VIDEO SYSTEM CENTER

CV-170

Taking a new step with a combination of HDTV and NBI in Urology
Advancing the standard:
Office-based video endoscopy with HDTV images.

HDTV
High-resolution HDTV images deliver sharp and clear details, boosting observation capabilities when viewing mucosal structures and other vessel patterns. The system’s improved imaging with minimal halation and image noise effectively supports diagnostics efficiently. This superior performance will expand the potential of endoscopy to a new level.

NBI (Narrow Band Imaging)
NBI enhances the visibility of capillaries and other structures on the mucosal surface by using special illumination to contrast abnormal tissue against the surrounding healthy area optically. This advanced visualization technology potentially reduces unnecessary biopsies and improves examination quality.

Compatible with existing scopes
Your current OLYMPUS fiberscopes are compatible with the CV-170 by connecting the camera head. This economical benefit will result in cost savings and greater usability, with NBI.

Simple design with LED
The CV-170's all-in-one design condenses its performance into a compact and convenient office size. The newly adopted long-life LED lamp minimizes lamp replacement, and as a result, maintenance is much easier. It generates virtually no heat, assuring long hours of operation while reducing energy and noise.

*Comparison of white light mode.
*This trolley is not available in some areas.
*Image of the monitor is simulated. Please ask our salesperson for further details.
## Power Supply
- **Voltage**: 100-240 V AC (NTSC)/220-240 V AC (PAL): within ±10%
- **Frequency**: 50/60 Hz: within ±1 Hz
- **Rated input**: 200 VA

## Size
- **Dimensions (W x H x D)**: 295 x 145 x 425 mm
- **Weight**: 11.0 kg

## Observation
- **Examination lamp**: LED lamp
- **Analogue HDTV signal output**: Either RGB (1080/60i: NTSC)/(1080/50i: PAL) or YPbPr (1080/60i: NTSC)/(1080/50i: PAL) output can be selected.
- **Analogue 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 (SMPTE 292M), SD-SDI (SMPTE 259M) 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.
- **Color tone adjustment**: The following color tone adjustments are possible.
  - 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.
- **Noise reduction**: Noise is corrected by image processing.
- **Iris**: The auto iris modes can be selected using the “iris mode” switch on the front panel.
  - 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 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.
- **Freeze**: An endoscopic image is frozen using an endoscope or the “FREEZE” key on the keyboard.
- **NBI observation**: This is one of optical-digital observations using the narrow band observation light.

## Remote control
- **The following ancillary equipment can be controlled (specified models only)**.
  - DVR
  - Video printer
  - Image filing system
  - Flushing pump
  - Endoscopic CO2 regulation unit

## Documentation
- **Patient data**: The following data can be displayed in the endoscopic image screen.
  - 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
- **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