

Amersham™ Typhoon 5 Quick Start

Starting the system

1. Push the power switch on the right side of the instrument



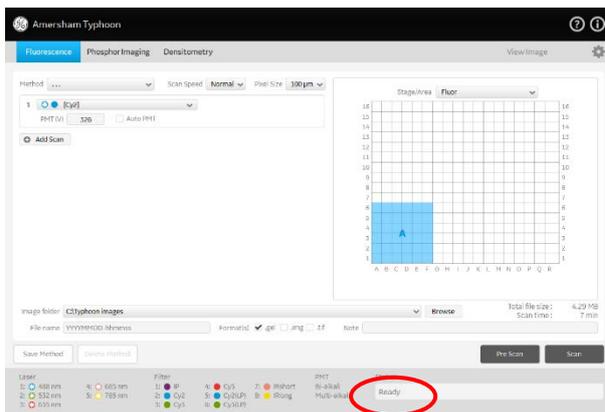
to the I

2. Push the On/Off  button in the instrument panel.
The instrument will make one beeping sound within 5 minutes
3. Start Amersham Typhoon Control Software from the Start menu or use the desktop



shortcut.

4. When the Amersham Typhoon Control Software is ready, the main window is displayed as below.



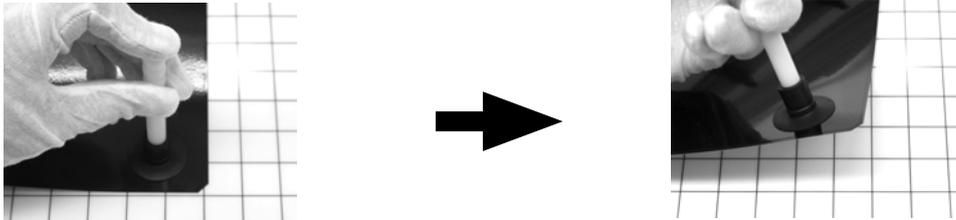
Turning off the system

1. Remove any stage from the scanner.
2. Press the On/Off  button on the front panel.
3. Push the power switch on the right side of the instrument to the O position.



Sample preparing

1. Preparing a sample for fluorescence imaging
 - 1). Place a gel or membrane on the fluor stage.
 - 2). Remove any air bubbles between the gel or membrane and the stage.
 - 3). If the sample is a membrane, place a membrane weight on top of the membrane to reduce vibrations during the scan.
 - 4). Open the main scanner door of the Amersham Typhoon scanner
 - 5). Place the stage on the stage holder, with the printed side of the stage facing up, and the handle of the stage facing to the front.
 - 6). Push the stage all the way into the scanner.
 - 7). Close the main scanner door.
2. Preparing a sample for phosphor imaging
 - 1). Place the cassette with the exposed storage phosphor screen next to the phosphor stage.
 - 2). Turn the phosphor stage upside down, so that the white print faces down.
 - 3). Open the cassette.
 - 4). Pick up the storage phosphor screen using the suction rod as follows:



- i. Press one end of the suction rod against the storage phosphor screen.
 - ii. Cover the other end of the suction rod with a finger.
 - iii. Lift the storage phosphor screen with the suction rod.
- 5). Place the storage phosphor screen on the bottom of the phosphor stage, with the exposed surface facing up.



* The phosphor stage is magnetic, so that it holds the storage phosphor screen in place.

- 6). Open the main scanner door of the Amersham Typhoon scanner.

- 7). Turn the phosphor stage around. Place the phosphor stage on the stage holder, with the white print on the phosphor stage facing up, and the storage phosphor screen attached to the bottom of the phosphor stage. The exposed surface of the storage phosphor screen should face down.

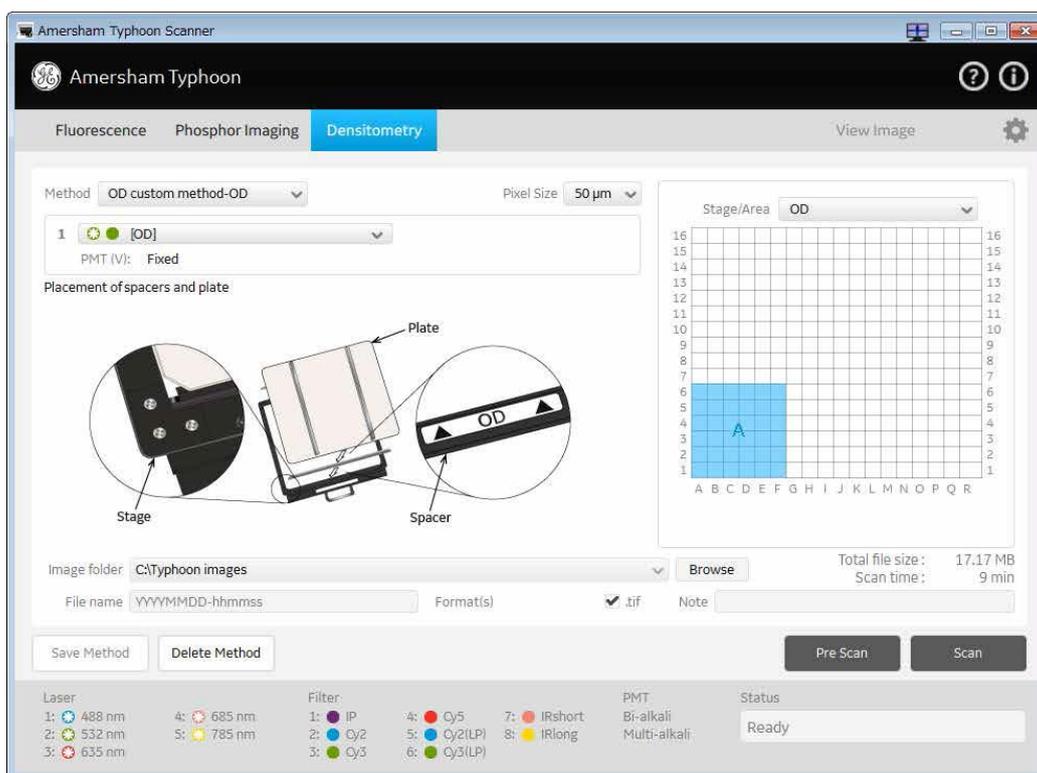


- 8). Push the stage all the way into the scanner.
 - 9). Close the main scanner door.
3. Prepare a titer plate for fluorescence imaging
 - 1). Place the guide plates on the multi stage. Align them with the grooves for the titer plate holder so that they click into place
 - 2). Place the titer plate holder on the multi stage.



- 3). Close the spring locks that hold the titer plate holder in place.
 - 4). Place the titer plate on the desired position in the titer plate holder.
 - 5). Open the main scanner door of the Amersham Typhoon scanner.
 - 6). Place the stage on the stage holder, with the printed side of the stage facing up, and the handle of the stage facing to the front.
 - 7). Push the stage all the way into the scanner.
 - 8). Close the main scanner door.
4. Preparing a sample for densitometry
 - 1). OD method for measurements of relative optical density
 - 2). Digitization method blue (blue laser)
 - 3). Digitization method (green laser)

4). The following illustration shows an example of the OD method set up screen.



Scanning the sample

1. Scanning

- 1). In the main window of the Amersham Typhoon Control Software, click on one of the scanning mode tabs to choose the scanning mode.
- 2). Select a saved method from the Method dropdown list in the Scan settings pane or adjust the scan settings to create a new method.
- 3). If necessary, adjust the Laser & Filter combination settings in the General settings dialog.
- 4). Select the area or areas to be scanned in the Stage/Area pane.
- 5). Define the image file settings:
 - i. Select the directory where the image file should be saved in the **Image folder** field.
 - ii. Type a name for the image file in the **File name** field.
 - iii. Select the image file format.
- 6). Click **Scan**.
 - i. The sample is scanned, and the image is displayed in the **View Image** window.
 - ii. When the scan is completed, the image file(s) are automatically saved in the location selected in the **Image folder** field.
- 7). For viewing, it is possible to adjust the display parameters if desired. To copy the displayed image, point to the image and right-click. A copy of the image can be pasted in other programs for presentation purposes.

2. Pre-scanning (optional) :

* *The pre-scan feature is not available in the phosphor imaging mode.*

- 1). In the main window of the Amersham Typhoon Control Software, click on one of the scanning mode tabs to choose the scanning mode.
- 2). Select a saved method from the Method dropdown list in the Scan settings pane or adjust the scan settings to create a new method.
- 3). If necessary, adjust the Laser & Filter combination settings in the General settings dialog.
- 4). Select the area or areas to be scanned in the Stage/Area pane.
- 5). Define the image file settings:
 - i. Select the directory where the image file should be saved in the **Image folder** field.
 - ii. Type a name for the image file in the **File name** field.
 - iii. Select the image file format.
- 6). Click **Pre-scan**.
 - i. The sample is scanned at low resolution, and the image is displayed in the View Image window.
 - ii. Adjust the display parameters if desired.
 - iii. Click **Back** to return to the main screen, or
Click **Scan** to start a scan, or
Adjust the PMT voltage, and click **Scan** to start a scan.

Stopping scanning

To stop a scan, click Stop. The scan is aborted. The image will be saved, and the unscanned area will be saved with a data value of 0. The scan cannot be re-started from the position where the scanning was stopped.