# UP-D25MD Digital Colour Printer UP-25MD Analogue Colour Printer

High quality, ultra compact A6 medical printers

www.pro.sony.eu/medical



### High quality. Compact design. Low total cost of ownership.



Smaller than conventional printers and designed specifically to fit easily into space-constrained medical environments, our high-quality A6 digital UP-D25MD and analogue UP-25MD colour printers are ideal for endoscopy and ultrasound applications, as well as in optical camera systems. They can be rack-mounted alongside other equipment on medical carts, and feature extra-compact, lightweight bodies.

As successors to our popular UP-20 series of medical printers, these printers feature the same footprint as previous models for ease of use. Designed to deliver long-term reliability whilst giving you superb quality and highly durable photoquality printouts, both printers provide an attractive total cost of ownership. Whilst the UP-D25MD delivers all the benefits of digital technology, the UP-25MD is the ideal choice for replacing old A6 analogue printers <sup>1</sup>.



Easy front-opening access



Simple ribbon cartridge replacement

#### Compact design convenience

The most compact of our UP-2X medical colour printer series, the UP-D25MD and UP-25MD share a common design and are smaller than conventional printers, so they fit easily into smaller spaces and give you the convenience of on-hand immediate printing. With their footprint being identical to those of their predecessors – the UP-D23MD and UP-21MD – they are the ideal choice for printer replacements.

### User-friendly front operation and LCD display

The printers are designed with a convenient front panel, enabling quick and easy insertion of ribbon cartridges and print media.

The front LCD display enables easy operation and colour adjustment. This display also shows the number of remaining prints, error messages and the loaded print media type, making it quick and easy to check you are using the correct settings and media.

The output tray illumination informs you about the progress of the data transfer and the printing progress. It also makes it easier to remove prints from the printer under the low light conditions often encountered in surgical environments.

<sup>1</sup> See Discontinued A6 analogue printers list on on page 3.



Nine-split test print for easy Hue-Saturation-Value (HSV) adjustment



Nine-split test print for easy grey balance (Colour Balance)<sup>1</sup> adjustment

## Choice of print media including durable self-lamination

For your convenience – especially if you are replacing an existing printer – the UP-D25MD and UP-25MD use the same UPC-21L and UPC-21S print media as other UP-20 series printers. Additionally, to meet the growing demand for higher image quality and durability, both printers can also be used with UPC-24LA and UPC-24SA self-lamination media. Providing a layer on each print that protects it from light, water, and fingerprints, these media ensure longterm durability and higher image quality.

## Colour adjustment and grey balance (Colour Balance)<sup>1</sup>

The UP-D25MD and UP-25MD incorporate two types of colour adjustment function: the normal RGB adjustment and an HSV function. The HSV function enables you to adjust the hue, saturation and value of each colour. With the UP-D25MD, you can check the adjustment result in a preview window on the printer driver GUI for your reference. In addition, both printers can print a nine-split image for colour balance, making it easier for you to select the colours that most accurately match your requirements with actual medical images. Your local Sony Specialist Dealer will be happy to demonstrate how to use the adjustment functions and set up the printer to match your standard requirements.

## Superb quality and colour at 423 dpi resolution

Using Sony dye sublimation printing technology, the UP-D25MD and UP-25MD ensure stable colour consistency (unlike inkjet printers where colour reproduction may vary between the start and end of each ink cartridge). While inkjet printers are prone to paper jams and ink nozzles drying out if not frequently used, UP-D25MD and UP-25MD are fully operational even if used irregularly. Dye sublimation delivers photorealistic quality prints with a high resolution of 423 dpi and true color reproduction of over 16.7 million possible colours for every pixel while inkjet printers can create colour impression only by rasterizing or dithering methods that do not withstand closer quality inspection. Given the critical importance of surgeons having accurate medical images when communicating with doctors and patients, our stable and superior image quality is a key differentiator from standard inkjet printers.

### Split-image prints

Two- or four-split images can be printed on a single sheet. With the UP-D25MD, this is selectable from the printer driver, with the UP-25MD this feature can be selected from the front panel.

### Printer-specific features

#### UP-D25MD: USB interface

This printer is equipped with a USB 2.0 interface as standard.

#### **UP-D25MD:** Compatibility

Printer drivers are available for Windows 7 (64/32 bit), Windows Vista (64/32 bit), Windows XP (64/32 bit), Windows 2000. Support for other operating systems on request.

#### UP-25MD: HDTV signal support

The UP-25MD supports HDTV (High Definition television) signal input. It accepts both 1080i and 720p signal types, and can automatically detect the input signal type.

## UP-25MD: Supported signals for the RGB/YPbPr/SYNC connectors

NTSC setting: 480/59.94i (SD), 1080/59.94i, 720/59.94p. PAL setting: 576/50i (SD), 1080/50i, 720/50p.

A6 analogue printers that can be replaced by the UP-25MD		
Printer	Media	
UP-1200	UPC-1010	
UP-1800MD	UPC-1010	
CVP-M1	UPC-1010	
CVP-M3	UPC-1010	
DPP-M55	UPC-1010	
FVP-1	UPC-1010	
UP-211	UPC-2010/2020	
UP-2100P	UPC-2010/2020	
UP-2300	UPC-2010/2020	
UP-2800	UPC-2010/2020	
UP-2850P	UPC-2010/2020	
UP-2900MD	UPC-2010/2020	
UP-2950MD	UPC-2010/2020	
UP-3000	UPC-3010	
UP-3030	UPC-3010	

<sup>1</sup> The UP-25MD uses the function name of Colour Balance

### UP-D25MD & UP-25MD Specifications

	UP-D25MD	UP-25MD	
Printing method	Dye sublimation	thermal transfer	
Resolution	423 dpi		
Gradations	Over 16.7 million colours, 256 levels (8 bits) each for Cyan, Magenta, Yellow		
Picture elements	UP-21L/24LA: 2,100 x 1,600 dots UP-21L/24SA: 1,600 x 1,200 dots	UP-21L/24LA: 2,132 x 1,600 dots UP-21L/24SA: 1,600 x 1,260 dots	
Picture area	UP-21L/24LA: 126.0 x 96.0 mm (5 x 3 3/4 inches) UP-21L/24SA: 96.0 x 72.0 mm (3 3/4 x 2 7/8 inches)	UP-21L/24LA: 127.9 x 96.0 mm (5 1/8 x 3 3/4 inches) UP-21L/24SA: 96.0 x 75.6 mm (3 3/4 x 3 inches)	
Printing time	UP-21L: Approx. 29 seconds, UP-21S: Approx. 19 seconds, UP-24LA: Approx. 36 seconds, UP-24SA: Approx. 25 seconds		
TV encoding system	-	PAL / NTSC (using hardware switch)	
HDTV IN/OUT signals	-	1080i/59.94i, 1080/50i (2:1 interlace) 720/59.94p, 720/50p (progressive)	
Paper tray capacity	L size: max. 50 sheets S size: max 80 sheets		
Interface	Hi-Speed USB (USB 2.0) Type B	RGB/U/Pb/Pr (BNC) (x3): 0.7 Vp-p, SYNC ON G: 0.3 Vp-p, sync negative, SYNC (BNC) (x1): 0.3 to 4 Vp-p, sync nega- tive, S VIDEO (4-pin mini-DIN) (x1): Y: 1 Vp-p. sync negative, C: 0.286 Vp-p (NTSC), 0.3 Vp-p (PAL), VIDEO (BNC) (x1): 1 Vp-p, sync negative	
Control connectors		REMOTE (automatic printing connector): Stero mini jack (x1): for optional RM-91 Remote Control Unit or FS-24 Foot Switch, RS-232C (Computer control interface): D-sub 25-pin connector (x1)	
Voltage requirements	AC 100 V to 240 V, 50/60Hz		
Input current	1.7 A to 1.0 A		
Operating temperature	5 °C to 35 °C (41 °F to 95 °F)		
Operating humidity	20% to 80% (non condensing)		
Storage and transport temperature	-20 °C to +60 °C (-4 °F to +140 °F)		
Storage and transport humidity	20% to 80% (non condensing)		
Dimensions	212 (W) x 98 (H) x 398 (D) mm, (8 3/8 x 3 7/8 x 15 5/8 inches)		
Weight	5.5kg (12 lb 2 oz)	5.7kg (12 lb 7 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 60601-1-1, EN 55022 (Class B), EN 55024, EN 61000-3-2, EN 61000-3-3, (AU) EN55022 Class B, (JP) VCCI Class A, JIS C 61000-3-2		
EMC standards	(US/CA) FCC Part 15 Subpart-B Digital Device Class A, ICES-003 Class A Digital Apparatus, (EU) EN 6061-1-2, EN 55022 (Class B), EN 55024, EN 61000-3-2, EN 61000-3-3, (AU) EN55022 Class B, (JP) VCCI Class A, JIS C 61000-3-2		
EC directive	(EU) MDD, EMC, LVD		
Supplied accessories	CD-ROM (containing Printer Driver and <i>Operating</i> <i>Instructions</i> document), HDTV IN/OUT signals 1080i/59.94i, 1080/50i (2:1 interlace) 720/59.94p, 720/50p (progressive), <i>Before Using this Printer</i> guide, Paper Tray, Stopper, Cleaning Cartridge, USB Cable	CD-ROM (containing <i>Operating Instructions</i> document), HDTV IN/OUT signals 1080/59.94i, 1080/50i) (2:1 interlace) 720/59.94p, 720/50p (progressive), <i>Before Using this Printer</i> guide, Paper Tray, Cleaning Cartridge	

Optional accessories \_\_ 🚎 🚎 · 🚝 🚎 a 🚐 ÷ 🚞 - 🚝 🚍 . UPC-21S UPC-21L UPC-24SA UPC-24LA RM-91 FS-24 Colour Print Pack Self-Laminating Colour Self-Laminating Colour Foot Switch Colour Print Pack Remote Printing Pack (L size) 160 sheets of print paper Printing Pack (S size) 180 sheets of print paper (60 sheets x 3 packs) (S size) Commander (L size) 240 sheets of print paper 200 sheets of print paper (80 sheets x 3 packs) (40 sheets x 4 packs) (50 sheets x 4 packs) 3 rolls of ink ribbon 4 rolls of ink ribbon 3 rolls of ink ribbon 4 rolls of ink ribbon

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Features, design and specifications are subject to change without notice. All non-metric weights and measures are approximate.