

SONY



HVO-550MD (Surgical Version)

HVO-500MD (Surgical Version)

HD Video Recorders

From patient records to education, training and referral to other physicians, modern medical workflows benefit from the increased convenience and detail offered by HD video recording.

The HVO-550MD (Surgical Version) and HVO-500MD (Surgical Version) HD Video Recorders have been designed for use in a variety of clinical environments, including hospital radiology and operating rooms, surgical centers and doctors' offices.

Suitable for storing High Definition videos from ultrasound, digital X-ray, endoscopic, laparoscopic and other compatible diagnostic and surgical imaging systems, the recorder offers extensive connection options.

These recorders store HD or Standard Definition video on its high-capacity internal hard disk drive. Via simple menu selection, videos can be recorded simultaneously to an external USB drive or network server, or burned directly to the recorder's internal DVD drive.*

This simultaneous recording capability saves time, eliminating the need to export or copy video files to another storage medium after recording. It also provides an extra safeguard against the risk of losing valuable data.

Furthermore, these recorders offer still image capture and printing function which is convenient in surgical application.

* DVD drive only available on the HVO-550MD.

Key Features

High Definition video recording

Recording crisply-detailed Full HD video at up to 1080i, these recorders offer an improvement in image quality over Standard Definition recording devices such as the DVO-1000MD.

Simultaneous recording on internal HDD and external media

To minimize the risks of accidental data loss, video files can be recorded onto the internal hard disk drive simultaneously with a DVD*¹, a connected USB drive or a network server. This also helps to shorten workflow, since videos do not need to be exported or copied onto another device after being recorded onto the internal HDD.

Burn files to DVD*¹

Video files can be burned permanently onto the recorder's internal optical disc drive (DVD-R) for convenient storage and longer-term archives.

Still image recording

Optimized for surgical applications, the recorder can also capture and replay color still images for review or printing. Still image recording can be triggered via front panel button, optional foot switch or external USB keyboard.

Wide range of interfaces and network data transmission

These recorders are compatible with a wide range of modalities, including current HD as well legacy SD devices. Interfaces are provided for HDMI, DVI, composite video, S-Video and audio, as well as networked data transmission through CIFS to a centralized server.

Long recording time, even in HD at best image quality settings

The recorder's high-capacity disk drive allows long video recordings without interruption, even in High Definition. A choice of three Image Quality settings (Standard/High/Best) permits between 39 and 100 hours of HD video recording (or between 99 and 172 hours of SD video). Each individual recording can be up to 24 hours long. Videos can be exported as PC-friendly MP4 files.

Compliance with Medical Safety Standards

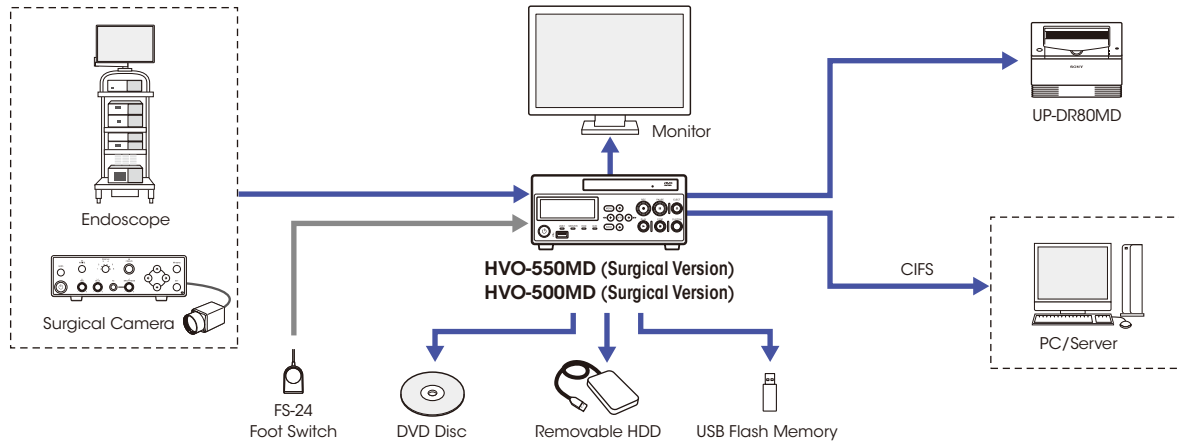
These recorders are compliant with and certified for IEC 60601-1 and product safety standards in the U.S.A., Canada, and Europe.*

*¹ DVD drive only available on the HVO-550MD.

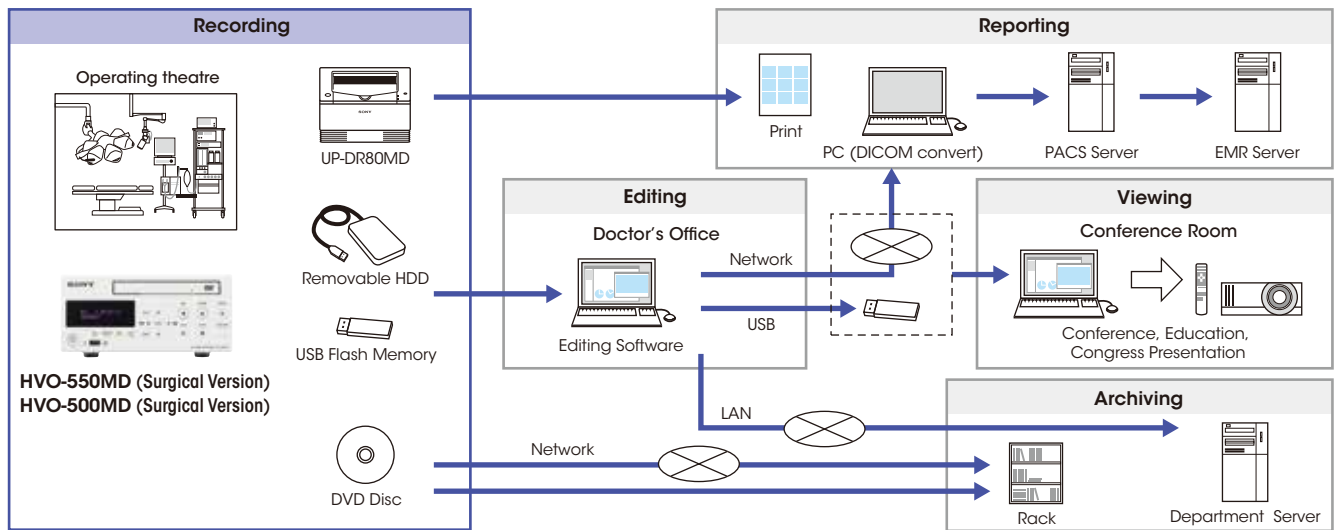
The HVO-550MD is classified as a Class 1 laser product as specified by the IEC 60825-1 standard.

* Registration status as a medical device may vary, depending on country. For more details, please contact your nearest Sony office or an authorized dealer.

System Configuration



Work Flow



Front and Rear Panels

Front Panel



HVO-550MD

Front Panel



HVO-500MD

Rear Panel

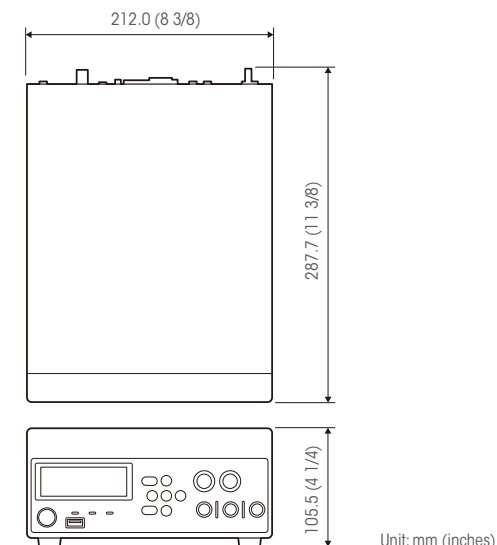


HVO-550MD/HVO-500MD

Specifications

	HVO-500MD (Surgical Version) (Order Code: HVO-500MD/SUR)	HVO-550MD (Surgical Version) (Order Code: HVO-550MD/SUR)
Recording Features		
Recording Video Format	MPEG-4 AVC/H.264	
Recording Audio Format	AAC LC	
Recording File Format	MP4	
Recording Media	Internal HDD (500GB), External USB Storage, Network (CIFS)	Internal HDD (500GB), DVD-R, External USB Storage, Network (CIFS)
Recording Resolution	1920 x 1080/59.94i, 1920 x 1080/50i, 1280 x 720/59.94p, 1280 x 720/50p, 720 x 480/59.94i, 720 x 576/50i	
Recording Bit Rate (HD)	20Mbps (Best), 12.5Mbps (High), 6Mbps (Standard)	
Recording Bit Rate (SD)	6Mbps (Best), 3.75Mbps (High), 2.25Mbps (Standard)	
3D Recording	-	
Connectors		
Input Connectors	HDMI (Type A) (1), DVI-D (DVI 19-pin) (1), S VIDEO (Mini DIN 4-pin type) (1), VIDEO (BNC type) (1)	
	AUDIO (Stereo mini jack) (1)	
	DC IN (DIN 3-pin)	
Output Connectors	HDMI (Type A) (1), DVI-D (DVI 19-pin) (1), S VIDEO (Mini DIN 4-pin type) (1), VIDEO (BNC type) (1)	
	AUDIO (Stereo mini jack) (1)	
Other Interfaces	USB (Type A) (3), USB (Type B) (1), Network (RJ-45, 1000 Base-T/100 Base-TX) (1), REMOTE RS-232C (D-sub 9-pin) (1), REMOTE contact switch (stereo mini jack) (2), REMOTE MONITOR (RJ-45) (1), Equipotential	
General		
Power Requirements	+12 V to +24 V DC (supply from AC-80MD AC adaptor)	
Input current	3.2 A to 1.6 A	3.5 A to 1.8 A
Operating Temperature	5°C to 40°C (41°F to 104°F)	
Operating Humidity	20% to 80% (Maximum wet-bulb temperature: 30°C (86°F)) (no condensation)	
Operating Pressure	700 hPa to 1060 hPa	
Storage and transport temperature	-20°C to +60°C (-4°F to +140°F)	
Storage and transport humidity	20% to 90% (Maximum wet-bulb temperature: 30°C (86°F)) (no condensation)	
Storage and transport pressure	700 hPa to 1060 hPa	
Mass	2.9 kg (6 lb. 6.3 oz.)	3.2 kg (7 lb. 0.88 oz.)
Dimensions (including longest protrusions)	212.0 x 287.7 x 105.5 mm (8 3/8 x 11 3/8 x 4 1/4 in.)	
Supplied Items	Before Using This Unit (1), CD-ROM (Instructions for Use) (1), Warranty booklet (1), AC-80MD AC adapter (1), AC-80MD Instructions for Use (1), Service Contact List (1)	

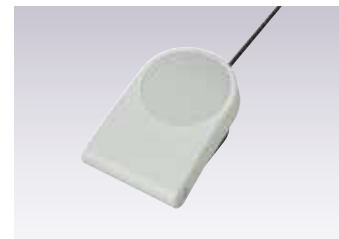
Dimensions



Optional Accessories



Digital Color Printer
UP-DR80MD



Foot Switch
FS-24*

* The FS-24 has an ingress protection rating of IPx3 and therefore should not be operated in environments liable to liquid splashes (e.g., a surgical operating room). For safety, devices with a rating of IPx6 or higher should be selected for that type of environment.

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 Registration status as a medical device may vary, depending on country.
 For more details, please contact your nearest Sony office or an authorized dealer.