

# New firmware and IPS update package available (MR4)

For HP Latex R Printer Series

May 2020

New versions of firmware and software for the HP Latex R Printer Series are available to download.

Related links: www.hp.com/go/latex/

Printers related to this article HP Latex R series

### Important note

There is a new firmware and IPS update package for HP Latex R Series Printers, we strongly recommend that **all printers are upgraded** to get benefit of all the improvements of the update.

Before starting the FW upgrade, make sure to contact HP support.

## Where to find the update package

Firmware: **SKAAR\_19\_19\_36.15** HP Internal Print Server (IPS): **19.101.7** 

http://hp.com/go/LatexR1000/firmware http://hp.com/go/LatexR2000/firmware

## How to implement the upgrade

Both components—the firmware and the IPS—must be installed together. No other combination is supported. Firmware update is allowed in **Normal mode** only. Do not try it in Diagnostic mode, or in any other mode.

Mandatory installation order:



Steps to implement the upgrade:

LFP Customer Assurance





## Download and unzip the files through the links

- 1. Download the 2 files that contain the upgrade files using one of the previous links. The files are:
  - If downloaded through WeTransfer:
    - FD19.15\_MR4.zip
  - If downloaded through hp.com:
    - FW19.15\_MR4.zip
    - FW19.15\_MR4.z01
- 2. Extract the contents using a file compressor utility (do not use the one built-in to Windows).
- 3. Turn OFF Tablet mode: Swipe in from the right side of your screen to open the action center. Turn off Tablet mode by touching the **Tablet mode** icon.



4. Copy the files onto the IPS PC's hard disk (it is recommended to use a dedicated folder, not the desktop).



## Download the files through the ASU

If the installation is done from a previous MR3 version to MR4 the users will see in their IPS a maintenance warning them of the new firmware that'll look similar to this.



With this version of the Automatic Software Upgrade, users will have the files to perform the software upgrade in the folder specified in the maintenance already downloaded and prepared to do it via a service agent.

## Update the firmware

- 1. Tap the **Home** icon, then tap the **About** icon at the bottom right of the Internal Printer Server's main window. A window showing the details of the current firmware version installed in the printer will appear.
- 2. Tap **Update firmware** and browse to select the .fmw file; select it by tapping **Select**.
- 3. The firmware will be uploaded and installed on the printer. The status of the update can be checked on the right side of the IPS main window. There are two possible statuses: **Receiving** and **Installing**.



	About						LIGHTS
👌 Ink					E Queue management		
	FIRMWARE VERSION: Skaar_15_18_31.10				Default		MOVE BELT (mm)
	SERIAL NUMBER: Sg6b71n003	PRODUCT NAME: Hp r2000 printer					500
	PRODUCT NUMBER:	SERVICE VERSION:					
	Firmware update		_				SCAN BEAM (mm)
			_				Printing
	Preparing firmware upd	ate. Do not turn off printer			+		
			_		No queue prepared		EDGE HOLD (mm)
			-				
							TEMPERATI
				ances			Installing
			Close				
		Skaar, 15, 16, 31.10 SEGAL NUMBER Sg6b71003 PRODUCT NUMBER F Firmware update Preparing firmware update	Skaar, 15, 16, 31.10  Skaar, 15, 16, 31.10  SEGAL NUMBER Sg6b71003  PRODUCT NAME Firmware update Preparing firmware update. Do not turn off printer	Skar_15_18_31.10  SERAL NUMBER PRODUCT NAME SSpb/T 1003  Fp 72000 printer PRODUCT NAME F Firmware update	Skar_15_18_31.10     Update Innere       SERAL NUMBER     PRODUCT NAME       Sigb/T In03     Hp r2000 printer       PRODUCT NUMBER     SERVICE VERSION       Firmware update     Preparing firmware update. Do not turn off printer	Skaar_15_18_31:10  Update termset  SpBD/11003  Hp /2000 printer  PRODUCT NAME  Firmware update  Preparing firmware update. Do not turn off printer  No queue prepared  I	Skaar_15_16_31.00 Uddet Strikets SpBD/1003 Hp 2000 printer PRODUCT NAME: Firmware update Preparing firmware update. Do not turn off printer No queue prepared No queue prepared

4. Upon completion, the IPS will show the following message. Tap **Ok** to continue. At this point, the printer will reboot without any interaction. If it does not, reboot the printer manually.

Firmware update	
Firmware was updated successfully. Printer will now be restarted.	
Ok	

**IMPORTANT**: The first boot after the firmware upgrade takes more time than usual.

5. Wait until the printer boots completely.

### Update the HP Internal Print Server (IPS)

- 1. Make sure the printer has boot up completely.
- Take note of the IPS preferences by taking some photos/screenshots of the IPS Preferences. Tap to access to the preferences and check the values in the "System," "Connectivity" and "Queue" sections, including (among others) the hot folder configuration.
- 3. Run the **HPIPs-Installer.exe**. This installer will close both the Front and Back End and Install the IPS software, this may take some time.

**NOTE:** the IPS updates all the jobs there are in the inbox and the history tab to make them compatible with MR4, so the more jobs there are, the longer this upgrade will take. Please, once you've launched the **HPIPs-Installer.exe** have some patience as this process will be processing in the background. Don't launch it again.



- 4. Once the installation process is complete, the IPS installer will prompt you to reboot the IPS PC. Please accept.
- 5. If the HP Internal Print Server software doesn't boot automatically, tap first on **HP Internal Print Server** and then on **HP Internal Print Server Front End**.



6. On the first boot, the Printer Data Sharing Agreement (PDSA) window will appear. Please click **Accept** to continue.

**NOTE:** Sometimes the PDSA won't appear on the first IPS boot up. It'll appear eventually by rebooting the IPS.

Accept data transfer agreement	
Printer Data Sharing	
Agreement	
Enrollment HP printer hardware, HP printer software and HP printer services (collectively "HP Printer Product(s")" may collect Customer Print Data, as defined and described below, to which HP or an HP authorized agent may have access. Recipient grants HP and/or an HP authorized agent permission to collect Customer Print Data and Recipient	
Cancel Accept	

HP strongly suggests accepting in order to take advantage of the Information retriever functionalities, and for a faster and better remote support experience.

7. As an additional step, to ensure that the **Remote assistance** option is enabled in the IPS Preferences window so that the system can send printer information to the HP servers. Notice that this option



will be enabled by default if the PDSA has been accepted when installing the new Internal Print Server.

System		
Connectivity	Jint connection un	http://hpiatex.8080/jmtservice
	Hot folder	0
Service	Jobs are automatically added from selected folder to the Inbox	
HP Cloud Services	Targel	Browse
	Remote assistance	
	Proxy server	~
	Manual proxy server configuration	0

8. Re-apply all the specific IPS preferences captured in step 1.

**NOTE:** If the JMF connection is lost, please, reboot the IPS PC.

9. As a recommended action, perform the first substrate synchronization with Configuration Center: Substrate Library > Back up substrates.

**NOTE:** In case of problems when starting the Internal Print Server software, please refer to Appendix 2 to troubleshoot these issues.

## RIP synchronization

The actions below must be carried out after the firmware upgrade in order to synchronize the media list and to import and export the ICC profiles.

### Caldera RIP

- 1. Export your custom ICCs and save them in a folder on your PC.
- 2. Go to Easy Media.
- 3. Select the printer and follow the steps to synchronize the media. Click **Import > Autosync > Missing presets only**.





- 4. Check that all media have been synchronized.
- 5. If there are any missing or mismatched media, repeat the previous procedure to synchronize them.
- 6. This time, instead of selecting the 'Add Missing Presets Only' option, select Full Reset.

**IMPORTANT**: This option deletes all existing media in Caldera and imports all media located in the IPS. If some media is stored in the RIP but not in the IPS, this media will be deleted. Make sure you have a backup of the media missing from your IPS.

7. Go to Easy Media and import your previously saved custom ICCs.



### **Onyx RIP**

- 1. Export your custom ICCs and save them in a folder on your PC.
- 2. Go to **Configure Printer > Device > Features > Configure** and select **From Printer**. **Select All** the media and click **OK** to synchronize.

en Open HP WallArt Job Editor Layout Tool CUT-Server Media Manager Edit Quick Se	ets Configure Print	er Recalibrate	Configure Proofing	Swatch Books				
r Status % Complete Elapsed Time Remaining Time Media P Latex R2000 Uninitialized Generic	Self-Adhesive Vin	Page Size Sheet 98"x96"	Placement Strategy Print Jobs Individ		ħ	d .		
Show Jobs For: Al Printers • >>> ×								
Preview Jobs Ready to Print Status Order Nu	Printer	Sze	Media	Copies Print Mode		All the second s	cted Conto	xur Cu
Configure Printer - HP Latex R2000		23 D	evice Features			_3		
Quick Set Device Media Page Sizes Properties Ink Calculation			Printer Features:				-	
Printers			Global Printer Option			Configure		
Physical Printer: Port:								
HP Latex R2000 Print to HP Internal Print	Configure Port							
Import Media	Configure Porc							
Realized and the second se	Features	<b>n</b>						
Meda Profiles		<u> </u>						
Select All  (d) (Aluminum Composite) Generic Aluminum Composite Panel								
<ul> <li>✓ (Aumnum Composite) Generic Auminum Composite Panel</li> <li>✓ (Cardstock and Corrugated Carton) Generic Compressed Cardboard</li> </ul>								
Cardstock and Corrugated Carton) Generic Corrugated Cardboard			-					
Cardstock and Corrugated Carton) Generic Honeycomb Board     Foam PVC) Generic PVC Foam						Done		
😨 (Foamboard) Generic Paper Foamboard						Done		
(Foamboard) Generic Plastic Foamboard     (Glass and Ceramic) Generic Ceramics			lobal Printer Options		_			23
(dass and ceranic) Generic Gass								
V (Metal Sheets) Generic Metal Sheet			Import Media					
(Paper) Generic Baddit Paper     (Paper) Generic Coated Paper	ок	Help	Synchronize ON	X ICCs to all compatible m	odes			
😨 (Paper) Generic Paper			From Printer					
(Plastic Corrugated) Generic Plastic Corrugated     (Plastic Films) Generic Backlit Polycarbonate Film								
(Plastic Films) Generic Backit Polycardonate Film     (Plastic Films) Generic Backit Polycardonate Film			Enable JMF Status					
Plastic Films) Generic Backlit Polypropylene Film			C. Charles and States					
(Plastic Films) Generic Baddit Polystyrene Film     (V) (Plastic Films) Generic polycarbonate Film						OK	Cance	8
📝 (Plastic Films) Generic Polyester Film		L.			_			_
(Plastic Films) Generic Polypropylene Film     (Plastic Films) Generic Polystyrene Film								
(Plastic Solid) Generic Acrylic								
19 Martin Palat Connels Builds Amile								-
	s Order Nu	Printer	Size	Media	Copies	Print Mode	Resolution	
R	ecycla	HP Latex R2000	8.19" × 11.69"	Generic Coated Paper [Paper]	1	300 dpi, Indoor Signage 6p-110-6c	300	
OK Cancel R	scyda	HP Latex R2000	8.19" x 11.69"	Generic Corrugated Cardboard [HP]	1	600 dpi, Indoor Signage 8p-120-6c	600	
	ecycla	HP Latex R2000	8.27" x 11.69"	Generic Self-Adhesive	1	300 dpi, High Quality 12p-150-6c	300	
			*****			100 M 100 M		

3. Go to Media Manager and import your previously saved custom ICCs.

### **RIP** driver updates

You are also advised to update your RIP driver to ensure you have the latest improvements and bug fixes.

- For Onyx RIP, drivers can be downloaded from: http://www.onyxgfx.com/printer-and-profile-download-manager/
- For Caldera RIP, separate drivers can be downloaded for the different R Series printers:
  - o HP Latex R1000 printers:

https://workspace.caldera.com/index.php?model=download&action=execute&scope=update\_files&file\_id=83314&file\_m d5=67a8c36793ab6f6f016d1d9cd01977f4

o HP Latex R2000 printers:

https://workspace.caldera.com/index.php?model=download&action=execute&scope=update\_files&file\_id=81941&file\_m d5=76c702f95aab1d54df5bb4326db7ae7b



## Summary of changes

The MR4 firmware release includes the following new improvements with respect to the previous one.

- 1. Reduced load time between boards with rigid substrates, more copies per hour.
- 2. Fast sandwich modes and more profiles.
- 3. New 8-pass printmode for ACP.
- 4. Allow adding new jobs to a queue while it is being printed.
- 5. Multiple queues; prepare the next queue with a different substrate while printing the current one.
- 6. Improved choke algorithms to fix artifacts.
- 7. Enhanced Automatic System Upgrade.
- 8. Multiple job selection for drag-and-drop to queue, delete, and reprint.
- 9. Improved substrate feed with Edge Holders.
- 10. Optimized keyboard to enter numeric keyboard.
- 11. New high density thermoforming print modes.
- 12. Diagnosticability changes and improvements.
- 13. Other small improvements and bug fixes.



## Release notes

## Reduced load time between boards with rigid substrates, more copies per hour

### Changes

Tailgating is a fully automated print mode for rigid substrates. it optimizes printing workflow to minimize switching time between jobs and increases sustained throughput with rigid substrates, especially when printing small boards.

### Details

• Tailgating mode is used in combination with Hot Load mode where the printer will ask the operator to load the next board as soon as the first board exits the Media Input area. Once the operator presses the "Substrate ready" button, the printer will feed the next board as soon as possible, this reduces the gap between boards to the minimum required and the printheads will not perform a dedicated service routine between boards; they will service while printing.

•For certain printmodes for the Generic Plastic Solid and Generic Backlit Plastic Solid substrate family, this reduction won't be applied to make sure the substrate is not deformed in the printing zone and produces crashes.

•Furthermore, some substrates that were not deforming in the printing zone, due to this new feature may start to curl causing crashes. If that's the case, please, check the Heat-sensitive drying and Heat-sensitive Curing in the substrate

## Fast sandwich modes and more profiles

### Changes

A new fast sandwich print mode has been added for the 3-layer sandwich mode: 29 passes and 60% white opacity. This allow a faster 3-layer sandwich mode with a lower white layer opacity.

This new print mode has been added to the following profiles: Self-Adhesive Vinyl, Plastic Solid, PET, and PVC banner.



## New 8-pass printmode for ACP

### Changes

We have created a new print mode for the ACP to solve the banding that appeared in some colors with the 6-pass mode, while maintaining a good throughput: the 8-pass print mode.

### Allow adding new jobs to a queue while it is being printed

### Changes

There is a new functionality that enables a job to be duplicated at any moment.

### Details

By selecting a job and pressing this button, a pop-up window will prompt you to name the duplicate job, this duplicate will maintain all the same properties as the original job, and then by naming this job differently than the original one, you can add this one in the queue while the original is still being printed.

Job information	✓ Copies	Print mode	Arrived	Status
Generic Self-Adhesive Vinyl (x2)				^
Duplicate job				
Job name		inkdump750	MYK Duplicat	e

## Multiple queues, prepare the next queue with a different substrate while printing the current one

### Changes

•You can now have up to eight queues, and the transition when thickness differs between queues has been improved.

•A new button has also been added to the IPS so you can create a new queue without having to drag different substrate types into the queue.

•The print queues now remain open for longer, allowing more time to add jobs.



## Improved choke algorithms to fix artifacts

### Changes

The choke feature has been redesigned to add a new option that eliminates the defect that appeared in the acute angles when the choke was applied. We will now have two options for choke behavior,

### Details

•If the Thin lines option is chosen, the choke will behave the same as in the previous versions: preserving the thin white lines but showing the tearing in the acute angles.

•If the Acute angles option is chosen, the tearing will disappear, but so will the thin lines.

Once we have chosen which choke behavior we want, we can also choose to "Shrink only where color layers overlap white layer", which causes the white layer only to shrink where it overlaps with a color layer, the same as in the previous "Smart Choke".

## Enhanced Automatic System Upgrade

### Changes

•The new IPS installers automatically remove the previous IPS software before installing the new one, for easier installation.

•From now on, the firmware versions will be pre-downloaded to a folder in the printer's IPS PC.

To upgrade from MR3 to MR4, the maintenance linked to the firmware upgrade will show the folder the firmware has been downloaded to and, from MR4 onwards, the maintenance will show two buttons to automatically upgrade the firmware and the IPS software.

## Multiple job selection for drag-and-drop to queue, delete, and reprint

### Changes

There's a new feature in the MR4 IPS enabling the multi selection of different elements.

white ink options		
Choke white Shrink white lay		No choke 📏
→	Pixels to shrink -	1 +
	Shrink only where color layers overlap white layer	0
Choke white	e ink	
No choke		
Thin lines	Shrink all white ink edge, preserving thin lines	
Acute angles	Shrink all white ink, providing precision at acute angles	
→	Pixels to shrink -	2 +
	Shrink only where color layers overlap white layer	1



### Details

•This feature lets the user drag multiple jobs into the queue at once, creating new queues when needed.

•This feature can also be used to check multiple jobs from the history to send them back to the inbox or to delete multiple jobs at once.

## Improved substrate feed with Edge Holders

### Changes

Until MR3, the alignment bar lifted to the uppermost position to allow the user to load the substrate without intervening in the loading workflow.

Now the alignment bar rises above the substrate thickness and then lowers until there is a clearance of 1 mm, this gently pushes the substrate and helps facilitate its advance if it is slightly bowed.

## Optimized keyboard to enter numeric keyboard

### Changes

When using any field in the IPS that only allows numeric values, a new, numeric-only,keypad has been added, showing the maximum and minimum value, and improving the usability of the IPS.

Copies	-	5	+		
Substrate type	Generic Self-Adhesiv	5			X
Color mode	6 colors	From 1 to 2	50		
Printing method	N/A	7	8	9	-
		4	5	6	
Print mode	High Quality 12p-120-6c	1	2	3	
Margins (mm)		+/-	0		OK
	- 4.99 +				

## New high density thermoforming print modes

### Changes

•Heat Sensitive High Density 20p 260

- •Heat Sensitive High Density 24p 390
- •Heat Sensitive High Density White OF W160 30p 260
- •Heat Sensitive High Density White OF W160 33p 390
- •Heat Sensitive High Density White UF W160 38p 260
- •Heat Sensitive High Density White UF W160 42p 390

Generic Self-Adl	acho Mout	62			
Job information		✓ Copies	Print mode	Arrived	Status
	Ø				
🖄 Inbox	🕒 Hist	ory			



## Diagnosticability

### Changes

Diagnostics permitted in a different boot mode will appear in the menu but shaded. E.g. If you are in normal mode, you'll see the checker shaded for these diagnostics you can run in diagnostic mode also there is a new search bar in the diagnostics menu.



## Appendix 1 – IPS doesn't boot

In case the Internal Print Server software doesn't boot properly after the upgrade, please perform the following action:

1. When the application has started, the following message appears. This error message regards an issue with Visual C++ redistributables.



"Could not load file or assembly 'MachineOperationsWrappers.dll" or one of its dependencies - The specified module could not be found. HPIPS at IPSApp.PrinterConfiguration.CreateManagers() at IPSApp.IpsLogic.Run()"

a. Swipe in from the right side of your screen to open the Action Center and select All settings. Go to System > Apps & features and search for Visual C++ redistributables.



- b. Uninstall all aps matching the name "Microsoft Visual C++ \* Redistributable \*".
- c. Run the IPS installer again. The required Visual C++ libraries will be installed during the process.

### Appendix 2 – Firmware upgrade error

In some cases the new firmware cannot be installed upon trying to update it:

RODUCT NUMBER	SERVICE VERS	ION:	
Firmware update			
Failed			
		ок	

If so, please perform the following action to troubleshoot the issue:

Check if the firmware file that you are trying to install is corrupted by computing the MD5 checksum value:

- 1. Go to <u>http://www.winmd5.com/</u> and download the windmd5 software.
- 2. Run the WindMD5.exe file. The following window will pop up:



G WinMD5Free v1.20	
WinMD5Free	www.winmd5.com
Select a file to compute MD5 checksum (or drag and drop a file onto this	window)
	Browse
	Cancel
File Name and Size: n/a Current file MD5 checksum value:	
n/a	
Original file MD5 checksum value (optional). It usually can be found fron	n website or .md5 file
paste its original md5 value to verify	
<u>W</u> ebsite <u>A</u> bout	Exit

3. Click Browse and select the SKAAR\_19\_19\_36.15.rfu.fmw file.

4. Paste the value "949e4ecc7a82b8893317d7ea2da3e8ed" in the "Original md5 value" field and click Verify.

If the two values do not match, the downloaded file is corrupted. In that case, download the firmware

file again from the HP support web site.