performance and operating life of the product and may cause a fire.



To prevent damage, do not drop the camera or subject it to strong shock or vibration



If installed close to a TV, radio transmitter, magnet, electric motor transformer or audio speakers the magnetic field generated may interfere with or distort the image.



Whether or not the camera is used outdoors, never point it toward the sun. Use caution when operating the camera in the vicinity of spot lights or other bright lights and light reflecting objects.

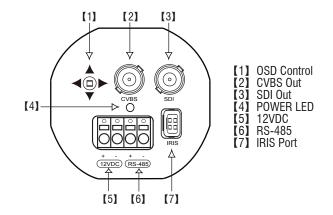


Do not use the camera in extreme environments where high temperatures or high humidity exists. Use the camera under conditions where temperatures are between $14^{\circ}\text{F} \sim 122^{\circ}\text{F}$ (- $10^{\circ}\text{C} \sim 50^{\circ}\text{C}$), and humidity is below 90%.

Features

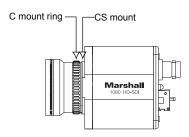
- 2.5 Megapixel 1/3-inch CMOS Progressive Scan Sensor
- CS/C Mount with DC-Auto Iris (lens sold separately)
- **C343-CSB:** 1920x1080p59.94/29.97, 1920x1080i59.94, 1280x720p59.94/29.97fps
- **CV343-CS:** CV343-CS: 1920x1080p60/50/30/25, 1920x1080i60/50, 1280x720p60/50/30/25fps
- 3G/HD-SDI (BNC) & CVBS (BNC) built into rear panel
- New WDR function supports high speed & high sensitivity to various light sources
- OSD Menu Joystick, RS-485 connectable (Pelco/Visca)
- · Stepped (Red/Blue) Gain Control, Gamma, and Shutter adjust
- 12VDC

Rear Panel Video/Power Connection



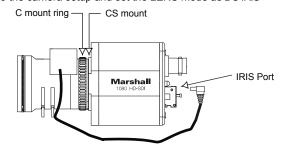
Manual IRIS Lens Connection

- 1. Please check whether lens mount type is C mount or CS mount.
- CS mount type: Mount the lens after removing the rubber cap.C mount type: Attach the C mount ring and mount the lens.
- 3. Go to the camera setup and set the LENS mode as ESC.



Auto IRIS Lens Connection

- 1. Mount the lens as described in the manual lens connection.
- 2. Connect the auto IRIS lens connector to the IRIS port on the the rear panel
- 3. Go to the camera setup and set the LENS mode as DC IRIS

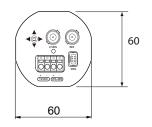


Specifications

| CV343 | | SPECIFICATIONS |
|-----------|--------------------------|---|
| Sensor | Image Sensor | 1/3" Progressive CMOS (Approx. 2.1 mega) |
| | Scanning System | 16:9 Progressive |
| | Sync. System | Internal |
| | Effective Pixel | 1920(H) x 1080(V) |
| | Min. Illumination | 0.2Lux (Day), 0.1Lux (Night), 0.005Lux (DSS on) |
| Ī | Horizontal Resolution | 1,000TVL |
| Optics | Lens C/CS Mount, DC-IRIS | |
| | Back Light Compensation | WDR/BLC |
| | | HLC (High Light compensation) |
| | Exposure | Auto / Manual |
| | White Balance | Auto (3,000°K~8,000°K) |
| | | ATW (1,900°K~11,000°K) |
| | | Manual |
| Functions | Day & Night System | AGC / TDN (ICR) |
| | Electronic Shutter | NTSC: 1/30~1/30000 |
| | | PAL: 1/25~1/30000 |
| | | DSS (~X64) |
| | Functions | Privacy Mask, Image Mirror, 3DNR, Flickerless |
| | | Sharpness, Defog, DIS (Digital Image Stabilizer) |
| | | Motion Detection, DSS (Digital Shutter Speed) |
| | SDI (BNC) | SMPTE 292M (1.485Gbps) |
| | | 1080p@25/30 or 29.97 |
| | | 1080i@50/60 or 59.94 |
| Video | | 720p@50/60 or 59.94 |
| Output | | 720p@25/30 |
| Output | | SMPTE 424M (2.97Gbps) |
| | | 1080p@50/60 or 59.94 |
| | | 800mVp-p, 75Ω, Unbalanced Generator(Single-Ended) |
| | CVBS (BNC) | Analog Composite (1V ± 0.2 Vp-p) NTSC/PAL |
| Control | RS-485 | PELCO-P/D, SONY-VISCA Protocol |
| CONTROL | | 8Bits Data, 1Stop Bit, No Parity, 2400~115200bps |
| General | Operation Temperature | -10℃ ~ 50℃ |
| | Power Input | 12VDC (7VDC to 15VDC) |
| | Power consumption | Max 6W |
| | Dimensions (W X H X D) | 60 X 60 X 56mm / 2.36 X 2.36 X 2.20Inches |
| | Net Weight | Approx. 160g/0.35Lbs (Without Lens) |
| | · | · |

Dimensions





HD-SDI 1080p Camera Setup: CV343-CS, CV343-CSB

| SETUP | SUB MENU | SUB MENU | DESCRIPTION |
|--------------------------|----------------|------------------------|--|
| 3E10P | | SOB IVIENO | |
| LENS | ESC DC IRIS | | IRIS is fixed. Shutter controls exposure automatically if shutter is set as auto. Controls exposure automatically. |
| - | AUTO | | · · · · · · |
| WB CONTROL | AUTO | | Color temperature is automatically adjusted to 3,000°K ~ 8,000°K Continuously adjusts camera color balance in accordance with any change in color temperature. Compensates for color temperature changes within |
| | ATW | | the range of 1,900K to 11,000K. |
| | PUSH | | Color temperature will be manually adjusted by pushing the OSD button. Place the white paper in front of the camera when OSD button is pressed to obtain the optimum result. |
| | | COLOR TEMPERATURE | Select color temperature from LOW, MIDDLE, or HIGH. |
| | MANUAL | RED GAIN | Adjust the Red tone level manually. Adjust the red tone of the image (0~20). |
| | | BLUE GAIN | Adjust the Blue tone level manually. Adjust the Blue tone of the image (0~20). |
| AE CONTROL (EXPOSURE) | BRIGHTNESS | 0~20 | Adjust the screen brightness. The bright control function adjusts gain and iris, to keep a brightness level. |
| | AGC LIMIT | 0~20 | A function which controls the amplification/gain process automatically if the illumination falls under the usable level. Camera raises up gain to selected gain limit when dark conditions. |
| | | AUTO | Shutter controls exposure automatically when IRIS is manual. Shutter control has the exposure control priority |
| | SHUTTER | MANUAL | Shutter speed is fixed. The exposure control priority is given to other resources. |
| | | FLICKERLESS | Use this function when you experience picture flicker, this happens when there is a conflict with the installed lighting frequency. |
| | DSS (SENS-UP) | OFF, x2~64 | When luminance condition is low, DSS can adjust the picture quality by maintaining the light level. Minimum slow shutter limit is down to x64. |
| | D33 (3EN3-01) | WDR | Enable user to view both object and background more clearly when background is too bright. (LOW, MIDDLE, HIGH). |
| | BACK LIGHT | BLC | Enable as back light compensation feature. |
| | BACK LIGHT | SPOT | - · |
| BACK LIGHT | ACE | | Enables a user to select a desired area on a picture and view that area more clearly when background is too bright. |
| | ACE | LOW, MIDDLE, HIGH | Brightness correction of the dark image area. |
| | ECLIPSE | LEVEL | Highlight the bright area with a masking box with a selected color. Adjust the masking level (0~20). |
| | | COLOR | Select the color for masking (GRN, MAG, RED, BLUE, BLK, WHT, YEL, CYN) Adjust the anti-saturation level manually. This feature will reduce the saturation phenomenon in which part of the camera receiving the light affected |
| | | ANTI-SAT. | by the IR or light in Night mode. |
| | AUTO | AGC LEVEL | The camera will stay in DAY in a normal environment, but switched to NIGHT mode when ambient illumination become this pre-set level. This level is threshold for switching day to night. It is same as the exposure gain level. |
| DAY/NIGHT | | AGC MARGIN | Set the margin between Day →Night switching level and Night →Day switching level. |
| | | DWELL TIME | Select the checking time of light condition to confirm to chage from the day mode to the night mode. |
| | COLOR | | The camera keeps color mode constantly. |
| | NIGHT | | The camera keeps black/white mode constantly. |
| | RANGE | 10%, 20%, 30% | This function will reduce image blurriness due to vibrations caused by hand shake or Pan/Tilt operation. |
| | KANGE | 10%, 20%, 30% | The image will be digitally zoomed in to compensate the shifted pixels. Set the digital zoom level for image stabilizing. (Max. 30%: x1.4 Digital Zoom) |
| IMAGE | FILTER | LOW, MIDDLE, HIGH | Select the level of correction hold filter for the worst case of image. HIGH: Less image correction. Low: More image correction. |
| STABILIZER | аито с | OFF, HALF, FULL | OFF: Disable the auto centering function. |
| | | | FULL: The camera will correct the blurness due to vibrations caused by both hand shake or Pan/Tilt operation. |
| | 601.00.151/51 | 0-20 | HALF: The camera will correct the blurness due to vibrations caused by hand shake. |
| ⊢ | COLOR LEVEL | 0~20 | Adjust the color level value for a fine color tune. |
| | SHARPNESS | 0~20 | Adjust the sharpness of the image. As you increase this value, the picture outline becomes stronger and clearer. |
| | MIRROR FLIP | | Video output is rotated horizontally. |
| | | 1.07 = 15.07 | Video output is rotated vertically. |
| | D-ZOOM | 1.0X ~ 16.0X | Enlarge digitally the video output up to 16X. |
| IMAGE | DEFOG | AUTO | This feature will help increase visibility in extreme weather conditions, such as fog, rain or in a very strong luminous intensity. |
| CONTROL | | MANUAL | Set the level of defoging function (LOW, MIDDLE, HIGH). |
| | DNR | OFF, LOW, MIDDLE, HIGH | This feature will reduce the video noise at low ambient light. |
| | MOTION | | This feature will observe the object movement by motion zone and sensitivity that are pre-set with sub menu. |
| | SHADING | | This feature will correct the inconsistent brightness level in the image. |
| <u> </u> | GAMMA | | This feature will adjust video output brightness (STANDARD, STRAIGHT, LOW, MIDDLE, HIGH). |
| DISPLAY CONTROL | FRAME RATE | | Change video output format. |
| | CAM VERSION | | Display the firmware version of the camera. |
| | CAM TITLE | | The camera title can be entered and it will appear over the video output. |
| | PRIVACY | | Mask an area you want to hide on the screen with sub menu. |
| | CAM ID | 0~255 | Select the camera ID number for RS-485 communication. |
| | BAUDRATE | | Set the baudrate of RS-485 communication (2400, 4800, 9600, 19200, 38400, 57600, 115200). |
| | LANGUAGE | | Select the menu language. |
| RESET | | | Reset the camera settings to the factory defaults. |
| EXIT | 1 | | Exit the setup. |