Children's
MINNESOTA

FilmArray Torch Instrument Maintenance

Purpose	This procedure provides instructions for performing instrument maintenance on the FilmArray Torch.
Policy Statements Materials	This procedure applies to all technical Microbiology staff performing testing on the BioFire FilmArray.

Reagents	Supplies	Equipment	Reagent storage
• Household bleach or Bleach wipes (0.65%) • Water	• Thumb drive • Fan filters	• FilmArray Torch and software • FilmArray Pouch Loading Station • Biosafety Hood • FilmArray Torch Printer	• Store reagents at room temperature

Special Safety Precautions

Microbiologists are subject to occupational risks associated with specimen handling. Refer to the safety policies located in the safety section of the *Microbiology Policy Manual*:

- *Biohazard Containment*
- *Safety in the Microbiology Laboratory*
- *Biohazardous Spills*

1. Wear appropriate personal protective equipment (PPE) including disposable gloves and lab coats.
2. Handle all samples and waste materials as if they were capable of transmitting infectious agents.
3. Change gloves often when handling reagents or samples.
4. Dispose of materials used in this assay, including reagents, used buffer vials in biohazardous waste.
5. Sample buffer will form hazardous compounds and fumes when mixed with bleach or other disinfectants.

Weekly

Clean the FilmArray Torch:
1. Put the software into cleaning mode by navigating to the "Settings" tab and selecting the **Disable Screen for Cleaning** option. This is located on the bottom left of the screen. This will freeze the screen for 30 seconds to allow for cleaning of the surface.

2. Wipe down all outside surfaces of the FilmArray Torch with a cloth or paper towel and 10% bleach solution. Let sit for 2 minutes. Follow with water.

3. Record on Rapid Molecular Maintenance Log.

Perform a system base restart when no samples are running:
1. Navigate to the Setting Tab

2. Click on the **Reset Torch** tab located on the bottom right corner of the screen. Screen will go black for a few seconds and then will restart.

3. **Or,** Press black dome button on back bottom right of instrument. Screen will go black for a few seconds and then will restart.

3. Software weekly maintenance

It is recommended to reset the System Base on a weekly basis. This action should be performed only with the reset button on the back of the System Base and not the System Base On/Off Switch.

System Base Reset   System Base On/Off Switch

4. Or: Navigate to the Setting Tab

5. Switch the instrument to Admin mode

6. Hit 'yes' to log out.

7. Log in using User name 'LabAdmin' and Password 'Lab_Admin' or use barcodes:

LabAdmin

Lab_Admin

8. Find Window button on bottom left side of screen. Click Power and then Restart. Screen will go black for a few seconds and then restart.

9. Record on Rapid Molecular Maintenance Log.

Quarterly

Archive Results:

1. Insert a thumb drive (located in the BioFire folder) into the USB port on the front of the System Base.

2. Navigate to the Settings Menu from the toolbar.

3. Select **Archive.**

4. Select **Archive Runs** to display a calendar.

5. Select a date parameter on the calendar (3 months).

6. Select **Next** to choose the location and filename for the archived runs (leave name as default).

7. Select **Yes** to launch the archiving process.

8. Once finished, remove the thumb drive and store in BioFire Folder.

9. Record on Rapid Molecular Maintenance Log

   NOTE: if more than 100 runs are selected, archived runs are sorted into files containing 100 runs each.

Clean & Replace Fan Filters

1. Remove the instrument module covers.

2. Remove the filters from the covers and thoroughly rinse with water, let dry.

3. Replace covers with dry filters wearing clean gloves.

4. Record on Rapid Molecular Maintenance Log.

Resetting and Powering down the instrument

For troubleshooting module "ATTENTION" errors:

1. Remove front faceplate on module, press and hold the reset button until the lights go out.

2. Wait 1-3 minutes. The module should then reboot and show "available" status on dashboard.

For troubleshooting screen (delayed/lagging) issues.
1. Perform full system shutdown (only when necessary).

2. First, press the Reset Torch tab in the Setting tab or the Reset button on the bottom right side at the back of the instrument. Wait for screen to go black.

3. Second, switch off the System Base power. You only have about 4 seconds before the system restarts so be ready to reach behind the instrument and locate the switch.

4. Third, switch off each Module.

5. Wait a few seconds.

6. Switch on the System Base Power. This will restart the system Base and start the software.

7. Switch on each Module.

2. System Base power cycling instructions

Before powering on the System Base, ensure that the On/Off Switches on all connected Modules are in the "off" position.

After the System Base has been powered on, then each connected Module can be powered on and the cable shrouds installed.

8. Turning off and on the Biofire FilmArray System Base may result in carbon build up on the switch contacts which can lead to excess heating inside the power switch, leading to deformation of the power switch case, which can create the opportunity for a power switch electrical short. Only turning off and on the system base when necessary will decrease to opportunity for potential carbon build-up which may lead to an overheated switch.

References   BioFire FilmArray Application and Training Guide BioFire Diagnostics, LLC 390 Wakara Way Salt Lake City UT 84108 May 2016

Customer and Technical Support   System Documents at www.biofiredx.com. Email at biofiresupport@biomerieux.com. Call bioMerieux at 1-800-682-2666, option 3 for technical support and option 7 for BioFire support.

Training Plan/ Competency Assessment

Training Plan	Initial Competency Assessment
1. Employee must read the procedure. 2. Employee will demonstrate the ability to perform procedure, record results, and document corrective action after instruction by the trainer.	1. Direct observation

Historical Record

Version	Written/Revised by:	Effective Date:	Summary of Revisions
1	Julie Laramie Susan DeMeyere	3/25/2019	Initial Version
2	Julie Laramie	10/15/2019	Changed from monthly shutdown to weekly log out.
3	Julie Laramie	10/19/2020	Added changing filters to quarterly schedule
4	Kailee Pacetti/Julie Laramie	12/14/2020	Added troubleshooting restart and user/password to base restart
5	Susan DeMeyere	2/24/2022	Revised weekly maintenance to shutdown instead of restart.
6	Susan DeMeyere	4/8/2022	Revised weekly maintenance to restart instead of shutdown. Added to troubleshooting section.
7	Susan DeMeyere	5/29/2024	Revised instructions for restart and shutdown.