

OLYMPUS

EVIS X1™
Endoscopy System

EVIS X1 Video System Center

CV-1500

A Unified Platform with 5 LED Spectrum Technology





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By integrating the LED light source with the video processor, Olympus has developed a system that is more compact and lightweight than its predecessors.¹

Broad Compatibility

The CV-1500 can be connected to different types of endoscopes, potentially providing access to a variety of endoscopy-supporting functions.

For full compatibility listing refer to Instructions for Use.

Observation Technology

In addition to conventional white light and NBI™ (Narrow Band Imaging™) Technology, the CV-1500 offers three other observations designed to improve diagnostic and therapeutic capability:

- TXI™ Technology (Texture & Color Enhancement Imaging) is designed to selectively improve brightness of dark areas in the image and increase visibility of mucosal morphology, color patterns and blood vessels.²
- RDI™ Technology (Red Dichromatic Imaging) is designed to improve the visibility of bleeding points within the mucosa and enhance visibility of deep blood vessels compared to white light.²
- BAI-MAC™ Technology (Brightness Adjustment Imaging with MAintenance of Contrast) is designed to correct the brightness of dark portions of the image while maintaining the brightness of the brighter portions of the image in order to increase visibility of distant areas.²

TXI,™ RDI,™ NBI™ and BAI-MAC technologies are not intended to replace histopathological sampling as a means of diagnosis.

User-friendly Functions

With One-Touch Connector and no need for white balance adjustment,³ setup is simplified, with the aim of streamlining workflow and accelerating procedure time. Touch-sensitive panel facilitates instinctive operation, while convenient functions like Pre-freeze and MyCV mode assist in creating a user-friendly working environment. Downtime may be reduced thanks to the use of LED bulbs that have been designed to last years without needing replacement.⁴

Specifications

Power Supply	Rated voltage	100-240 V AC; Within ±10%
	Frequency	50/60 Hz; within ±3 Hz
	Rated input	600 VA
Size	Dimensions (W x H x D)	370 x 198 x 488 mm; 398 x 218 x 580 mm (maximum)
	Weight	19.4 kg
Classification (Medical Electrical Equipment)	Type of protection against electric shock	Class I
	Degree of protection against electric shock of applied part	Dependent on applied part. (The degree of protection against electric shock of this product is BF type if the mounting part to be connected to this product.)
	Degree of protection against explosion	The video system center should be kept away from flammable gases.
Observation	Analog signal output	VBS composite
	Digital signal output	12G-SDI (SMPTE ST 2082), 3G-SDI (SMPTE424M), HD-SDI (SMPTE292M), SD-SDI (SMPTE259M)
	User settings	The function settings for up to 20 users can be stored.
	Color tone adjustment	Adjust the color tone of each endoscopic image for White light observation mode, NBI observation mode, and RDI observation mode. · 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	· H (High): Darkens the dark part and brightens the bright part. · L (Low): Brightens the dark part and darkens the bright part.
	BAI-MAC Technology	Brightness adjustment with maintenance of contrast
	Iris	The iris modes can be switched. · 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 settings	Fine patterns or edges in the endoscopic images can be enhanced electrically to increase the image sharpness. · Enhancement type A: Emphasizes the pattern and contour of the endoscopic image. · Enhancement type B: Emphasizes the finer parts than structure emphasis type A.
	Switching the enhancement modes	The enhancement level can be selected from 3 levels (OFF, 1, 2, and 3)
	Image size selection	The size of the endoscopic image can be selected from 2 modes. (Except SDTV)
	Electric zoom	Switch between mode 1, mode 2, and mode 3.
	PIP/POP	Switch between PIP and POP.
	Aspect ratio	Switch between 16:9 and 4:3. (Except SDTV)
	Freeze	Freeze the endoscopic image.
	Pre-freeze	The image with the least blur is selected from the images captured in the set time period before freeze operation and displayed.
	Optical-digital observation	The optical-digital observation can be performed. The endoscope compatible with the optical-digital observation is required. · NBI technology: This observation mode uses the narrow band light. · RDI technology: This observation mode uses the red dichromatic lights. · TXI technology: This observation mode enhances color, texture and brightness.
	Custom switch	Assign specific functions to the following buttons. · Remote switches (Up to 5) · Foot switches (Up to 2) · Keyboard custom key (Up to 4) · Touch panel custom button of basic functions screen (Up to 3) · Touch panel custom button of custom functions screen (Up to 10)
	MyCV mode	Customizable switch to activate multiple functions at once.
	Remote control	The following peripheral device can be controlled (specified models only). · Portable memory · Video recorder · Color video printer · Image filing system · Server
Patient information	The following data can be displayed on the monitor. · Patient ID · Patient name · Gender · Age · Date of birth · Comment	
Documentation	Displaying the record state	The recording state of the following peripheral device can be displayed on the monitor. · Portable memory · Remaining capacity · Video recorder: Number of shots /Recording status · Color video printer: Number of shots · Image filing system: Number of shots
	Displaying the image information	The following data can be displayed on the monitor. · Image enhancement · Electric zoom ratio · Color mode · Focus · Observation mode
	Advanced registration of patient information	Up to 50 patients' information can be registered. · Patient ID · Patient name · Gender · Age · Date of birth
Recording format	Standard image quality: TIFF; Low image quality: JPEG	
Memory Backup	Memorization of user settings	The settings are retained when the video system center is turned OFF.
	White balance	Once the white balance is set for a specific scope it is held in the systems memory.

The EVIS X1™ endoscopy system is not designed for cardiac applications. Other combinations of equipment may cause ventricular fibrillation or seriously affect the cardiac function of the patient. Improper use of endoscopes may result in patient injury, bleeding, and/or perforation. Complete indications, contraindications, warnings, and cautions are available in the Instructions for Use (IFU).

1. Data on file with Olympus (DC00436067)
2. Data on file with Olympus (DC00489968)
3. Olympus 1100 series endoscopes only, data on file with Olympus (DC00436067)
4. Data on file with Olympus (DC00468069)

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