



HP Latex 1500 and 3x00 Printer Series

TECHNICAL DOCUMENT for getting the best results with the Double-sided Day Night Kit

Double-sided Day Night Kit

What is the Double-sided Day Night Kit?

From city-light posters to store signs, there is a wide range of outdoor applications that can be placed in lightboxes. This way, they can be effective regardless of the time of the day.

During the day, thanks to the sunlight, we are able to see them properly as frontlit posters. When night falls, the artificial light sources behind the posters are switched on, allowing them to capture our attention. This is a fantastic way of maximizing the impact of an advertising campaign or making a store more visible.

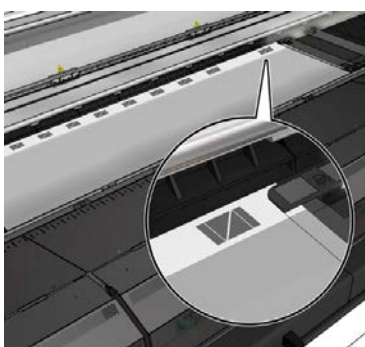
By printing on both sides of the media, the colors will look perfect under any light. If the light source comes from the front, the light will reflect on the media and the viewer will only see the ink placed on the front side. If the light source comes from the back, the viewer will observe the ink placed on both sides; the extra layer adding greater saturation.

The printer will automatically detect exactly where to print on side B, thanks to a specific sensor, and will compensate for deviations, skew or even bowing, resulting in amazing accuracy with less than 2mm of error at any point, regardless of the length or width of the job. Forget about manually adjusting side B...let the machine print it by itself without the operator even being there.

Real-time corrections:



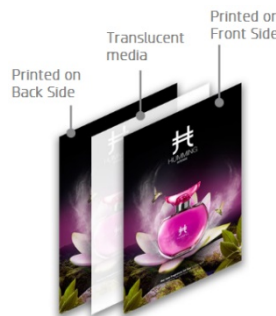
The HP Latex Day Night Kit is available as an optional accessory for the HP Latex 1500 Printer and the HP Latex 3000 Printer series.



- Sensor reads registration marks
- Each time the printer finds a mark, it makes calculations
- Printer makes adjustments in real time
- No special skills needed.



Media types: Translucent



Backlit PVC banners

Translucent PVC banners intended for retro-illumination.

Backlit paper

Tear-resistant, translucent paper intended for retro-illumination.

Maximum media roll dimensions that can be used:

HP Latex 1500

Width: 3.2 m (126 in)
Weight: 160 kg (350 lbs)
Diameter: 30 cm (12 in)

HP Latex 3x00 Series

Width: 3.2 m (126 in)
Weight: 300 kg (660 lbs)
Diameter: 40 cm (15.75 in)

Please be aware that Dual roll configuration is not supported when printing with the Double-sided Day and Night kit.

For more information about the media profiles available, visit the [Media Locator Solution](#). It is continuously updated with new media profiles.

You can find more information in the:

[Latex 1500 Manual](#) and [Latex 3x00 series Manuals](#).

The kit is in fact a service-installed upgrade of the machine. The upgrade consists of a set of LED lights on the printer platen and a light sensor on the carriage – these are used to track and align the image on each side. The kit also includes output zone lighting (like the 3000 series)—frontlit and backlit—so that registration can be checked by the operator.

HP Latex 1500

Double-sided Day and Night Kit Part Number **P4P91A**

HP Latex 3000 Series

Double-sided Day and Night Kit Part Number **J8J14A**



Double-sided Day Night vs. Backlit applications

Backlit plots are designed for applications that are retro-illuminated all the time. They are printed only on one side. The ink density and the number of passes needed to obtain bright colors typically start from 10 passes and 150% ink density. If retro illumination disappears, the image will become dark.

Double-sided Day Night plots, however, are designed for applications that are sometimes retro-illuminated and sometimes with front illumination. They are printed on two sides. The HP Latex printer reads printed fiducials on the front side to compensate for the real time image printed on the back side in order to ensure proper registration from side to side. The ink density needed to obtain bright colors is divided onto the two media sides. This way, when plots are front-illuminated, the image will be seen with natural colors and when plots are back-illuminated, the image will continue to be seen with natural and bright colors.

Recommended print modes

It is recommended to use Generic PVC and Paper media profiles available on the printer. If for any reason you would like to create your own profile, you could always clone a generic one and use it as a starting point.

To select a generic Double-sided Day Night substrate when loading a roll: in the IPS, click the **Substrate Type** drop-down list and select the substrate to load.

Suitable generic substrates are:

- Front Side or Side A: Generic Side **A** Translucent PVC Banner
Generic Side **A** Translucent Paper
- Back Side or Side B: Generic Side **B** Translucent PVC Banner
Generic Side **B** Translucent Paper

Some possible configurations that you could use are:

HP Latex 1500

<i>Category: PVC banner</i>	
<u>Front Side</u>	<u>Back Side</u>
<i>Generic Side A – Translucent PVC banner</i>	<i>Generic Side B – Translucent PVC banner</i>
6 passes, 120% ink density	4 passes, 100% ink density
4 passes, 100% ink density	3 passes, 80% ink density

<i>Category: Paper</i>	
<u>Front Side</u>	<u>Back Side</u>
<i>Generic Side A – Translucent Paper</i>	<i>Generic Side B – Translucent Paper</i>
6 passes, 120% ink density	4 passes, 100% ink density
4 passes, 100% ink density	3 passes, 80% ink density

HP Latex 3x00 Series

<i>Category: PVC banner</i>	
<u>Front Side</u>	<u>Back Side</u>
<i>Generic Side A – Translucent PVC banner</i>	<i>Generic Side B – Translucent PVC banner</i>
8 passes, 100% ink density	6 passes, 80% ink density
6 passes, 90% ink density	4 passes, 60% ink density

<i>Category: Paper</i>	
<u>Front Side</u>	<u>Back Side</u>
<i>Generic Side A – Translucent Paper</i>	<i>Generic Side B – Translucent Paper</i>
6 passes, 90% ink density	4 passes, 60% ink density

There are more available print modes to be configured in case you need them. You can find all the information in the [HP Latex 1500 User Guide](#) and [HP Latex 3x00 series User Guide](#). There is a complete chapter in the User Guide with *Recommended print modes for each substrate type*.

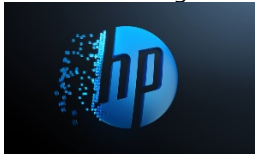


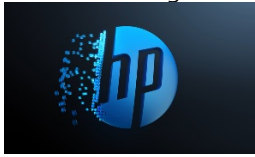




Use examples









Backlit

Front Side image: 	 Day   Backlight ON	 Night   Backlight ON
	Back Side image: NO 	 Day   Backlight OFF

Day and Night (same image on both sides)

Front Side image: 	 Day   Backlight ON	 Night   Backlight ON
	Back Side image: 	 Day   Backlight OFF

Day and Night (different images on each side)

Front Side image: 	 Day   Backlight OFF	 Night   Backlight ON
Back Side image: 		You could see overlap front side and back side images and have different effect pending on front or back illumination.



In this document is basic information that you could use if you are interested in using the Double-sided Day and Night Kit. In case you would like to start printing, you can find another document [here](#) where it is explained step by step how to print your first plot using the Double-sided Day and Night Kit.