

MEDICAL PRODUCTS

General Catalog 2011

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Introduction



Thanks to the Ullevål Hospital in Norway and to Gelderse Vallei Hospital in the Netherlands for the use of their facilities.

Sony Technology – Providing High-Quality Medical Images

As video technology moves from analog to digital, it provides the opportunity to enhance the performance, flexibility, and reliability of video equipment used in medical environments. Sony audio-visual technology – including high-performance digital video cameras, color monitors, printers, and video recorders – has been used for many years in these environments, assisting quicker, more accurate diagnosis and treatment in hospitals and clinics around the world.

This catalog illustrates the latest models from the wide range of Sony professional imaging products, all of which are designed to capture, record, monitor, and print images of the highest quality.

With our innovative technologies, Sony continues to develop and support the many ways in which video imaging is applied to the advancement of medicine. Furthermore, our extensive choice of products enables users to choose the optimum solution for a variety of usage needs.

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For Image Capture
PMW-10MD, DXC-990/990P, DXC-390/390P, DXC-C33/C33P

For Image Recording
HVO-1000MD, DVO-1000MD

For Image Monitoring
LMD-3250MD, LMD-2450MD/LMD-2451MD, LMD-2140MD, LMD-1950MD,
LMD-1530MD, LMD-2110MD

For Image Printing
UP-25MD, UP-55MD, UP-897MD, UP-990AD, UP-970AD, UP-D897, UP-D25MD, UP-D55,
UP-DR80MD, UP-D77MD, UP-DF750, UP-DF550, UP-DF500, UP-D74XRD, UP-D72XR

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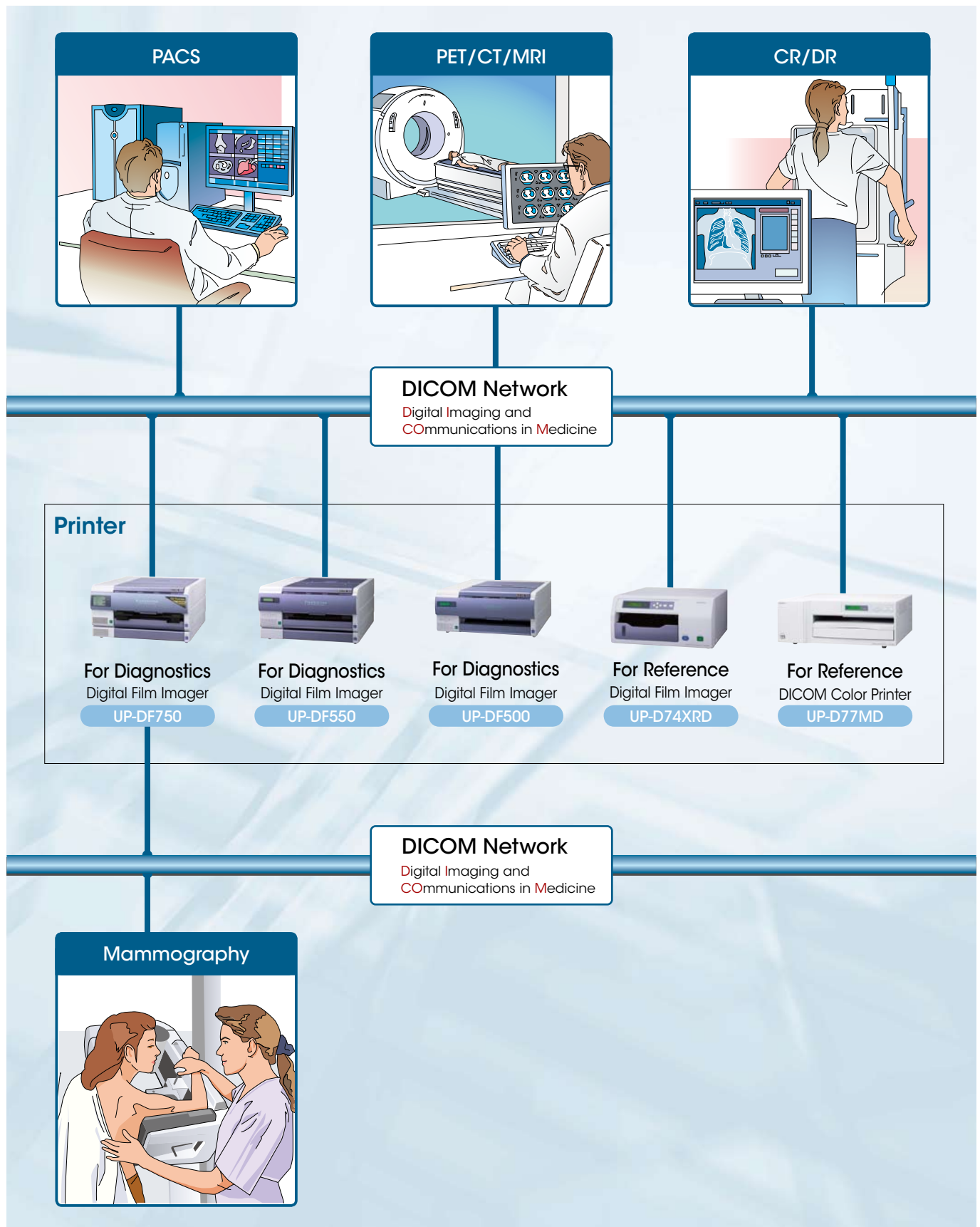
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Print Media at a Glance

The products in this catalog are categorized under the standards/regulations that they have been approved for. Please refer with your local Sony representative on any local laws or classification regarding medical devices.

For Network System



Product Lineup

For Image Capture

Color Video Cameras

1/2-inch type 3-Exmor™ CMOS Color Video Camera



PMW-10MD

- Equipped with three 1/2-inch type Exmor Full HD CMOS sensors
 - Excellent sensitivity of F10
 - Remarkable signal-to-noise of 54 dB
 - High horizontal resolution of 1,000 TV lines
 - Wide dynamic range of 450%
- C-mount type of lens mount
- Compact and lightweight camera head unit
- Camera head unit can be installed remotely up to 20 m from the camera control unit
- Various Shooting Modes, Specialized for Medical Use
 - Image reverse mode convenient for microsurgery
 - Freeze function synchronized with flash light of retinal camera
 - Spot photometry mode provided for the AE (Auto Exposure) on slit lamp
- Six Picture Profile™ settings for camera parameters, which can be customized and directly controlled from the switch on the front panel.

1/2-type 3-CCD Color Video Camera



DXC-990/990P

Lens is Optional

1/3-type 3-CCD Color Video Camera



DXC-390/390P

Lens is Optional

1/3-type 3-CCD Color Video Camera



DXC-C33/C33P

Lens is Optional

- Incorporates one of the smallest and lightest camera head units
- High horizontal resolution of 850 TV lines

- Two SxS Memory Card Slots
 - Record moving images and still images
 - No overwriting of valuable existing footage
 - Using the Media Adaptor MEAD-MS01 or MEAD-SD01, certain Memory Stick™ or SDHC memory card can be used for recording.*1
- Long recording time of up to 140 minutes in a single card. Two recording modes are available:
 - HQ Mode: (1920 x 1080, 35Mb/s, VBR) 100 minutes*2
 - SP Mode: (1440 x 1080, 25 Mb/s, CBR) 140 minutes
- Come with XDCAM Browser Software
 - Allows users to easily browse and copy video clips to other devices such as hard disk drives.
 - Serves as a bridge tool between different formats - converting the clips to other file formats such as the DV format for export to existing DV-based nonlinear editing systems
 - Available for both Windows®-based PCs and Macintosh® computers
- A Wide Variety of Interfaces
 - Two HD-SDI outputs, a DVI-D output that supports 1080/60P and 1080/50P, an analog component output, analog composite output, and S-Video output. It also has a microphone input for audio recording.
 - A 9-pin RS-232C connector for remote control and a mini-stereo jack for a footswitch are provided
- 59.94i/50i switchable operation
- Worldwide AC power supply: AC100 V to 240 V
- Please refer to the specification page for details about standards and regulations.

*1 An early version of the PMW-10MD requires firmware upgrade to use SxS-1™ memory card and the Media Adaptor, MEAD-MS01 / MEAD-SD01.

Please contact your local Sony service representative for further details.

*2 On a 32-GB card. When recording in HQ (35 Mb/s) mode, the recording time may differ from the above specified figure depending on the actual bit rate that is adopted during VBR encoding.

- ExwaveHAD™ technology provides excellent sensitivity and low smear levels
- 1/2-type bayonet mount
- Compact and lightweight design
- High horizontal resolution of 850 TV lines
- RGB, Y/C, composite and component outputs
- On-screen programmable menu functions
- Full function control from the rear panel or the optional RM-C950 Remote Control Unit
- DynaLatitude™, Partial Enhance and Color Shading compensation functions
- Many advanced AE (Automatic Exposure) functions
- Optional CMA-D2MD/D2MDCE or CMA-D3/D3CE can be used for AC power supply. Please refer to the accessory page for details about camera adaptors.
- Please refer to the specification page for details about standards and regulations.

- Exwave HAD™ technology provides excellent sensitivity and low smear levels
- C mount
- Very compact and light-weight
- High horizontal resolution of 800 TV lines
- RGB, Y/C and composite video outputs
- On-screen programmable menu functions
- Full function control from the side panel or the optional RM-C950 Remote Control Unit
- DynaLatitude™, Partial Enhance and Color Shading compensation functions
- Many advanced AE (Automatic Exposure) functions
- Optional CMA-D2MD/D2MD CE or CMA-D3/D3CE can be used for power supply. Please refer to the accessory page for details about camera adaptors.
- Please refer to the specification page for details about standards and regulations.

- DV output terminal allows image recording into i.LINK™* interface-equipped VTRs with no deterioration
- DynaLatitude™, Partial Enhance and Color Shading compensation functions
- Frame memory (long term exposure, freeze function)
- Two AE (Automatic Exposure) areas can be preset
- Easy control and operation of the camera by an external computer is possible with the RS-232C interface
- External synchronization (HD/VD, VBS) allows for multiple camera operation
- Please refer to the specification page for details about standards and regulations.

* i.LINK is a Sony trademark used only to designate that a product is equipped with an IEEE1394 connector. Some products with an i.LINK connector may not communicate with each other. Please refer to the documentation that comes with any device having an i.LINK connector for information on compatibility, operating conditions, and proper connection.

For Image Recording

Recorders

HD Video Recorder



HVO-1000MD

- High-quality HD Recording (MPEG-4 AVC/H.264 Compression)
- Users can select the 20-Mb/s, 12.5-Mb/s, or 6-Mb/s* recording mode to suit their picture quality requirements.
- * Via VBR recording to internal HDD with a full-HD signal.
- Broad Support for Consumer Media:
 - Blu-ray disc (BD-R or BD-RE in BD-data format), DVD(DVD-R in DVD-data format), removable HDD (USB), and USB flash memory

- Wide Range of Interfaces:
 - HD-SDI, DVI-D, SD-SDI, composite, and S-Video, 1080/60p signal by conversion to 1080/60i or 1280/720p.
- Simultaneous image recording on internal HDD and two external media (Blu-ray disc, removable HDD (USB), and USB flash memory).
- Combined with Sony's network security recorders, the NSR Series*, the HVO-1000MD delivers real-time distribution.
- * This function is available from version 1.4.0.
- Users can record high-quality moving images for up to 24 hours (approx.) on the 320-GB internal HDD, and for up to five hours (approx.) on a Blu-ray disc.
- Simple operation with a minimum of buttons
- Network data transmission via FTP or CIFS
- Still and motion image capture
 - MP4 moving image files, and JPEG, TIFF, and BITMAP still image files
- Pre-installed Sony USB printer driver for Sony's medical USB printers (UP-DR80MD, UP-D25MD)
- Compact design ideal for medical carts
- Compliance with medical safety standards

DVD Recorder



DVO-1000MD

- DVD recorder offering high-quality digital video recording using the MPEG-2 compression format
- Uses the DVD+RW disc as a recording medium, which provides rewrite capability and playback compatibility with many DVD players
- DVD+RW media allows operators to quickly eject the disc after recording without "finalize" process that can usually take a considerable amount of time

- DVD media also enables long-term archiving of images due to its long life
- Real-time VBR (Variable Bit Rate) encoding optimizes picture quality
- Records audio in the Dolby™ Digital Stereo format sound reproduction
- Long recording time of up to three hours on a single disc. Three recording modes are available:
 - HQ Mode*: 60 minutes •SP Mode: 120 minutes •LP Mode: 180 minutes
- Quick random access by title and chapter
- High-speed color picture search with ± 3 times normal-speed playback as standard
- A variety of repeat playback modes
- Various data recording such as disc/title names, patient data of up to 2 KB (per one title), and scale data
- A variety of remote control interfaces and a wide range of interfaces
- Quick recording using an internal HDD
- Comes with the Canopus "DVD InfoEditor" software for browsing and editing of disc content on a PC
- Compact design and low power consumption
- NTSC/PAL switchable operation
- Worldwide AC power supply: AC 100 V to 240 V
- Please refer to the specification page for details about standards and regulations.
- * In HQ Mode, CBR (Constant Bit Rate) encoding is used.

For Image Monitoring

Multi format HD Monitors

* Screen size is a viewable area measured diagonally

LCD Monitor



LMD-3250MD

- 32-inch* monitor designed for surgical endoscopy applications
- Full HD resolution of 1920 x 1080 pixels

- Smoother-than-ever natural gradation with a 10-bit panel driver and 10-bit signal processing.
- Sophisticated I/P (Interlace to Progressive) conversion
- ChromaTRU color processing
- Multi-format signal support (Video (SD/HD), PC (DVI-D/HD15) input)
- Flexible input configuration with optional input adaptors*
- Picture & picture mode
- Variety of scan mode for wide range of applications
- Full screen size mirror (reverse) image display
- VESA mounting with 200 x 400 mm pitch (4 holes)
- One parallel and two types of serial remote control ports
- Please refer to the specification page for details about standards and regulations.

* A BKM-243HS HD/SD-SDI input adaptor is pre-installed

For Image Monitoring

Multi format HD Monitors

* Screen size is a viewable area measured diagonally

LCD Monitor



- 24-inch* monitor designed for surgical endoscopy applications
- High-resolution of 1920 x 1200 pixels (WUXGA)
- Excellent brightness and contrast

- Natural gradation and accurate color reproduction (10-bit DSP)
- Sophisticated I/P (Interlace to Progressive) conversion
- ChromaTRU color processing
- Multi-format signal support (Video (SD/HD), PC (DVI-D/HD15) input)
- 3G-SDI input for 1080/p signals by installing an optional BKM-250TG*¹
- DVI-D input capability is expandable with the optional BKM-256DD input adaptor*¹
- Two input slots provide flexible input configuration from optional input adaptors*²
- Picture & picture mode
- Variety of scan mode for wide range of applications
- Full screen size mirror (reverse) image display*¹
- VESA mounting with 100- mm pitch
- One parallel and two types of serial remote control ports
- Please refer to the specification page for details about standards and regulations.

*¹ These functions are supported by LMD-2451MD only

*² LMD-2450MD is equipped with the BKM-243HS HD/SD-SDI input adaptor pre-installed

*³ LMD-2450MD only

LCD Monitor



- 21-inch* LCD monitor optimized for medical use
- High resolution of 1024 x 768 pixels (XGA)

- Excellent brightness and contrast
- Smooth image reproduction with Sony's original X-Algorithm technology
- Multi-format signal support (Video (SD/HD), PC (DVI-D/HD15) input)
- Two input slots provide flexible input configuration from optional input adaptors
- A wide variety of picture scan modes, Normal, Underscan, Overscan, Zoom, and Native
- 20 patterns of monitor set-up data can be memorized in the user preset
- VESA mounting with 100 x 100 mm pitch
- Parallel and serial remote control ports
- Please refer to the specification page for details about standards and regulations.

LCD Monitor



- 19.1-inch* LCD monitor optimized for medical use
- High-resolution of 1280 x 1024 pixels (SXGA)

- Smooth image reproduction with Sony's original X-Algorithm technology
- Natural gradation and accurate color reproduction (10-bit DSP)
- A variety of signal input capabilities from SD to HD video and PC signals via DVD-I or HD15 connectors
- Selectable scan mode; 20% Over Scan, Normal Scan (7 % over scan), -3% Under Scan, Full Scan, Native Scan, and Zoom
- Two input slots provide flexible input configuration from optional input adaptors
- 20 patterns of monitor set-up data can be memorized in the user preset
- VESA mounting with 100- mm hole spacing
- Parallel and serial remote control ports
- Please refer to the specification page for details about standards and regulations.

LCD Monitor



- 15-inch* LCD monitor optimized for medical use
- High-resolution of 1280 x 768 pixels (WXGA)

- Wide viewing angle
- High-performance LCD panel provides high-brightness, and high-contrast images with natural color reproduction
- 10-bit signal process reproduces lifelike images
- Accepts a full range of SD inputs including analog composite, Y/C (S-Video), 525i/625i component, and RGB
- HDMI input
- Variety of scan mode for wide range of applications
- VESA mounting with 100- mm pitch
- Parallel remote control port
- Please refer to the specification page for details about standards and regulations.

LCD Monitor



- 21-inch* LCD monitor optimized for medical use
- High-resolution of 1920 x 1080 pixels (Full HD)

- High-performance LCD panel provides high-brightness, and high-contrast images with natural color reproduction
- 10-bit signal process reproduces lifelike images
- HD/SD-SDI signal input capable with an optional BKM-341HS HD/SD-SDI input adaptor
- Accepts a full range of SD inputs including analog composite, Y/C (S-Video), 525i/625i component and RGB
- HDMI input
- Variety of scan mode for wide range of applications
- VESA mounting with 100-mm pitch
- Parallel remote control port
- Please refer to the specification page for details about standards and regulations.

For Image Printing

Analog Printers

Color Video Printer



UP-25MD

A6 Color	PAL NTSC	HD Video Interface
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- Dye sublimation printer for superb quality prints
- High resolution of 423 dpi
- High-speed printing of approx. 19 seconds* in A6 size
- Compact, space-saving design: 212 x 98 x 398 mm (8 3/8 x 3 7/8 x 15 5/8 inches)
- Self-lamination media with a protective layer resistant to light, heat etc.
- Easy-to-use with two types of color balance adjustment: the normal RGB, and HSV adjustment on a 9-split image print
- Front-loading operation allows for easy maintenance and flexible set up
- Selectable 2 or 4-split image print mode
- HDTV (high-definition television) signal support accepting both 1080i and 720p signal types
- Accepts analog RGB, S-Video (Y/C), or composite video input/output signals
- Image spool function (eight frame memories)
- RS-232C port for remote control operation
- Convenient remote control with the optional FS-24 or RM-91 Remote Commander
- Please refer to the specification page for details about standards and regulations

* Measured in high-speed mode with the UPC-21S (excluding data transfer time)

Color Video Printer



UP-55MD

A5 Color	PAL NTSC
-------------	-------------

- Dye sublimation printer for superb quality prints
- High resolution of 379 dpi
- High-speed printing of approx. 20 seconds* in A5 size
- Compact, space-saving design: 280 x 125 x 398 mm (11 1/8 x 5 x 15 3/4 inches)
- Equipped with printer window display which allows menu operation on front panel
- Convenient image copy function (equipped with a USB host port)
- Easy-to-use color adjustment function
- Selectable 2, 4 or 8 split image print mode
- Image spool function (eight frame memories)
- Accepts analog R/Cr, G/G+S/Y, B/Cb, SYNC, Video, S-Video input/output signals
- Please refer to the specification page for details about standards and regulations.

* Measured in high-speed mode with the UPC-55 Color Printing Pack

Video Graphic Printer



UP-897MD

A6 B/W Paper	PAL NTSC
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- Direct thermal printer with a high resolution of 325 dpi
- High-speed printing of approx. 2 seconds* in A6-size
- Compact, space-saving design: 154 x 88 x 240 mm (6 1/6 x 3 1/2 x 9 1/2 inches)
- Superior operability with the front LCD display panel and Jog dial
- Supports standard and side print modes
- Detailed sharpness setting with 15 steps
- Multiple copy function (up to 20 copies of the last printed image)
- Zoom function (from 0.5 to 2 times in 0.1 increments)
- Image-capture function (up to 10 transferred images)
- Selectable 4:3 or 1:1 aspect ratio
- Automatic selection of EIA or CCIR video signal
- Worldwide AC power supply: AC 100 V to 240 V
- Please refer to the specification page for details about standards and regulations.

* Measured in high speed mode with the UPP-110HG or UPP-110S (excluding data transfer time)

Analog, Digital Hybrid Printers

Hybrid Graphic Printer



UP-990AD



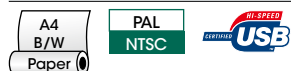
- Direct thermal printer with a high resolution of 325 dpi
- Accepts both analog and digital signal input
- Supports printing on blue transparent film and printing paper
- Superior operability with the front LCD panel and jog dial
- High-speed printing of approx. 8 seconds* in A4 size
- Compact, space-saving design: 316 x 132.5 x 305 mm (12 1/2 x 5 1/4 x 12 1/8 inches)
- Selectable 2, 4 or 6 split image print mode
- Automatic media-cutting function
- Worldwide AC power supply: AC 100 to 240 V
- Please refer to the specification page for details about standards and regulations.

* Measured in standard mode.

Hybrid Graphic Printer



UP-970AD



- Direct thermal printer with a high resolution of 325 dpi
- Accepts both analog and digital signal input
- Supports printing on printing paper
- Superior operability with the front LCD panel and jog dial
- High-speed printing of approx. 8 seconds* in A4 size
- Compact, space-saving design: 316 x 132.5 x 305 mm (12 1/2 x 5 1/4 x 12 1/8 inches)
- Selectable 2, 4 or 6 split image print mode
- Worldwide AC power supply: AC 100 to 240 V
- Please refer to the specification page for details about standards and regulations.

* Measured in standard mode.

Digital Graphic Printer



UP-D897



- Direct thermal printer with a high resolution of 325 dpi
- High-speed printing of approx. 2 seconds* in A6-size
- Compact, space-saving design: 154 x 88 x 240 mm (6 1/6 x 3 1/2 x 9 1/2 inches)
- Superior operability with the front LCD display panel and Jog dial
- Supports standard and side print modes
- Detailed sharpness setting with 15 steps
- Multiple copy function (up to 20 copies of the last printed image)
- Resize image data to fit a pre-set printing area
- Panoramic-size print is available especially for dental applications
- Equipped with a Hi-Speed USB interface (USB 2.0) as standard
- Please refer to the specification page for details about standards and regulations.

* Measured in high speed mode with the UPP-110HG or UPP-110S (excluding data transfer time)

Digital Printers

Digital Color Printer



UP-D25MD



- Dye sublimation printer for superb quality prints
- High resolution of 423 dpi
- High-speed printing of approx. 19 seconds* in A6 size
- Compact, space-saving design: 212 x 98 x 398 mm (8 3/8 x 3 7/8 x 15 5/8 inches)
- Self-lamination media with a protective layer resistant to light, heat etc.
- Easy-to-use with two types of color balance adjustment: the normal RGB, and HSV adjustment on a 9-split image print
- Preview window on the printer driver GUI to check the color adjustment result
- Front-loading operation allows easy maintenance and flexible set up
- Selectable 2- or 4-split image print mode
- Image spool function (two frame memories)
- Equipped with a Hi-Speed USB (USB 2.0) as standard
- Includes a PC utility driver software kit
- Resize-to-fit function
- Please refer to the specification page for details about standards and regulations

* Measured in high-speed mode with the UPC-21S (excluding data transfer time)

Digital Color Printer



UP-D55



- Dye sublimation printer for superb quality prints
- High resolution of 379 dpi
- High-speed printing of approx. 20 seconds* in A5 size
- Compact, space-saving design: 280 x 125 x 398 mm (11 1/8 x 5 x 15 3/4 inches)
- Front-loading operation allows easy maintenance and flexible set up
- Selectable 2, 4 and 8 split image print mode
- Color balance adjustment capability
- Image spool function (two frame memories)
- Resize-to-fit function
- Paper tray with paper stopper
- Equipped with a Hi-Speed USB interface (USB 2.0) as standard
- Includes a PC utility driver software kit
- Please refer to the specification page for details about standards and regulations.

* Measured in high-speed mode (excluding data transfer time)

Digital Color Printer



UP-DR80MD



- A4/Letter color printer with built-in Hi-Speed USB (USB 2.0) interface
- Dye sublimation printer for superb quality prints
- High resolution of 301 dpi
- High-speed printing of approx. 76 seconds in A4-size
- Stylish and compact design: approx. 317 x 207 x 425 mm (12 1/2 x 8 1/8 x 16 3/4 inches)
- Front-loading operation for easy operation and maintenance
- Easy color adjustment
- Two types of color look up table to reproduce suitable colors for different modalities.
- Gray balance adjustment for the most suitable tonal range for your application.
- Highly durable prints with self-laminating print media
- Worldwide AC power supply: AC 100 V to 240 V
- Please refer to the specification page for details about standards and regulations.

DICOM Color Printer



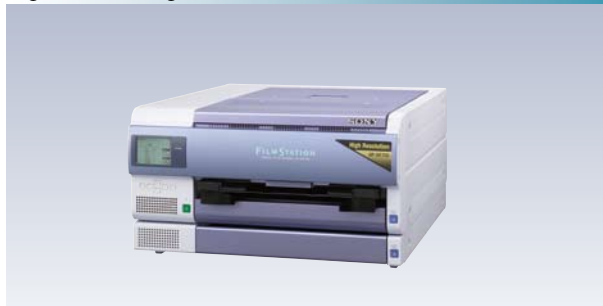
UP-D77MD



- A4/Letter color printer with built-in DICOM 3.0 interface
- Dye sublimation printer for superb quality prints
- High resolution of 300 dpi
- High-speed printing of approx. 85 seconds in A4-size
- Compact, space-saving design: approx. 494 x 176 x 469 mm (19 1/2 x 7 x 18 1/2 inches)
- Front-loading operation for easy operation and maintenance
- Easy color setting from 25 color patch pictures
- Precise color tuning capability
- Fine Gamma curve setting capability
- Highly durable prints with self-laminating print media
- Worldwide AC power supply: AC 100 V to 240 V
- Please refer to the specification page for details about standards and regulations.

Digital Film Imagers

Digital Film Imager



UP-DF750

FILM STATION

10"x12", 8"x10"	14" x 17", 11" x 14", 10" X 12", 8" x 10"	DICOM
High Density Blue Film	Blue Film	

- Digital film imager with a high resolution of 604 dpi, suitable for mammography imaging
- Supports dedicated Sony's High Density Blue Thermal Film and Blue Thermal Film (four sizes)
- High density blue thermal film for mammography (UPT-M710BL and UPT-M712BL) has a high maximum density of 3.8+.

- Two film supply trays to support four different film sizes (14 x 17, 11 x 14, 10 X 12, 8 x 10 inches)
- Vertical installation capability to save space
- Compact, space-saving design: 600 x 316 x 686 mm (23 5/8 x 12 1/2 x 27 1/8 inches)
- Auto calibration function
- Large 3.8-inch graphic LCD which provides menu direction change
- Four languages supported to display on the LCD.
- IP address, Net mask, Default Gateway and AE title can be set from front panel
- Large effective print area and edge-to-edge printing capability
- One default fixed gamma curve and 19 changeable gamma curves setting capability, for both regular blue thermal film and high-density blue thermal film
- DICOM-compliant network capability
- Quick warm-up time of only two minutes
- Worldwide AC power supply: 100-120/200-240V
- Incorporates environmentally friendly Sony thermal dry-processing technology
- Top and rear covers for easy maintenance to fix film jams
- Please refer to the specification page for details about standards and regulations.

Digital Film Imager



UP-DF550

FILM STATION

14" x 17", 11" x 14", 10" X 12", 8" x 10"	DICOM
Blue Film	

- Digital film imager with a high resolution of 320 dpi
- Supports dedicated Sony Blue Thermal Film (four sizes)

- Two film supply trays to support four different film sizes (14 x 17, 11 x 14, 10 X 12, 8 x 10 inches)
- Vertical installation capability to save space
- Compact, space-saving design: 600 x 316 x 686 mm (23 5/8 x 12 1/2 x 27 1/8 inches)
- Auto calibration function
- IP address, Net mask, Default Gateway and AE title can be set from front panel
- Large effective print area and edge-to-edge printing capability
- Top and rear covers for easy maintenance to fix film jams
- One default fixed gamma curve and 19 changeable gamma curves setting capability
- DICOM-compliant network capability
- Quick warm-up time of only two minutes
- Worldwide AC power supply: 100 V to 240 V
- Incorporates environmentally friendly Sony thermal dry-processing technology
- Please refer to the specification page for details about standards and regulations.

Digital Film Imager



UP-DF500

FILM STATION

14" x 17"	DICOM
Blue Film	

- Digital film imager with a high resolution of 320 dpi
- Supports dedicated Sony Blue Thermal Film (14 x 17 inch)

- Vertical installation capability to save space
- Compact, space-saving design: 600 x 250 x 686 mm (23 5/8 x 9 7/8 x 27 1/8 inches)
- Auto calibration function
- One default fixed gamma curve and 19 changeable gamma curves setting capability
- IP address, Net mask, Default Gateway and AE title can be set from front panel
- DICOM-compliant network capability
- Quick warm-up time of only a few minutes
- Edge-to-edge printing capability
- Worldwide AC power supply: 100 V to 240 V
- Incorporates environmentally friendly Sony thermal dry-processing technology
- Please refer to the specification page for details about standards and regulations.

Digital Film Imagers

DICOM Digital Imager



UP-D74XRD



- Digital film imager with a high resolution of 300 dpi
- Newly designed mechanical paper/film path and blue thermal film provide higher picture quality

- Supports both of the UPT-736BL Blue Thermal Transparent Film and the UPP-725 Thermal Printing Paper
- DICOM-compliant network capability and Hi-Speed USB (USB 2.0) as standard
- Available network parameter settings and switching of paper and film easily via the front panel
- By incorporating micro-step motor, operation noise is reduced
- High-speed printing of approx. 40 seconds in 8 x 10 inch size
- Precise gamma-curve setting capability
- Compact, space-saving design: 412 x 210 x 431mm (16 1/4 x 8 3/8 x 17 inches)
- Front-loading operation allows easy operation and maintenance
- Secure paper-tray lock system
- Equipped with a small window on the paper tray to check media availability
- Detachable dust filter
- Worldwide AC power supply: 100 V to 240 V
- Incorporates environmentally friendly Sony thermal dry-processing technology
- Please refer to the specification page for details about standards and regulations.

Digital Film Imager



UP-D72XR






- Digital film imager with a high resolution of 300 dpi
- Supports both of the UPT-735BL Blue Thermal Transparent Film and the UPP-725 Thermal Printing Paper
- High-speed printing of approx. 40 seconds in 8 x 10 inch size
- Precise gamma-curve setting capability
- Compact, space-saving design: 412 x 210 x 431mm (16 1/4 x 8 3/8 x 17 inches)
- Front-loading operation allows easy operation and maintenance
- Secure paper-tray lock system
- Equipped with a small window on the paper tray to check media availability
- Detachable dust filter
- USB connector and PARALLEL interface* (IEEE1284)
- Incorporates environmentally friendly Sony thermal dry-processing technology
- Please refer to the specification page for details about standards and regulations.

- Digital film imager with a high resolution of 300 dpi
- Supports both of the UPT-735BL Blue Thermal Transparent Film and the UPP-725 Thermal Printing Paper
- High-speed printing of approx. 40 seconds in 8 x 10 inch size
- Precise gamma-curve setting capability
- Compact, space-saving design: 412 x 210 x 431mm (16 1/4 x 8 3/8 x 17 inches)
- Front-loading operation allows easy operation and maintenance
- Secure paper-tray lock system
- Equipped with a small window on the paper tray to check media availability
- Detachable dust filter
- USB connector and PARALLEL interface* (IEEE1284)
- Incorporates environmentally friendly Sony thermal dry-processing technology
- Please refer to the specification page for details about standards and regulations.


* Supported in ECP (Extended Capabilities Port), Compatible-Nibble and Compatible modes.

Specifications

For Image Capture


	1/2-type 3-CCD Color Video Camera DXC-990/990P	1/3-type 3-CCD Color Video Camera DXC-390/390P	1/3-type 3-CCD Color Video Camera DXC-C33/C33P
			
Image device	Three 1/2-type IT (Interline Transfer) Exwawe HAD		Three 1/3-type IT (Interline Transfer) Exwawe HAD
Effective picture elements	768 (H) x 494 (V) (DXC-990/390/C33) , 752 (H) x 582 (V) (DXC-990P/390P/C33P)		
Sensing area	6.4 (H) x 4.8 (V) mm	4.8 (H) x 3.6 (V) mm	
Scanning system	2:1 interlaced, 525 lines (DXC-990/390/C33), 2:1 interlaced, 625 lines (DXC-990P/390P/C33P)		
Horizontal frequency	15.734 kHz (DXC-990/390/C33), 15.625 kHz (DXC-990P/390P/C33P)		
Vertical frequency	59.94 Hz (DXC-990/390/C33), 50Hz (DXC-990P/390P/C33P)		
Sync system	Internal or external with VBS, HD/VD		
Phase control	H/SC phase control		
Horizontal resolution	850 TV lines	800 TV lines	850 TV lines
Lens mount	Bayonet mount		C mount
Flange back	38.00mm		17.526 mm
Sensitivity	F11 at 2000 lx		F8.0 at 2000 lx
Minimum illumination	1 lx (F1.4, GAIN: HYPER)		4 lx (F2, GAIN: HYPER)
S/N ratio	63 dB (DXC-990), 62dB (DXC-990P)		62 dB (DXC-390/C33), 61dB (DXC-390P/C33P)
Gain	STEP/AGC/HYPER selectable STEP:0 to 24 dB by 1 dB step AGC:0 to 24 dB (Limit value: 6 dB, 12 dB, 18 dB, 24 dB selectable) HYPER: 30 dB		
Shutter speed	0.5 to 1/100,000 s	8.0 to 1/100,000 s	
Electronic shutter	OFF/STEP/VARIABLE/CCD IRIS selectable		OFF/STEP/VARIABLE/CCD IRIS/KNOB selectable
Iris	Auto/Manual		Manual
AE area	Multi/Large/Medium/Spot/Slit/Manual selectable		
AE speed	Fast/Mid/Slow selectable		
AE defect	Average/Peak selectable		
Contrast effect	Manual/DynaLatitude/DCC+ selectable		
Knee point	High/Mid/Low/Off selectable (Contrast Effect: Manual)		
Black stretch	Variable (Contrast Effect: Manual)		
Gamma	On/Off (Variable at ON)		
Pedestal	Master and R/B Manual adjustable		
Black balance	ABB		
White balance	AWB/ATW normal/ATW wide/Manual/3200 K/5600 K selectable AWB or ATW R/B paint, manual R/G gain		
ATW area	Normal/Manual selectable		
ATW speed	Fast/Mid/Slow selectable		
Detail level	All/Target/Off (Variable at All or Target)		
Detail frequency	High/Mid/Low selectable		
Linear matrix	All/Target/Off (Variable at All or Target)		
Linear matrix mod	Standard/R Enhance/G Enhance/B Enhance/Manual selectable		
Partial enhance	All/In/Out selectable		
CCD integration mode	Field/Frame selectable		
Shading compensation	Off/On (Manual control)		
Baud rate	19200/9600/4800/2400/1200 selectable		
Sync	RGB/G/Off selectable		
Trigger	On (Positive edge trigger/Negative edge trigger)/Off		
Strobe	Slave		
User file	A/B switchable		
Scene file	Standard/Microscope/Full Auto/Strobe/File A or B		
Output signals	VBS, RGB/SYNC, Y/C, Y/R-Y/B-Y	VBS, RGB/SYNC, Y/C	VBS, RGB/SYNC, Y/C, i.LINK(DV)
Serial data	RS-232C		
Operational temperature	-5 to 45°C (23 to 113°F)		
Storage temperature	-20 to 60°C (-4 to 140°F)		
Power requirements	DC 10.5 to 15.0 V		AC 100 to 240 V, 50/60 Hz
Power consumption	Approx. 7.6 W	Approx. 7.6 W	CHU: 48 g (1.7 oz) CCU: 2.5 kg (5 lb 8 oz)
Dimensions	70 x 72 x 123.5 mm (2 7/8 x 2 7/8 x 4 7/8 inches)	56 x 50 x 128 mm (2 1/4 x 2 x 5 1/8 inches)	CHU: 32 x 38 x 40 mm (1 5/16 x 1 1/2 x 1 5/8 inches) CCU: 2.5 kg (5 lb 8 oz)
Mass	Approx. 630 g (1 lb 6 oz)	Approx. 370 g (13 oz)	CHU: 48 g (1.7 oz) CCU: 2.5 kg (5 lb 8 oz)
Connectors	RGB/SYNC (9-pin D-sub), DC IN/VBS (12-pin), VIDEO OUT (BNC), TRIGGER IN (BNC), REMOTE (8-pin mini DIN), GEN LOCK IN (BNC) LENS (6-pin)	RGB/SYNC (9-pin D-sub), DC IN/VBS (12-pin), VIDEO OUT (BNC), TRIGGER IN (BNC), REMOTE (8-pin mini DIN), LENS (6-pin)	DV OUT (6-pin jack), RGB/SYNC (9-pin D-sub) FS/TRIG IN (Stereo Mini jack), REMOTE (8-pin mini DIN), AC Inlet, Camera (20-pin), EXT SYNC IN (BNC)
Standards/Regulations	DXC-990/390 US/CANADA: Safety: UL60601-1, CSA C22.2 No.601.1 EMC: FCC Part 15 Subpart-B Digital Device Class A ICES-003 Class A Digital Apparatus Japan: EMC: VCCI Class A DXC-990P/390P Europe: Safety: EN60601-1 EMC: EN 60601-1-2, EN55103-1(E1-E4), EN55103-2 EC Directive: MDD, EMC Australia: EMC: EN55103-1(E1-E4) CB Certification: IEC 60601-1		DXC-C33 US/CANADA: Safety: UL60601-1, CSA C22.2 No.601.1 EMC: FCC Part 15 Subpart-B Digital Device Class A ICES-003 Class A Digital Apparatus Japan: EMC: VCCI Class A DXC-C33P Europe: Safety: EN60601-1 EMC: EN 60601-1-2, EN55103-1(E1-E4), EN55103-2 EC Directive: MDD, EMC Australia: EMC: AS/NZS CISPR22 Class B CB Certification: IEC 60601-1


For Image Capture

		PMW-10MD
		
General		
Mass		CHU : Approx. 100g (3.5 oz) CCU : Approx. 2.7kg (5 lb 15 oz)
Dimensions		CHU : 35 x 45 x 50 mm (1 7/16 x 1 13/16 x 2 inches) without projection CCU : 200 x 88 x 240 mm (7 7/8 x 3 1/2 x 9 1/2 inches) without projection
Power Requirements		AC 100 to 240 V, 50/60 Hz
Power Consumption		Max.25 W
Operational Temperature		0°C to 40°C (32°F to 104°F)
Storage Temperature		-20°C to 60°C (-4°F to 140°F)
Camera Head Unit		
Image Device		3-chip 1/2-inch type Exmor CMOS
Effective Picture Elements		1920 (H) x 1080 (V)
Lens Mount		C-mount
Optical system		F2.2 prism system
Sensitivity		F10 typical (in 1920 x 1080/59.94i mode)
Minimum Illumination		0.14 lx (in 1920 x 1080/59.94i mode, F2.2, +21 dB gain, with 64-frame slow shutter)
S/N Ratio		54 dB (Y) (typical)
Horizontal Resolution		1000TV lines (in 1920 x 1080/59.94i ;through HD-SDI)
White Balance		PRESET/MEMORY/ATW
AE		ON/OFF
AE Area		Multi/Large/Medium/Spot/Slit Selectable
Connector		
Camera output		20-pin (x1)
Camera Control Unit		
Picture Profile		PictureProfile 1-6
Output Signals		HD-SDI, VBS, S-Video(Y/C), Y.Pb,Pr, DVI-D
DVI-D output		1080i/1080P
Color Bars		Multiformat/75%/100%/Off
Downconvert Mode		Squeeze/Letterbox/EdgeCrop
Flash Trigger output		CMOS/Open-Collector
Serial Data		RS-232C
Connectors		
Camera input		36-pin (x1)
MIC input		Stereo mini-jack (x1)
Composite output		BNC (x1)
S-Video output		mini DIN 4-pin (x1)
Component output		D-Sub 15-pin (x 1)
DVI-D output		DVI connector 19-pin (x1)
HD SDI output		BNC (x 2)
EXT SYNC input		BNC (x1)
FS,TRIG IO		Stereo mini-jack (x1)
Remote		D-sub 9-pin (x1)
Freeze function		OFF/ON
Recording Media		SxS PRO™ Memory Card, SxS-1 Memory Card, Memory Stick*, SDHC Memory Card*
Recording Format(Video)		
HQ mode		35Mbps (VBR) MPEG-2 MP@HL - 1920x1080 / 59.94i, 50i
SP mode		25Mbps (CBR) MPEG-2 MP@H-14 - 1440x1080 / 59.94i, 50i
Recording Format(Audio)		LPCM (16bits, 48kHz, 2Ch)
Recording Capacity		
HQ mode		Approx. 100 min. with SBP-32 (32 GB) memory card Approx. 50 min. with SBP-16 (16 GB) memory card
SP mode		Approx. 140 min. with SBP-32 (32 GB) memory card Approx. 70 min. with SBP-16 (16 GB) memory card
Standards/Regulations		US/CANADA: Safety: UL 60601-1, UL 60065, CSA C22.2 No.601.1, CSA C22.2 No.60065 EMC: FCC Part 15 Subpart-B Digital Device Class A ICES-003 Class A Digital Apparatus Europe: Safety: EN 60601-1, EN 60065 EMC: EN 60601-1-2, EN55103-1(E1-E4), EN55103-2 EC Directive: MDD, EMC, LVD Australia: EMC: EN55103-1(E1-E4) Japan: EMC: VCCI Class A, JIS C 61000-3-2 CB Certification: IEC 60601-1, IEC 60950-1




* Please contact your local Sony office for the latest compatibility information.

For Image Recording





HD Video Recorder	
HVO-1000MD	
	
General	
Power requirements	100 V to 240 V AC, 50 Hz/60 Hz
Input current	1.9 A to 0.8 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 1,040 hpa
Temperature range for storage	-20°C to +60°C (-4°F to +140°F)
Humidity range for storage (no condensation)	20% to 90% (Maximum wet-bulb temperature: 30°C (86°F))
Storage and transport pressure	700 hPa to 1,040 hPa
Mass	8.4 kg (18.5 lb.)
Dimensions (w x d x h)	305 x 410 x 115.5 mm (12 1/8 x 16 1/4 x 4 5/8 inches) (including protrusions)
Recording devices	
Internal hard disk drive	320 GB
Blu-ray Disc/DVD drive (1)	Compatible media: BD-RE2.0, BD-R1.0, DVD-R
Input connectors	
S-VIDEO IN	Mini DIN 4-pin type (1) Y: 1.0 Vp-p (75 Ω) Sync negative C (BURST): 0.286 Vp-p (75 Ω) (NTSC) C (BURST): 0.3 Vp-p (75 Ω) (PAL)
VIDEO IN	BNC (1), Composite, 1.0 Vp-p (75 Ω), Sync negative
DVI-D IN	Receptacle (1), TMDS 1 channel (single link)
RGB IN	D-sub 15-pin (1), 0.7 Vp-p/with sync on green G: 1.0 Vp-p 75 Ω
HD-SDI IN	BNC (1) SD: SMPTE259M compliant HD: SMPTE292M compliant 75 Ω
AUDIO LINE IN	Stereo mini jack (1) 1.4 Vrms (full bit), input impedance 10 kΩ or higher, unbalanced
Output connectors	
S-VIDEO OUT	Mini DIN 4-pin type (1) Y: 1.0 Vp-p (75 Ω) Sync negative C (BURST): 0.286 Vp-p (75 Ω) (NTSC) C (BURST): 0.3 Vp-p (75 Ω) (PAL)
VIDEO OUT	BNC (1), Composite, 1.0 Vp-p (75 Ω), Sync negative
DVI-D OUT	Receptacle (1), TMDS 1 channel (single link)
HD-SDI OUT	BNC (1), SD/HD 0.8 Vp-p 75 Ω
AUDIO OUT	Stereo mini jack (1), 1.4 Vrms (full bit), load impedance 10 kΩ, unbalanced
Other interfaces	
USB	USB 2.0 (4)
Network	RJ-45 (1), 1000Base-T/100Base-TX
REMOTE RS-232C	D-sub 9-pin (2)
REMOTE contact switch	Stereo mini jack (4)
REMOTE MONITOR	RJ-45 type (1)
Equipotential connector	
Standards/Regulations	

DVD Recorder	
DVO-1000MD	
	
General	
Power Requirements	AC 100 V to 240 V, 50/60 Hz
Power Consumption	35 W
Operating Temperature	+5 to +40°C (41 to 104°F)
Storage Temperature	-20 to +60°C (-13 to 140°F)
Operating Humidity	20 to 80%
Dimensions	212 x 128.5 x 382 mm (8 3/8 x 5 x 15 inches)
Mass	6 kg (13 lb 4 oz)
Recording System	DVD Recording, NTSC/PAL Switchable
Recording Format	Video: MPEG-2 compression Audio: Dolby Digital format
Recordable Media	DVD+RW (2.4x and 4x speed)
Recording Time	HQ Mode: 60 minutes SP Mode: 120 minutes LP Mode: 180 minutes
Safety Standards	IEC60601-1, EN60601-1, UL60601-1, CAN/CSA C22.2 No.601.1
Input/Output	
Analog Composite Input	BNC x2, with loop-through, unbalanced, 1.0 Vp-p, 75 Ω
S-Video Input	4-pin DIN x2, with loop-through Y: 1.0 Vp-p, 75 Ω, unbalanced C: 0.286 Vp-p (NTSC)/0.3 Vp-p (PAL), 75 Ω, unbalanced
Analog Composite Output	BNC x1, 1.0±0.2 Vp-p, 75 Ω, unbalanced
S-Video Output	4-pin DIN x1 Y: 1.0 Vp-p, 75 Ω, unbalanced C: 0.286 Vp-p (NTSC)/0.3 Vp-p (PAL), 75 Ω, unbalanced
Analog Audio Input	RCA Pin x2 (L/R), 2 Vrms (full bit), input impedance 47 kΩ
Analog Audio Output	RCA Pin x2 (L/R), 2 Vrms (full bit), load impedance 47 kΩ
Monitor Audio Output	Monitor RCA Pin x1, 2 Vrms (full bit), load impedance 47 kΩ
i.LINK (DV IN)	i.LINK 6-pin x1, IEEE1394
Remote Control	RS-232C x1, D-sub 9-pin Remote1 x1, stereo mini jack (for connection with the optional SVRM-100A/DSRM-10 controllers) Remote2 x1, stereo mini jack (for connection with the optional FS-24 foot switch) USB 2.0 x1 (Full Speed)
Standards/Regulations	US/CANADA: Safety: UL 60601-1, CSA C22.2 No.601.1 EMC: FCC Part 15 Subpart-B Class B personal computers and peripherals ICES-003 Class B Digital Apparatus Europe: Safety: EN 60601-1 EMC: EN 60601-1-2 EC Directive: MDD Australia: EMC: EN55022 Class B Japan: Safety: PSE EMC: J55013, JIS C 61000-3-2 CB Certification: IEC 60601-1, IEC 60065, IEC 60825-1



For Image Monitoring

	LCD Monitor	LCD Monito	LCD Monito
	LMD-3250MD	LMD-2450MD	LMD-2451MD
			
Picture Performance			
Type	α-Si TFT Active Matrix LCD with an AR-coated protection panel		
Resolution	1920 x 1080 pixels (Full HD)	1920 x 1200 pixels (WUXGA)	
Effective Picture Size (H x W) (Diagonal)	698 x 393 mm (27 1/2 x 15 1/2 inches) 801.3 mm (31 5/8 inches)	518.4 x 324.0 mm (20 1/2 x 12 7/8 inches) 613.2 mm (24 1/4 inches)	
Aspect	16:9	16:10	
Colors	Approx. 1,073,700,000 colors (10-bit)	Approx. 16,770,000 colors (8-bit)	
2D Viewing Angle (LCD panel specification)	89°/89°/89°/89° (typical) (up/down/left/right contrast >10:1)		
3D Viewing angle	-	-	-
Input			
Composite	BNC (x1), 1.0 Vp-p ±3dB sync negative		
Y/C	Mini DIN 4-pin (x1) Y: 1.0 Vp-p ± 3dB sync negative, C: 0.286 Vp-p ± 3dB (NTSC burst signal level), 0.3 Vp-p ± 3dB (PAL burst signal level)		
RGB, Component	BNC (x3) RGB : 0.7 Vp-p ± 3dB (Sync On Green, 0.3 Vp-p sync negative) Component : 0.7 Vp-p ± 3dB (75% chrominance standard color bar signal)		
External Sync	BNC (x1) 0.3 Vp-p to 4.0 Vp-p ± bipolarity ternary or negative polarity binary		
DVI-D	DVI-D (x1) TMDS single link		
HD15	D-sub 15-pin (x1), R/G/B: 0.7 Vp-p sync positive (Sync On Green, 0.3 Vp-p sync negative) Sync : Total level (polarity free, H/V separate sync) Plug & Play function : corresponds to DDC2B		
Option slot	2 slots A BKM-243HS board is supplied.	2 slots A BKM-243HS board is supplied.	2 slots
Parallel remote	Modular connector 8-pin (x1) (Pin-assignable)		
Serial remote	D-sub 9-pin (RS-232C) (x1), RJ-45 modular connector (ETHERNET) (x1) (10BASE-T/100BASE-TX)		
DC in	DC 5V / 24V (output impedance 0.05 ohms or less)		
Output			
Composite	BNC (x1), Loop-through, with 75 ohms automatic termination		
Y/C	Mini DIN 4-pin (x1) Loop-through, with 75 ohms automatic termination		
RGB, Component	BNC (x3), Loop-through, with with 75 ohms automatic termination		
External Sync	BNC (x1), Loop-through, with 75 ohms automatic termination		
General			
Power Requirement	DC IN: 24 V 5.0 A, 5 V 0.060 A (Supplied from AC adaptor) AC Adaptor (Sony, AC-3250MD) AC IN: 100 V to 240 V, 50/60Hz, 1.53 A to 0.58 A DC OUT: 24 V 5.0 A, 5 V 0.060 A	DC IN: 24 V 3.5 A, 5 V 0.030 A (Supplied from AC adaptor) AC adaptor (Sony, AC-2450MD) AC IN: 100 V to 240 V, 50/60 Hz, 1.2 A to 0.6 A DC OUT: 24 V 3.5 A, 5 V 0.030 A	DC IN: 24 V 3.5 A, 5 V 0.030 A (Supplied from AC adaptor) AC adaptor (Sony, AC-100MD) AC IN: 100 V to 240 V, 50/60 Hz, 1.53 A to 0.58 A DC OUT: 24 V 5.0 A, 5 V 0.060 A
Power Consumption	Maximum: approx. 136 W (with 2 x BKM-229X)	Maximum: approx. 115 W (with 2 x BKM-229X)	
Operating Temperature	0°C to 35°C (32°F to 95°F) Recommended: 20°C to 30°C (68°F to 86°F)		
Operating Humidity	30% to 85% (no condensation)		
Storage / Transport Temperature	-20°C to +60°C (-4°F to +140°F)		
Storage / Transport Humidity	0% to 90% (no condensation)		
Operating / Storage / Trans. Pressure	700 hPa to 1060 hPa		
Dimensions (W x H x D)	783 x 480 x 125 mm (30 7/8 x 18 7/8 x 5 inches) (including the projection parts)		
Mass	13.3 kg (29 lb 5 oz) (with 1 x BKM-243HS, pre-installed) AC adaptor (AC-3250MD): 1.2 kg (2 lb 10 oz)	8.5 kg (18 lb 12 oz) (with 1 x BKM-243HS, pre-installed) AC adaptor (AC-2450MD): 1.3 kg (2 lb 14 oz)	8.7 kg (19 lb 3 oz) (with 2 x BKM-229X) AC adaptor (AC-100MD): 1.2 kg (2 lb 10 oz)
Standards/ Regulations	US/CANADA: Safety: UL 60601-1, CSA C22.2 No.601.1 EMC: FCC Part 15 Subpart-B Digital Device Class A ICES-003 Class A Digital Apparatus Europe: Safety: EN 60601-1 EMC: EN 60601-1-2 EC Directive: MDD Australia: EMC: EN 55022 Class B Japan: EMC: VCCI Class A CB Certification: IEC 60601-1, IEC 60950-1	US/CANADA: Safety: UL 60601-1, CSA C22.2 No.601.1 EMC: FCC Part 15 Subpart-B Digital Device Class A ICES-003 Class A Digital Apparatus Europe: Safety: EN 60601-1 EMC: EN 60601-1-2 EC Directive: MDD Australia: EMC: AS/NZS CISPR 22 Class B Japan: EMC: VCCI Class A CB Certification: IEC 60601-1, IEC 60950-1	




For Image Monitoring

	LCD Monitor	LCD Monitor	LCD Monitor	LCD Monitor
	LMD-2140MD	LMD-1950MD	LMD-1530MD	LMD-2110MD
				
Picture Performance				
Type	α-Si TFT Active Matrix LCD with an AR-coated protection panel			α-Si TFT Active Matrix LCD
Resolution	1024 x 768 pixels (XGA)	1280 x 1024 pixels (SXGA)	1280 x 768 pixels (WXGA)	1920 x 1080 pixels (Full HD)
Effective Picture Size (H x W) (Diagonal)	430 x 322 mm (17 x 12 3/4 inches) 537 mm (21 1/4 inches)	376 x 301 mm (14 7/8 x 11 7/8 inches) 482 mm (19 inches)	334 x 200 mm (13 1/4 x 7 7/8 inches) 390 mm (15 3/8 inches)	477 x 268 mm (18 7/8 x 10 5/8 inches) 547 mm (21 5/8 inches)
Aspect	4:3	5:4	15:9	16:9
Colors	Approx. 16,770,000 colors (8-bit)			Approx. 16,770,000 colors
Viewing Angle (LCD panel specification)	85°/85°/85°/85°(typical) (up/down/left/right contrast >10:1)	89°/89°/89°/89°(typical) (up/down/left/right contrast >10:1)	88° / 88° / 88° / 88° (typical) (up/down/left/right contrast >10:1)	170°/160° (typical) (horizontal/vertical contrasts>10:1)
Input				
Composite	BNC (x1), 1.0 Vp-p ±3dB sync negative			
Y/C	Mini DIN 4-pin (x1) Y: 1.0 Vp-p ± 3dB sync negative, C: 0.286 Vp-p ± 3dB (NTSC burst signal level), 0.3 Vp-p ± 3dB (PAL burst signal level)			
RGB, Component	BNC (x3) RGB : 0.7 Vp-p ± 3dB (Sync On Green, 0.3 Vp-p sync negative) Component : 0.7 Vp-p ± 3dB (75% chrominance standard color bar signal)			
Audio	-	-	Phono jack (x2), -5 dBu 47 kilohms or higher	Phono jack (x2), -5 dBu 47 kilohms or higher OPTION AUDIO IN: Phono jack (x1), -5 dBu 47 kilohms or higher
External Sync	BNC (x1) 0.3 Vp-p to 4.0 Vp-p ± bipolarity ternary or negative polarity binary			BNC (x1) 0.3 Vp-p to 4 Vp-p negative polarity binary
HDMI	-	-	HDMI (x1)	-
DVI-D	DVI-D (x1) TMDS single link		-	-
HD15	D-sub 15-pin (x1), R/G/B: 0.7 Vp-p sync positive (Sync On Green, 0.3 Vp-p sync negative) Sync : Total level (polarity free, H/V separate sync) Plug & Play function : corresponds to DDC2B		-	-
Option slot	2 slots		-	-
Option in connector	-	-	-	D-sub 9-pin (x1), female
Parallel remote	Modular connector 8-pin (x1) (Pin-assignable)			
Serial remote	D-sub 9-pin (RS-232C) (x1)		-	-
Output				
Composite	BNC (x1), Loop-through, with 75 ohms automatic termination			
Y/C	Mini DIN 4-pin (x1) Loop-through, with 75 ohms automatic termination			
RGB, Component	BNC (x3), Loop-through, with with 75 ohms automatic termination			
External Sync	BNC (x1), Loop-through, with 75 ohms automatic termination			
Audio monitor out	-	-	Phono jack (x2), Loop-through	
Speaker (Built-in)	-	-	0.5 W (mono)	
General				
Power Requirement	AC 100 V to 240 V, 50/60 Hz, 1.2 A to 0.6 A	DC IN: 24 V 2.8 A (Supplied from AC adaptor) AC adaptor (Sony, AC-2450MD) AC IN: 100 V to 240 V, 50/60 Hz, 1.2 A to 0.6 A DC OUT: 24 V 3.5 A, 5 V 0.030 A	AC 100 V to 240 V, 50/60 Hz	
Power Consumption	Maximum: approx. 100 W (with 2 x BKM-255DV) Standard: Approx. 92 W (without optional input adaptor)	Maximum: approx. 66 W (with 2 x BKM-229X) Standard: Approx. 59 W (without optional input adaptor)	Maximum: approx. 40 W, 0.6 A to 0.4 A	Maximum approx. 60 W, 1.0 A to 0.5 A
Operating Temperature	0°C to 40°C (32°F to 104°F) Recommended: 20°C to 30°C (68°F to 86°F)		0°C to 35°C (32°F to 95°F) Recommended: 20°C to 30°C (68°F to 86°F)	
Operating Humidity	30% to 85% (no condensation)			
Storage / Transport Temperature	-10°C to +40°C (14°F to +104°F)	-20°C to +60°C (-4°F to +140°F)		
Storage / Transport Humidity	0% to 90% (no condensation)			
Operating / Storage / Trans. Pressure	700 hPa to 1060 hPa			
Dimensions (W x H x D)	505 x 444 x 119 mm (20 x 17 3/8 x 4 3/4 inches)	442 x 403 x 118 mm (17 1/2 x 15 7/8 x 4 3/4 inches)	372 x 336 x 264 mm (14 3/4 x 13 1/4 x 10 1/2 inches) (not including the projection parts)	515 x 403 x 264 mm (20 3/8 x 15 7/8 x 10 1/2 inches)
Mass	9.8 kg (21 lb 10 oz) (with 2 x BKM-255DV)	9.4 kg (20 lb 12 oz) (with 2 x BKM-229X)	6.2 kg (13 lb 11 oz)	8.6 kg (18 lb 15 oz) (with stand)
Standards/ Regulations	US/CANADA: Safety: UL 60601-1, UL 60950-1, CSA C22.2 No.601.1, CSA C22.2 No.60950-1 EMC: FCC Part 15 Subpart-B Digital Device Class A ICES-003 Class A Digital Apparatus Europe: Safety: EN 60601-1 EMC: EN 60601-1-2 EC Directive: MDD Australia: EMC: EN 55022 Class B Japan: EMC: VCCI Class A, JIS C 61000-3-2 CB Certification: IEC 60601-1, IEC 60950-1	US/CANADA: Safety: UL 60601-1, CSA C22.2 No.601.1 EMC: FCC Part 15 Subpart-B Digital Device Class A ICES-003 Class A Digital Apparatus Europe: Safety: EN 60601-1 EMC: EN 60601-1-2 EC Directive: MDD Australia: EMC: EN 55022 Class B Japan: EMC: VCCI Class A CB Certification: IEC 60601-1, IEC 60950-1	US/CANADA: Safety: UL 60601-1, CSA C22.2 No.601.1 EMC: FCC Part 15 Subpart-B Digital Device Class A ICES-003 Class A Digital Apparatus Europe: Safety: EN 60601-1 EMC: EN 60601-1-2 EC Directive: MDD Australia: EMC: AS/NZS CISPR22 Class B Japan: EMC: VCCI Class A CB Certification: IEC 60601-1, IEC 60065	




For Image Printing

	Color Video Printer	Color Video Printer
	UP-25MD	UP-55MD
		
Printing Method	Dye sublimation thermal transfer	
Resolution	423 dpi	379 dpi
Gradations	256 levels (8 bits) each for Yellow, Cyan, Magenta	
Picture elements	UP-21L/24LA: 2,132 x 1,600 dots UP-21S/24SA: 1,600 x 1,200 dots	2,528 x 1,920 dots (full screen print)
Paper size		A5 Size: 178 x 152 mm (7 1/8 x 6 inches)
Printing Time (High-speed Mode)	UP-21L: Approx. 29 sec UP-21S: Approx. 19 sec UP-24LA: Approx. 36 sec UP-24SA: Approx. 25 sec	Approx. 20 seconds
Paper tray capacity	L size tray: Max. 50 sheets S size tray: Max. 80 sheets	Max. 100 sheets
Picture memory	8 frame memories	
Interface	Video (x1), S-Video (x1), RGB (x1), SYNC (x1)	
Control connectors	Remote 1 (special mini) (x1) Remote 2 (stereo mini) (x1) for optional RM-91 or FS-24 Foot Switch RS-232C interface port (D-sub 25-pin) (x1) for external computer	
Power requirements	AC 100 V to 240 V, 50/60Hz	AC 100 V to 120 V, 50/60 Hz, AC 220 V to 240 V, 50/60 Hz
Input current	1.7 A to 1.0 A	100 V to 120 V: Max. 2.8 A 220 V to 240 V: Max. 1.2 A
Operating temperature	5°C to 35°C (41°F to 95°F)	
Operating humidity	20% to 80% (no condensation allowed)	
Storage and transport temperature	-20°C to +60°C (-4°F to +140°F)	
Storage and transport humidity	20% to 80% (no condensation allowed)	20% to 90% (no condensation allowed)
Dimensions	212 (W) x 98 (H) x 398 (D) mm, (8 3/8 x 3 7/8 x 15 5/8 inches)	280 (W) x 125 (H) x 398 (D) mm (11 1/8 x 5 x 15 3/4 inches) excluding the projection parts
Mass	5.7 kg (12 lb 6 oz)	9 kg (19 lb 13 oz)
Safety standards	(US/CA) UL 60601-1, UL 60950-1, CSA C22.2 No.601.1, CSA C22.2 No.60950-1 (EU) EN 60601-1, EN 60950-1 (CB) IEC 60601-1, IEC 60950-1	
EMC standards	(US/CA) FCC Part 15 Subpart-B Digital Device Class A, ICES-003 Class A Digital Apparatus (EU) EN 60601-1-2, EN 55022 (Class B), EN 55024, EN 61000-3-2, EN 61000-3-3 (AU) EN55022 Class B (JP) EMC: VCCI Class A, JIS C 61000-3-2	
EC directive	(EU) MDD, EMC, LVD	



For Image Printing




	Video Graphic Printer	Hybrid Graphic Printer	
	UP-897MD	UP-990AD	UP-970AD
			
Printing Method	Direct thermal printing		
Resolution	325 dpi		
Gradations	8 bits (256 levels) processing		
Picture elements	(when "SC:WD1" is selected from "SCAN") EIA: 1,210 x 490 dots CCIR: 1,210 x 582 dots	Digital: 3,414 x 2,560 dots EIA: 1,280 x 508 dots CCIR: 1,280 x 612 dots	
Picture area	(when "SC:WD1" or "SC:NOR" is selected from "SCAN") When "S:STD" is selected from "SIDE" EIA: 94 x 73 mm CCIR: 94 x 71 mm	When "S:STD" is selected from "SIDE" EIA: 187 x 140 mm (7 3/8 x 5 1/2 inches) CCIR: 187 x 138 mm (7 3/8 x 5 3/8 inches) When "S:SIDE" is selected from "SIDE" EIA: 249 x 188 mm (9 3/4 x 7 3/8 inches) CCIR: 249 x 186 mm (9 3/4 x 7 3/8 inches)	
Paper size	Paper width of 110 mm (4 3/8 inches)	Paper width of 210 mm (8 1/4 inches)	
Printing time	When "SP:HI" is selected from "SPEED" Approx. 2 seconds / image (at standard setting)	Approx. 8 seconds / image (in standard mode)	
Picture Memory	10 frame memories (800k x 8 bits per frame)	Digital mode: Max. 3,414 x 2,560 dots Analog mode: 6 frames (800k x 8 bits per frame)	
Interface	Input: VIDEO IN (BNC) (x1) EIA or CCIR composite video signals 1.0 Vp-p, 75-ohm/high-impedance (EIA/CCIR automatically discriminated) Output: VIDEO OUT (BNC) (x1) EIA or CCIR composite video signals 1.0 Vp-p, 75-ohm loop-through/EE switchable	Digital: Hi-Speed USB (USB 2.0) (x1) Analog: Input: VIDEO IN (BNC) (x1) EIA or CCIR composite video signals 1.0 Vp-p, 75-ohm/high-impedance (EIA/CCIR automatically discriminated) Output: VIDEO OUT (BNC) (x1) EIA or CCIR composite video signals 0 Vp-p, 75-ohm loop-through/EE switchable	
Control connectors	Stereo mini jack (x1) for optional RM-91 or FS-24 Foot Switch		
Printer driver software	Microsoft Windows 2000/XP/Vista		
Power requirements	AC 100 V to 240 V, 50/60 Hz		
Input current	1.5 A to 0.8 A	2.4 A to 1.3 A	
Operating temperature	5°C to 35°C (41°F to 95°F)		
Operating humidity	20% to 80% (no condensation allowed)		
Storage and transport temperature	-20°C to +60°C (-4°F to +140°F)		
Storage and transport humidity	20% to 90%	20% to 80%	
Dimensions	154 (W) x 88 (H) x 240 (D) mm (6 1/6 x 3 1/2 x 9 1/2 inches)	316 (W) x 132.5 (H) x 305 (D) mm (12 1/2 x 5 1/4 x 12 1/8 inches)	
Mass	2.6 kg (5 lb 11 oz)	8 kg (17 lb 10 oz)	
Safety standards	(US/CA) UL 60601-1, UL 60950-1, CSA C22.2 No.601.1, CSA C22.2 No.60950-1 (EU) EN 60601-1, EN 60950-1 (CB) IEC 60601-1, IEC 60950-1		
EMC standards	(US/CA) FCC Part 15 Subpart-B Digital Device Class A, ICES-003 Class A Digital Apparatus (EU) EN 60601-1-2, EN 55022 (Class B), EN 55024, EN 61000-3-2, EN 61000-3-3 (AU) EN55022 Class B (JP) EMC: VCCI Class A, JIS C 61000-3-2		
EC directive	(EU) MDD, EMC, LVD		

For Image Printing

	Digital Color Printer	Digital Color Printer	Digital Graphic Printer
	UP-D25MD	UP-D55	UP-D897
			
Printing Method	Dye sublimation thermal transfer		Direct thermal printing
Resolution	423 dpi	379 dpi	325 dpi
Gradations	256 levels (8 bits) each for Yellow, Cyan, Magenta		8 bits (256 levels) processing
Picture elements	UP-21L/24LA: 2,100 x 1,600 dots UP-21S/24SA: 1,600 x 1,200 dots	2,528 x 1,920 dots (when printing the full-image)	4,096 x 1,280 dots
Picture area	UP-21L/24LA: 126 x 96 mm (5 x 3 3/4 inches) UP-21S/24SA: 96 x 72 mm (3 3/4 x 2 7/8 inches)	169 x 129 mm (6 3/4 x 5 1/8 inches)	320 x 100 mm (12 5/8 x 4 inches)
Paper size	A6 S size: 100 x 90 mm (4 x 3 5/8 inches) A6 L size: 144 x 100 mm (5 3/4 x 4 inches)	A5 Size: 178 x 152 mm (7 1/8 x 6 inches)	Paper width of 110 mm (4 3/8 inches)
Printing time	High-speed Mode UP-21L: Approx. 29 sec UP-21S: Approx. 19 sec UP-24LA: Approx. 36 sec UP-24SA: Approx. 25 sec	High-speed Mode Approx. 20 seconds / image	High-speed mode Approx. 2 seconds / image (960 x 1,280 dots) Normal speed Approx. 3.3 seconds / image (960 x 1,280 dots)
Paper tray capacity	L size: max. 50 sheets S size: max. 80 sheets	Max. 100 sheets	
Picture memory	Two frame memories	18 MB (two frame memories)	4,096 x 1,280 x 8 (bit)
Interface	Hi-Speed USB (USB 2.0) (x1)		
Printer driver software	Microsoft Windows 2000/XP/Vista		
Power requirements	AC 100 V to 240 V, 50/60 Hz	AC 100 V to 120 V, 50/60 Hz, AC 220 V to 240 V, 50/60 Hz	AC 100 V to 240 V, 50/60 Hz
Input current	1.7 A to 1.0 A	100 V to 120 V: 2.8 A 220 V to 240 V: 1.2 A	1.5 A to 0.8 A
Operating temperature	5°C to 35°C (41°F to 95°F)		
Operating humidity	20% to 80% (no condensation allowed)		
Storage and transport temperature	-20°C to +60°C (-4°F to +140°F)		
Storage and transport humidity	20% to 80% (no condensation allowed)	20% to 90% (no condensation allowed)	20% to 80% (no condensation allowed)
Dimensions	212 (W) x 98 (H) x 398 (D) mm (8 3/8 x 3 7/8 x 15 5/8 inches)	280 (W) x 125 (H) x 398 (D) mm (11 1/8 x 5 x 15 3/4 inches)	154 (W) x 88 (H) x 240 (D) mm (6 1/6 x 3 1/2 x 9 1/2 inches)
Mass	5.5 kg (12 lb 2 oz)	9 kg (19 lb 13 oz)	2.6 kg (5 lb 11 oz)
Safety standards	(US/CA) UL 60601-1, UL 60950-1, CSA C22.2 No.601.1, CSA C22.2 No.60950-1 (EU) EN 60601-1, EN 60950-1 (CB) IEC 60601-1, IEC 60950-1		
EMC standards	(US/CA) FCC Part 15 Subpart-B Digital Device Class A, ICES-003 Class A Digital Apparatus (EU) EN 60601-1-2, EN 55022 (Class B), EN 55024, EN 61000-3-2, EN 61000-3-3 (AU) EN55022 Class B (JP) EMC: VCCI Class A, JIS C 61000-3-2		
EC directive	(EU) MDD, EMC, LVD		



For Image Printing

	DICOM Color Printer	Digital Color Printer
	UP-D77MD	UP-DR80MD
		
Printing method	Dye sublimation thermal transfer	
Resolution	300 dpi	301 dpi
Gradations	256 levels (8 bits) each for Yellow, Cyan, Magenta	
Picture elements	A4 size: 3,208 x 2,400 dots Letter size: 3,000 x 2,400 dots	A4 size: 3,400 x 2,392 dots Letter size: 3,192 x 2,464 dots
Picture area	A4 size: 271.6 x 203.2 mm (10 3/4 x 8 inches) Letter size: 254.0 x 203.2 mm (10 x 8 inches)	A4 size: 287 x 202 mm (11 1/4 x 8 inches) Letter size: 269 x 208 mm (10 5/8 x 8 1/4 inches)
Paper size	Letter size: 254 x 203.2 mm (10 x 8 inches) A4 size: 271.6 x 203.2 mm (10 3/4 x 8 inches)	
Printing time	A4 size: Approx. 85 seconds / image	A4 size: Approx. 76 seconds / image Letter size: Approx. 72 seconds / image
Paper tray capacity	72 sheets	50 sheets
Interface	DICOM 3.0 (100BASE-TX/10BASE-T) (x1)	Hi-Speed USB (USB 2.0) (x1)
Printer driver software	Microsoft Windows 2000/XP/Vista	
Power requirements	AC 100 V to 240 V, 50/60 Hz	
Input current	3.5 A to 1.5 A	3.4 A to 1.4 A
Operating temperature	10°C to 30°C (50°F to 86°F)	5°C to 35°C (41°F to 95°F)
Operating humidity	20% to 80% (no condensation allowed)	
Storage and transport temperature	-20°C to +60°C (-4°F to +140°F)	
Storage and transport humidity	20% to 80% (no condensation allowed)	
Dimensions	493.8 (W) x 176 (H) x 468.8 (D) mm (19 1/2 x 7 x 18 1/2 inches)	317 (W) x 207 (H) x 425 (D) mm (12 1/2 x 8 1/8 x 16 3/4 inches)
Mass	21 kg (46 lb 5 oz)	11.5 kg (25.3 lbs)
Safety standards	(US/CA) UL 60601-1, UL 60950-1, CSA C22.2 No.601.1, CSA C22.2 No.60950-1 (EU) EN 60601-1, EN 60950-1 (CB) IEC 60601-1, IEC 60950-1	
EMC standards	(US/CA) FCC Part 15 Subpart-B Digital Device Class A, ICES-003 Class A Digital Apparatus (EU) EN 60601-1-2, EN 55022 (Class B), EN 55024, EN 61000-3-2, EN 61000-3-3 (AU) EN55022 Class B (JP) EMC: VCCI Class A, JIS C 61000-3-2	
EC directive	(EU) MDD, EMC, LVD	

	Digital Film Imager		
	UP-DF750	UP-DF550	UP-DF500
			
Printing method	Direct Thermal Printing		
Resolution	604 dpi	320 dpi	
Gradations	16,384 levels processing	4,096 levels processing	
Picture elements	8,256 x 9,888 dots	5,232 x 4,360 dots	5,060 x 4,224 dots
Maximum density	3.8 and higher with UPT-M712BL/M710BL 3.2 and higher with UPT-517BL/514BL/512BL/510BL	3.2 and higher with UPT-517BL/514BL/512BL/510BL	3.2 and higher with UPT-517BL
Picture area	UPT-517BL: 346.7 x 415.3 mm (13 3/4 x 16 3/8 inches)	UPT-517BL: 346.7 x 415.3 mm (13 3/4 x 16 3/8 inches)	UPT-517BL: 335.4 x 401.8 mm (15 7/8 x 13 1/4 inches)
Media size	354 x 430 mm (14 x 17 inches) 279 x 354 mm (11 x 14 inches) 253 x 304 mm (10 x 12 inches) 202 x 253 mm (8 x 10 inches)		354 x 430 mm (14 x 17 inches)
Throughput	Approx. 75 sheets per hour (excluding time for cooling the head)	Approx. 70 sheets per hour (excluding time for cooling the head)	
Film supply tray	Two trays	One tray	
Film supply tray capacity	125 sheets (max.)		
Interface	DICOM 3.0 (RJ-45 modular jack x1), AC IN (for power) (x1)		
Power requirements	AC 100-120/200-240 V, 50/60 Hz	AC 100 V to 240 V, 50/60 Hz	
Input current	4.4 A to 2.4 A	4.4 A to 1.8 A	
Operating temperature	10°C to 30°C (50°F to 86°F)		
Operating humidity	20% to 80% (no condensation allowed)		
Storage and transport temperature	-20°C to +60°C (-4°F to +140°F)		
Storage and transport humidity	20% to 80% (no condensation allowed)		
Dimensions	600 (W) x 316 (H) x 686 (D) mm (23 5/8 x 12 1/2 x 27 1/8 inches)		600 (W) x 250 (H) x 686 (D) mm (23 5/8 x 9 7/8 x 27 1/8 inches)
Mass	65 kg (143 lb 5 oz)	63 kg (138 lb 14 oz)	55 kg (121 lb 4 oz)
Safety standards	(US/CA) UL 60601-1, UL 60950-1, CSA C22.2 No.601.1, CSA C22.2 No.60950-1 (EU) EN 60601-1, EN 60950-1 (CB) IEC 60601-1, IEC 60950-1		
EMC standards	(US/CA) FCC Part 15 Subpart-B Digital Device Class A, ICES-003 Class A Digital Apparatus (EU) EN 60601-1-2, EN 55022 (Class B), EN 55024, EN 61000-3-2, EN 61000-3-3 (AU) EN55022 Class B (JP) EMC: VCCI Class A, JIS C 61000-3-2		
EC directive	(EU) MDD, EMC, LVD		

* When printing on 14 x 17 inch film.

For Image Printing

	DICOM Digital Imager UP-D74XRD	Digital Film Imager UP-D72XR
		
Printing method	Direct Thermal Printing	
Resolution	300 dpi	
Gradations	512 levels processing	
Picture elements	2,743 x 2,320 dots	
Picture area	232.2 x 196.4 mm (9 1/4 x 7 3/4 inches)	
Printing time	Approx. 40 seconds / image	
Paper tray capacity	Paper: 100 sheets /Film: 100 sheets	
Picture memory	16 MB	
Interface	DICOM port (x1) (RJ-45 modular jack) USB connector (x1)	Parallel IEEE 1284 ECP Mode (x1) USB connector (x1)
Printer driver software	Microsoft Windows 2000/XP/Vista	
Power requirements	AC 100 V to 240 V, 50/60 Hz	AC 100 V to 120 V, 50/60 Hz, AC 220 V to 240 V, 50/60 Hz
Input current	3.5 A to 1.5 A	100 V to 120 V: 2.9 A 220 V to 240 V: 1.3 A
Operating temperature	10°C to 30°C (50°F to 86°F)	
Operating humidity	20% to 80% (no condensation allowed)	
Storage and transport temperature	-20°C to +60°C (-4°F to +140°F)	
Storage and transport humidity	20% to 80% (no condensation allowed)	20% to 90% (no condensation allowed)
Dimensions	412 (W) x 210 (H) x 431 (D) mm (16 1/4 x 8 3/8 x 17 inches)	
Mass	16 kg (35 lb 3 oz)	15.5 kg (34 lb 3 oz)
Safety standards	(US/CA) UL 60601-1, UL 60950-1, CSA C22.2 No.601.1, CSA C22.2 No.60950-1 (EU) EN 60601-1, EN 60950-1 (CB) IEC 60601-1, IEC 60950-1	
EMC standards	(US/CA) FCC Part 15 Subpart-B Digital Device Class A, ICES-003 Class A Digital Apparatus (EU) EN 60601-1-2, EN 55022 (Class B), EN 55024, EN 61000-3-2, EN 61000-3-3 (AU) EN55022 Class B (JP) EMC: VCCI Class A, JIS C 61000-3-2	
EC directive	(EU) MDD, EMC, LVD	

Optional Accessories

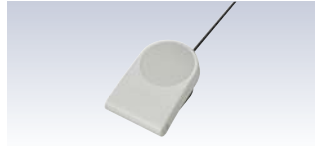
For Image Capture



CMA-D2MD/D2MDCE

Camera Adaptor

DXC-990/990P DXC-390/390P



FS-24

Foot Switch

Connector: Stereo mini plug
Cable Length: 5 m
Mass: Approx. 190 g (6.7 oz)

PMW-10MD



RM-C950

Remote Control Unit

DXC-990/990P DXC-390/390P
DXC-C33/C33P



CCDC cable

12-pin/4-pin DC Cable

DXC-990/990P DXC-390/390P



CCXC-12 cable

12-pin/12-pin Multi Core Cable

DXC-990/990P



CCMC-9DS cable

9-pin/4BNCs, DIN 4-pin

DXC-990/990P DXC-390/390P
DXC-C33/C33P



CCMC-T20/15/10/05

Camera Cable

PMW-10MD

CCMC-20 cable

20-pin/20-pin Cable

DXC-C33/C33P

CCXC-9DBS cable

9-pin/5BNCs Cable

DXC-990/990P DXC-390/390P

DXC-C33/C33P

CCXC-9DD cable

9-pin/9-pin Cable

DXC-990/990P DXC-390/390P

DXC-C33/C33P

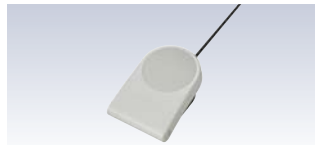
For Image Recording



SVRM-100A

Remote Control Unit

DVO-1000MD



FS-24

Foot Switch

Connector: Stereo mini plug
Cable Length: 5 m
Mass: Approx. 190 g (6.7 oz)

HVO-1000MD DVO-1000MD

* Only one of the PDBK-102, 103 or 104 boards can be installed at any one time.

For Image Monitoring



BKM-341HS

HD/SD-SDI Input Adaptor

LMD-2110MD



BKM-220D

SD-SDI 4:2:2 Input Adaptor

LMD-2450MD LMD-2451MD
LMD-2140MD LMD-1950MD



BKM-227W

NTSC/PAL Input Adaptor

LMD-2450MD LMD-2451MD
LMD-2140MD LMD-1950MD



BKM-229X

Analog Component Input Adaptor

LMD-2450MD LMD-2451MD
LMD-2140MD LMD-1950MD



BKM-243HS

HD/SD-SDI SDI&SDI Input Adaptor

LMD-2450MD LMD-2451MD

LMD-2140MD



BKM-250TG

3G/HD/SD-SDI Input Adaptor

LMD-2451MD



BKM-256DD

DVI-D Input Adaptor

LMD-2451MD



BKM-30G

Circular-polarizer 3D Glasses

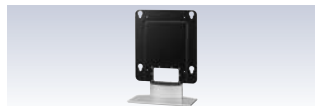
LMD-2451MD



BKM-31G

Clip-on type
Circular-polarizer 3D Glasses

LMD-2451MD



SU-32FW

Display Stand

LMD-3250MD



SU-560

Display Stand

LMD-2450MD LMD-2451MD

LMD-2140MD LMD-1950MD

For Image Printing



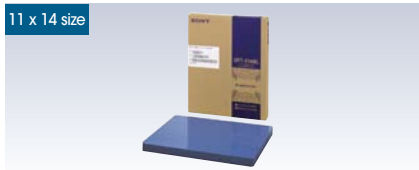
14 x 17 Size

UPT-517BL

Blue Thermal Film

Contents: 125 sheets of print film
Paper size: 354 x 430 mm (14 x 17 inches)

UP-DF500 UP-DF550 UP-DF750



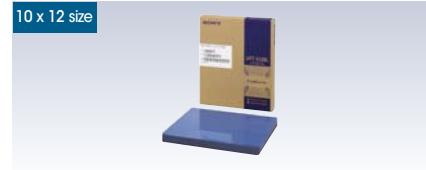
11 x 14 size

UPT-514BL

Blue Thermal Film

Contents: 125 sheets of print film
Paper size: 279 x 354 mm (11 x 14 inches)

UP-DF550 UP-DF750



10 x 12 size

UPT-512BL

Blue Thermal Film

Contents: 125 sheets of print film
Paper size: 253 x 304 mm (10 x 12 inches)

UP-DF550 UP-DF750



8 x 10 Size

UPT-510BL

Blue Thermal Film

Contents: 125 sheets of print film
Paper size: 202 x 253 mm (8 x 10 inches)

UP-DF550 UP-DF750



10 x 12 Size

UPT-M712BL

Blue Thermal Film

Contents: 125 sheets of print film
Film size: 253 x 304 mm (10 x 12 inches)

UP-DF750



8 x 10 Size

UPT-M710BL

Blue Thermal Film

Contents: 125 sheets of print film
Film size: 202 x 253 mm (8 x 10 inches)

UP-DF750



8 x 10 Size

UPT-736BL

Blue Thermal Film

Contents: 100 sheets of print film
Paper size: 202 x 253 mm (8 x 10 inches)

UP-D74XRD



8 x 10 Size

UPT-735BL

Blue Thermal Transparent Film

Contents: 100 sheets of print film
Paper size: 202 x 253 mm (8 x 10 inches)

UP-D72XR



8 x 10 Size

UPP-725

Thermal Printing Paper

Contents: 100 sheets of print media
Paper size: 203 x 254 mm (8 x 10 inches)

UP-D74XRD UP-D72XR



A4 Size

UPC-770

Self-Laminating Color Printing Pack

Contents: 72 sheets of print paper
a roll of ink ribbon
Paper size: 210 x 298 mm (8 3/8 x 11 3/4 inches)

UP-D77MD



Letter Size

UPC-771

Self-Laminating Color Printing Pack

Contents: 72 sheets of print paper
a roll of ink ribbon
Paper size: 216 x 280 mm (8 5/8 x 11 1/8 inches)

UP-D77MD



A4 Size

UPC-R80MD

Self-Laminating Color Printing Pack

Contents: Paper roll for 50 prints x 2
Ink ribbon x 2
Paper length: 210 mm x 16 m (8 3/8 x 630 inches)

UP-DR80MD



Letter Size

UPC-R81MD

Self-Laminating Color Printing Pack

Contents: Paper roll for 50 prints x 2
Ink ribbon x 2
Paper length: 216 mm x 15 m (8.5 x 590 inches)

UP-DR80MD



A5 Size

UPC-55

Color Printing Pack

Contents: 200 sheets of print paper
2 rolls of ink ribbon
Paper Size: 178 x 152 mm (7 1/8 x 6 inches)

UP-D55 UP-55MD



A6 Size

UPC-21S

Color Printing Pack

Contents: 240 sheets of print paper
3 rolls of ink ribbon
Paper size: 100 x 90 mm (4 x 3 5/8 inches)

UP-20 UP-21MD UP-25MD
UP-D23MD UP-D25MD

For Image Printing



UPC-21L
Color Printing Pack
 Contents: 200 sheets of print paper
 4 rolls of ink ribbon
 Paper size: 144 x 100 mm (5 3/4 x 4 inches)

- UP-20 UP-21MD
- UP-25MD UP-D23MD
- UP-D25MD



UPC-24SA
Self-Laminating Color Printing Pack
 Contents: 180 sheets of print paper
 (60 sheets x 3 packs)
 3 rolls of ink ribbon

- UP-25MD UP-D25MD



UPC-24LA
Self-Laminating Color Printing Pack
 Contents: 160 sheets of print paper
 (40 sheets x 4 packs)
 4 rolls of ink ribbon

- UP-25MD UP-D25MD



UPT-210BL
Blue Thermal Transparent Film
 Paper size: 210 mm (W) x 12.5 m
 Print quantity: 42 prints (6-sprit) (with UP-990AD/970AD)

- UP-990AD



UPP-210HD
High Density Printing Paper
 Paper size: 210 mm (W) x 25 m
 Print quantity: 139 prints (with UP-990AD/970AD)

- UP-990AD UP-970AD



UPP-210SE
High Quality Printing Paper
 Paper size: 210 mm (W) x 25 m
 Print quantity: 139 prints (with UP-990AD/970AD)

- UP-990AD UP-970AD



UPP-110HG
High Glossy Printing Paper
 Paper size: 110 mm (W) x 18 m
 Print quantity: 193 prints (with UP-897MD/D897)

- UP-897MD UP-D897



UPP-110HD
High Density Printing Paper
 Paper size: 110 mm (W) x 20 m
 Print quantity: 215 prints (with UP-897MD/D897)

- UP-897MD UP-D897



UPP-110S
High Quality Printing Paper
 Paper size: 110 mm (W) x 20 m
 Print quantity: 215 prints (with UP-897MD/D897)

- UP-897MD UP-D897



RM-91
Remote Commander
 Connector: Stereo mini
 Cable length: 5 m
 Mass: 80 g (3 oz)
 Supplied accessory: Operation manual

- UP-20 UP-21MD
- UP-25MD UP-55MD
- UP-897MD UP-990AD
- UP-970AD



FS-24
Foot Switch
 Connector: Stereo mini
 Cable Length: 5 m
 Mass: Approx. 190 g (6.7 oz)

- UP-20 UP-21MD
- UP-25MD UP-55MD
- UP-897MD UP-990AD
- UP-970AD



UPA-500
Cleaning Kit
 Contents: cleaning roller x 5
 cleaning paper x 5
 wrapping film x 1

- UP-DF500

General-purpose Optional Accessories (Non medical products)

For Image Capture



CMA-D3/D3CE
Camera Adaptor

DXC-990/990P DXC-390/390P



CCZ-A cable
26-pin/26-pin Cable

DXC-990/990P DXC-390/390P

CCMC-3MZ
Cable

DXC-990/990P DXC-390/390P



SBP-32/16
SxS Pro Memory Cards

PMW-10MD



SBS-64G1A/32G1A
SxS-1 Memory Card*

PMW-10MD



MEAD-MS01/SD01
Media Adaptor*

PMW-10MD

* An early version of the PMW-10MD requires upgrade to use SxS-1 Memory Card and Media Adaptor. Regarding the latest compatibility information of the media, please contact your local SONY office.

For Image Recording



DSRM-10
Remote Control Unit

DVO-1000MD

Print Media at a Glance

Size	Description	Model	Print sheets pack	UP-DF750	UP-DF550	UP-DF500					
14 x 17 size	Blue Thermal Film	UPT-517BL	125	○	○	○					
11 x 14 size	Blue Thermal Film	UPT-514BL	125	○	○						
10 x 12 size	Blue Thermal Film	UPT-512BL	125	○	○						
8 x 10 size	Blue Thermal Film	UPT-510BL	125	○	○						
10 x 12 size	Blue Thermal Film	UPT-M712BL	125	○							
8 x 10 size	Blue Thermal Film	UPT-M710BL	125	○							
				UP-D74XRD			UP-D72XR				
8 x 10 size (inches)	Blue Thermal Film	UPT-736BL	100	○							
	Blue Thermal Transparent Film	UPT-735BL	100				○				
	Thermal Printing Paper	UPP-725	100	○			○				
				UP-DR80MD			UP-D77MD/D75MD				
A4 size	Self-Laminating Color Printing Pack	UPC-R80MD	100	○							
	Self-Laminating Color Printing Pack	UPC-770	72				○				
Letter size	Self-Laminating Color Printing Pack	UPC-R81MD	100	○							
	Self-Laminating Color Printing Pack	UPC-771	72				○				
				UP-980/980CE			UP-D70XR				
A4 size	Blue Thermal Transparent Film	UPT-730BL /731BL	100				○				
Letter size	Blue Thermal Transparent Film	UPT-210BL	12.5 m	○							
				UP-55MD/D55	UP-51MD	UP-51MDP	UP-D50	UP-5600/5600MDP	UP-D5500	UP-5000series	
A5 size	Color Printing Pack	UPC-55		○							
	Color Printing Pack	UPC-510	200		○	○	○				
	Color Printing Pack	UPC-5510	200					○	○		
	Color Printing Pack	UPC-5010A	100							○	
				UP-990AD	UP-970AD	UP-980/980CE	P-960/960CE	UP-930/910			
A4 Width	Blue Thermal Transparent Film	UPT-210BL	12.5 m	○							
	High Density Printing Paper	UPP-210HD	25 m	○	○	○		○		○	
	High Quality Printing Paper	UPP-210SE	25 m	○	○	○		○		○	
	High Density Printing Paper	UPP-216HD	25 m							○	
	High Quality Printing Paper	UPP-216SE	25 m							○	
				UP-D25MD/25MD	UP-D23MD	UP-20/21MD	UP-1000 series	UP-3000 series	UP-2950MD/2900MD/2850P/2800P/2300P	UP-211/2100P	UP-D2600/D2600S/D2500
A6 size	Color Printing Pack	UPC-21S	240	○	○	○					
	Color Printing Pack	UPC-21L	200	○	○	○					
	Self-Laminating Color Printing Pack	UPC-24SA	180	○							
	Self-Laminating Color Printing Pack	UPC-24LA	160	○							
	Color Printing Pack	UPC-1010	100				○				
	Color Printing Pack	UPC-3010	80					○			
	Color Printing Pack	UPC-2010	200						○	○	
	B&W Printing Pack	UPC-2020	200						○	○	
				UP-897MD/D897	UP-895MD/895CE/D895/D895MD	UP-890MD/890CE/D890	UP-860/860CE/D860/D860E				
A6 Width	High Glossy Printing Paper	UPP-110HG	18 m	○	○						
	Superior Density Printing Paper	UPP-110HA	18 m					○			
	High Density Printing Paper	UPP-110HD	20 m	○	○	○		○		○	
	High Quality Printing Paper	UPP-110S	20 m	○	○	○		○		○	

All print quantity numbers are measured in default setting. All non-metric weights and measures are approximate.

Production of these products has been discontinued.

Remote Commander at a Glance

Size	Description	Model	UP-20/21MD/55MD	UP-897MD/990AD/970AD	UP-980/980CE 960/960CE	UP-895MD/895CE 890MD/890CE	UP-51MD/51MDP	UP-7300/7300MDP	UP-2950MD/2900MD/2850P/2800P/2300P/2100/2100P
Remote Commander	Foot Switch	FS-24	○	○	○	○	○	○	○
	Remote Commander	RM-91	○	○	○	○	○	○	○

Production of these products has been discontinued.

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