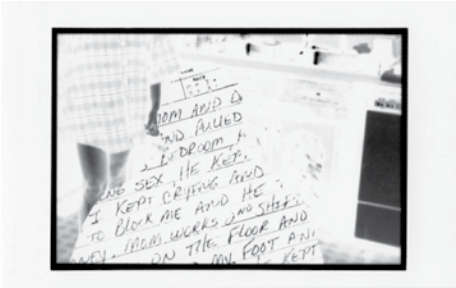


# LAPTOPOGRAMS

## CONTACT PRINTING WITH A LAPTOP



### KEY TERMS

Contact Printing  
Laptopogram

### SUPPLIES

Photo Sensitive Paper  
Laptop or Electronic Device  
Standard Processing Chemicals  
\*Gaffers Tape / Tape  
\*Ruler  
\*Objects for applying pressure. Ex. books  
  
*\*not required but helpful*

### ARTISTS TO LOOK AT



Aditya Mandayam  
Credited with discovering the process.



Kristine Thompson  
[www.kristinethompson.com](http://www.kristinethompson.com)

### LAPTOPOGRAMS

#### Introduction

Laptopograms are a type of contact print made by pressing light-sensitive photographic paper to an electronic screen, usually a laptop, for a duration of time.

You don't have much control over the result of a laptopogram as there are only three variables you can control.

1. Screen Brightness - the amount of light being output (*think aperture*).
2. Exposure Time - how long you expose the paper to the screen (*shutter speed*).
3. Pressure - the amount of pressure you apply affects the sharpness/softness of the contact print. (*focus*)

#### Appearances | Negative, Positive, and Combinations

A straight-forward laptopogram will yield a negative print but digital processing can be applied to yield a positive print or a combination of negative and positive appearances. A positive print can be created by converting your digital image into a negative. Using Photoshop or your preferred image editing software do the following:

1. Convert your image to B&W (*you don't have to do this but it's helpful*)
2. Invert the image (*to a digital negative*)
3. Flip the image horizontally (*to correct image orientation and make text readable*)

#### Controlling Sharpness & Softness

One of the really neat qualities of contact printing with an electronic screen is the varying qualities of sharpness and softness that can be obtained. Areas where the photographic paper is firmly pressed against the screen will appear sharp while areas where pressure is not applied will appear soft. You can achieve a cool combination of sharpness and softness throughout a single print by applying different amounts of pressure in different places.

#### Things to Try

- Capturing motion - move the paper, or try to capture video.
- Intentional ghosting by lifting the paper without dimming the screen.
- Including/excluding status bars and software menus.
- Use tape and/or other materials to create borders.
- Apply varying degrees of pressure to get different degrees of clarity.
- Place flat objects between the paper and screen.



Prepare your digital negative and your screen: image size, border... use tape to get a clean edge or to aid in aligning your paper to the image.



If you are using a secondary keyboard you can flip your laptop upside down for stability when pressing the image against the screen and use the secondary keyboard for turning the screen on and off.



With the screen on the bottom you can use books or other objects to apply pressure to all or part of the paper in order to increase sharpness in the areas with extra pressure.

## EXTRA

<https://www.wired.com/2010/04/laptopogram-photo-paper-exposed-by-computer-screen/>

## HOW TO

A laptopogram can be made from any backlit screen but these instructions are written specifically for working with a laptop, and more specifically a macbook.

### Setup

Laptopograms should be made in a darkroom. The print development process is the same as developing a standard black and white print, assuming you're working with black and white photopaper.

A laptopogram can be made from any backlit screen but these instructions are written specifically for working with a laptop, and more specifically a macbook.

### Preparing Your Laptop

- Clean your screen.
- Turn your monitor brightness down to it's dimmest setting.
- Turn off keyboard light (*F5 to dim, press till it turns off*)
- Tape up any additional lights on your device.
- Open your image and compose your layout. (Apply any processing you desire and adjust the size of the image on the screen to match your desired output. *\*This is where the ruler and tape come in handy.\**)
- Place tape on your monitor to aid in alignment and/or to create a clean border for your print.

### Exposure: Screen Brightness + Exposure Time

#### Screen Brightness

Electronic screens emit a lot of light so you want to turn your screen's brightness all the way down in order to increase the length of your exposure. (*Tip: You can also add a slightly transparent black layer (I set mine at 50% opacity) on top of your image to help lengthen your exposure time.*)

#### Exposure Time

This is the tricky part. I'm working with a MacBook and the only way I've found to turn the screen on and off without having some sort of brightness graphic or login screen pop up is to use Control + Shift + Power or Eject to put the display to sleep. You can then press any key (I use the space bar) to awaken the screen. But these commands aren't instant. The screen's brightness fades on and off with each command taking about half a second. Laptop monitor brightness is so intense that even with the brightness turned all the way down the ideal exposure time on my MacBook is about 2 seconds. This means you have to be super quick with pressing your command keys.

Remember that keyboard shortcuts are going to vary from one device to another. If you are using a Linux system there's a script that can be run to control the timing of your monitor. I'm sure there's something equivalent for a Mac but I'm still searching for it.

#### Determining Your Exposure Time

If you followed all of my above directions, I recommend starting with two seconds and then adding or subtracting as needed. Be sure to include the time it takes the screen to fade on and off.

*Tip: Practice your shortcut keys in order to be fast and accurate.*

#### Lifting the Print

You have two choices: use shortcut keys to turn your screen off so you can lift your print without fear of ghosting, or embrace the ghosting by lifting your print while the monitor is still on. Either way you will now process the print like normal.