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EVIS EXERA VIDEO SYSTEM CENTER

OLYMPUS **CV-160**

SUPERIOR VIDEO IMAGING TECHNOLOGY

An advanced system featuring an impressive array
of leading-edge video functions including
structure enhancement, image size enlargement,
scope ID function, digital image terminal, and much more,
for high-quality, high-resolution image reproduction

Specifications

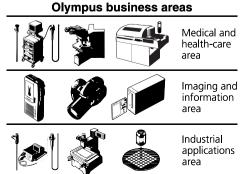|		
Observation	Video signal output	VBS composite, Y/C, RGB; simultaneous output is possible.
	White balance	By pressing the white balance switch on the front panel, automatic white balance can be performed.
		After initialization, white balance settings are retained in memory for EVIS EXERA 160 Series scopes.
	Standard color chart output	The color bar image can be displayed using the "Color Bar" key on the keyboard.
	Digital communication port	Ethernet (100BASE-TX)
	Color tone adjustment	"CHROMA" control: ± 7steps, "R" control: ± 7steps, "B" control: ± 7steps
	Automatic gain control (AGC)	The image can be electrically amplified when the light is inadequate due to the distal end of the videoscope being too far from the subject.
	Contrast	Normal Contrast mode: Normal image
		Low Contrast mode: The dark areas are lighter and the light areas are darker than in a normal image.
		High Contrast mode: The dark areas are darker and the light areas are lighter than in a normal image.
	Iris mode selection	Average: Normal observation Peak: When focusing on and/or observing a small bright area.
	Structure enhancement setting	The detailed patterns and edges of endoscopic images are emphasized electronically to increase image sharpness.
		The structure enhancement level can be switched between "Low", "Medium" and "High".
	Edge enhancement setting	The edges of endoscopic images are emphasized electronically to increase image sharpness.
		The edge enhancement level can be switched between "Low", "Medium" and "High".
	Image size selection	The size of endoscopic images can be changed using the "Image Size" key on the keyboard or endoscope switch.
	Default reset	The following settings can be restored by pressing the "RESET" switch on the front panel.
		Image Source, Iris, Enhancement, Color, AGC, Display mode, Contrast, Printer Lock, Keyboard mode, Printer mode, Printer QTY.
	Freeze screen display	A stationary image can be displayed using the endoscope switch, keyboard or OVC switch.
Documentation	Remote control	The following ancillary equipment can be controlled by the endoscope remote switch, the front panel and the keyboard. (Only the specified device types are valid.)
		Monitor VTR Video printer equipment Digital video cassette recorder Flushing pump
	Patient data	The following data and modes can be displayed on the video monitor using the keyboard.
		1. ID number 2. Patient name 3. Sex, age 4. Date of birth 5. Date/time (built-in clock, stopwatch)
		6. Frame number 7. VTR condition 8. Picture quality selection 9. Physician 10. Comments
	Pre-procedural patient data	For a maximum of 40 patients. 1. ID number 2. Patient name 3. Sex, age 4. Date of birth 5. Physician
	Recalling and registered scope information (scope ID function)	The following scope-related data stored in the memory chip of the scope can be recalled and displayed on the screen. Scope Model, Serial No., Comments, Cumulative Uses, Check Period, Service Contract, Warranty Date, Owner, Customer ID No., ID Ver.
Image storage and retrieval	Monitor output	Using the monitor output switch on the front panel, it is possible to select an image from the endoscope or ancillary equipment for display on the monitor.
	Memorization of selected setting	The following settings on the front panel are retained even when the power is turned OFF.
		Color Enhancement White balance Iris
Classification (medical electrical equipment)	Type of protection against electric shock	Class I
	Degree of protection against electric shock of applied part	Type BF applied part (The applied part where classification types are not marked is Type BF applied part.)
Power supply	Voltage	NTSC 100—120 V AC, PAL 220—240 V AC
	Frequency	50/60 Hz
	Input current	NTSC 1.0 A, PAL 0.5 A
	Fuse rating	3.15 A, 250 V
Size	Dimensions	370 (W) x 72 (H) x 420 (D) mm
	Weight	8 kg

More features, more functions, and more performance make this innovative system the new standard for the 21st century
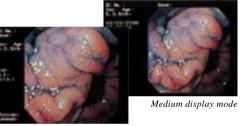
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Designed specifically to maximize the capabilities of our new line of high-performance EVIS EXERA 160 Series scopes, the CV-160 video system center delivers high-resolution images with improved color reproduction capability and a larger display size.
An improved video signal processing system enables clear observation of minute details to ensure more accurate examination and treatment.

Structure enhancement highlights minute details.

By electronically emphasizing minute details on the mucous membrane, the CV-160's powerful structure enhancement circuitry makes endoscopic images sharper without increasing noise. Unlike conventional edge enhancement functions, this system uses frequencies specifically suited to endoscopic images to ensure more accurate observation. Enhancement levels can be selected by the user, allowing more precise control over image rendering. With enhancement, it is much easier to observe minute tissue textures and subtle color variations on the mucous membrane surface.

Full height expanded display mode facilitates observation.

The CV-160 offers a full height mode that uses the full vertical area of the monitor screen to display images. The resulting expanded display is much larger than was possible with previous models and allows closer examination of the image area.
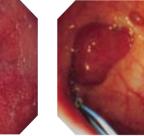
Medium display mode

Full height display mode

■ **Structure Enhancement**

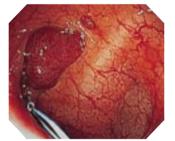*Level 1*   *Level 7*   *Level 4*   *Level 8*

35% more compact design saves space in your endoscopy suite.

With their new, more compact designs, the CV-160 and the CLV-160 xenon light source combine to form a system that's a full 80 mm narrower and 35% smaller than our previous models.
The entire system can be installed on a dedicated cart together with a video monitor and other ancillary equipment.

Ergonomically designed front panel and newly designed keyboard.

Large membrane switches and indicators on the front panel of the CV-160 make operations clear and simple. The newly designed keyboard features a more ergonomic, user-friendly design and also fits snugly on the dedicated cart.

Dual-purpose system increases endoscopy suite efficiency.

The CV-160 has been designed to eliminate redundancy and maximize the efficiency of your endoscopy suite. In addition to EVIS EXERA 160 Series scopes, this versatile center can also accommodate EVIS EXERA video bronchoscopes, enabling you to use the same system for both gastrointestinal endoscopy and bronchoscopy.

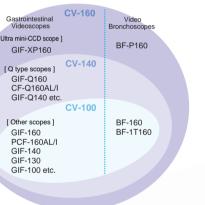| Gastrointestinal Videoscopes	CV-160	Video Bronchoscopes
[Ultra mini-CCD scope]		
GIF-XP160		BF-P160
	CV-140	
[Q type scopes]		
GIF-Q160		
CF-Q160AL/I		
GIF-Q140 etc.		
	CV-100	
[Other scopes]		BF-160
GIF-160		BF-1T160
PCF-160AL/I		
GIF-140		
GIF-130		
GIF-100 etc.		

Compatibility with EVIS 100/130/140 Series scopes.

To ensure that your existing investment in endoscopic technology is not wasted, the CV-160 is also compatible with all of our EVIS 100/130/140 Series gastrointestinal scopes.

Scope ID function for more efficient management and control.

The CV-160's scope ID function receives data from the memory chip built into the connected EVIS EXERA 160 Series scope and displays that information on the monitor. ID data includes model name and serial number, as well as the number of times the scope has been connected to the CV-160. The scope ID function also enables automatic control of white balance.

Memory chip built into EVIS EXERA 160 Series scopes

Start-up display

Scope information menu

Digital image terminal for two-way communication with a PC.

The CV-160 features a digital image terminal that will enable direct transfer of endoscopic still images to a PC for storage using dedicated interface software.

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IMAGE SOURCE
SCOPE VTR D.FILE PRINTER
RESET PRINT ENH. IRIS WHITE BAL SELECT