How to solve printing quality issues for Primera Signature Cassette Printer



If the ribbon breaks during a print job, there can be different issues. In this case check the following causes:

Printing Temperature setting

Can the heat setting be turned down and still obtain acceptable print quality? Depending on the cassette type a suitable temperature will be between 80 and 100. If the temperature is too low the printing will be very light, if the temperature is to high the ribbon will possibly break frequently. The maximum temperature for the Cassette Printer is 130.

Cassette Quality

Is the printing surface of the cassette clean, even and uniform, but with a certain roughness? Are there dents or spots with different surface texture? Try another package and lot number of the used cassettes, in order to sort out consumable issues.

Cassettes that are too rough or too smooth are more prone to cause ribbon breaks. The cassette printers are optimised for print surfaces similar to the US version of Sakura Uni-Cassettes (Ref. No. 8170).

Printhead

Printheads that are not cleaned regularly (every 1000 prints and after every ribbon break) will be more prone to cause ribbon breaks.

Follow the instruction to proceed the cleaning correctly:

 Clean the printhead by using the printhead pen. (Printhead Cleaning Pen: 076922DTM) Swipe across the burn line once or twice. If you notice that the tip is getting dirty, clean it by wiping it across a clean sheet of paper.







2. If the cleaning pen does not resolve the issue, the pink cleaning cloth (Printhead Polishing Paper: 895703DTM) should be used. Rub the cleaning cloth over the printhead burn line a few times to help remove any built-up debris.





Unused polishing paper



Used polishing paper

If cleaning the printhead does not resolve the quality problem, (e.g. a horizontal line through the entire print) it is maybe time to replace the printhead.

Please contact your local distributor or your technical department if the printhead should be changed.





Template selection and offset settings

All printing should be completely contained within the printable surface of the cassette. Make sure that the selected template matches the cassette used.

Check if the correct cassette type was selected in the software (i.e. cassette with square ends when the cassette in fact has rounded ends)?

Depending on the shape of the cassettes you will have to select the proper template in PTTemplate or in the Windows driver. Preferably check the settings in PTTemplate.

The settings are available in the Windows driver as well, but you will only see the printable size.

For BioOptica, Cellpath, Sakura or similar cassettes you should choose a template with 45° face angle and rounded ends because the cassettes have a 45° angle and the printable area is a bit reduced. This will be selection "Size 2" in PTTemplate.

Using Simport cassettes you should use a template with 35° face angle and square ends because the cassettes have a 35° angle and the printable area is bigger. This will be selection "Size 3" in PTTemplate.

PTTemplate	– 🗆 X
Cassette Printer Template	Preview
9 ★ Delete Size 1 • 0 ★ Printable Area Description	
Size 1 0.236* x1.010* 45* face angle, square ends Size 2 0.236* x0.880* 45* face angle, rounded ends Size 3 0.293* x1.010* 35* face angle, square ends Size 4 0.293* x0.880* 35* face angle, rounded ends Texc Add more components to the 'Layout' by clicking the buttons on the left. After adding all the components, click the 'Input-Output' tab above to specify barcode details and what to log.	
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If you use the wrong template or inadequate offset settings, two issues can happen:

a) The printhead will hit the cassette at the beginning because it is going down for printing too early. This can occur when you are using a cassette with rounded ends but a template with square ends. You will just hear a vibrating sound because the printhead is not able to move over the cassette. It gets stuck in front of the cassette. That can cause a ribbon break because the ribbon is pinched between the cassette and the printhead.

Possible result: no print on the cassette and a hole in the ribbon

b) The printhead will fall down after printing. You will hear a "klong" and see a black mark on the right edge of the cassette. This can happen when you are using a cassette with rounded ends but a template with square ends. The printhead will try to continue printing but the cassette is already at the end.

Possible result: a hole in the ribbon or it will be torn completely

If only error a) occurs, it can be solved by changing the offset settings.

But if you recognise error b) after changing the offset settings you will have to reduce the printable area otherwise you will get stuck between error a) and b).

The offset settings move the complete printable area to the left or to the right depending on your changes, but they don't reduce the printable area.

Open the settings in PTLab by selecting the gear symbol on the upper right side. In the opening dialog box, the option Advanced Settings cannot be selected directly. Use the key combination SHIFT + A in order to access the "Advanced Settings":

Horizontal Offset 2 Set Horizontal Offset 2 Set Vertical Offset -5 Set int Head Settings Head Resistance 3233 Set Restore Factory Defaults	t Offsets	Advanced Settings	*
Int Head Settings Head Resistance 3233 Set Restore Factory Defaults	H ++V 13-123456789 remove 2014-02-24	Horizontal Offset 2 Vertical Offset -5	Set Set
Restore Factory Defaults	It Head Settings Head Resistance 3233	Set	
	Restore Factory Defaults		



Changing the "Vertical Offset" will move the entire print to the right by increasing the existing value (see picture: **right aligned**) and to the left by decreasing the existing value (see picture: **left aligned**).

In this example the standard "Horizontal Offset" is 2 and the "Vertical Offset" is -5. The printing is centred (see picture: **centred**). Please note these values may vary for each Cassette Printer.

Printing result pictur	e	Horizontal Offset	Vertical Offset
"left aligned"	left right	2	-15
"centred" and OK	left right	2	-5
"right aligned"	left right	2	10

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