OLYMPUS®

Your Vision, Our Future

EVIS EXERA III

EVIS EXERA III VIDEO SYSTEM CENTER

CV-190

Video processing powering advanced endoscopy

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Main Features

- NBI (Narrow Band Imaging) in EVIS EXERA III 190 Series scopes provides twice the viewable distance of EVIS EXERA II 180 Series scopes and offers much greater contrast between blood vessels and mucosa.
- CV-190 contains the electronics to operate the dual focus that delivers an optimal view whether close up or distant by connecting HQ scopes.
- The newly designed waterproof one-touch connector enables a one-step connection to the light source and does not require a separate scope cable for the video processor.
- A new and improved image processing delivers sophisticated image quality via enhanced color reproduction, minimized image noise, and reduced halation.
- The pre-freeze function selects the clearest still image automatically, saving time.
- Compatible with EVIS 100/130/140/150 Series, EVIS EXERA 160 Series, EVIS EVERA II 180 Series, EVIS EXERA III 190 Series, and GI/BF/VISERA Series scopes.
- 16:9 and 16:10 output for a HDTV monitor is available. Compatible with analog, HD-SDI, and DVI output.
- Link connection to peripheral devices avoids complicated cable connections and accelerates transmission speed.
- OLYMPUS documentation system enhances networking expandability.
- Picture-in-picture and index function effectively enhance your observation.
- Portable memory is compatible, which is standard for data management. Simply connect and upload.
- Supports DV output to compatible documentation devices.

Specifications

Power Supply	Voltage	100-240 V AC (NTSC)/220-240 V AC (PAL); within ±10%
	Frequency	50/60 Hz; within ±1 Hz
	Consumption electric power	150 VA
Size	Dimensions (W x H x D)	370 x 85 x 455 mm; 382 x 91 x 489 mm (maximum)
	Weight	10.7 kg
Classification (medical electrical equipment)	Type of protection against electric shock	Class I
	Degree of protection against electric shock of applied part	Depend on applied part See also applied part (camera head or videoscope).
	Degree or protection against explosion	The video system center should be kept away from flammable gases.
Observation	Analog HDTV signal output	Either RGB (1080/60I: NTSC)/(1080/50I: PAL) or YPbPr (1080/60I: NTSC)/(1080/50I: PAL) output can be selected.
	Analog SDTV signal output	VBS composite (480/60I: NTSC)/(576/50I: PAL), Y/C (480/60I: NTSC)/(576/50I: PAL), and RGB(480/60I: NTSC)/(576/50I: PAL); simultaneous outputs possible.
	Digital signal output	HD-SDI (SMTPE 292M), SD-SDI (SMPTE 259M), DV (IEEE 1394), and DVI (WUXGA, 1080p or SXGA) can be selected.
	White balance adjustment	White balance adjustment is possible using the white balance button on the front panel.
	Standard color chart output	The "Color bar" or the "50% white" screen can be displayed.
	Color tone adjustment	The following color tone adjustments are possible using the color tone level adjustment button and color tone selector button on the keyboard. • Red adjustment: ±8 steps • Blue adjustment: ±8 steps • Chroma adjustment: ±8 steps
	Automatic gain control (AGC)	The image can be electronically amplified when the light is inadequate due to the distal end of the endoscope being too far from the object.
	Contrast	• N (Normal): Normal image • H (High): The dark areas are darker and the bright areas are brighter than in the normal image. • L (Low): The dark areas are brighter and bright areas are darker than in the normal image.
	Iris	The auto iris modes can be selected using the "iris mode" switch on the front panel. • Auto: The brightness is adjusted based on the brightest part of the central part and the average brightness of the periphery part. • Peak: The brightness is adjusted based on the brightest part of the endoscopic image. • Average: The brightness is adjusted based on the average brightness of the endoscopic image.
	Image enhancement setting	Fine patterns or edges in the endoscopic images can be enhanced electrically to increase the image sharpness. Either the structural enhancement or edge enhancement can be selected according to the user setup. • Structural enhancement: Enhancement of contrast of the fine patterns in the image. • Edge enhancement: Enhancement of edges of the endoscopic image.
	Switching the enhancement modes	The enhancement level can be selected from 3 levels (OFF, 1, 2, and 3) using the image enhancement mode button on the front panel.
	Image size selection	The size of the endoscopic image can be changed using the "IMAGE SIZE" key on the keyboard.
	Freeze	An endoscopic image is frozen using an endoscope or the "FREEZE" key on the keyboard.
	Switching the method of freezing the endoscopic image	Pre-freezing: The image with the least blur is selected from the images captured in the set time period before freeze operation and displayed.
	Fog free function	When a compatible endoscope is connected to the video system center, the fog free function can be used.
	Endoscope's remote switches function	The functions of the remote switches on the endoscope can be set in the user settings.
	Reset to defaults	The following settings can be reset to their defaults using the reset button on the front panel. • Color tone • Iris mode • Image enhancement mode • Color enhancement mode • Optical-digital observation • Image size • Contrast • Freeze • Release index • Electronic zoom • Optical-digital observation • Arrow pointer • Stopwatch • Characters on screen • PIP/POP
	Remote control	The following ancillary equipment can be controlled (specified models only). • Monitor • DVR • Video printer • Image filing system
Documentation	Patient data	The following data can be displayed on the monitor using the keyboard. • Patient ID • Patient name • Sex • Age • Date of birth • Date of recording (time, stopwatch) • Comments
	Displaying the record state	The recording state of the following ancillary equipment can be displayed on the monitor. • Portable memory and internal buffer • DVR • Video printer • Image filing system
	Displaying the image information	The following data can be displayed on the monitor. • Structure enhancement level • Edge enhancement level • Zoom ratio • Color mode • Focus
	Advance registration of patient data	Up to 50 patient's data can be registered. • Patient ID • Patient name • Sex and age • Date of birth
Portable Memory	Media	MAJ-1925 (OLYMPUS)
	Recording format	• TIFF: no compression • JPEG (1/5): approx. 1/5 compression • JPEG (1/10): approx. 1/10 compression
	Number of recording images	• TIFF: approx. 227 images • JPEG (1/5): approx. 1024 images • JPEG (1/10): approx. 2048 images
Memory Backup	User settings	Up to 20 user settings can be registered.
	Memorization of selected setting	The following settings are held in memory even after the video system center is turned OFF. • Color tone • Iris mode • Enhancement • Color enhancement mode • Contrast • AGC • Color mode • White balance
	Lithium battery	Life: 5 years

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