

## UP-X898MD

A6 Analog and Digital Black and White Thermal Printer



### Overview

**High speed, high quality black & white printing of medical images in a compact space-saving footprint with analogue and digital inputs**

The UP-X898MD is a compact A6 medical grade black and white digital printer that can accept analogue video as well as PC-friendly digital USB signal inputs.

It's designed to be integrated into a wide range of compatible medical imaging environments such as digital ultrasound systems, mobile C-arms or cardiac catheterisation laboratory. The high quality thermal print engine can produce hard copy prints of still images captured by these systems for use in patient records and referrals. For even greater convenience, printed still images can also be stored to a connected USB flash drive.

(Please note that images printed from the UP-X898MD are not to be used for diagnosis).

The UP-X898MD is a successor to the popular Sony UP-897 series of medical printers. Redesigned and upgraded, it offers several operational and ergonomic enhancements while retaining the same space-saving footprint and easy integration into medical carts. Usability is further enhanced by an enlarged LCD display panel and joystick for intuitive menu navigation.

Capable of delivering high-quality black & white prints in under two seconds. Advanced thermal printing technology delivers near-photo quality results using widely available print media.

- **Wireless Printing Capability**

By using the optional UPA-WU10\* Wireless Print System, you can achieve cable-free connection between the UP-991AD, mobile C-arm and other hospital imaging modalities.

\* Product availability of the UPA-WU10 may vary according to the sales area. For more information, please contact your nearest Sony sales office or an authorised dealer.

## Features

- **High print quality**

Advanced thermal printing technology enables photo-quality black & white prints with a high resolution up to approximately 325 dpi and grey levels up to 256 steps.

- **A6 prints in less than two seconds**

While operating in high speed mode, the UP-X898MD can produce A6-size prints in approximately 1.9 seconds (when used with UPP-110HG or UPP-110S print media).

- **Hybrid operation with analogue and digital inputs**

A choice of analogue composite video and PC-friendly digital USB inputs allows flexible use with a wide range of modality devices.

- **Store pictures on a USB flash drive**

The UP-X898MD can automatically store printed images from both USB and Video inputs onto a connected USB storage device.

- **Compact, space-saving design**

Measuring 88mm (H) x 154 mm (W) x 240 mm (D), the UP-X898MD has the same space-saving design as the UP-897MD for easy, flexible integration into medical carts.

- **Enhanced operability**

Building on the success of the popular UP-897MD, the UP-X898MD features an enlarged LCD panel that displays printer settings, selected paper type and advisory messages. An intuitive joystick control allows speedy menu navigation, while the new Auto Lock mode prevents unintentional changes to print settings.

- **Hard copy reference of print settings**

For convenient reference, selected settings (Brightness, Contrast, Gamma and Sharpness) can optionally be printed in a blank space on the print paper.

- **Uses widely available print media**

Sony offers a choice of three high quality, widely available A6 thermal print media types to meet the needs of different applications. Choose from the UPP-110HD, UPP-110S, or the UPP-110HG High Glossy Printing Paper that produces glossy, long-lasting near-photo quality prints.

- **Wide PC compatibility**

For maximum flexibility, a wide range of PC drivers are provided for Windows XP, Vista, 7 and 8 (32/64bit).

- **Quick guide print**

Quick instruction guides for different print operations can be selected via the front control panel. They can be printed out for easy reference without needing to refer to the user manual.\*

\*English only.

- **Wireless Printing Capability**

The optional UPA-WU10 Wireless Print System provides a cable-free connection between the UP-991AD, the mobile C-arm and other hospital imaging modalities. This is ideal for busy clinical environments, where modalities are constantly being moved between different examination rooms and ORs. This all-in-one wireless printing solution also resolves the problem of limited space on medical carts, allowing connection between a medical imaging modality and an 'off-cart' printer without a lengthy USB cable.

\*\* Product availability of the UPA-WU10 may vary according to the sales area. For more information, please contact your nearest Sony sales office or an authorised dealer.

- **Compliance with Medical Safety Standards\***

This device is compliant and certified for IEC 60601-1 and product safety standards in the U.S.A., Canada and Europe.

\*Registration status as a medical device may vary, depending on country.

## Technical Specifications

Specifications	
● Printing Method	Direct thermal printing
● Resolution	325 dp
● Gradations	8 bits (256 levels) processing
● Picture Elements	Digital: 4096 x 1280 dots Video NTSC: 720 x 504 dots Video PAL: 720 x 604 dots
● Picture Area	Digital: 320 x 100 mm/12 5/8 x 3 7/8 inch (Max) STD Video NTSC: 94 x 73 mm, Video PAL: 94 x 71 mm (WIDE1) SIDE Video-NTSC: 124 x 96 mm, Video-PAL: 127 x 96 mm (WIDE1)
● Paper Size	Paper width of 110 mm (4 3/8 inches)
● Printing Time	High-speed mode: Approx. 1.9 seconds/image (at standard setting) Normal speed mode: Approx. 3.3 seconds/image (at standard setting)
● Picture Memory	Digital: 4,096 x 1,280 x 8 (bit) Video: 10 frame memories (850 k x 8 bits per frame)
● Interface	USB terminal (type A) for USB flash drive (X1) Hi-Speed USB (USB 2.0) (x1) VIDEO INPUT: BNC type (x1) NTSC or PAL composite video signals 1.0 Vp-p, 75 ohms (NTSC/PAL automatically discriminated) VIDEO OUTPUT: BNC type (x1) Loop-through REMOTE: Stereo mini jack (x1)
● Printer Driver Software	Microsoft Windows XP 32/64, Vista 32/64, 7 32/64, 8 32/64
● Power Requirements	AC 100 V to 240 V, 50/60 Hz
● Input Current	1.3 A to 0.6 A
● Operating Temperature	5°C to 40°C (41°F to 104°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 (W x H x D)	154 x 88 x 240 mm (6 1/6 x 3 1/2 x 9 1/2 inches)
● Mass	2.5 kg (5 lb 8 oz)
● Safety Standards	(US/CA) ANSI/AAMI ES60601-1, UL 60601-1, UL 60950-1, CAN/CSA-C22.2 No.60601-1, CAN/CSA C22.2 No.601.1, CAN/CSA C22.2 No.60950-1 (EU) EN 60601-1, EN 60950-1 (CB) IEC 60601-1 (2nd/3rd Ed.), 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 (Class B), EN 55022 (Class B)+EN 55024, EN 61000-3-2+ EN 61000-3-3 (AU) AS/NZS CISPR22 (EN55022) Class B (JP) VCCI Class A, JIS C 61000-3-2 (KR) KN22, KN24 Class B
● EC Directive	(EU) MDD, EMC, LVD

● Supplied Thermal head cleaning sheet (1), CD-ROM (1), Before Using this Printer (1), Service Contact List (1), USB Flash Drive Ex. Cable, Print media (UPP-110HG)  
Accessories

### Medical Accessories



**FS-24**  
Foot Switch



**RM-91**  
Wired Remote Commander  
for medical printers

### Medical Black & White Thermal Print Media



**UPP-110HD**  
A6 width B&W High Density  
print media (type II) for use  
in UP-X898MD / D898MD /  
D898DC / 897MD / D897MD  
/ D897 / 895 / D895 / 890 /  
D890 / 860 / D860 printers



**UPP-110HG**  
A6 width B&W High Glossy  
print media (type V) for use  
in UP-X898MD / D898MD /  
D898DC / 897MD / D897MD  
/ D897 / 895 / D895 / 890 /  
D890 / 860 / D860 printers.



**UPP-110S**  
A6 Size B&W High Quality  
Print Media (type I) for use in  
UP-X898MD / D898MD /  
D898DC / 897MD / D897 /  
895 / D895 / 890 / D890 / 860  
/ D860