Latex Knowledge Center



# How to RIP and Print in Sandwich Mode with Latex 700W and 800W



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# 1. Introduction

A new sandwich print mode, 5 Layers, has been added to the machine with the upgrade of the firmware *(Firmware PLS\_20\_21\_10.10)*. The Latex 700W and 800W printers now have the possibility to print both Day and Night (3 Layers) and Dual Side (5 Layers).

**NOTE:** The RIPs need to be updated to the latest version to be able to use this firmware.

## i. Considerations

The two images must have the same size and resolution.

The image you want to be in contact with the substrate (Side A) must have the white layer inside.

The image you want to be in contact with the substrate (Side A) will always be the source of the composition. The other image (CMYK) will be added to this one, not the other way around.

Files RIPped against a backlit category substrate are printed assuming they will be illuminated and are going to be the "light side".

Files RIPped against a non-backlit category substrate will be those exposed to the sight of the user, therefore the "visual side".

## ii. Dual Side vs Day and Night

Day and Night (3 Layers) Dual Side (5 Layers)

Sandwich mode comes with two different applications, Dual Side and Day and Night. A Dual Side application allows an image to be viewed from both sides of the transparent media equally, while a Day and Night application is designed to be viewed from one side only, and it changes if it is backlit.

# 2. RIP

The RIP will be responsible for sending raster data with 9 channels (CMYK**W**CMYK) to the printer when the user selects a sandwich print mode.

If the user selects the 78p (AKA 3L) print mode, the RIP will generate the 9 channel raster, and the printer will process the information of the **W** channel as 3 layers of white ink.

For the 123p (AKA 5L) print mode the raster is still the same but the printer will now process the information of the **W** channel as 5 layers (2 layers of white ink + 1 layer of black ink + 2 layers of white ink).

The only difference when preparing the job through the RIP is to select one or the other print mode depending on the sandwich mode wanted.

# i. <u>SAI</u>

## Considerations

- It is not possible to nest different sandwich jobs.
- It is not possible to do tilling with sandwich jobs.

#### How to

a. In Production Manager load the **Side A**, **White Layer**, and **Side B** jobs.



- b. In the Side A job open the Job Properties.
- c. In the **Color Management** tab be sure to set the right print mode for the sandwich job.

9 🔁 🖬			_
Color correction			
Use color corre	ection $\checkmark$		
Output profile:	Generic Self-Adhes Vinyl_78p_6c_W_SW_ $\sim$		
Media:	Generic Self-Adhes Vinyl $\qquad \qquad \lor$		
Print mode:	78p_6c_W_SW_T110_B110 ~		
Resolution:	600x600 input V DPI		
Color mode:	CMYKWCMYK 8 bits V Choke		•
Dither:	✓ <u>E</u> dit		s.
Smooth gra	dients	-	pertie
	Advanced	ן ר	b pro
			sic jo
Simulation:	None		ä
Use color ma	apping		
Ignore overp	rint Anti-aliasing		

d. In the **Printer Options** tab set the **White type** to **Spot color**. Job Properties

Preset: [Use Default Job Pro	perties]	~	· 🔚 🔚 📭 👘
		i 🗐 🚹 🛆	
Print mode settings:	CMYKLITESW Media manag	InkDensity 110 Passes 78 Jement	WM SW3L V
	Media source: Margin type:	Auto ~ Normal ~	
	Margin layout:	Standard ~	
	Optin	nize for lamination	
	White type:	Spot color $\checkmark$	
Smart chokes	Smart chocke	es pixels amount: 2	~

e. Repeat steps b and c for the White Layer job.

- f. In the **Printer Options** tab set the **White type** to **Substrate**.
- g. Repeat steps b, c, and d for the **Side B** job. (Side B as Spot color).
- h. Select all jobs: Side A, White Layer, and Side B, and select the option **Create a layer job** (use the right mouse button to open the menu).



i. Put the jobs in the right order (CYMK+W+CMYK) and then just click the **OK** button in the **Layers printing** window.

Layers printing Layer-A.jpg (print as Colors front,) Layer-B.jpg (print as White,) Layer-C.jpg (print as Colors back,)	Print as:	
	L Colors back	
	White Substrate ~	
Cancel	1	ОК

¢			<u>×</u>
<	<ul> <li>W Buho_OK.pdf Done</li> <li>Multikyve (Fjeld) Holding Layer-Ajpg Layer-Ajpg Layer-Cjpg</li> </ul>	nallem nallem nallem nallem	Job Name     Multilayer (3 jobs)       Setup     HP Lates 800 W       Sender     nallen       Date     7/15/2021 44038 PM       Color     Color       Output profile     Generic Cat Self-Adhesive Vinyl_78p6c110_WSW160.icc       Dither type     Type       Type     Layer job       Copies     1       Dimensions     File Size       File Size     103.1K       # Pages     1       File type     IPEG       After Output     Hold       Resolution     600/600 input       Path     C1/Userst/nallem/Pictures)

j. The Production Manager will first RIP the 3 jobs and then it will send the jobs to the printer (in the printer queue you will see only one job with the name of the **Side B** job).

Print jobs	۰۰۰ 🕕 🌚
My-New-Media 1,626 mm × Unknown	Side B.jpg
Nojobs	Substrate not loaded for this job
<ul> <li>⊘ Generic Self-Adhesiv 1 ∧</li> <li>Side B.jpg</li> <li>186 × 106 mm</li> <li>78p_6c_W_SW_T110_B</li> </ul>	

## ii. <u>Caldera</u>

#### Considerations

- It is not possible to nest different sandwich jobs.
- It is not possible to make copies of sandwich jobs.
- It is not possible to do Print&Cut jobs.

#### How to

- a. To start the sandwich, click the button with three dots (...).
- b. In the Manage Layers window, click the Add button.

• F	IP-Latex-800-W 💿 🔿 🛞		
	No image		
		Manage layers	×
Copies	: 1 ±	Layers Configurations Settings	
Resolution	: 600 🗵	Teners dipart i unitation per participation approved	1
Loading	: Custom (Roll 1625.6 mm 🔳 🧝		ŵ
Media	: Generic Self-Adhesive V 🕎 📿		∰₹
Mode	: СМҮК8	제 동생은 것은 것은 것이 성장에 넣었을 것이 같은 것	1
Quality	: 6p_6c_100 6p6c100		Ϋ́
Action	: Rip then Print	Add layers	
	Keep Ripped file	Printer specific : Sandwich	
Default con	figuration	Configuration : No configurations	₹
No laver		Layer 1 : Sandwich (Side A)	
		Layer 2 : Sandwich (Side B)	
	<b>२ = ो ⊗</b> ⊗		
		Add	1
? Ready	Print Quit	Clos	e

c. The layer structure will be present, now click **Close**.

Manage layers	×
Layers Configurations Settings	
Layer Support E Layer 1 : Sandwich Layer 1-1 : Sandwich (Side A) Layer 1-2 : Sandwich (Side B)	⊑ ← → ∰ @ \^
Add layers	
Printer specific : Sandwich	
O Configuration : No configurations	
Layer 1 : Sandwich (Side A) Layer 2 : Sandwich (Side B)	
	Add
	Close

- d. Load the **Side A** image to the driver window, you will need to set the right print mode.
- e. Add the extra white layer to the **Side A** image.

- HP-Latex-800-W (* * *)	Page 5	Setup ×
Layer-A+W_caldera.ttf CMYK 8 bits 176.4 x 105.8 mm		Main Marks S&R Cutting Colors White Enable Separation Method : Use an Extra-Channel & Auto Channel : White
Copies : 1 :		
Loading : Custom (Roll 1625.6 mm 2 2 Media : Generic Self-Adhesive V 2 2	11	Adjust : 0.00 2 pixel Print Marks Available sources
Mode : CMYK8		White Extra Channel
Action : Print	8	E
Default configuration E C Layer 1-1 : Sandwich (Side A)		
🗄 🔧 \Xi 🕼 😵	<b>A</b>	Show all possibilities     Linearization
<b>?</b> Ready Print Quit		Vise a custom curve
	Hide backgound image	M Generate even if empty
	? Unit : • pixels • inches 🧕 mm	Print Reset Close

- f. To load the Side B image to the Driver window you need to select the Layer 1-2: Sandwich (Side B) option on the menu.
- g. Select the appropriate print mode.

h. Send to print.



i. On the printer front panel, you will see the following.



## iii. <u>ONYX</u>

#### Considerations

- It is not possible to nest different sandwich jobs.
- It is not possible to do Print&Cut jobs.
- When making copies and using the RIP to create the white layer, add the white layer after selecting the number of copies needed.

#### How to

- a. Load the **Side A** job and open it in job editor.
- b. In the **Printer and Media** tab set the right sandwich print mode, the RIP will automatically detect the white layer of the job and will represent it as a light green.
- c. Go to the **Print** tab and press the **Submit** button.



- d. In the Rip Queue just click the job with the right mouse button and select the option **Edit and Printer Settings**.
- e. Click the Gear button to open the Color White Color window.
- f. In the **Color White Color (Sandwich mode)** window first click the **Color White Color** radio button.
- g. On the **Side B** image group select the option **File** and click the button with three dots (...). In the next window select the image of **Side B** and click the **Open** button.

h. When it finishes, click **OK**.

Print Ontions - HD Latex 900 W VM	X Calar White Calar (Sandwich mode)	0
rint Options - HP Latex 800 W VM	Color White Color (sandwich mode)	
Media: Generic Self-Adhesive Vinyi [Self-Adhesive Vinyi] Media Type: Generic Self-Adhesive Vinyi	Off	
	Color Write Color	
Print Mode	Side B image	
7dp_6C_vr_5vv_1110_6110	Same as 'Side A'	
Double-Sided Printing	User Select at Print Time	
Disabled		
	Name ending	
	Example:	
	Location:	_
Optimize for lamination		
White choke control	OK Cance	el
1 pixels	Media Print Mode Outter Time	
Accounting		
Account ID Project ID		Start
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OK Cancel		Con
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Media: Generic Self-Adhesive Vinyl [Self-Adhesive Vinyl] Media Type: Generic Self-Adhesive Vinyl		
Media: Generic Self-Adhesive Vinyl [Self-Adhesive Vinyl] Media Type: Generic Self-Adhesive Vinyl		
Media: Generic Self-Adhesive Vinyl [Self-Adhesive Vinyl] Media Type: Generic Self-Adhesive Vinyl Print Mode 78p_6c_W_SW_T110_B110	~	
Media: Generic Self-Adhesive Vinyl [Self-Adhesive Vinyl] Media Type: Generic Self-Adhesive Vinyl Print Mode 78p_6c_W_SW_T110_B110	~	
Media: Generic Self-Adhesive Vinyl [Self-Adhesive Vinyl] Media Type: Generic Self-Adhesive Vinyl Print Mode 78p_6c_W_SW_T110_B110 Double-Sided Printing	~	
Media: Generic Self-Adhesive Vinyl [Self-Adhesive Vinyl] Media Type: Generic Self-Adhesive Vinyl  Print Mode  78p_6c_W_SW_T110_B110  Double-Sided Printing  Disabled	~	
Media: Generic Self-Adhesive Vinyl [Self-Adhesive Vinyl] Media Type: Generic Self-Adhesive Vinyl Print Mode 78p_6c_W_SW_T110_B110 Double-Sided Printing Disabled Color White Color	~	
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Media: Generic Self-Adhesive Vinyl         Media Type: Generic Self-Adhesive Vinyl         Print Mode         78p_6c_W_SW_T110_B110         Double-Sided Printing         Image: Disabled         Color White Color         Image: Color White Color, File: Layer-C.tif         Image: Optimize for lamination         Image: White color for lamination         Image: Optimize for lamination         Image: Accounting         Account ID       Project ID		
Media: Generic Self-Adhesive Vinyl         Media Type: Generic Self-Adhesive Vinyl         Print Mode         78p_6c_W_SW_T110_B110         Double-Sided Printing         Image: Disabled         Color White Color         Image: Color White Color, File: Layer-C.tif         Image: Optimize for lamination         Image: White Color for lamination         Image: Accounting         Account ID         Project ID		
Media: Generic Self-Adhesive Vinyl         Media Type: Generic Self-Adhesive Vinyl         Print Mode         78p_6c_W_SW_T110_B110         Double-Sided Printing         Image: Disabled         Color White Color         Image: Color White Color, File: Layer-C.tif         Image: Optimize for lamination         Image: White Color for lamination         Image: Accounting         Account ID         Image: Project ID		
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- i. From the RIP Queue just press the **Print Now** button.
- j. You will see that **Side A** will be moved to the bottom of the RIP window and **Side B** will remain in the top window.
- k. Click the **Print Now** button again to send **Side B** to the printer. (*the job will only be displayed on the printer queue after sending the Side B job, and the name of the job will be* **<Side B>\_@B**).

l. On the printer front panel, you will see the following.





# 3. Firmware considerations:

If you want to add the new white print modes available with the last firmware to profiles created before the upgrade, you will have to:

- Clone from a generic and create a new preset.
- To add them to an existing preset and keep the settings, CLC, etc., proceed as follows:
  - Batch export all the custom presets through the Embedded Web Server or Print OS Configuration center.
  - Batch import.
  - Reboot the printer.