

Quick Guide to Screen Printing

① Create Artwork

Whatever art you choose to print, there are some universal laws that contribute to a successful project. Firstly, ensure all shapes are colored black. If the art has gradients, convert them to bitmaps or halftones. If the art has multiple colors, separate each color to its own layer and add registration marks.

② Print Transparency

Export as a PDF. Other formats aren't supported by Acrobat Reader. Send file to makers.seattle@gmail.com. Download file and open with Acrobat Reader. Print to "TRANSPARENCY PRINTER" at preferred scale.

Want to print from your own computer?

Download the driver for Canon iX6820 and make sure to match these print settings to ensure the most opaque black.



③ Select Screen

If your design has a large shapes or simple lines, you may want to buy a mesh that has a very open weave (Fig. 1). If you plan to use the screen for a variety of different images in a range of styles, a medium weave is fine (Fig. 2). If you work with fine lines, a very tight weave is best (Fig. 3)

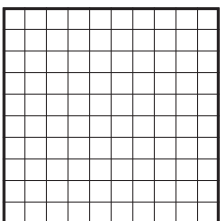


Fig. 1
100 mesh screen

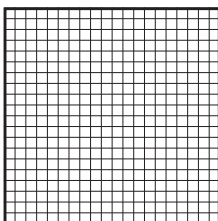


Fig. 2
200 mesh screen

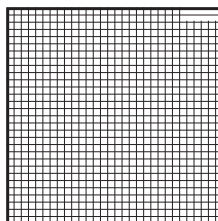


Fig. 3
300 mesh screen

④ Coat with Emulsion

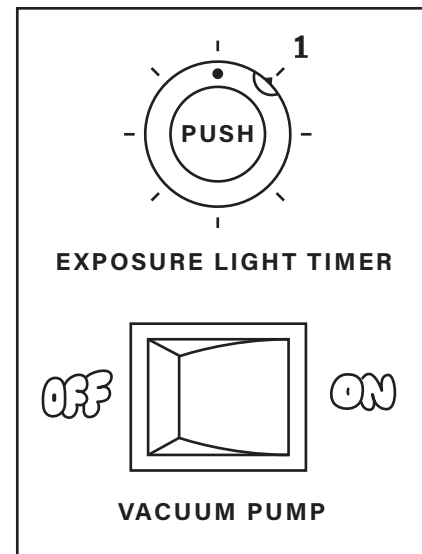
If a screen has not been pre-coated, you will need to coat one yourself. Fill scoop coater with 5-6 spoonfuls of emulsion. Coat screen with a thin layer on both sides. Return any unused emulsion to bucket.

⑤ Let it Dry

Place coated screen on a shelf in the black tent. Switch on fan and zip door closed. Emulsion should dry within 30 minutes. To test, check for any glossiness or tackiness in coated layer. These are signs your screen is not yet dry enough to be burned.

⑥ Burn Screen

Place transparency on exposure unit. No need to mirror the art. Set coated screen on top with the mesh side against the glass. Lay string across the screen to allow air to travel between compartments.



Close lid and clamp shut. Start the vacuum pump. Ensure timer is set to 1 minute. When cover is suctioned against screen, press center of timer to start burning your screen. UV lights will automatically turn off when timer expires.

⑦ Wash Out

Once burned, position screen in washout booth and flip on backlight. The switch is located just behind the mini-fridge. Before turning on the power washer, rinse each side of the screen with low pressure.

Next, switch on power washer and begin washing out the screen. Use evenly spaced lateral passes, slightly overlapping the previous row. Make sure to give equal attention to all parts of the burned screen to avoid blowing out the design. Run powerwasher for at least 5 seconds at a time to avoid overheating the motor.

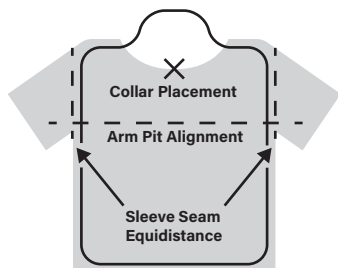
The design will appear clear when it is well washed out. You may opt for the scrubby brush to finish this process, a little abrasion may be helpful.

⑧ Tape Off

Towel dry and place screen on corner rack with fan on. Once it is completely dry (~15 minutes), tape off the interior perimeter of the screen where the mesh meets the frame. Make sure to cover to the edge of emulsion coat on all sides.

⑨ Line Up

Attached your taped up screen to the printing press with the top of your design pointing outward. Adjust platen so design falls according to your desired placement.



Load a tester shirt from the bin next to the press. Make sure sleeve seams are equidistant from platen edge and arm pits are aligned horizontally. Mark where the collar lies on the platen once preferred position is determined.

⑩ Load Ink

Select ink color and scoop a healthy amount onto the space below artwork. Remember, excess ink may be returned to jar after printing session—don't skimp ☺ Be careful not to drip ink onto the design itself, it may seep through the screen.

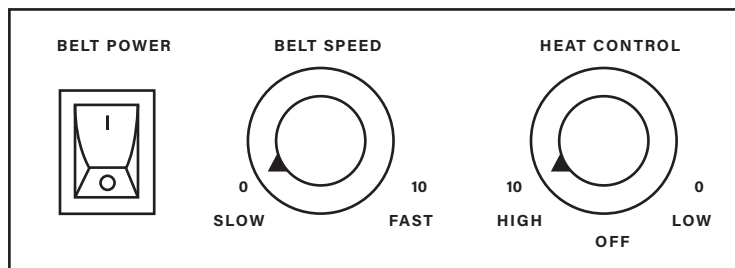
Find a squeegee that is an inch or two wider than your design to avoid clipping the edges of art when printing.

⑪ Print

Show time! With squeegee, flood ink across all parts of design evenly with light pressure. With squeegee tilted at 45 degrees, pull or push it (according to taste) across design at an even pace while applying downward pressure. Screen should stretch and touch the shirt during this pass. Check print. If more ink coverage is desired, repeat step 11.

⑫ Cure

Remove shirt from platen (being careful not to allow shirt to fold in on itself) and place it on conveyor belt of t-shirt dryer. Machine settings should match the diagram below. Turn on ventilation system. (switch located on north wall, right of the door)



Resources



Reserving Studio Time

To use dark room or printing press, please book time on the calender.



Purchasing Studio Time

This helps us pay for studio supplies. Machine time credits may be applied.



Open Studio

Every Wednesday from 5-8 pm the screen printing studio is open to certified members to work on their projects. A knowledgeable steward will be available to answer questions, provide feedback and offer guidance when neccessary. Please RSVP the events calender to book your spot.