

# EFEVRE TECH LTD

YOUR NECESSITY, OUR INNOVATION

## AMGEL NGS LIBRARY PREPARATION PLATFORM

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Serial number : AMGEL2021N1001CY  
Intended use : Laboratory automation for Research only

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# Original equipment manufacturer (OEM) components

OpenTrons Labworks Inc :

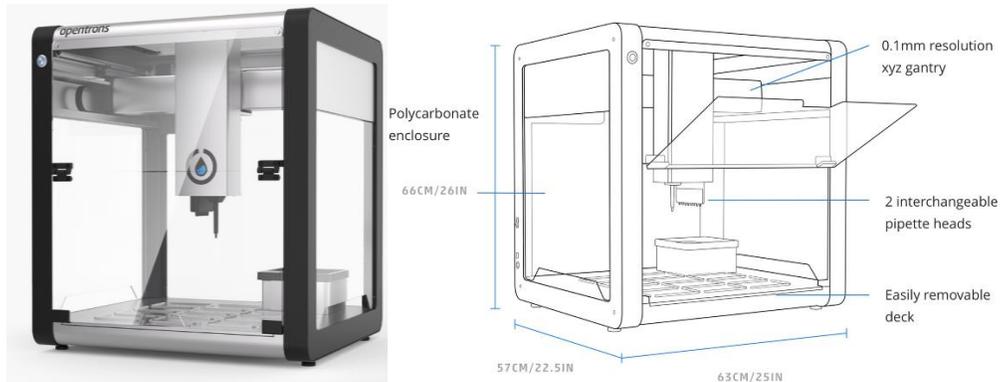
2x OT2 liquid handlers (22 positions total and 2 small trash bins)

1x P20 single channel pipette (1-20ul)

1x P300 single channel pipette [20-300ul (without filter tips) or 20-200 (filtered tips)]

1x P20 8-channel pipette (1-20ul)

1x P300 8-channel pipette [20-300ul (without filter tips) or 20-200 (filtered tips)]



1x Magnetic module



1x Temperature module (4-95°C)

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Quantifoil Instruments GmbH :

1x BioShake 3000-T elm (RT-99°C, 200-3000rpm)  
Aluminum adaptor for PCR plates



Shenzhen Yuejiang Technology Co., Ltd :

1x Dobot M1 robotic arm and basic suite kit with custom fingers for microtiter plate  
pneumatic gripper



Heavy duty Portable Bench with industrial automation

a) 8mm Stainless steel (304) stabilization plate

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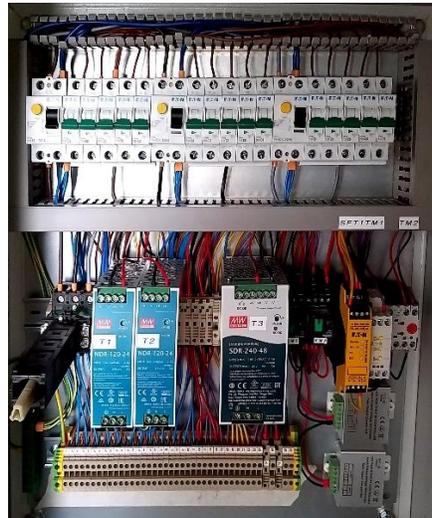
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- b) 1.5mm Stainless steel (304) user-interaction surface
- c) 4 x Anti-vibration - hygienic-grade - adjustable feet
- d) 4 x Heavy-duty wheels for easy relocation inside the lab
- e) Mounting brackets and removable hatch for integration of new devices (e.g., automated centrifuge or PCR)
- f) Enclosure for Robotic arm

### High-End Industrial automation



# Control Buttons

## Power button

Located below the bench on electrical box.  
This button provides power to the full system.



**Caution: DO NOT TURN OFF. Qualified personnel use only.**



## User-action buttons

1. **Green or Red** – ON : Press and Hold for 2 sec for restarting the robotic computer.
2. **Blue** – RESET : Press and Hold for 2 sec for RESETTING the emergency button. The Emergency button should be at original state (not pressed position) before pressing the RESET button.



**Caution: Recommended for Qualified personnel use only.**



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### UV-C germicidal led controllers

States:

#### A) Original state – Inactive UV-C lights



#### B) For fixed 15-minute program

1. Turn left the Left-hand knob on the left.
  - The UV-C lights are turned-on.
  - A preprogrammed timer will automatically turn-off the UV-C lights in 15 minutes.



2. Please reset the knob back to its original state after UV-C lights are off.



Caution:

1. During the 15-minute decontamination period all labware, samples, reagent should be removed, and the doors of liquid handlers remain closed.
2. Do not allow exposure of your skin or eyes to the UV-C light.

#### C) For custom exposure time :

1. Set-up the Right-hand knob at the desired time for exposure.  
Ratio 1 : 10 minutes.
2. Turn the Left-hand knob on the right.

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- The UV-C lights are turned-on.
- A timer will turn-off the UV-C lights automatically after the custom exposure time.



*In this example the UV-C lights will stay-on for 20 minutes (Right-hand knob on 2).*

3. Please reset both right-hand and left-hand knob back to their original state after UV-C lights are off.



Caution:

1. During the 15-minute decontamination period all labware, samples, reagent should be removed, and the doors of liquid handlers remain closed.
2. Do not allow exposure of your skin or eyes to the UV-C light.

Emergency stop button.



NOT PRESSED POSITION



Caution:

Use Emergency stop button in case of emergency press the red button :

1. The red button will pull back and stay at pressed position.
2. All systems will be stopped, and laboratory procedures will be lost.

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3. Call Repair service of EFEVRE TECH.

Suggested cases for using the Emergency stop button:

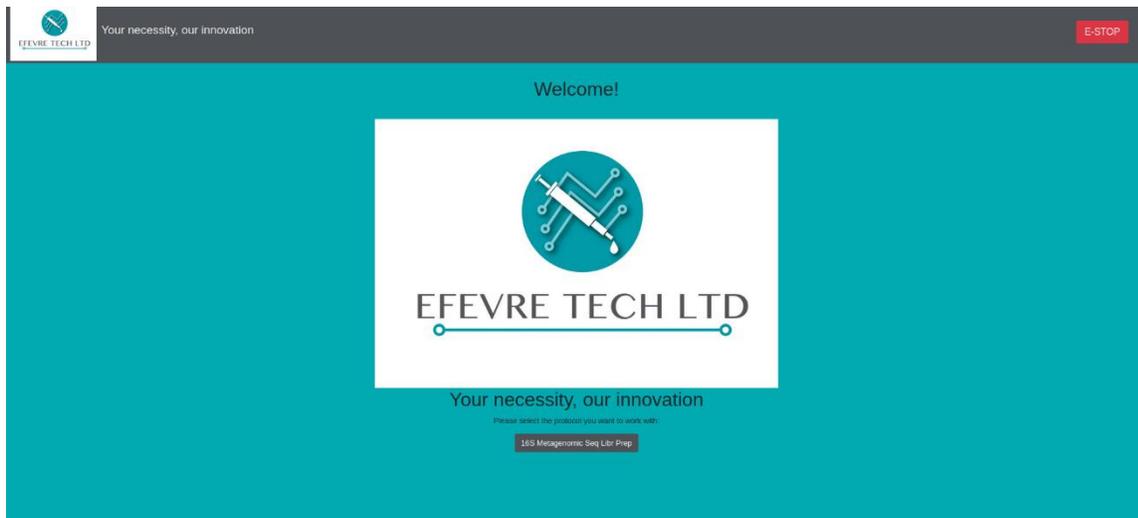
1. Before or after collision of robotic parts between each other or with labware.
2. Before or after collision of robotic parts with laboratory personnel. Please follow all instructions during protocol execution and avoid opening the doors of liquid handlers during an automated process execution for eliminating this case.

**Do NOT press emergency stop button for cancellation or for resetting an automated process which has been initiated and running.**

## User Interface

Step 1: Open web application

Step 2 : Press Button ‘ 16S Metagenomic Seq Libr Prep ‘



Step 3 : Select the automated procedure by pressing the corresponding button.

Example shown in Screenshot below : Tagment Genomic DNA and Amplify Libraries button was pressed.



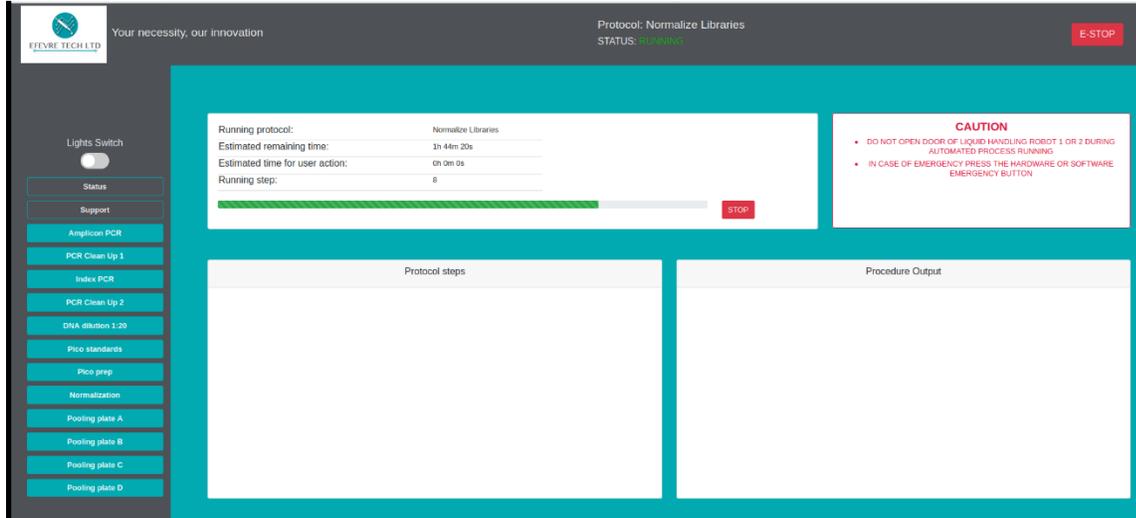
Important note:

You can select a different process by pressing any other process button.

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Step 4 : Press START (green button) and follow instructions for running the selected protocol.

Step 5 : Monitor the running process by selecting the button ‘Status’.



## Important notes:

1. For semiautomated processes the ‘Estimated time for user action:’ will indicate when the User will intervene in the process (User action). During User action the procedure will be paused. You can follow the instruction for resuming the process.
2. Procedures : ‘Clean Up Libraries’, ‘Normalize Libraries’ and ‘Pool Libraries’ do not require User action after initiation of process – Fully automated procedures. You can return to the device once the full protocol is finished.
3. Press STOP button (red) to cancel the process – Be aware that you cannot resume the process from the point of Cancellation. Any protocol steps executed, prior to cancellation will be lost.
4. Press E-stop button (red button on top right) in case of Emergency.
  1. All systems will be stopped, and laboratory procedures will be lost.
  2. Call Repair service of EFEVRE TECH.

Suggested cases for using the Emergency stop button:

1. Before or after collision of robotic parts between each other or with labware.
2. Before or after collision of robotic parts with laboratory personnel. Follow all instructions during protocol execution and avoid opening the doors of liquid handlers during an automated process execution for eliminating this case.

**Do NOT press emergency stop button for cancellation or for resetting an automated process which has been initiated and running.**

# Warranty

-1-year warranty for all hardware from 1<sup>st</sup> of May 2021 until 1<sup>st</sup> of May 2022.

-This warranty is void if the product is misused, altered, tampered with or is installed or used in a manner that is inconsistent with EFEVRE TECH LTD written recommendations, specifications and/or instructions, or fails to perform due to normal wear and tear.

-EFEVRE TECH LTD is not liable for special, indirect, incidental, consequential, or other damages including, but not limited to, loss, damage, personal injury, or any other expense directly or indirectly arising from the use of or inability to use its products either separately or in combination with other products.

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