

# SONY®

## Sony Digital Photography Paper

### Paper makes the Picture

Using a printing paper that is both stable and reliable is important for customer satisfaction in your digital photo business. If you thought that protection against environmental factors such as light, heat and humidity was not possible with a digital image from a printer, you haven't experienced the impressive combination of Sony Digital Photography Paper and Sony dye sublimation printing.

It provides not only high picture quality but also picture permanence you expect.

What you get is not just a print out,  
it's a photograph!

**DIGITAL**  
**PHOTOGRAPHY**

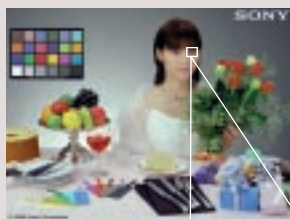
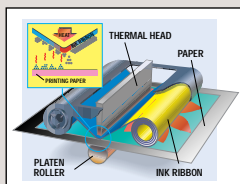
# Sony Photo Printing Technology

## Dye sublimation printing

Dye sublimation printing is the only method that produces a photo-quality printout. In dye sublimation printing, the ink is converted into a gas to produce

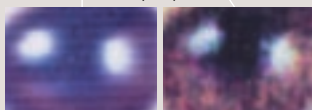
rich colors with a tonal range of up to 256 gradations. With over 16 million different colors available for each printed dot, color reproduction is highly accurate. This is different to other printing methods such as inkjet, which cannot realize gradations in each dot.

As you can see in the examples below, dye sublimation printing method clearly reproduces images of photographic quality when compared to those produced using other printing methods, such as inkjet.



Original Photo

(x200)



Sony Printer

Inkjet Printer

In addition, Sony Digital Photography Paper has been developed to protect the superb picture quality of dye sublimation printing. It uses a totally new type of multi-component laminated coating that is applied to the surface of the paper during the actual printing process. This coating provides highly effective protection to your prints, guarding against the effects of light, heat and humidity.

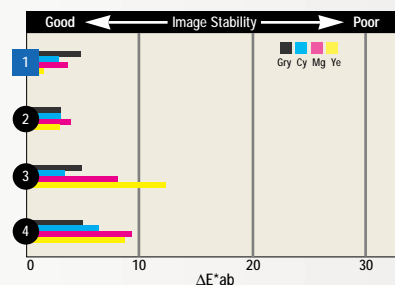
## Environmentally friendly

Sony dye sublimation printing technology is also environmental friendly. It does not use liquid chemicals, so there are no problems with chemical waste. This feature makes installation of the printer very flexible. With no drainage required, it can be placed in any convenient location.

## Interior Lighting Exposure Test

Tested by using accelerated testing equipment, with fluorescent tubes that are widely used for interior lighting. This testing conditions approx. equal 3 years' exposure to interior lighting, when assuming the average illuminance in the room is 500 Lux, 10 hours per day.

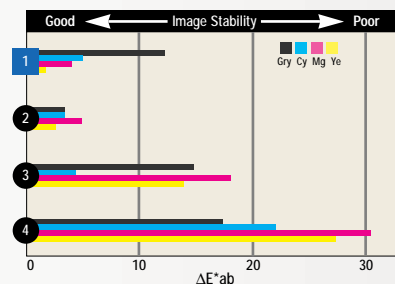
Test Conditions	
Equipment	Fluorescent tube Fade-o-meter (Toyo Seiki Seisaku-sho, Ltd.)
Light Source	Toshiba mellow white FL20SS-N/18, 16 tubes
Black Panel Temperature	50°C (122°F)
Chamber R.H. Temperature and Humidity	36° to 38°C (97° to 100°F), 20% to 25% R.H.
Illuminance and Operation Time	Approx. 1.5 x 10 <sup>4</sup> Lux, for 350 hours



## Sunlight Exposure Test

Tested by using accelerated testing equipment, with a xenon lamp that has a similar spectrum profile to sunlight through windows. This testing conditions approx. equal 3 to 4 months' exposure to sunlight through a window facing south.

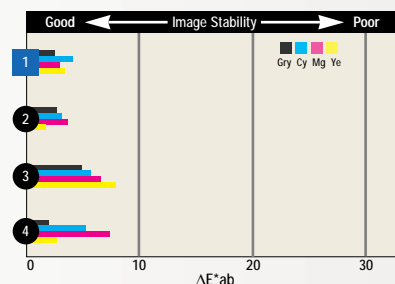
Test Conditions	
Equipment	Atlas Ci 35 Fade-o-meter
Light Source	Xenon Lamp
Filters	(Inner) IR absorbing glass (Outer) Soda lime glass
Black Panel Temperature	45°C (113°F)
Chamber Temperature and Humidity	25°C (77°F), 50% R.H.
Illuminance and Operation Time	Approx. 1.1 x 10 <sup>5</sup> Lux, for 93 hours



## Heat Resistance Test

Tested in a high temperature environment.

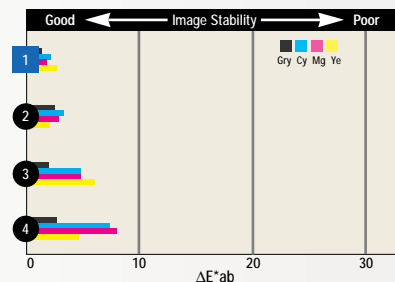
Test Conditions	
Environment	60°C (140°F), 30% R.H., dark place
Time	for 14 days



## Humidity Resistance Test

Tested in a high temperature and high humidity environment.

Test Conditions	
Environment	40°C (104°F), 90% R.H., dark place
Time	for 30 days



ΔE\*ab is used as the criterion for evaluation in each condition. ΔE\*ab is the color difference in L\*a\*b\* color space of each picture before and after testing. ΔE\*ab color differences can be considered to have a high correlation with color differences perceived by human eye.

# Image Stability

Sony Dye Sublimation Printing  
(with lamination)



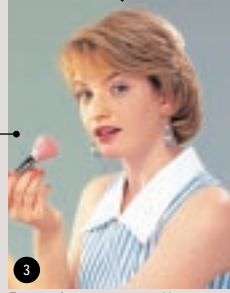
Exposed ▲ Unexposed

Silver Halide Photo



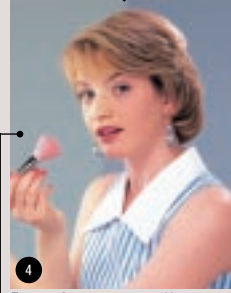
Exposed ▲ Unexposed

Ink Jet



Exposed ▲ Unexposed

Thermal Development and  
Dye Transfer



Exposed ▲ Unexposed

Disorder in color balance due to  
Magenta and Yellow discolored

Decline of each pigment

Sony Dye Sublimation Printing  
(with lamination)



Exposed ▲ Unexposed

Silver Halide Photo



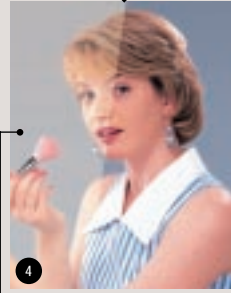
Exposed ▲ Unexposed

Ink Jet



Exposed ▲ Unexposed

Thermal Development and  
Dye Transfer



Exposed ▲ Unexposed

Disorder in color balance due to  
Magenta and Yellow discolored

Decline of each pigment

Sony Dye Sublimation Printing  
(with lamination)



Exposed ▲ Unexposed

Silver Halide Photo



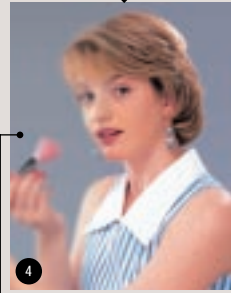
Exposed ▲ Unexposed

Ink Jet



Exposed ▲ Unexposed

Thermal Development and  
Dye Transfer



Exposed ▲ Unexposed

Disorder in color balance  
due to Yellow discolored

Blurred all over

Sony Dye Sublimation Printing  
(with lamination)



Exposed ▲ Unexposed

Silver Halide Photo



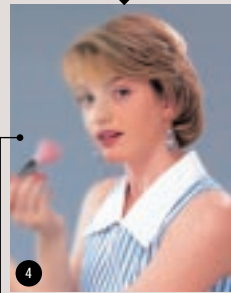
Exposed ▲ Unexposed

Ink Jet



Exposed ▲ Unexposed

Thermal Development and  
Dye Transfer



Exposed ▲ Unexposed

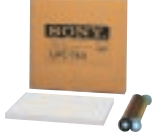
Disorder in color balance  
due to Yellow discolored

Blurred all over

1/2 of the images were covered up during light, heat and humidity testing.  
All of the above are simulated pictures based on the actual data.

**UPC-740**  
Self-Laminating Color Printing Pack


**A4 SIZE**



**For the UP-D70A**  
Contents: 1 roll of YMCL ink ribbon  
72 sheets of print paper  
Paper size: 210 x 297 mm  
(8 3/8 x 11 7/8 inches)  
Print area: 203.2 x 271.6 mm  
(8 x 10 3/4 inches)

**UPC-741**  
Self-Laminating Color Printing Pack


**LETTER SIZE**



**For the UP-D70A**  
Contents: 1 roll of YMCL ink ribbon  
72 sheets of print paper  
Paper size: 216 x 279 mm  
(8 3/8 x 11 inches)  
Print area: 203.2 x 254 mm  
(8 x 10 inches)

**UPC-747**  
Self-Laminating Color Printing Pack


**A4+ SIZE**



**For the UP-D70A**  
Contents: 1 roll of YMCL ink ribbon  
72 sheets of print paper  
Paper size: 222 x 322.4 mm  
(8 3/4 x 12 3/4 inches)  
Print area: 216 x 297 mm  
(8 3/8 x 11 3/4 inches)

**UPC-540**  
Self-Laminating Color Printing Pack


**A5 SIZE**



**For the UP-D50**  
Contents: 1 roll of YMCL ink ribbon  
102 sheets of print paper  
Paper size: 210 x 148 mm  
(8 3/8 x 5 7/8 inches)  
Print area: 184 x 133 mm  
(7 1/4 x 5 1/8 inches)

**UPC-2045**  
Self-Laminating Color Printing Pack


**A6 SIZE**



**For the UPX-C21, UP-D2600S/D2600**  
Contents: 1 roll of YMCL ink ribbon  
120 sheets of print paper  
Paper size: 148 x 100 mm  
(5 7/8 x 4 inches)  
Print area: Max. 112 x 84 mm  
(4 1/2 x 3 3/8 inches)

**UPC-2040A (for ID photo application)**  
Self-Laminating Color Printing Pack

**A6 SIZE**



**For the UPX-C21, UP-D2600S/D2600**  
Contents: 1 roll of YMCL ink ribbon  
120 sheets of print paper  
Paper size: 148 x 100 mm  
(5 7/8 x 4 inches)  
Print area: Max. 112 x 84 mm  
(4 1/2 x 3 3/8 inches)

**Features of UPC-2040A**



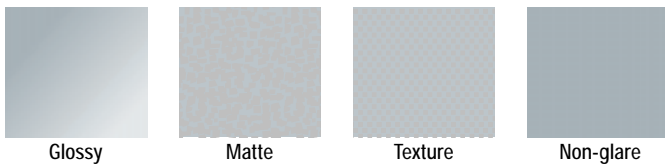
Organic Solvents

Stamp capability  
Resistance to organic solvent

## A choice of print finish

With Sony Digital Photography Paper, you have the choice of a glossy, matte, texture and non-glare finish to your prints, depending upon your preference or that of your customer.

Size	Model	Printer	Glossy	Matte	Texture	Non-glare
A4	UPC-740	UP-D70A	●	●	●	●
Letter	UPC-741	UP-D70A	●	●	●	●
A4 Plus	UPC-747	UP-D70A	●	●	●	●
A5	UPC-540	UP-D50	●	●	●	
A6	UPC-2045	UPX-C21/ UP-D2600	●	●	●	



## Printing time

Size	Model	Printer	Printing time
A4	UPC-740	UP-D70A	115 seconds
Letter	UPC-741	UP-D70A	115 seconds
A4 Plus	UPC-747	UP-D70A	130 seconds
A5	UPC-540	UP-D50	40 seconds
A6	UPC-2040A	UPX-C21/ UP-D2600	97 seconds
A6	UPC-2045	UPX-C21/ UP-D2600	70 seconds

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