Quick-Guide for TYPHOON 8600 04April2023

First, thoroughly review the User’s Guide & other Typhoon documents (see “Training options & Documents” page on the LSU Genomics Core website for detailed instructions on how to use the Typhoon 8600 for fluorescent samples & phosphor screens.

1. Turn on Typhoon & computer; log on to computer (contact staff).
   1. Logon ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. Password: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. When **Green** light on Typhoon stops blinking, click on Scanner Icon.
   1. Do **not** start Typhoon software until the solid green light appears.
   2. If shortcut does not work, use File Explorer to access **\*.exe** file directly (*inform staff*).
3. Place *thin* gels or phosphor screen on scanning surface of Typhoon.
   1. Do **not** lay gels directly on platen; rather, wrap them first in plastic film.
   2. **Fastest** scanning – orient sample’s long axis in the ‘A-Q’ direction.
4. Select scan settings using Scanner Control software.
   1. **Fastest** scanning – select largest pixel size (i.e., **200 μm**, **std. electrophoresis**).
   2. **50 μm** scanning takes 4X longer and is almost never necessary.
5. Start scan.
6. Evaluate results; if necessary, rescan with different settings to adjust sensitivity.
7. The ‘**.gel**’ extension cannot be opened by most software. To use an image elsewhere, first save file as ‘**\*.gel**’; then, make a copy of the file and change the copy’s extension to ‘**.tif**’.
8. Save files to USB drive (note: user files on hard drive will be deleted periodically).
9. If needed, clean scanning surface.
   1. Allowed fluids: H2O2, Nanopure H2O, & EtOH; ask staff for details.
   2. Do **not** pool fluids on platen as liquids can run under the edge into Typhoon.
10. Turn **Off** Typhoon (preserves laser life).

**► To have your Typhoon privileges suspended, skip #10!**

**Typhoon specifications**

* Scan modes: Phosphorimaging; Fluorescence; Chemiluminescence (not recommended).
* Scan resolutions:
  + 200 μm/pixel: Standard electrophoresis (100 data lines/grid square);
  + 100 μm/pixel: DNA sequences (200 data lines/grid square); or,
  + 50 μm/pixel: Whole body autoradiography (400 data lines/grid square).
* Scanning time (e.g., 20 X 25 cm): 5 min (200 μm); 9 min (100 μm); 19 min (50 μm).
* Excitation lasers: 532 nm, 633 nm.
* Standard emission filters: 555DF20, 580DF30, 610DF30, 670DF30, 526SP, 560LP.
* Beamsplitters: 560, 580.
* Platen size: 35 cm × 43 cm.

Note: [Vendor pdf’s](https://genomics.lsu.edu/genomics-documents.php) for Typhoon are on [LSU Genomics Core](https://genomics.lsu.edu/) website:

1. User’s Guide v3.0 for Microsoft Windows, ~4 Mb;
2. Fluorescence Imaging Principles & Methods, ~700 Kb;
3. Fluorescent Gel Imaging with the Typhoon 8600, ~400 Kb;
4. Fluorescence Applications using the Typhoon Variable Mode Imager, ~550 Kb.