

THE POD PRESS RISO SET-UP GUIDE

**Pod Press is a community risograph press
for Wester Hailes as part of WHALE Arts.**

This is an open-resource guide for anyone who needs it. Feel free to share it with others and print out if desired - we only ask for it not to be sold in any way. To access our open resource Pod Press Design Guide for Beginners, [click here](#).

Visit our YouTube channel for our playlists on risograph for more learning!

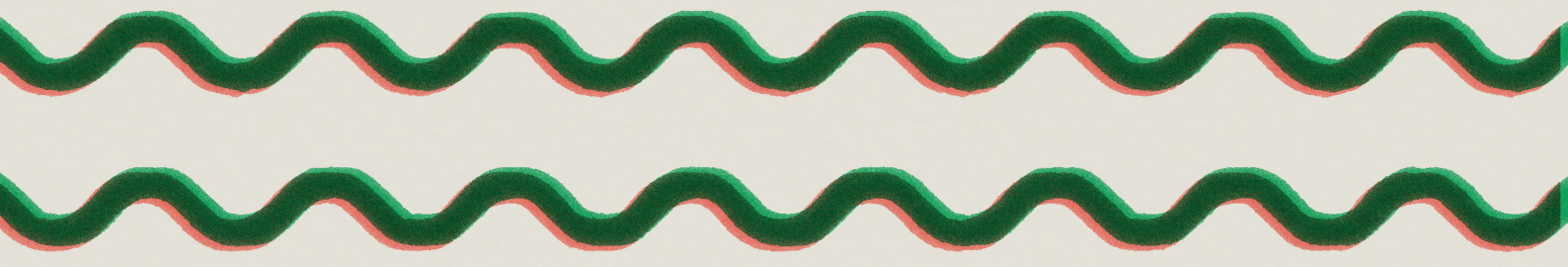
To take part on any of our upcoming riso workshops:

☎ 0131 458 3267

✉ info@whalearts.co.uk

If you have a particular project in mind
and would like to discuss with us more:

✉ podpress@whalearts.co.uk



What is riso? [REE-soh]

A riso (risograph) machine is an old-school duplicator from the 80s which looks a lot like a photocopier. It makes a colour stencil using your designs and is able to make hundreds or thousands of copies very quickly, which was great when it was used for political leaflets and church programmes. As with many outdated technologies, artists have rediscovered riso as a way to make artwork for cheap!



Its eco-credentials are pretty good as well - it may look like a photocopier, but it takes much less energy to run, doesn't generate heat, AND the inks are soy based - what's not to love?

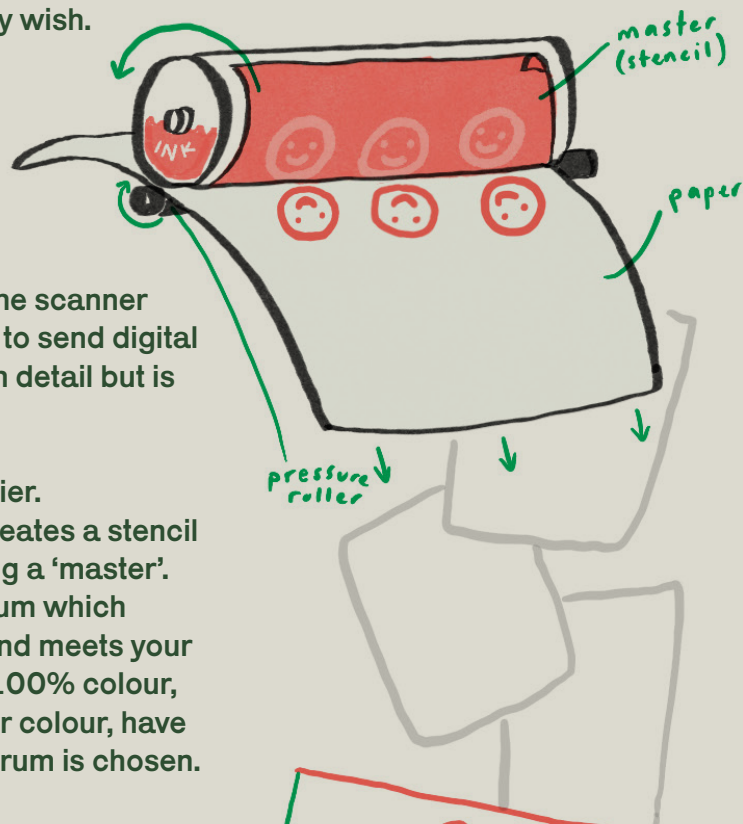
Pod Press commits to stocking only recycled papers in-house - they look great riso printed and are better for the environment. Customers are welcome to bring outside papers if they wish.

How does it work?

So, like a photocopier, you can scan your artwork on the scanner bed on top of the machine, or you can use a computer to send digital files to it instead. The scan function won't give as much detail but is very immediate, which some people prefer.

What happens after this is very different to a photocopier. When your artwork is sent to print, the riso machine creates a stencil of your design on a piece of specialised paper, creating a 'master'. Your master is then attached to a cylindrical colour drum which rotates, making a print impression each time it turns and meets your paper. The riso can't read colour, so where you want 100% colour, you should use 100% black in your original - for lighter colour, have lighter shades of grey. The colour comes from which drum is chosen.

Each stencil only prints in a single colour - so if you want multiple colours in your artwork, you need to separate your colours into multiple files. Luckily, our RISO MZ970 model can hold two colour drums - printing one straight after the other - making things a bit quicker (but you still need to separate your colour files first!)



digi-file-GREEN



Green Layer Print

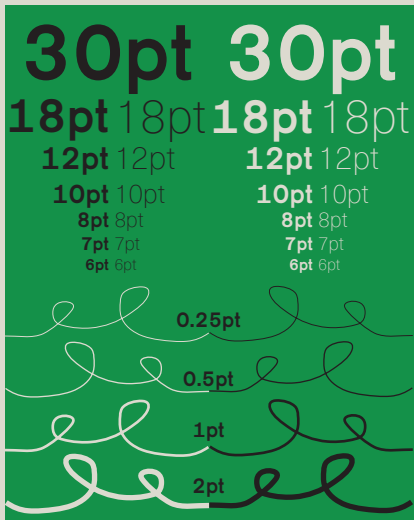


digi-file-RED



Red Layer Print





'Riso charm'

The riso printing process isn't as 'clean' as digital processes - it's more like screenprinting many ways. Inkjet and laserjet don't have the charm that riso does. With charm comes limitation, so here are some things to keep in mind when creating your files for risograph:

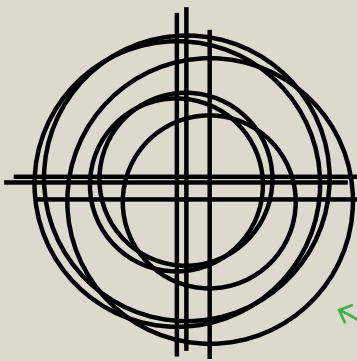
Line weight

The riso machine can print quite a fine level of detail, but it will reach a point where things are too fine to print. Thicker lines will for sure print better than thin ones - and this goes for text too. For this reason, we advise not going finer than 6-8pt text, or 0.25pt line weight.

Ink coverage

If you would like to have a large area of full colour, we recommend printing onto coloured paper or reducing large areas of colour down to 75% black in your digital file. This is because heavy ink cover leads to paper jamming and strange wobbly textures on your prints.

Riso-friendly printing papers range from 80-250gsm and must be uncoated - for heavier ink coverage, we advise using heavier papers!



Misregistration

Prints can come out 'misregistered' - not lined up properly - because each colour is printed at a different time.

This is just part of the process and lots of people love it!

(Beware of having 'cut-outs' as misregistration can make text or some images hard to read) Your digital colour proof will look more 'perfect' than your finished print.



DANGER ZONE

Danger Zone

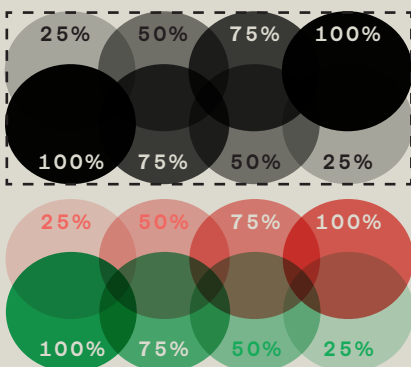
Pick-up rollers grab the paper to feed the machine, and if they touch wet ink then they'll transfer to every page after. Avoid roller marks by:

- Designing your print to only use two colours.
- Waiting at least 24 hours before the next print pass.
- Avoiding having any ink in the danger zone until your final 'pass'.

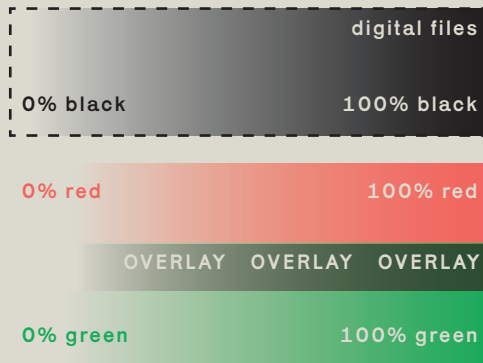
Colour overlay and playing with opacity

Because each colour is printed at a different time, you can print one colour on top of the other. This can cause the colours to mix a bit, making a whole new colour! You can experiment even more by playing with opacities (different shades of grey in your originals).

using blocks at different opacities:



using gradients:

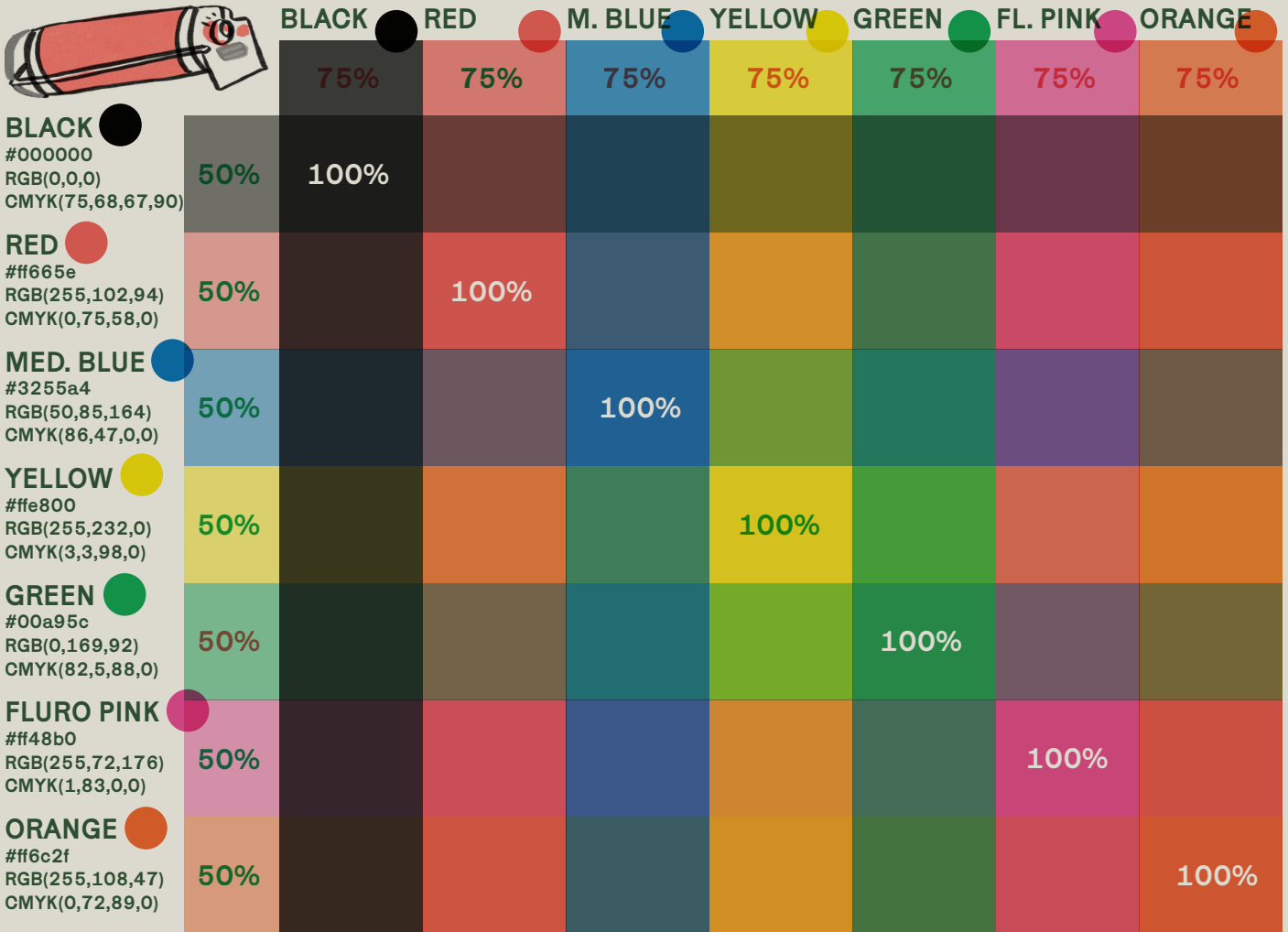


Smudges

Once dry, smudges from the printing process can be physically erased. This can help be avoided in the first place by lowering the opacity of your digital file to have less ink coverage.

Colours

We have seven colour drums in total - the palette below shows how layering works!



What we need from you:

- File dimensions at intended paper size.
- 10mm empty border on each edge.
- 75% max ink coverage to avoid sticking.
- Areas under 20% grey will be unreliable.
- Added crop marks if needed.
- Flattened, greyscale, PDF for each layer.
- Each layer file titled 'name_size_colour'

- A colour proof in JPG or PNG file format (to give us an idea of what you mean)

For mac users, there is a handy piece of software called Spectrolite. It takes a full colour image and separates your layers for you! It has been made specially for riso artwork in mind.

We have downloadable templates for various sizes and projects on our website which should work on most image editing software.

