Full-HD (3G/HD-SDI) 2.5MP Compact Broadcast Camera with AUDIO + HDMI (CS/C mount w/ Auto-Iris)





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.

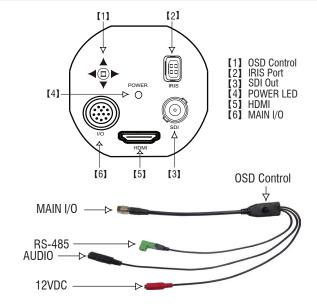


Do not use the camera in extreme environments where high temperatures or high humidity exists. Use the camera under conditions where temperatures are between $14^{\circ}\text{F} \sim 122^{\circ}\text{F}$ (- $10^{\circ}\text{C} \sim 50^{\circ}\text{C}$), and humidity is below 90%.

Features

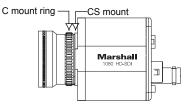
- 2.5 Megapixel 1/3-inch CMOS Sensor
- CS/C Mount with DC-Auto Iris (lens sold separately)
- **CV345-CSB:** 1920x1080p59.94/29.97, 1920x1080i59.94, 1280x720p59.94/29.97fps
- **CV345-CS**: 1920x1080p60/50/30/25, 1920x1080i60/50, 1280x720p60/50/30/25fps
- Lemo-style (I/O) connector contains: RS-485(+/-), 12V power connector & TRS microphone input with 2.5V power supplied
- 3G/HD-SDI (BNC) & HDMI (full size-v1.3) built into rear panel
- Audio Mic 3.5mm TRS Stereo input embedding w/ 2.5V power supplied
- OSD Menu Joystick, RS-485 (Pelco/Visca)
- 12VDC

Rear Panel Video/Power Connection



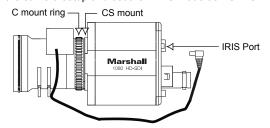
Manual Iris Lens Connection

- 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

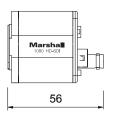
- 1. Mount the lens as described in the manual lens connection.
- Connect the auto IRIS lens connector to the connector on IRIS port on the the rear panel.
- 3. Go to the camera setup and set the LENS mode as DC IRIS

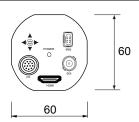


Specifications

	CV345	SPECIFICATIONS
	Image Sensor	1/3" Progressive CMOS (Approx. 2.1 mega)
Sensor	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)
	Horizontal Resolution	1,000TVL
Optics	Lens	C/CS Mount, DC-IRIS
	Back Light Compensation	WDR/BLC
Functions		HLC (High Light compensation)
	Exposure	Auto / Manual
	White Balance	Auto (3,000°K~8,000°K)
		ATW (1,900°K~11,000°K)
		Manual
	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
		720p@50/60 or 59.94
		720p@25/30
		SMPTE 424M (2.97Gbps)
		1080p@50/60 or 59.94
Video		800mVp-p, 75Ω, Unbalanced Generator (Single-Ended)
Output	HDMI (HDMI Type A)	HDMI 1.3 compliant (Embedded Audio)
Output		1920x1080p@50/60 or 59.94
		1920x1080i@50/60 or 59.94
		1920x1080p@25/30 or 29.97
		1280x720p@50/60 or 59.94
		1280x720p@25/30
	MIC Input	Mic Level (1Vrms). 2.5V Mic bias
		Bit Depth: 16,20,24,32Bits. 48KHz sample rates
		Gain : -12dB ~ 59.5dB
Control	RS-485	PELCO-P/D, SONY-VISCA Protocol
2011001		8Bits Data, 1Stop Bit, No Parity, 2400~115200bps
	Operation Temperature	-10℃ ~ 50℃
	Power Input	12VDC (7VDC to 15VDC)
General	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: CV345-CS, CV345-CSB

SETUP	SUB MENU	SUB MENU	DESCRIPTION
LENC	ESC		IRIS is fixed. Shutter controls exposure automatically if shutter is set as auto.
LENS	DC IRIS		Controls exposure automatically.
WB CONTROL	AUTO		Color temperature is automatically adjusted to 3,000°K ~ 8,000°K
	ATW		Continuously adjusts camera color balance in accordance with any change in color temperature. Compensates for color temperature changes within 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.
	MANUAL	COLOR TEMPERATURE	Select color temperature from LOW, MIDDLE, or HIGH.
		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.
			A function which controls the amplification/gain process automatically if the illumination falls under the usable level. Camera raises up gain to
	AGC LIMIT	0~20	selected gain limit when dark conditions.
	SHUTTER	AUTO	Shutter controls exposure automatically when IRIS is manual. Shutter control has the exposure control priority
		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.
	BACK LIGHT	WDR	Enable user to view both object and background more clearly when background is too bright. (LOW, MIDDLE, HIGH).
		BLC	Enable a back light compensation feature.
		SPOT	Enables a user to select a desired area on a picture and view that area more clearly when background is too bright.
BACK LIGHT	ACE	LOW, MIDDLE, HIGH	Brightness correction of the dark image area.
_	ACE	LEVEL	Highlight the bright area with a masking box with a selected color. Adjust the masking level (0~20).
	ECLIPSE	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
	AUTO	ANTI-SAT.	by the IR or light in Night mode.
		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	300222 111012	The camera keeps color mode constantly.
	NIGHT		The camera keeps black/white mode constantly.
			This function will reduce image blurriness due to vibrations caused by hand shake or Pan/Tilt operation.
	RANGE	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	AUTO C		OFF: Disable the auto centering function.
		OFF, HALF, FULL	FULL: The camera will correct the blurness due to vibrations caused by both hand shake or Pan/Tilt operation.
			HALF: The camera will correct the blurness due to vibrations caused by hand shake.
	AUDIO LEVEL	0~143	Enabled when AUDIO AGC is set OFF. Adjust the audio level manually.
AUDIO	AUDIO AGC	OFF, ON	Automatically adjusts the MIC gain as the input signal becomes overly loud or very weak.
AODIO	AGC MAX	0~119	Enabled when AUDIO AGC is set ON. Set the maximum level of AUDIO AGC.
	SAMPLE BITS	16, 20, 24, 32 BITS	Select the bit depth of audio.
	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		Video output is rotated horizontally.
	FLIP		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	DEFOG	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.
	GAMMA		This feature will adjust video output brightness (STANDARD, STRAIGHT, LOW, MIDDLE, HIGH).
	FRAME RATE		Change video output format.
	CAM VERSION		Display the firmware version of the camera.
DISPLAY CONTROL	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	0 233	Set the baudrate of RS-485 communication (2400, 4800, 9600, 19200, 38400, 57600, 115200).
1	DAODINAIL		555 the 2000 St. 10-705 communication (2400, 4000, 3000, 15200, 30400, 113200).
<u> </u>	LANGUAGE		Select the manu language
RESET	LANGUAGE		Select the menu language. Reset the camera settings to the factory defaults.