

RF640

Technote

RIP SOFTWARE - VERSION 12 - CALDERA 2019



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Drivers:

- Roland-RF640-ESOL: Eco-solvent 2xCMYK
- Roland-VersaEXPRESS-RF640-ESOL-8C : Eco-solvent CMYKkROG (*)
- Roland-RF640-WBASE-4C: Water-based 2xCMY
- Roland-RF640-WBASE-6C: Water-based CMYKcm (*)
- Roland-RF640-WBASE-8C: Water-based CMYKcmOG (*)

(*) Driver supports custom **NColor** modes (NColor key required) and ink channel reordering.

It is very important to use the correct driver according to the printer's ink setup, because the print modes are not the same. Do not use 4 color driver to print in CMYK mode on a 6 or 8 colors printer. Do not use 6 color driver to print in CMYK or CMYKcm mode on a 8 color printer. The output could be incorrect.

Driver History

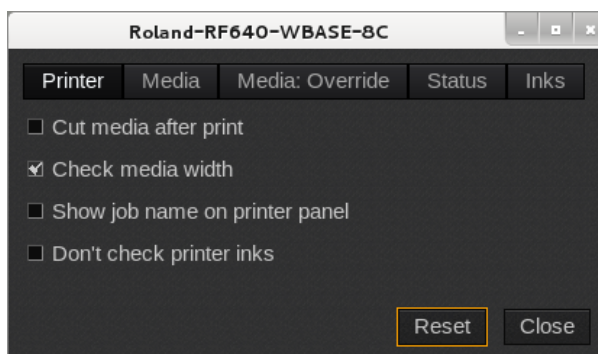
Supported since **Version 9.20**

Version 10 History

Release	Date	Comments
A (V10.2)	04/2016	Ink level status showed wrong colors when the print module was closed then opened again.
A (V10.1)	12/2015	Added support for MAX3 EcoSOL inks.

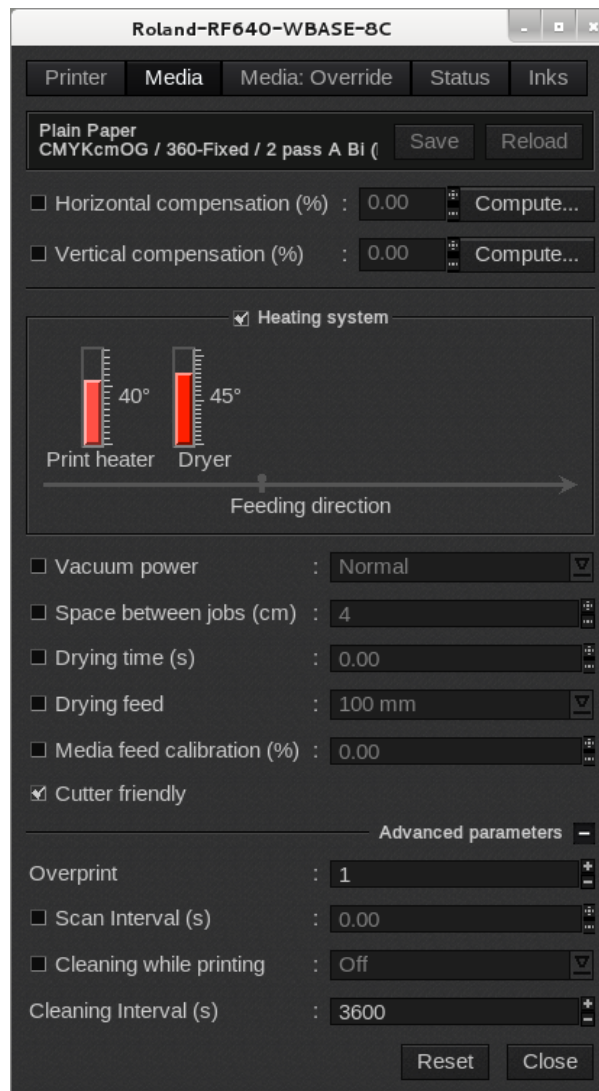
Printer settings

Printer

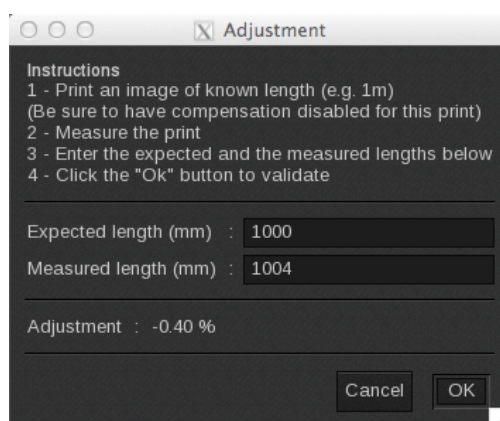


- **Cut media after print:** it enables the embedded cutter and automatically cuts the job after the print.
- **Check media width:** a warning is shown if the media width is smaller than the printed document.
- **Show job name on printer panel:** if enabled, it displays the job name on the printer panel screen. When disabled, the printer panel shows the current print mode.
- **Don't check printer inks:** doesn't display a warning if the printer inks do not match the selected print mode. When disabled, a warning is shown when a required ink is missing in the printer.
- **Reset:** This **Reset** button allows you to come back to the original (default) options. Advanced ones are also concerned by this action.

Media



- **Information:** at the top of the window, you are able to see information about your media. There you have access to two actions:
 - **Save:** when you click on this button, the current media settings are saved with the selected media profile (printer, media, resolution, mode) so there will apply for any new job using the same print configuration. If you don't save, the changes you made are only applied to the current job.
 - **Reload:** will revert back to default as set during profiling or to the last saved changes.
- **Horizontal compensation (%)**: we recommend not to modify this. Any deviation is likely to be mechanical on the printer's side.
- **Vertical compensation (%)**: this can be useful if you detect an increase or decrease in the length due to heating or media tension which is common when printing on vinyl or textiles for example. To calculate the compensation, click **Compute** and follow the software's instructions.



Disabling the checkbox of any of the following options will cause to use parameter value as set on the printer panel.

- **Heating system:** set the **Print heater** and the **Dryer** temperature levels in Celsius Degrees. The range goes from 30° to 145° for the **Print heater** and 30° to 50° for the **Dryer**. You can turn it off by taking the temperature below 30° to *OFF*.
- **Vacuum power:** you can choose the vacuum power. Use a predefined state: *normal*, *strong* or *off*; or select a percentage.
- **Space between jobs:** Space is expressed in centimeters.
- **Drying time (s):** Duration allowed to the drying after the print (in seconds).
- **Drying feed:** function that performs feed to the top of the dryer to promote drying after printing has finished.
- **Media feed calibration (%):** this specifies the distance-correction value in the media-feed direction.
- **Cutter friendly:** indicates if the media supports cutting or not.

Advanced parameters

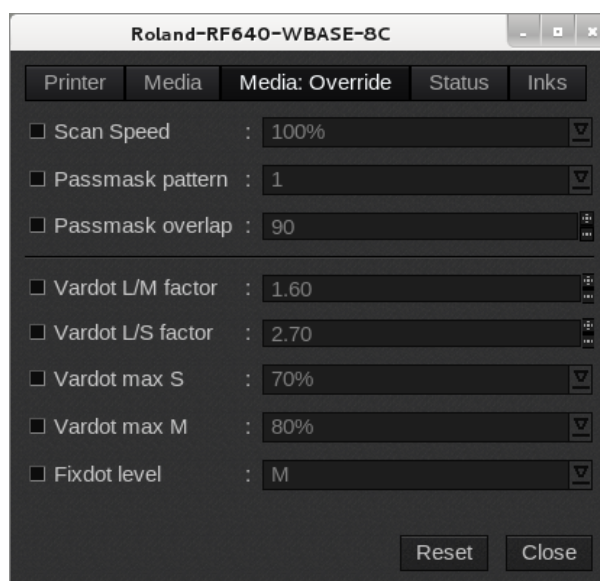
- **Overprint:** this performs overprinting or the number of passes specified by the parameter.
- **Scan interval (s):** specifies the minimum time to pause the head movement between passes (slows down the print and improves drying).
- **Cleaning while printing:** performing cleaning during printing, indicate the degree of cleaning to perform. It can remove potential clogging or condensation on the head during print.
- **Cleaning Interval (s):** time interval of **Cleaning while printing** (from 0 to 60000 seconds).

Media: Override

The driver allows to override some of the print mode parameters. This is an advanced feature without any foolproof mechanisms. If you force values that are out of range, the printer will reject the job with *Data Error* message.

Changing some parameters can be useful when the default print mode setting gives unsatisfactory results, like misaligned dots or apparition of patterns between head passes.

Concerned parameters can be overwritten in Media Override tab. Each parameter override must be enabled first. When disabled, the print modes use their own predefined default value. Please note that the predefined value is never displayed anywhere in the interface. However, all currently used values are printed in the annotations, with “**More details**” option enabled.



- **Scan Speed:** scan speed can only be reduced by specifying the amount in % (in steps of 10%). The value 100% corresponds to the predefined value of selected print mode.
- **Feed Speed**(only for the RF ESOL 8C): 10%-100% by 10% steps. Allows to reduce the feed speed relatively to the print mode.
- **Passmask pattern:** This defines the RIPC pass mask pattern. If the default value is not satisfactory, the correct value should be determined by comparing prints using different values. The value “Off” disables the RIPC feature.

Warning: sometimes print modes have RIPC disabled by default (most often the fastest modes or fixed-dot modes). In that case, overriding the pattern only will not work. You will have to override also the Passmask overlap parameter.

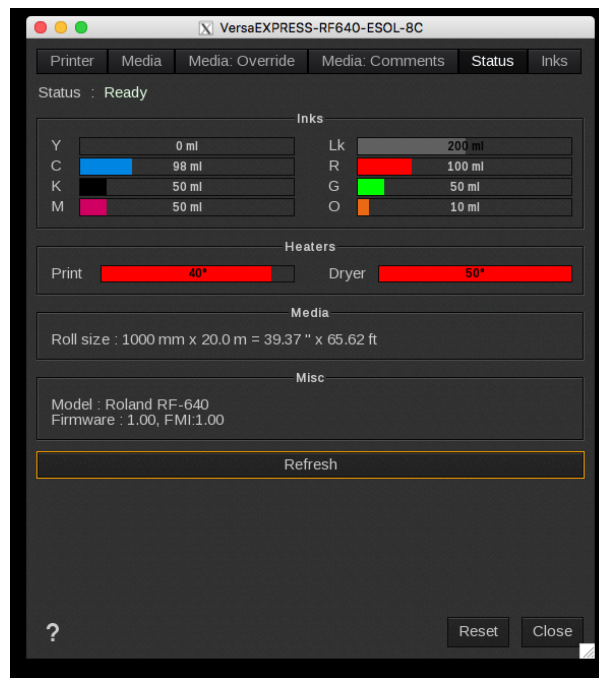
- **Passmask overlap :** This parameter overrides RIPC pass overlap. **Enable this override only if you know what you are doing.**

Using different values from the predefined one affects profoundly the print mode, notably the real number of passes of the print mode.

We do not recommend you to change the Vardot settings. It is reserved for an advanced usage only.

- **Vardot L/M factor:** factor between *Large* and *Medium* dots
- **Vardot L/S factor:** factor between *Large* and *Small* dots
- **Vardot max S:** maximum percentage of *Small* dots
- **Vardot max M:** maximum percentage of *Medium* dots
- **Fixdot level:** choice of the fixdot level between *Small*, *Medium* or *Large*

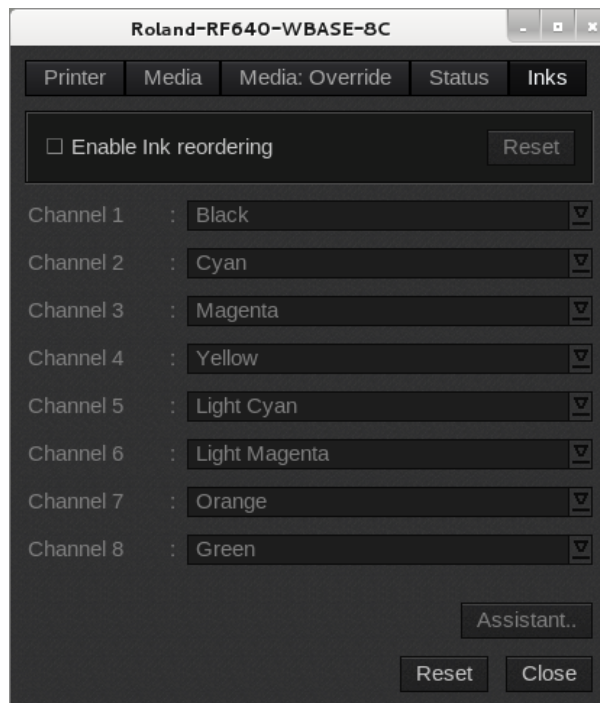
Status



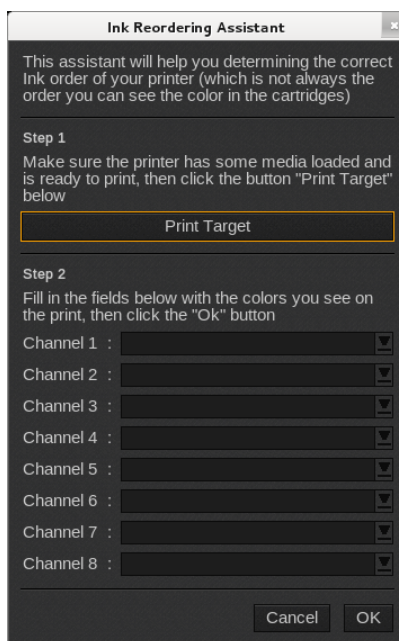
- **Status:** Global state of the printer: *Ready, Not available, Printing*. All data are coming from the printer, if it is *not available*, nothing can be displayed..
- **Inks:** *Ink* levels.
- **Heaters:** temperature level of the *Print heater* and the *Dryer*.
- **Media:** Info about the media loaded on the printer.
- **Misc:** complementary info about the printer (*model, serial number, firmware version*).
- **Refresh:** button to refresh the tab.

Inks

This tab is only available for Roland-VersaEXPRESS-RF640-ESOL-8C : Eco-solvent CMYKkROG, Roland-RF640-WBASE-6C and Roland-RF640-WBASE-8C models.



- **Enable Ink reordering:** If you see that the colors of your print seem mixed, you can enable the ink reordering. For each channel, specify the right color.
- **Assistant:** use the **Assistant** to help you setting the right colors. Sometimes the ink order does not match the cartridge order.



As said on the pop-up window, first **Print the Target** then set the colors as seen on the print and click **OK**. It will automatically reorder the Inks accordingly.

Printer specificities

Print modes

Roland-RF-640-ESOL

Print Mode	Est. speed (m ² /h)	Recommended for ink
360 1p (*)	48.5	MAX2
540x360 2p (*)	32.6	MAX2
540x360 3p	22.3	MAX2
540x360 4p	16	MAX2
360x720 2p (*)	27.4	MAX2
360x720 3p	18.4	MAX2
360x720 4p	16	MAX2
540x720 5p	12.8	MAX2
540x720 6p	10.8	MAX2
540x720 8p	8.1	MAX2
720-Fixed 8p (*)	8	MAX2
720 5p	13	MAX2
720 6p	10.8	MAX2
720 8p	6.7	MAX2

Print Mode	Est. speed (m ² /h)	Recommended for ink
720 9p	5.9	
1080x720 6p	7.6	
1080x720 8p	5.7	
<u>1440x720 6p</u>	<u>5.9</u>	<u>MAX2</u>
<u>1440x720 8p</u>	<u>4.4</u>	<u>MAX2</u>
<u>1440x720 10p</u>	<u>3.6</u>	<u>MAX2</u>
720x1080 8p	8	
720x1080 10p	6.4	
720x1080 12p	5.4	
<u>1080-Fixed 9p (*)</u>	<u>7.1</u>	<u>MAX2</u>
720x1440 10p	6.4	
720x1440 12p	5.4	
720x1440 16p	4	
<u>1440-Fixed 16p (*)</u>	<u>4</u>	<u>MAX2</u>

(*): Mode does not use RIPC (Roland Intelligent Pass Control) by default

PRINTER SPECIFICITIES

Roland-RF640-WBASE-4C

Print Mode	Est. speed (m ² /h)	Recommended for ink
360-Fixed 1p A (*)	56.8	FPG
360-Fixed 1p B (*)	45.3	
540x360 2p (*)	32.6	FPG
540x360 3p	22.3	FPG
360x720 2p A (*)	32.7	
360x720 2p B (*)	24.2	
360x720 3p	18.4	
360x720 4p	16	FPG
540x720 4p (*)	16	
540x720 5p	12.8	
540x720 6p	10.8	
540x720 8p	8.1	
720-Fixed 8p (*)	8	FPG
720 4p (*)	14.8	
720 5p	13	FPG
720 6p	10.8	FPG
720 8p	8	FPG
720 9p	7.1	

Print Mode	Est. speed (m ² /h)	Recommended for ink
1080x720 6p	7.6	
1080x720 8p	5.7	
1440x720 6p	5.9	
1440x720 8p	4.4	
1440x720 10p	3.6	
720x1080 8p	8	
720x1080 10p	6.4	
720x1080 12p	5.4	
720x1080 18p	3.6	
720x1080 24p	2.7	
1080-Fixed 9p (*)	6.1	FPG
720x1440 10p	6.4	
720x1440 12p	5.4	FPG
720x1440 16p	4	
720x1440 18p	3.6	
720x1440 24p	2.7	
720x1440 32p	2	
1440-Fixed 16p (*)	3.3	FPG

(*): Mode does not use RIPC (Roland Intelligent Pass Control) by default

Roland-RF640-WBASE-6C

Print Mode	Est. speed (m ² /h)
360-Fixed 2p A (*)	32.7
360-Fixed 2p B (*)	27.1
540x360 3p	12.7
540x360 4p (*)	16
540x360 5p	12.9
360x720 6p	10.7
360x720 8p	8
540x720 8p (*)	8
540x720 10p	6.4
540x720 12p	5.4
540x720 16p	4
720-Fixed 16p (*)	4
720 8p (*)	8
720 10p	6.4
720 12p	5.4
720 16p	4
720 18p	3.6

Print Mode	Est. speed (m ² /h)
1080x720 12p	3.8
1080x720 16p	2.9
1440x720 10p	3.6
1440x720 12p	3
1440x720 16p	2.2
720x1080 16p	4
720x1080 20p	3.2
720x1080 24p	2.7
720x1080 36p	1.8
720x1080 48p	1.3
1080-Fixed 18p (*)	3.1
720x1440 18p	3.6
720x1440 24p	2.7
720x1440 32p	2
720x1440 36p	1.8
720x1440 48p	1.3
1440-Fixed 32p (*)	1.7

(*): Mode does not use RIPC (Roland Intelligent Pass Control) by default

Roland-RF640-WBASE-8C

Print Mode	Est. speed (m ² /h)
360-Fixed 2p A (*)	32.7
360-Fixed 2p B (*)	27.1
540x360 3p	12.7
540x360 4p (*)	16
540x360 5p	12.9
540x360 6p	10.7
360x720 6p	10.7
360x720 8p	8
540x720 8p (*)	8
540x720 10p	6.4
540x720 12p	5.4
540x720 16p	4
720-Fixed 16p (*)	4
720 8p (*)	7.3
720 10p	6.4
720 12p	5.4
720 16p	4

Print Mode	Est. speed (m ² /h)
720 18p	3.6
1080x720 12p	3.8
1080x720 16p	2.9
1440x720 10p	2.7
1440x720 12p	2.2
1440x720 20p	1.4
720x1080 16p	4
720x1080 20p	3.2
720x1080 24p	2.7
720x1080 36p	1.8
720x1080 48p	1.3
1080-Fixed 18p (*)	3
720x1440 24p	2.2
720x1440 32p	1.7
720x1440 36p	1.5
1440-Fixed 32p (*)	1.4

(*): Mode does not use RIPC (Roland Intelligent Pass Control) by default

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