



Shaking of white and metallic ink

What are the effects if I don't shake the cartridges before the days work?

Shaking of white ink

WHY DO WE NEED TO PERFORM DAILY SHAKING OF THE WHITE/METALLIC INK CARTRIDGES

To keep your printer in good running condition, Roland DG often mentions it is necessary to shake the white cartridge before starting the daily operation. In this text we will try to explain what effect it has on the printer. First we start with some basic information on the ink.

Only white?

White ink has far heavier pigments. This is the reason white and metallic cartridges need to be shaken. Color cartridges do not need to be shaken on a regular base. (expentions do exist)



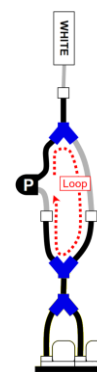
INK SETTLING

Paint, glue, medicine, some food, spray cans,... all these items often mention stirring, shaking, ... before using it. The main reason is that these products are made from several components, over time they get separated into different "layers", shaking or stirring mixes those components back to a homogeneous substance. Ink is made of several items, but consist mainly from pigments and ecosolvents. These pigments

tend to drop to the bottom of the cartridge while the solvents stay on the top of the cartridge.

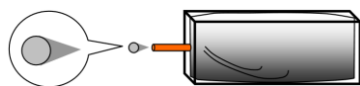
INSIDE THE PRINTER

Your Roland DG printer is equipped with a so called circulation system on the white ink lines. To prevent the ink settling inside the ink lines an automatic circulation will be performed depending on installation and usage variables. The circulation will however only do this for the ink that is already inside the machine. Like you can see in the image is the ink in the cartridge not included in this automated circulation system.



EFFECTS ON THE PRINTER

If the printer performs an automated ink circulation, then why do I need to shake the cartridge?



The ink is taken from the cartridge through a needle. This is located roughly in the centre of the cartridge. If the ink settles inside the cartridge and you start the days printing, the ink lines will fill up with only the Eco Solvent part of the ink. This causes the white ink to become more transparent. But furthermore this "milky white" has a major downside. Taking the solvent from the cartridge means only the pigment will stay. At some point (after shaking of cleanings) the pigments will also go into the ink tube. Because the viscosity of the ink is much bigger, this will block the printhead resulting in costly repairs to your device.

WE ASK YOU TO PERFORM THE SHAKING BEFORE THE DAYS USE, SINCE CLEANINGS AND PRINTING WILL ALWAYS USE A LIMITED AMOUNT OF WHITE INK TO FLOW INTO THE INKLINES.

OUT BEST ADVICE IS TO SHAKE BEFORE YOU START PRINTING AND PERFORM YOUR WEEKLY MAINTENANCE!