OLYMPUS®

Your Vision, Our Future

EVIS EXERA II VIDEO SYSTEM CENTER

OLYMPUS CV-180

EVIS EXERA II

Experience the new standard in endoscopic imaging with this advanced HDTV compatible video processor

HDTV NBI

Main Features

- Equipped with high resolution HDTV imaging capability to provide the best possible image quality for endoscopes and laparoscopes, enabling observation of capillaries, mucosal structures, and other patterns.
- Compatible with EVIS 100/130/140 Series and EVIS EXERA 160 Series endoscopes in addition to EVIS EXERA II 180 Series models as well as bronchoscopes and surgical endoscopes (EndoEYE videoscopes, flexible VISERA videoscopes, and VISERA 1CCD/OTV-SP1 3CCD camera heads).
- NBI (Narrow Band Imaging) to enhance the visibility of capillaries and other structures on the mucosal surface (only for GI).
- Two types of structure enhancement are available — the original Type A for observation of larger mucosal structures with high contrast and the new Type B for observation of smaller structures, such as capillaries.
- Electronic magnification enlarges moving images at the touch of a button on the scope or on the keyboard by 1.2X or 1.5X.
- HD/SD SDI output for high-quality video image transfer.
- Convenient digital-to-digital recording of both still and moving images. Still images are stored on xD cards via PC card adapter, and moving images are stored on digital video recorders via IEEE 1394 (FireWire, DV, iLINK) using remote control switches.
- Automatic Iris eliminates the need for switching between Peak and Average required in conventional manual adjustment.
- Picture-in-picture display for any combination of endoscopic images, fluoroscopic images, ultrasound images, laparoscopic images, and images from the endoscope position detecting unit.
- Convenient index display for documentation.
- Scope ID function for easier endoscopy suite management and for next-generation system expansion.

Specifications

Observations	HDTV signal output	Either RGB or YPbPr output can be selected		
	SDTV signal output	VBS composite (NTSC/PAL), Y/C and RGB; simultaneous output possible.		
	White balance adjustment	White balance adjustment is possible using the white balance switch on the front panel.		
	Standard color chart output	A color bar chart can be displayed.		
	Color tone adjustment	The following color tone adjustments are possible. Red, Blue, Chroma adjustment; ±8steps		
	Automatic gain control (AGC)	The image can be electrically amplified when the light is inadequate due to the distal end of the endoscope being too far from the object.		
	Contrast	The image contrast can be set to one of the following three modes (N, H, L). ・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. Peak: For use when observing by focusing on a small bright area. Auto: For use when observing by focusing on the image center.		
	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.		
	Switching the enhancement modes	The enhancement level can be selected from 4 levels (OFF, 1, 2 and 3).		
	Image size selection	The size of endoscopic image can be changed.		
	Reset to defaults	The following settings can be reset to their defaults. ・User preset・Image source・Color tone・Freeze・Release index・ Zoom・Special light observation ・Arrow pointer・Stop watch・Character on screen・Exposure・PinP		
	Freeze	An endoscopic image is frozen.		
Documentation	Remote control	The following ancillary equipment can be controlled. (Specified models only) ・VCR・Video printer・Image filing system・Endoscopic ultrasound center, etc.		
	Patient data	The following data can be displayed on the monitor by keyboard. ・Patient ID No.・Patient name・Sex & age・Date of birth・Date of recording (time, stopwatch)・Image frame No. ・Videotape recorder mode・Display image setting・Physician name・Comments		
	Advance registration of patient data	The following data of up to 40 patients can be entered prior to surgery. ・Patient ID No.・Patient name・Sex & age・Date of birth・Physician		
PC card	Media	xD-Picture Card (1G/512/256/128/64/32/16 MB), specified by Olympus. MAPC-10 can be used as PC card adapter.		
	Recording format	TIFF: no compression, SHQ: approx. 1/5, HQ: approx. 1/7, SQ: approx. 1/10.		
	Number of recording images	In 16 MB, SDTV/HDTV, TIFF: approx. 30/6 images, SHQ: approx. 310/110 images, HQ: approx. 2000/760 images, SQ: approx. 2570/430 images.		
Image storage and retrieval	Monitor output	Using the monitor out switches on the front panel, it is possible to select an image from the endoscope or ancillary equipment for display on the monitor.		
Memory backup	Memorization of selected setting	The following setting are held in memory even after the video system center is turned OFF. ・White balance・Iris mode・Enhancement・Image size・Color tone		
Classification as 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 videoscope).		
	Degree of protection against explosion	The video system center should be kept away from flammable gases.		
Power supply	Voltage (Voltage fluctuation)	220-240V AC (Within ±10%)		
	Frequency (Frequency fluctuation)	50/60 Hz (Within ±1%)	Consumption electric power	150 VA
Size	Fuse rating	5A, 250V	Fuse size	φ5 × 20 mm
	Dimensions	382 (W) × 91 (H) × 490 (D) mm	Weight	10.5kg

Specifications, design and accessories are subject to change without any notice or obligation on the part of the manufacturer.

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Specifications

Observations	HDTV signal output	Either RGB or YPbPr output can be selected		
	SDTV signal output	VBS composite (NTSC), Y/C and RGB; simultaneous output possible.		
	White balance adjustment	White balance adjustment is possible using the white balance button on the front panel.		
	Standard color chart output	A color bar chart can be displayed by pressing the "SHIFT" + "F7" keys on the keyboard.		
	Color tone adjustment	The following color tone adjustments are possible using the "COLOR" key and "arrow" keys on the keyboard. ・ Red adjustment: +/-8 steps ・Blue adjustment: +/-8 steps ・Chroma adjustment: +/-8 steps		
	Automatic gain control (AGC)	The image can be electrically amplified when the light is inadequate due to the distal end of the endoscope being too far from the object.		
	Contrast	The image contrast can be set to one of the following three modes (N, H, L) using the "SHIFT" + "F6" key on the keyboard. ・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" button on the front panel. ・Peak: For use when observing by focusing on a small bright area. ・Auto: For use when observing by focusing on the image center.		
	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.		
	Switching the enhancement modes	The enhancement level can be selected from 4 levels (OFF, 1, 2 and 3) using the image enhancement switch on the front panel.		
	Image size selection	The size of endoscopic image can be changed using the "SHIFT" + "F8" key on the keyboard.		
	Reset to defaults	The following settings can be reset to their defaults using the reset button on the front panel. ・User preset ・Image source ・Color tone ・Freeze ・ Release index ・Zoom ・Special light observation ・Arrow pointer ・Stop watch ・Characters on screen ・Exposure ・PinP		
	Freeze	An endoscopic image is frozen using an endoscope or "FREEZE" key on the keyboard.		
Documentation	Remote control	The following ancillary equipment can be controlled from the front panel, keyboard or endoscope's remote switches. (Specified models only) ・VCR ・Video printer ・Image filing system ・Endoscopic ultrasound center, etc.		
	Patient data	The following data can be displayed on the monitor by keyboard. ・Patient ID No. ・Patient name ・Sex & age ・Date of birth ・Date of recording (time, stopwatch) ・Image frame No. ・Videotape recorder mode ・Display image setting ・Physician name ・Comments		
	Advance registration of patient data	The following data of up to 40 patients can be entered prior to surgery using the keyboard. ・Patient ID No. ・Patient name ・Sex & age ・Date of birth ・Physician		
PC card	Media	xD-Picture Card (1G/512/256/128/64/32/16 MB), specified by Olympus. MAPC-10 can be used as PC card adapter.		
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Image storage and retrieval	Monitor output	Using the monitor out switches on the front panel, it is possible to select an image from the endoscope or ancillary equipment for display on the monitor.		
Memory backup	Memorization of selected setting	The following setting are held in memory even after the video system center is turned OFF. ・White balance ・Iris mode ・Enhancement ・Image size ・Color tone		
Classification as 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).		
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Power supply	Voltage (Voltage fluctuation)	100-240V AC (Within ±10%)		
	Frequency (Frequency fluctuation)	50/60 Hz (Within ±1%)	Consumption electric power	150 VA
Size	Fuse rating	5A, 250V	Fuse size	φ5 × 20 mm
	Dimensions	382 (W) × 91 (H) × 490 (D) mm (Maximum)	Weight	10.5kg

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