

# Color Video Printer UP-51MD/ 51MDP



he UP-51MD/51MDP is an A5 color video printer using dye sublimation technology. It is the perfect printing solution for many medical applications, for example in high-end Endoscopy and Ultrasound systems, and is also ideal for a wide range of scientific, industrial, and engineering uses that require highperformance printing systems.

The UP-51MD/51MDP combines excellent image quality with fast printing. In addition, it is designed for heavy-duty use, offering superb reliability and durability.

With all these features in its compact body, the UP-51MD/51MDP is ideal for the creation of high-quality hard copy images from video.

# Superior Print Quality and Color at approx. 300 dpi Resolution

Incorporating Sony dye sublimation printing technology, the UP-51MD/51MDP provides photo-realistic quality prints with more than 16 million color tones. The innovative PQC (Picture Quality Control) feature provides highly accurate image reproduction. A new color adjustment function allows you to easily select the color that most closely matches your requirements. Three alternative gamma curves are also available, so that the one that provides the most suitable tonal range for your application can be selected.



**Color adjustment function** 

### **Alternative Print Media**

Two types of printing packs are available for use with the UP-51MD/51MDP. The UPC-510 Color Printing Pack contains an ink ribbon and paper for 200 prints. The alternative UPC-540/540MD Selflaminating Color Printing Pack produces 102 prints that are laminated for increased durability, making them ideal for archiving applications. Prints from the UPC-510 and UPC-540/540MD are cut sheets. They are not curled so that you can handle them very easily.

### High-Speed Printing, A5 Size

When printing on the UPC-510, the UP-51MD/51MDP outputs an A5size print from an NTSC (PAL) video frame in approx. 20 (22) seconds\*. The UPC-540/540MD is available for the greater durability of a laminated finish. This enables you to choose the type of paper best suited to your application. The rapid print operation is the result of the introduction of a newly developed high-speed IC, combined with a powerful loading motor and highly-sensitive print media. \*Measured at high-speed mode.

### **Compact Size**

The adoption of a new printing mechanism for the UP-51MD/51MDP has resulted in a compact design with dimensions of approx.  $370(W) \times 125(H) \times 475(D) \text{ mm} (14 \frac{5}{8} \times 5 \times 18 \frac{3}{4} \text{ inches})$  and a weight of only 14 kg (31 lb). A width of 370 mm (14  $\frac{5}{8}$  inches) ensures a comfortable fit on a medical cart or in areas where space is at a premium.

### **Eight Frame Memories**

The UP-51MD/51MDP features eight built-in memories so that up to eight frame-quality color images can be stored in memories simultaneously. While printing an image from one of the memories, the UP-51MD/51MDP can simultaneously store additional images in the remaining memories. Furthermore, multiple images can be saved in the frame memories and can be printed out as a single print.

### High Durability and Reliability

The UP-51MD/51MDP is engineered for reliability. It features a long-life thermal head, and other mechanical components and their control system are new designs to enhance their service life.

### Versatile Analog Video Inputs and Outputs

The UP-51MD/51MDP accepts and outputs an analog RGB, S-Video (Y/C) or composite video signal.

### **Convenient Remote Controls**

Two optional foot switches are available. With the FS-30 and FS-36, hands-free control of printer functions is possible. Two optional wired/wireless remote control units are also available. The RM-91 is a single button controller, while the RM-5500 provides comprehensive control of printer functions. With this choice of remote control units and foot switches, printer operation is both simple and easy in many different applications.

### **System Connections**





## RS-232C Port

The UP-51MD/51MDP has an RS-232C port so that you can control the printer from external equipment such as a computer.

### Monitor Loop-Through for System Power Saving

The UP-51MD/51MDP has a signal loop-through capability so that input sources can be viewed on a connected monitor even when the printer is not powered on. This loop-through function reduces the total power consumption of the system.

### 2,4,8, or 16 Split / Duplicate Image Print Mode

Different or duplicate images can be printed in a variety of sizes on a single page.



### Besides medical applications, the UP-51MD/51MDP can also be used for the following applications.





Printing Method	Dye Sublimation Printing	
Resolution	Approx. 300 dpi (2048 dots)	
Gradations	256 gradations for Yellow, Magenta, Cyan	
	Over 16.7 million colors per dot	
Effective Print Pixels	NTSC (UP-51MD)	976 x 1,920 dots
	PAL (UP-51MD/51MDP)	1,176 x 1,920 dots
Print Area		
NTSC (UP-51MD)	126.2 x 165.1 mm (5 x 6 1/2 inches) — Full           117.0 x 170.9 mm (4 3/5 x 6 3/4 inches) — 2 Splits	
	128.2 x 167.1 mm (5 x 6	5 <sup>1</sup> /2 inches) — 4 Splits
	117.9 x 170.9 mm (4 3/s	5 x 6 3/4 inches) — 8 Splits
	129.2 x 165.1 mm (5 x 6	5 3/4 inches) — 16 Splits
PAL (UP-51MD/51MDP)	124.8 x 165.1 mm (5 x 6 <sup>1</sup> / <sub>2</sub> inches) — Full	
	117.0 x 170.9 mm (4 3/5 x 6 3/4 inches) — 2 Splits	
	126.9 x 167.1 mm (5 x 6	5 <sup>1</sup> /2 inches) — 4 Splits
	119.0 x 170.9 mm (4 <sup>2</sup> /3	3 x 6 3/4 inches) — 8 Splits
	127.4 x 165.1 mm (5 x 6 <sup>1</sup> / <sub>2</sub> inches) — 16 Splits	
Paper Size	A5 Size 148 x 210 mm (5 7/8 x 8 3/8 inches)	
Printing Time	NTSC (UP-51MD)	PAL (UP-51MD/51MDP)
(High-speed Mode)		
UPC-510	Approx. 20 seconds	Approx. 22 seconds
UPC-540/540MD	Approx. 31 seconds	Approx. 33 seconds
Memory	8 Frame Memories	
Control Connector	Remote 1 (special mini.) for optional RM-5500, RM-91 Remote 2 (stereo mini) for optional FS-36	
	Remote 3 (D-sub 9-pin) for optional FS-30	
	RS-232C interface port (D-sub 25-pin) for external computer	
Inputs/Outputs	Video, S-Video, RGB	
Max. Paper Tray Capacity	100 sheets	
Max. Power Consumption	2.8 A(UC) , 1.2 A(CED)	

Power Requirements		
UP-51MD	AC 100 to 120 V. 50/60 Hz	
	AC 220 to 240 V, 50/60 Hz	
UP-51MDP	AC 220 to 240 V. 50/60 Hz	
Dimensions	370(W) x 125(H) x 475(D) mm (14 5/8 x 5 x 18 3/4 inches)	
Mass	Approx.14 kg ( 31 lb)	
Safety Standards		
UP-51MD	UL : UL2601-1	
	CSA : CSA C22.2 No. 601.1	
	TUV : EN 60950, 60601-1	
	CE : LVD / MDD	
UP-51MDP	TUV : EN60950, 60601-1	
	CE: LVD / MDD	
	AC Power Code (1) Paper Tray (1)	
	Print Tray (1)	
	Color Print Pack (20 prints)	
	Operation Manual (1)	
Optional Acces	ssories	
	UPC-510 Color Printing Pack (200 prints)	
	UPC-540/540MD Self-Laminating Color Printing Pack (102 prints)	
	UPA-50RH Ink Ribbon Holder	
	RM-5500 Wired/Wireless Remote Commander	
	RM-91 Remote Control Unit	
	FS-36 Foot Switch	
	FS-30 Foot Switch	

### **Optional Accessories**



UPC-510 Color Printing Pack



UPC-540/540MD Self-laminating Color Printing Pack

Distributed by

©2000 Sony Corporation. All rights reserved. Reproduction in whole or in part without written permission is prohibited. Features and specifications are subject to change without notice. All non-metric weights and measures are approximate. Sony is a registered trademark of Sony Corporation.