

TECHNICAL INFORMATION

CRYSTALJET ELITE RC

PREMIUM RC PAPER FOR PHOTO PRINTERS

A PREMIUM QUALITY RESIN COATED INKJET PAPER FOR AQUEOUS DYE AND PIGMENT PRINTERS

HARMAN PHOTO CRYSTALJET ELITE RC INKJET PAPER is designed to produce quick drying, high quality photo images on popular photo-dedicated inkjet printers using pigment or dye inks.

The paper is available in a Gloss, Luster or Pearl surface finish, to produce high quality images with the appearance of a real photograph. Prints have excellent vibrancy, a high colour gamut resulting in broad tonal range and good shadow and highlight definition.

Key Features

- Bright white resin coated base produces images with extended colour gamut.
- Available in 260 or 295 gsm.
- 260gsm available in Gloss or Luster finish.
- 295gsm available in Gloss and Pearl finish.
- Compatible with most popular pigment or dye inkjet printers.
- Instant drying, water resistant surface
- Photo quality images
- Excellent results for both colour and black and white printing
- Good surface scuff resistance to general handling.

Printing Tips

To load the paper into the printer feed tray, follow the printer manufacturers advice.

Prints will be touch-dry directly after printing and can be handled immediately. However, stacking, storing, framing, and displaying prints in albums should only be carried out when the images are completely dry. We recommend leaving them for 24 hours or at least overnight for any out-gassing from the inks to be completed. The actual drying time will vary according to the ambient conditions where you are printing.

The paper is compatible with pigment or dye inks and most photo-dedicated/photo-capable printers, using the manufacturer's original inks.

The printing side is the glossier side of the paper. The paper is packed in the box printing side up. To ensure that the paper remains flat, store the paper in the original box until you are ready to print. Always store the boxes flat, not on their edges.

Handle the paper carefully, and avoid touching the printing surface as this may cause finger marks, and adversely affect colour and image quality.

As with all photographic and inkjet materials do not expose this paper to extremes of temperature and humidity as this will adversely affect image quality and colour.

Printer Settings

HARMAN PHOTO CRYSTALJET ELITE RC is designed to give excellent results when used with a variety of printers, whether pigment or dye using the manufacturers printer driver.

For most users, good results may be obtained using the appropriate photo paper for the printer e.g. Epson Premium Photo Glossy / Luster. In the application let the printer manage colors then select the appropriate paper in the printer dialogue box.

- Choose "Best Quality" or "High Quality" Photo setting
- Choose "Photo Quality Media" of the closest surface match.
- Use Color Management = On

For advanced users aiming to achieve the very best quality and colour matching, we recommend the use of ICC Profiles. HARMAN technology produce ICC Profiles for most professional model inkjet photo printers and detailed instructions can be found later in this document. ICC Profiles can be downloaded free from www.harman-inkjet.com

The printer settings we recommend are based on extensive practical tests at our factory, and evaluation using calibrated equipment and professional software.

Depending upon your particular set-up you may find that you need to change these settings depending on your personal preferences, the types of images you are printing and your local conditions.

For example, if a warmer or darker image is required to suit your personal preferences, you may need to increase 'saturation' or 'intensity'. Similarly, changing the media selection, which appears in the printer software's drop down menu, can also dramatically alter the look and colour of resultant prints. Do not be afraid to experiment to achieve the look you are seeking.

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Use of ICC Profiles

Installing ICC Profiles

Download and unzip the appropriate ICC profile for your media/printer/ink combination and locate it on your desktop for easy retrieval. The profile will then need to be installed into the appropriate folder (depending on the operating system). See below for location.

Mac: OS 8 – 9 - System Folder/ColorSync Folder
Mac OS X – Mac HD/Library/ColorSync/Profiles
Microsoft Windows 9x – C:\Windows\System\Color
Microsoft Windows 2000 – C:\WINNT\Spool\Color
Microsoft Windows XP / Vista / 7 / 8
C:\Windows\System32\Spool\Drivers\Color

TIP MS Windows Users may also simply right click on the ICC profile and Select "Install Profile"

Using the Installed ICC Profile in Graphics Package (e.g. Photoshop/Lightroom etc.)

Go to the Print option control
Select Color Management or Color Handling
Let the Application Determine Colors
Under Profile / Print Space choose the Installed Profile
(HARMAN_CJ_ELITE_(SURFACE CODE#_PRINTER_VERS)
Surface codes GL = Gloss, LS=Luster/Pearl
Rendering Intent - Perceptual
Black Point Compensation - On
Select Print

In the Printer Driver Dialog Box

Under Printer Settings select Photo/Highest Quality
For Media select Photo Premium Glossy/Luster as appropriate
Select Maximum Quality
Use Color Management = Off, this may be shown as
ICM = Off in some printers and is very important.
Select Print

Storage and Display

The well-established recommendation for storing traditional colour photographs in a "cool dry place" can also be applied to inkjet prints. This can be broadly defined as 24C (75F) or lower, with relative humidity in the 30-50% range. Attics and basements, or cellars, which can be subject to wide swings in heat and humidity, are not suitable environments for long-term storage.

Inkjet prints develop less stain than traditional colour photographs over time, and thermal fade (i.e. from heat alone) is also generally not an issue with inkjet inks. Nevertheless, there are two important factors to be aware of that can seriously shorten the life of inkjet prints. These are high humidity and air pollution. The extent to which a print will react to these factors is dependent on whether they were printed with dye or pigment inks.

Inks used in printers fall into two categories; dyes that are similar to those used in traditional colour photographs and pigments, that are the colorants found in paints.

Pigments are generally more resistant to high humidity, air pollution and light fading than dyes.

When prints made with dye inks are subjected to high humidity or dampness, the colours have a tendency to bleed or spread, resulting in blurred looking prints. In extreme cases, direct water contact will cause streaking and destruction of the image. Prints made with pigment inks though, are much less susceptible to the effects of humidity, and are also quite water resistant.

High humidity can also promote the growth of mould.

Atmospheric pollutants, especially ozone, can also cause image degradation - with unprotected dye ink prints being the most susceptible. However, this can be easily minimised by storing prints in photo albums and/or polyester sleeves in storage boxes designed for the long-term storage of photographic prints.

Prints intended for long-term display should be protected behind glass, or laminated to reduce the influence of pollutants, excess humidity, and other deterrents to print life.

Print Display Life

Today's inkjet printers and latest generation ink sets, combined with state of the art photo quality inkjet papers such as those from HARMAN technology, can produce prints that not only rival the quality of traditional colour photographs but that also can comfortably outlast them. However, as with traditional silver halide colour photo prints, proper care in storage and display (as described above) is required to maximise the life of prints. Actual life will vary according to the specific printer, ink, media, printed image, and display conditions.

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