

## UP-991AD

A4 Analogue and Digital Printer  
for Black and White Thermal  
Paper



### Overview

#### **Fast, high quality black & white printing from both analogue and digital imaging inputs onto paper or with USB storage**

The UP-991AD is a compact black and white printer designed for use with both analogue and digital radiology imaging systems such as mobile C-arm, ultrasound, cardiac catheterisation laboratory and other compatible medical imaging systems.

Smaller than its predecessor (the UP-990AD), it provides high-quality hard copies of still images captured by the imaging system, that can then be used as reference prints for patient record purposes or referrals. (Please note that images printed from the UP-991AD are not to be used for diagnosis).

Offering even more flexible workflow than the UP-971AD, the UP-991AD can store images on a connected USB flash drive.

Added convenience is provided by an integrated media cutter, together with the same Multi-picture mode and panoramic print features of the UP-971AD.

#### **Wireless Printing Capability**

By using the optional UPA-WU10\* Wireless Print System, you can achieve cable-free connection between the Sony digital printer with 5V USB output port\*\*, 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 authorized dealer.

\*\* For more information about compatible printers, please contact your nearest Sony sales office or an authorised dealer.

## Features

### **Accepts both digital and analogue video input signals**

The UP-991AD can receive digital as well as analogue signals, allowing the printer to support both types of C-arm system. It also can receive signals from two different integrated systems – i.e. analogue from a C-arm and digital from an ultrasound system.

### **High quality printing**

Using Sony's direct thermal printing technology, the UP-991AD delivers photo-quality black & white prints with a high resolution of approximately 325 dpi.

### **High speed printing**

In standard mode, the UP-991AD can deliver a print in approximately 8 seconds.

### **More compact, more visible**

The UP-991AD has a compact design with dimensions of approximately 316 (W) x 132.5 (H) x 265 (D) mm (12 1/2 x 5 1/4 x 10 1/2 inches) – 40mm smaller in depth than its predecessor. At the same time, the size of the LCD display panel is increased, and the control panel features a white LED backlight that offers clear visibility regardless of ambient light levels.

### **Enhanced operability**

All function keys of the UP-991AD are located on the front panel,

allowing easy setup and operation when the printer is installed in a medical cart. In addition, separate knobs on the front panel allow easy adjustment of both contrast and brightness and an auto lock function that prevents inadvertent alteration of settings.

### **Automatic media cutter**

The printer automatically cuts paper to size when printing is completed.

### **Multi-picture modes**

As well as printing a single picture, the UP-991AD also offers a choice of two-, four- and six-way split printing of images on a single sheet when connected to an analogue video signal. The 'Multi' button on the front panel allows quick switching between 'Single-picture' and 'Multi-picture' modes. With digital input signals, the printer can provide two or four split pictures on one sheet (NB: Multi button does not function with digital input).

### **Panoramic printing**

When connected to a digital signal, the UP-991AD can produce panoramic prints up to a maximum of 600mm long.

### **Visual print quality control**

Optimum print settings can be compared and chosen from a 'collage' print of nine pictures with different values for brightness, contrast, tone or sharpness.

### **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.

### **USB flash drive storage**

The UP-991AD can store either the printed image or captured video frame on a USB flash drive inserted into the USB port on

the front of the printer. Stored images can be in colour, provided that the input signal is in colour and Colour mode (for better B&W printing of colour images) is chosen.

### **Wireless Printing Capability\***

The optional UPA-WU10 Wireless Print System allows cable-free connection between the UP-991AD and surgical endoscopes, ultrasound systems, and other hospital imaging modalities. This is ideal for busy clinical environments, where modalities are constantly being moved between different OR and treatment rooms. 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 requiring a lengthy USB cable.

\* This function is available to Sony digital printers with USB 5V type A Output port. For more information regarding the compatibility, please contact your nearest Sony office or an authorised dealer.

### **Compliance with Medical Safety Standards**

This product is distributed to the US and EU as a medical device and satisfies product safety standards (e.g. IEC 60601-1). For more details, please contact your nearest Sony sales office or an authorized dealer.

## Specifications

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Printing Method	Direct thermal printing
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Resolution	325 dpi
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Gradations	8 bits (256 levels) processing
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Picture Elements	Digital: 7680 x 2560 dots Video NTSC: 720 x 504 dots Video PAL: 720 x 604 dots
Picture Area	DIGITAL: 600 x 200 mm (23 5/8 x 7 7/8 inch) (Max) VIDEO: STD NTSC: 182 x 144 mm PAL: 188 x 140 mm SIDE NTSC: 244 x 184 mm PAL: 244 x 183 mm
Paper Size	Paper width of 210 mm (8 1/4 inches)
Printing Time	Approx. 8 seconds/image (in standard mode)
Picture Memory	Digital: 2816 x 7680 x 8 bits Video: 6 frames (720 x 608 x 8 bits for one 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 1.0Vp-p, 75ohm (NTSC/PAL automatically discriminated)

	VIDEO OUTPUT: BNC type (x1) Loop-through REMOTE: Stereo mini jack (x1)
Printer Driver Software*	Microsoft Windows 10 32/64, 8 32/64, 7 32/64, Vista 32/64, XP 32/64
Power Requirements	AC 100 V to 240 V, 50/60 Hz
Input Current	2.9 A to 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%
Dimensions (W x H x D)	316 x 132.5 x 265 mm (12 1/2 x 5 1/4 x 10 1/2 inch)
Mass	7 kg (15lb 7oz)
Supplied Accessories	Print Media (1), Thermal head cleaning sheet (1), CD-ROM (1), Before Using this Printer (1),

## Service Contact List (1)

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Sony does not guarantee proper operation in all system environments.

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## Gallery

