
# hygiena DUP-1000 Automated Thermal Block User Guide



Contents



## Automated Thermal Block

### Model DUP-1000




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Part Number 2C-075.1-0314

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**FIELD OF USE**

The Automated Thermal Block is manufactured by Torrey Pines Scientific for use with the BAX System. Please see BAX System documentation for details on Field of Use. Please read the Limitation of Warranty and Liability before using the product.

## WARRANTY

This product is warranted by Torrey Pines Scientific to be free from defects in material and workmanship for a period of one year from the date of purchase. If repair or adjustment is necessary and has not been the result of abuse or misuse within the one-year period, correction of the defect will be made without charge.

For warranty and repair issues, contact Torrey Pines Scientific at (760) 930-9400.

## TECHNICAL SUPPORT

If you have any questions or comments on the Automated Thermal Block, please contact your distributor or Hygiena at 800-863-6842 or email **diagnostics.support@Hygiena.com** for technical assistance.

User Guide

### Instrument Overview

The Automated Thermal Block is a Peltier-driven heating and cooling device pre-programmed to perform the lysis steps of the BAX System protocols. It has been designed as a solid-state device with minimal moving parts to help ensure quality performance over time. The temperature of the plate is sensed by a platinum resistance temperature device mounted under the plate. The computer in the unit compares the plate temperature with the target temperature and instructs the module to heat or chill the plate as required.

The block automatically provides the sequential heating and cooling conditions for lysis protocols, eliminating the need to transfer samples between separate heating and cooling blocks. Once the lysis program is complete, the block holds the samples at 4 °C until they are removed.

This model has been optimized for use with the cluster tubes and metal tube holder supplied with the BAX System. Other tubes and holders are not recommended.


### Supplied Components

The purchase of the thermal block includes the following components:

1. Thermal block unit
2. Metal tube holders (2)
3. Power supply and cord
4. User documentation



#### Specifications and Requirements

| Item | Specification |
|---|---|
| Dimensions (with lid) | 6.5″ W x 8.75″ D x 8″ H (16.5 x 22.25 x 20.3 cm) |
| Weight | Approximately 8 lbs. (3.6 kg) |
| Power usage | 12 volts, 8.4 amps |
| Power requirements | 90 to 265 volts AC, 50/60Hz |
| Thermal range | -10 °C to 110 °C (14 to 230 °F) |
| Thermal uniformity | ±1 °C as measured at the block surface |
| Thermal accuracy | ±1 °C as measured at the block surface |
| Sample throughput | 1-96 samples per cycle |
| Room environment | Temperature between 65 and 89 °F (18 and 32 °C) |

#### Safety Symbols and Precautions

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##### Safety Symbols

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**Symbol** **Description**

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 Indicates that you should consult the manual for further information and proceed with appropriate caution.

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 Indicates the presence of a hot surface or other high-temperature hazard and proceed with appropriate caution.

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 Indicates the presence of an electrical shock hazard and proceed with appropriate caution.

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**General Safety Information**

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Extreme Temperatures

 The thermal block is capable of reaching 110 ºC (230 ºF), which can burn the skin if touched.
To prevent injury, remember the following:

- Use extreme caution around the block at all times.
- Never leave the block accessible to others when it is hot.
- Do not touch the plate surface unless you are sure it has cooled.
- Always keep the lid in place when the block is not in use.

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Power Requirements

 Always use the supplied AC power cord when connecting the heating block to a power source. Use the normal care and precaution that one would use with any electrical appliance.

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**Connecting the Thermal Block**

The Automated Thermal Block is pre-programmed to perform the sequential heating and cooling steps needed for BAX System assays. No calibration or software installation is required when the thermal block is used as specified.

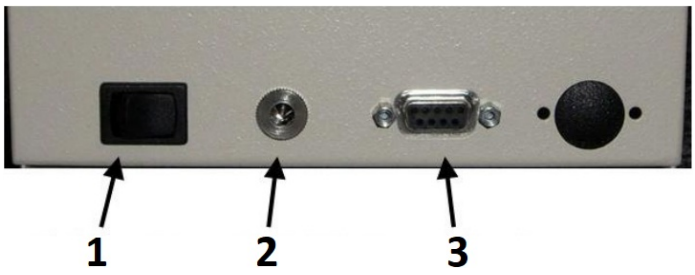
Follow these steps to connect the thermal block:

1. Place the thermal block unit on a level, dry laboratory workbench. Allow at least 4 inches (10 cm) on all sides of the unit for ventilation.

2. Insert one end of the provided power cord into the power supply and plug the other end of the power cord into a 3-wire outlet.

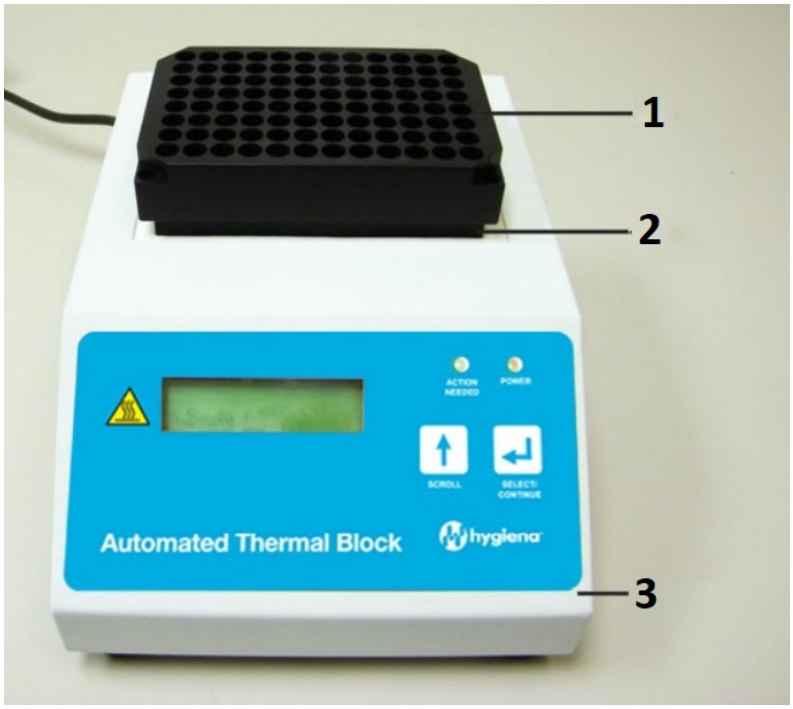
Note: Ensure the outlet is properly grounded and runs the appropriate voltage (see specifications on the previous page).

3. Insert the power supply jack into the power input port on the back panel of the thermal block.




1. On/Off switch
2. Power input
3. IO port

4. Seat the metal tube holder over the metal plate surface on the top of the thermal block unit.

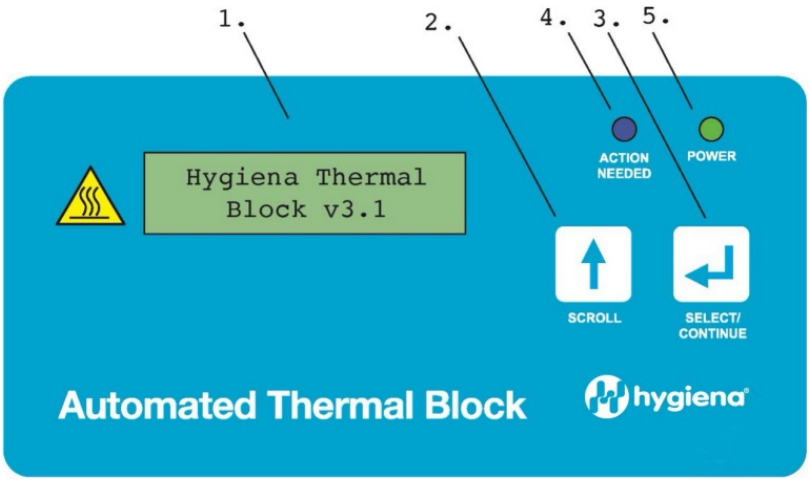



1. Metal tube holder
2. Metal plate surface
3. Thermal block unit

**Front Panel Display**

The front panel of the Automated Thermal Block contains the following items:

1. **LCD display –** shows the program menu, program selection, settings and instructions.
2. **SCROLL button –** changes the selected menu item in the LCD display. An audible beep sounds when the button is pressed.
3. **SELECT/CONTINUE button –** sets the menu item in the LCD display as the selected program and is also used to confirm required actions. An audible beep sounds when the button is pressed.
4. **Blue ACTION NEEDED LED –** indicates that the user must perform an action before the program can continue. This notification is accompanied by an audible alarm.
5. **Green POWER LED –** indicates that the thermal block is turned on.




**Program Menu**

The Automated Thermal Block is pre-programmed with four lysis protocols:

**Gram positive –** use with Gram-positive bacteria, including Staphylococcus and Listeria*
*Note: For Listeria 24E assays, use the “24E” program. For real-time Listeria assays, use the “RT Listeria” program.

**Gram negative –** use with Gram-negative bacteria, including Salmonella, E. coli, Campylobacter, Vibrio and Cronobacter

**24E –** use with BAX System 24E assays for Listeria and L. monocytogenes

**RT Listeria –** use with BAX System real-time assays for Listeria and L. monocytogenes

**Turning the Thermal Block On and Off**

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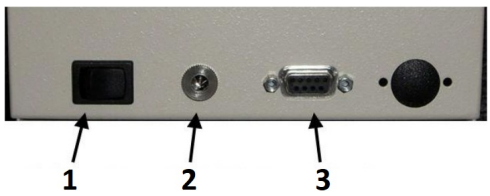
**ON**

Turn on the thermal block by toggling the on/off switch on the back panel of the unit.

At start-up, the LCD automatically displays the following series of messages:




1. On/Off switch
2. Power input
3. IO port

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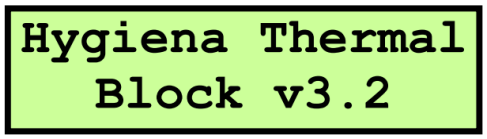
The first screen shows the version of software currently installed on the thermal block.

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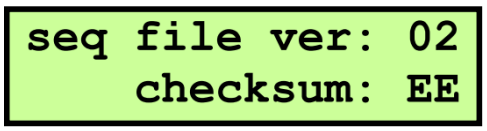
The second screen shows the seq file version number and the checksum number for validation purposes.

Note: A change in either of these values indicates a modification to the thermal block software. If this occurs, any validation previously performed on the instrument may no longer apply.

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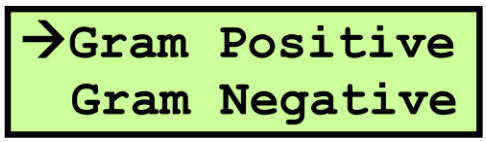
The start-up sequence is complete when the LCD display shows the program menu.

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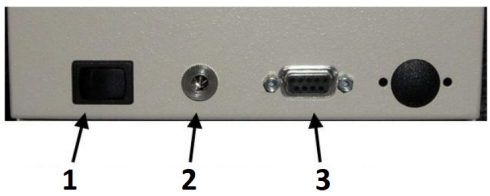
**OFF**

After finishing a run, you can either select another program or turn off the power to the unit by toggling the on/off switch on the back panel of the unit.




1. On/Off switch
2. Power input
3. IO port

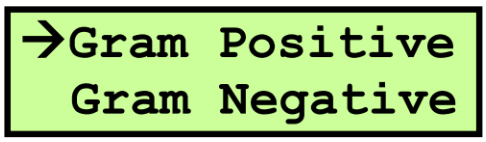
---

**Running the Gram-Positive Program**

Samples are heated to 55 °C for 60 minutes, then 95 °C for 10 minutes, then held at 4 °C for at least 5 minutes or until removed.

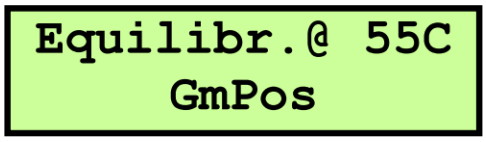
1 Turn on the thermal block, then press the SCROLL button until the arrow → is next to the **Gram Positive** option.

Press the SELECT/CONTINUE button.




2 The unit beeps once and the LCD display changes as the thermal block begins equilibrating to 55 °C.

Note: Do not load samples into the thermal block until the load prompt appears on the LCD display.




3 When the thermal block has reached 55 °C, the unit sounds two audible beeps and the blue ACTION NEEDED LED activates. The LCD display changes to “Load Samples”.


4 After the “Load Samples” prompt appears, place a rack of prepared samples into the metal tube holder.

Note: See the BAX System User Guide for information on preparing samples.

Press the SELECT/CONTINUE button.

5 The LCD display changes to “GmPos Lysis 55C”. A timer in the bottom right corner counts down from 60:00 and shows the number of minutes remaining in this step.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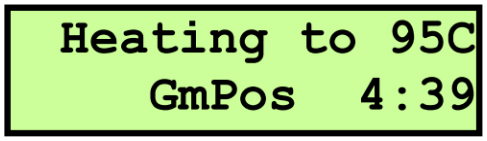
6 After lysis at 55 °C is complete, the LCD display changes to “Heating to 95C”. A timer in the bottom right corner counts up from 0:00 during the temperature change. No user action is required.

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7 After the thermal block reaches 95 °C, the LCD display changes to “Denaturing @ 95C”. A timer in the bottom right corner counts down from 10:00 and shows the number of minutes remaining in this step. No user action is required.


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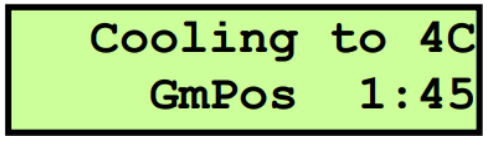
8 After denaturation at 95 °C is complete, the LCD display changes to “Cooling to 4C”, and the thermal block sounds two audible beeps to signal the change. A timer in the bottom right corner counts up from 0:00 during the temperature change. No user action is required.

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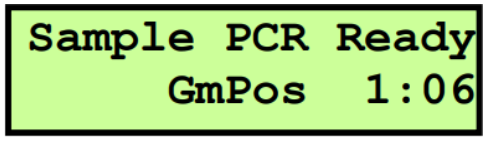
9 After the samples have cooled for 5 minutes, the LCD display changes to “Sample PCR Ready”, the blue ACTION NEEDED LED activates and the thermal block sounds four audible beeps to signal that samples can be removed.

Press the SELECT/CONTINUE button.



Note: A timer in the bottom right corner counts up from 0:00 to show any additional time that samples are held at 4 °C.

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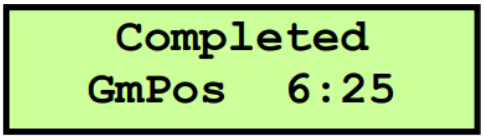
10 The LCD display changes to “Completed” and the thermal block sounds an audible beep to signal that the program has been completed. The timer continues to show any additional time that samples are held at 4 °C.

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11 Follow the instructions in the BAX System User Guide to hydrate the PCR tablets with these lysates.

Note: Lysates must be maintained at 4 °C during tablet hydration.

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12 After the PCR tablets have been hydrated, remove the rack of cluster tubes from the metal tube holder.

Press the SELECT/CONTINUE button.


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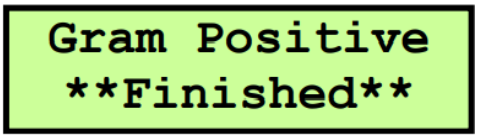
13 The LCD display changes to “Gram Positive Finished” and the thermal block sounds an audible beep to signal that the program has finished.

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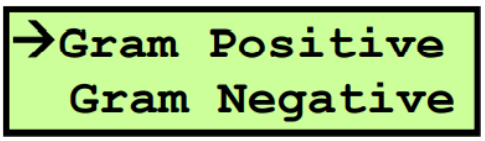
14 Press the SELECT/CONTINUE button to exit from the program. The LCD changes to display the program menu.

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**Running the Gram-Negative Program**

Samples are heated to 37 °C for 20 minutes, then 95 °C for 10 minutes, then held at 4 °C for at least 5 minutes or until removed.

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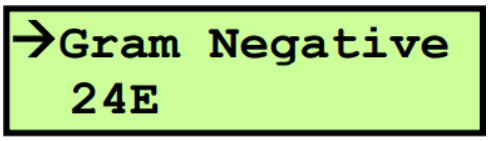
1 Turn on the thermal block, then press the SCROLL button until the arrow → is next to the **Gram Negative** option.

Press the SELECT/CONTINUE button.

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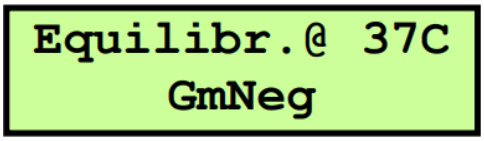
2 The unit beeps once and the LCD display changes as the thermal block begins equilibrating to 37 °C.

Note: Do not load samples into the thermal block until the load prompt appears on the LCD display.




---

3 When the thermal block has reached 37 °C, the unit sounds two audible beeps and the blue ACTION NEEDED LED activates. The LCD display changes to “Load Samples”.


---

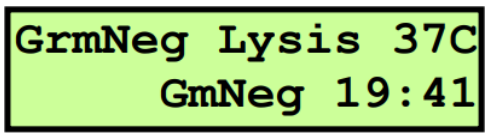
4 After the “Load Samples” prompt appears, place a rack of prepared samples into the metal tube holder.

Note: See BAX System User Guide for information on preparing samples.

Press the SELECT/CONTINUE button.


---

5 The LCD display changes to “GmNeg Lysis 37C”. A timer in the bottom right corner counts down from 20:00 and shows the number of minutes remaining in this step.

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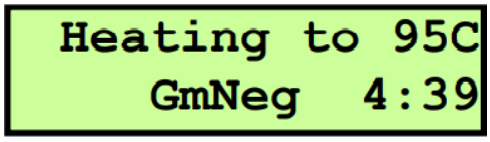
6 After lysis at 37 °C is complete, the LCD display changes to “Heating to 95C”. A timer in the bottom right corner counts up from 0:00 during the temperature change. No user action is required.

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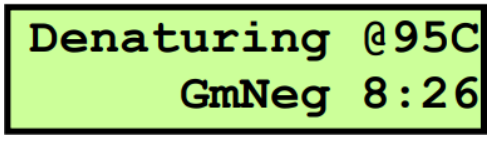
7 After the thermal block reaches 95 °C, the LCD display changes to “Denaturing @ 95C”. A timer in the bottom right corner counts down from 10:00 and shows the number of minutes remaining in this step. No user action is required.

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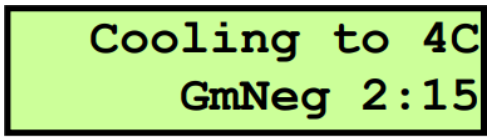
8 After denaturation at 95 °C is complete, the LCD display changes to “Cooling to 4C” and the thermal block sounds two audible beeps to signal the change. A timer in the bottom right corner counts up from 0:00 during the temperature change. No user action is required.

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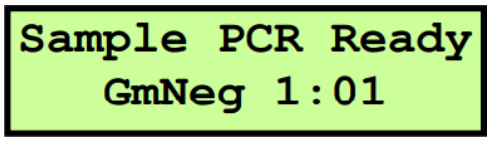
9 After samples have cooled for 5 minutes, the LCD display changes to “Sample PCR Ready”, the blue ACTION NEEDED LED activates and the thermal block sounds four audible beeps to signal that samples can be removed.

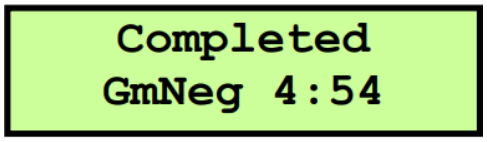
Press the SELECT/CONTINUE button.




Note: A timer in the bottom right corner counts up from 0:00 to show any additional time that samples are held at 4 °C.

---

10 The LCD display changes to “Completed” and the thermal block sounds an audible beep to signal that the program has been completed. The timer continues to show any additional time that samples are held at 4 °C.




---

11 Follow the instructions in the BAX System User Guide to hydrate the PCR tablets with these lysates.

Note: Lysates must be maintained at 4 °C during tablet hydration.

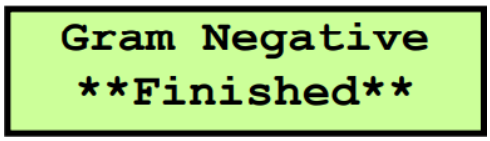
---

12 After the PCR tablets have been hydrated, remove the rack of cluster tubes from the metal tube holder.

Press the SELECT/CONTINUE button.


---

13 The LCD display changes to “Gram Negative Finished” and the thermal block sounds an audible beep to signal that the program has finished.

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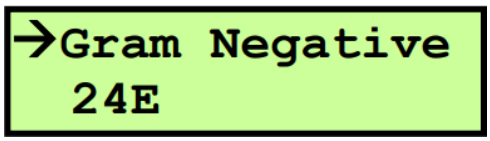
14 Press the SELECT/CONTINUE button to end the program. The LCD changes to display the program menu.

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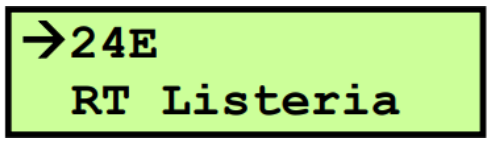
**Running the 24E Program**

Samples are heated at 37 °C for 30 minutes, then removed for the addition of lysis reagents.
Samples then are heated to 55 °C for 30 minutes, then 95 °C for 10 minutes, then held at 4 °C for at least 5 minutes or until removed.

---

1 Turn on the thermal block, then press the SCROLL button until the arrow → is next to the **24E** option.

Press the SELECT/CONTINUE button.

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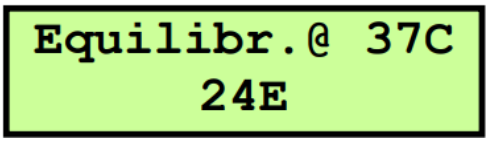
2 The unit beeps once and the LCD display changes as the thermal block begins equilibrating to 37 °C.

Note: Do not load samples into the thermal block until the load prompt appears on the LCD display.

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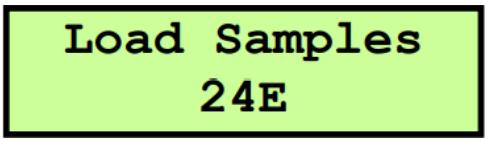
3 When the thermal block has reached 37 °C, the unit sounds two audible beeps and the blue ACTION NEEDED LED activates. The LCD display changes to “Load Samples”.

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4 After the “Load Samples” prompt appears, place a rack of prepared samples into the metal tube holder.

Note: See BAX System User Guide for more information on prepared samples.

Press the SELECT/CONTINUE button.


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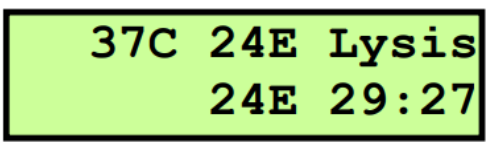
5 The LCD display changes to “37C 24E Lysis”. A timer in the bottom right corner counts down from 30:00 and shows the number of minutes remaining in this step.

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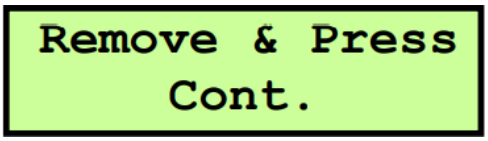
6 After lysis at 37 °C is complete, the blue ACTION NEEDED LED activates and the thermal block sounds two

audible beeps to signal that user action is required. The LCD display changes to “Remove & Press Continue”.

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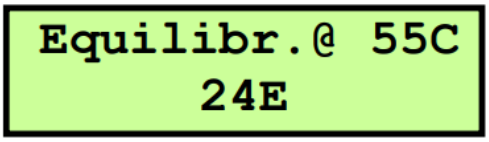
7 Remove the rack of cluster tubes from the metal tube holder.

Press the SELECT/CONTINUE button.


---

8 The unit beeps once and the LCD display changes as the thermal block begins equilibrating to 55 °C.

While the block is heating, follow the instructions in the BAX System User Guide to add additional lysing reagents to each sample.




Note: Do not re-load samples into the thermal block until the re-load prompt appears on the LCD display.

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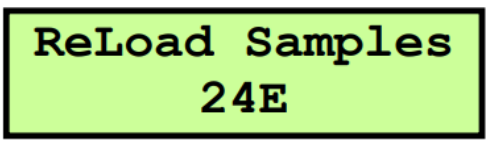
9 When the thermal block has reached 55 °C, the unit sounds two audible beeps and the blue ACTION NEEDED LED activates. The LCD display changes to “Reload Samples”.




---

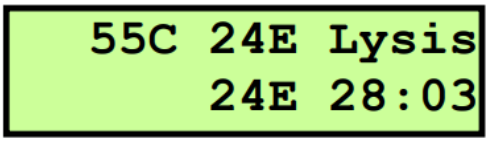
10 After the “Reload Samples” prompt appears, place the rack of samples with additional lysing reagents into the

metal tube holder.

Press the SELECT/CONTINUE button.

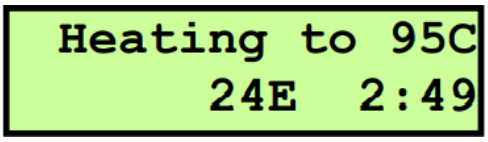

---

11 The LCD display changes to “55C 24E Lysis”. A timer in the bottom right corner counts down from 30:00 and shows the number of minutes remaining in this step.



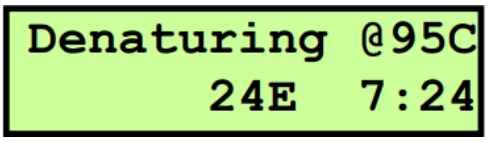

---

12 After lysis at 55 °C is complete, the LCD display changes to “Heating to 95C”. A timer in the bottom right corner counts up from 0:00 during the temperature change. No user action is required.



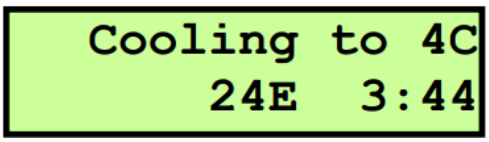

---

13 After the thermal block reaches 95 °C, the LCD display changes to “Denaturing @ 95C”. A timer in the bottom right corner counts down from 10:00 and shows the number of minutes remaining in this step. No user action is required.




---

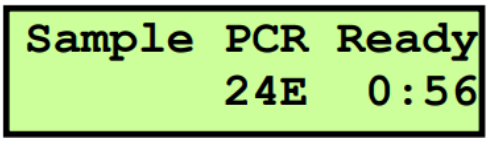
14 After denaturation at 95 °C is complete, the LCD display changes to “Cooling to 4C” and the thermal block sounds two audible beeps to signal the change. A timer in the bottom right corner counts up from 0:00 during the temperature change. No user action is required.




---

15 After samples have cooled for 5 minutes, the LCD display changes to “Sample PCR Ready”, the blue ACTION NEEDED LED activates and the thermal block sounds four audible beeps to signal that samples can be removed.

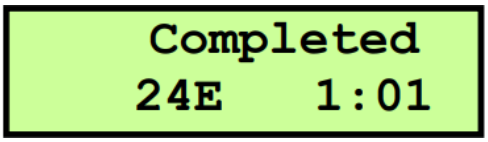
Press the SELECT/CONTINUE button.




Note: A timer in the bottom right corner counts up from 0:00 to show any additional time that samples are held at 4 °C.

---

16 The LCD display changes to “Completed” and the thermal block sounds an audible beep to signal that the program has been completed. The timer continues to show any additional time that samples are held at 4 °C.




---

17 Follow the instructions in the BAX System User Guide to hydrate the PCR tablets with these lysates.

Note: Lysates must be maintained at 4 °C during tablet hydration.

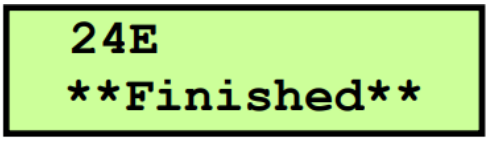
---

18 After the PCR tablets have been hydrated, remove the rack of cluster tubes from the metal tube holder.

Press the SELECT/CONTINUE button.

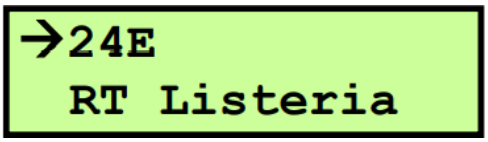

---

19 The LCD display changes to “24E Finished” and the thermal block sounds an audible beep to signal that the program has finished.




---

20 Press the SELECT/CONTINUE button to end the program. The LCD changes to display the program menu.




---

**Running the RT Listeria Program**

Samples are heated to 55 °C for 30 minutes, then 95 °C for 10 minutes, then held at 4 °C for at least 5 minutes or until removed.

---

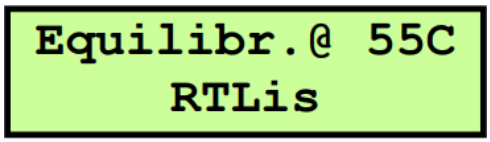
1 Turn on the thermal block, then press the SCROLL button until the arrow → is next to the **RT Listeria** option.

Press the SELECT/CONTINUE button.


---

2 The unit beeps once and the LCD display changes as the thermal block begins equilibrating to 55 °C.

Note: Do not load samples into the thermal block until the load prompt appears on the LCD display.




---

3 When the thermal block has reached 55 °C, the unit sounds two audible beeps and the blue ACTION NEEDED LED activates. The LCD display changes to “Load Samples”.


---

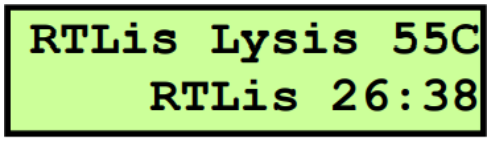
4 After the “Load Samples” prompt appears, place a rack of prepared samples into the metal tube holder.

Note: See the BAX System User Guide for information on preparing samples.

Press the SELECT/CONTINUE button.

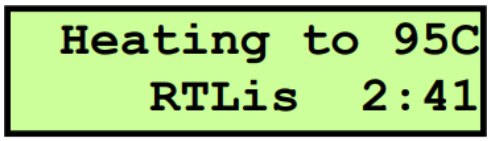

---

5 The LCD display changes to “RTLis Lysis 55C”. A timer in the bottom right corner counts down from 30:00 and shows the number of minutes remaining in this step.



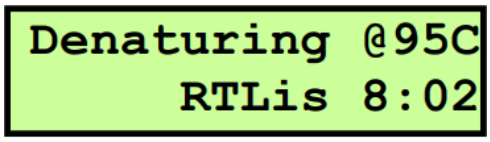

---

6 After lysis at 55 °C is complete, the LCD display changes to “Heating to 95C”. A timer in the bottom right corner counts up from 0:00 during the temperature change. No user action is required.



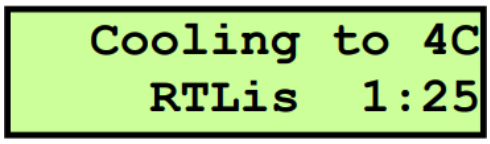

---

7 After the thermal block reaches 95 °C, the LCD display changes to “Denaturing @ 95C”. A timer in the bottom right corner counts down from 10:00 and shows the number of minutes remaining in this step. No user action is required.




---

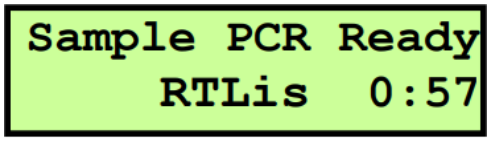
8 After denaturation at 95 °C is complete, the LCD display changes to “Cooling to 4C” and the thermal block sounds two audible beeps to signal the change. A timer in the bottom right corner counts up from 0:00 during the temperature change. No user action is required.




---

9 After the samples have cooled for 5 minutes, the LCD display changes to “Sample PCR Ready”, the blue ACTION NEEDED LED activates and the thermal block sounds four audible beeps to signal that samples can be removed.

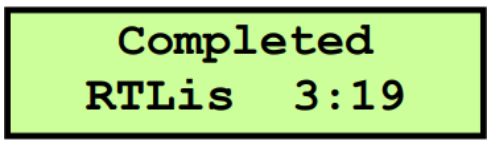
Press the SELECT/CONTINUE button.




Note: A timer in the bottom right corner counts up from 0:00 to show any additional time that samples are held at 4 °C.

---

10 The LCD display changes to “Completed” and the thermal block sounds an audible beep to signal that the program has been completed. The timer continues to show any additional time that samples are held at 4 °C.



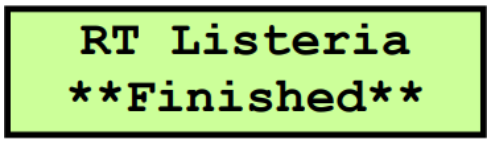
11 Follow the instructions in the BAX System User Guide to hydrate the PCR tablets with these lysates.

Note: Lysates must be maintained at 4 °C during tablet hydration.

12 After the PCR tablets have been hydrated, remove the rack of cluster tubes from the metal tube holder.

Press the SELECT/CONTINUE button.


13 The LCD display changes to “RT Listeria Finished” and the thermal block sounds an audible beep to signal that the program has finished.




14 Press the SELECT/CONTINUE button to exit from the program. The LCD changes to display the program menu.


**Cleaning and Decontaminating the Thermal Block**

**Cleaning the Thermal Block**

- Do not attempt to clean the thermal block or metal tube holder when they are hot.
- Remove dust and debris by wiping the instrument surfaces with a lint-free cloth.
- Wipe all spills or condensation with a soft cloth or paper towel, if needed.
- If needed, the casing can be wiped off with a damp cloth using mild soap or detergent.
- Do not use solvents or cleansers containing iodine or acetone, as these solutions could damage the paint or display window of the block.

#### Decontaminating the Thermal Block

If contamination should occur, the following steps can be performed under sterile conditions to help remove the contaminants.

- Wipe the surface of the thermal block unit with a cloth dampened with 20% bleach solution*, followed by a 70% ethanol rinse to prevent damage to the equipment.
- Soak metal tube holders in 20% bleach solution* for about 5 minutes, then rinse thoroughly with water and allow to air dry.

* An alternate cleaner designed to remove free DNA may also be investigated. A 10% bleach solution may also be used for decontamination in accordance with your laboratory SOP but may require repetition of the cleaning to ensure the removal of all amplicons.

#### Calibrating the Thermal Block

The Automated Thermal Block should not require calibration when used as directed. If your laboratory requires calibration as part of your standard operating procedures, you can use the following procedure to calibrate the block to the nearest degree.

### Materials

- Resistance Temperature Detector (RTD) thermometer with microprobe – VWR #61220-601 or equivalent
- Cluster tubes used for lysis (at least 48)

Note: If an RTD thermometer is not available, a dry bath alcohol thermometer (VWR #89095-782 or equivalent) may be used to perform the calibration. However, because results may be less accurate due to the lower resolution of the dry bath thermometer, calibration with an RTD thermometer is strongly recommended.

The buttons on the front panel display will serve different purposes during calibration:

- **SCROLL** button – increases the value entered in the LCD display.
- **SELECT/CONTINUE** button – decreases the value entered in the LCD display.
- Pressing **SCROLL** and **SELECT/CONTINUE** buttons at the same time – sets the value in the LCD display as the selected value.

---

1 Arrange 48 cluster tubes in a rack and fill each tube with 200 µL of water.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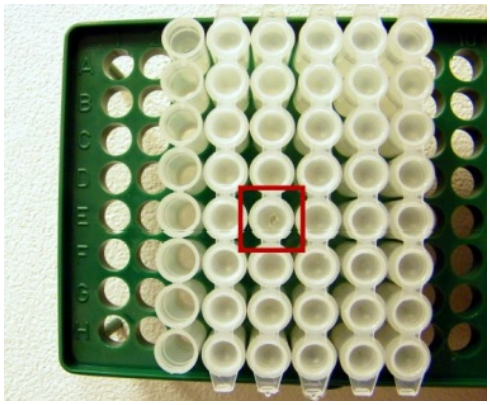
2 Poke a small hole in the cap of one cluster tube near the center of the cluster tube rack.



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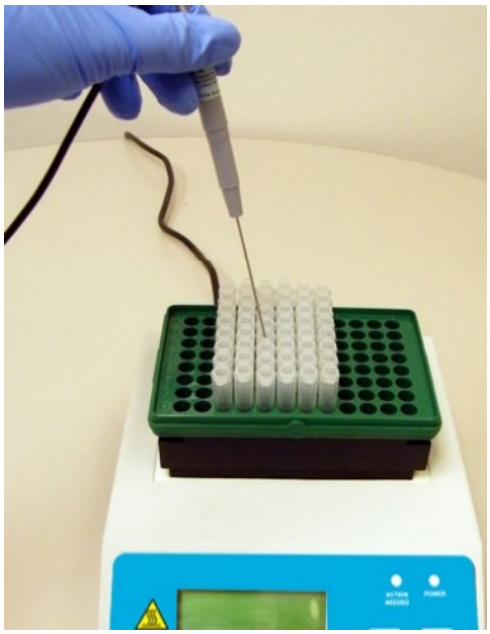
3 With the **power turned off**, place the rack of cluster tubes in the metal holder.


---

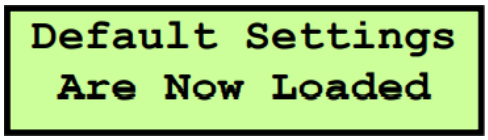
4 Insert the microprobe of the RTD thermometer through the hole in the cap of the cluster tube.

Make sure the tip of the probe touches the bottom of the tube to ensure that the probe is completely immersed.



---

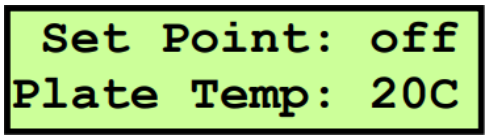
5 While pressing and holding the SELECT/CONTINUE button, turn on the power to the thermal block by toggling the on/off switch on the back panel. The LCD displays a message that “Default Settings Are Now Loaded”.




---

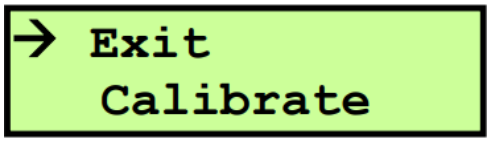
6 Continue to hold the SELECT/CONTINUE button until the LCD displays “Set Point: off” (about 15 seconds).

Note: Plate temp is not important at this point.



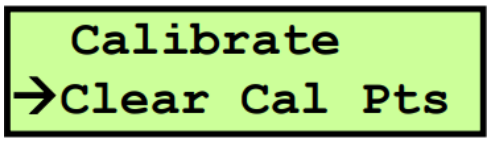

---

7 Press the SCROLL and SELECT/CONTINUE buttons at the same time. The LCD displays the Calibration menu.




---

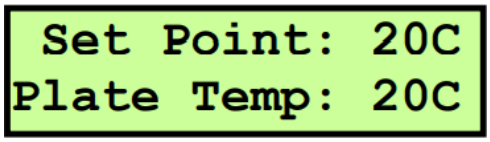
8 Press the SELECT/CONTINUE button until the arrow → is next to the **Clear Cal Pts** option.




---

9 Press the SCROLL and SELECT/CONTINUE push buttons at the same time to select the **Clear Cal Pts** option.

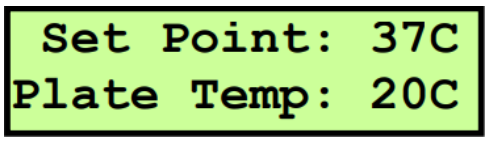
Calibration points previously saved in the thermal block are cleared, and the LCD display changes to read “Set Point: off”.




---

10 Press the SCROLL button to increase the value of the set point to 37 °C. The block automatically begins the heating process.

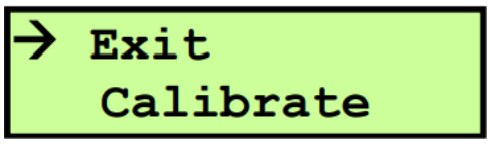
If needed, use the SELECT/CONTINUE button to decrease the value of the set point.




Note: Be sure to wait for the temperature reading of the thermometer to equilibrate before proceeding.

---

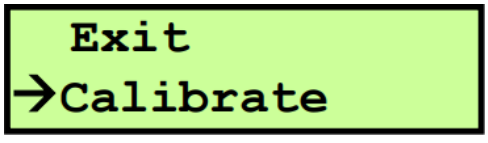
11 Press the SCROLL and SELECT/CONTINUE buttons at the same time. The calibration menu again appears on the LCD display.




---

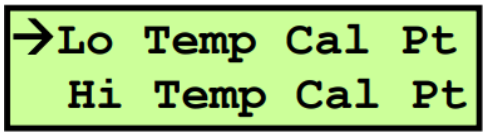
12 Press the SELECT/CONTINUE button until the arrow → is next to the **Calibrate** option.

Press the SCROLL and SELECT/CONTINUE buttons at the same time to select the **Calibrate** option.



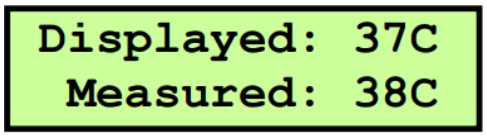
13 Press the SELECT/CONTINUE push button until the arrow → is next to the **Lo Temp Cal Pt** option.

Press the SCROLL and SELECT/CONTINUE buttons at the same time to select the **Lo Temp Cal Pt** option.




14 The LCD display changes to a screen that compares the Displayed and Measured temperatures.

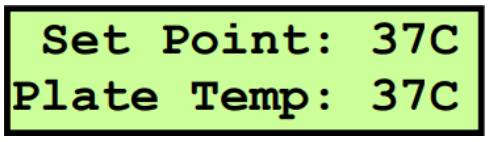
If needed, use the SCROLL button to increase the value of the Measured temperature or the SELECT/CONTINUE button to decrease the value of the Measured temperature to the value displayed on the thermometer.




Note: When entering the Measured temperature, do not include decimal places.

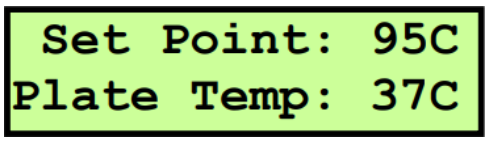
15 Press the SCROLL and SELECT/CONTINUE buttons at the same time to set the Measured temperature.

If necessary, the thermal block will automatically adjust the Plate Temperature to align with the Set Point.



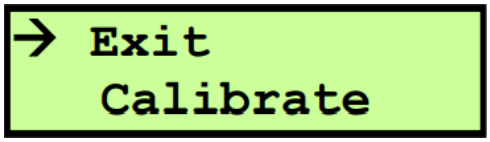

16 Press the SCROLL button to increase the value of the set point to 95 °C. The block automatically begins the heating process.

If needed, use the SELECT/CONTINUE button to decrease the value of the set point.



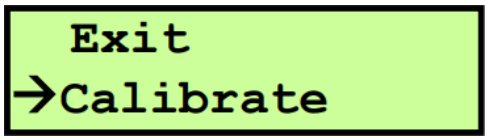

Note: Be sure to wait for the temperature reading of the thermometer to equilibrate before proceeding.

17 Press the SCROLL and SELECT/CONTINUE buttons at the same time. The calibration menu again appears on the LCD display.



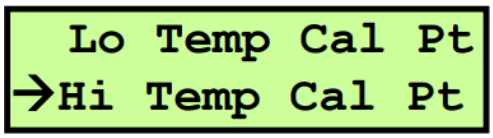

18 Press the SELECT/CONTINUE button until the arrow → is next to the **Calibrate** option.

Press the SCROLL and SELECT/CONTINUE buttons at the same time to select the **Calibrate** option.



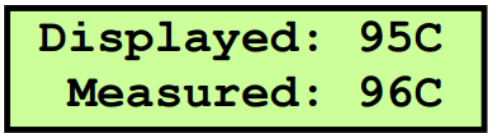

19 Press the SELECT/CONTINUE push button until the arrow → is next to the **Hi Temp Cal Pt** option.

Press the SCROLL and SELECT buttons at the same time to select the **Hi Temp Cal Pt** option.




20 The LCD display changes to a screen that compares the Displayed and Measured temperatures.

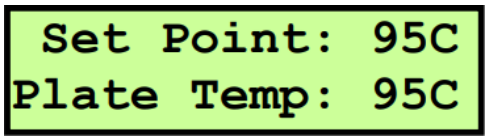
If needed, use the SCROLL button to increase the value of the Measured temperature or the SELECT/CONTINUE button to decrease the value of the Measured temperature to the value displayed on the thermometer.




Note: When entering the Measured temperature, do not include decimal places.

21 Press the SCROLL and SELECT/CONTINUE buttons at the same time to set the Measured temperature.

If necessary, the thermal block automatically adjusts the Plate Temperature to align with the Set Point.

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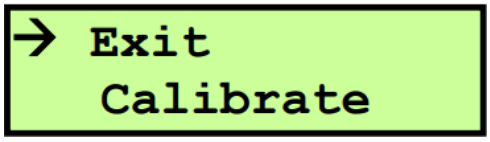
22 Calibration is complete. Turn off power to the thermal block by toggling the on/off switch on the back panel.




---

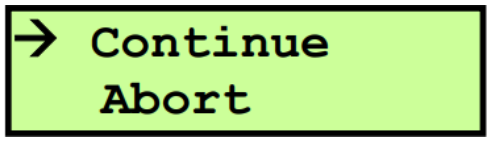
**Tips and Troubleshooting**

**Aborting a Program**

The Automated Thermal Block automatically progresses through each sequential step until the program is complete. If necessary, you can cancel the program prior to completion via the Abort option.

---

1 While the program is running, press the SCROLL button to display the **Abort menu**.

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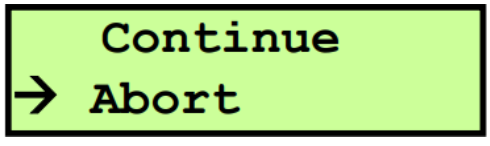
2 Press the SCROLL push button until the arrow → is next to the **Abort** option, then press the SELECT/CONTINUE push button.

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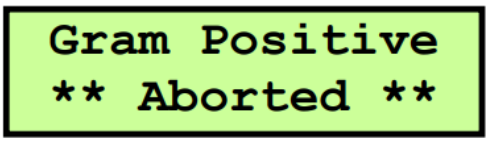
3 The LCD display shows a message to confirm that the program was terminated.

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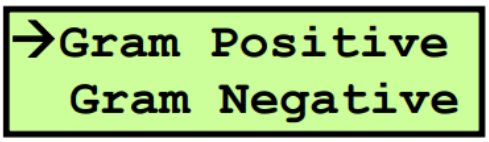
4 To start another program, press the SELECT/CONTINUE button to return to the program menu.

To turn off the unit, toggle the on/off switch on the back panel.

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#### Error Messages

If the power fails or any interruption occurs during a run, the LCD displays an error message.

Affected samples in the thermal block should not be used with the BAX System. Remove and dispose of these samples according to your standard operating procedures.

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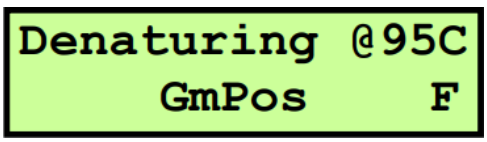
The letter "**F**" (Fault) appears in the lower right corner of the LCD display if an interruption occurs during any step in the program.

This fault indicator appears on the LCD display until the program completes or the program is aborted by the user.

Affected samples should not be used with the BAX System. Remove and dispose of these samples according to your standard operating procedures.

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The **Power Failure** message appears when power is interrupted or fails during a run. Toggle the on/off switch on the back panel to reset the unit.

Affected samples should not be used with the BAX System. Remove and dispose of these samples according to your standard operating procedures.

Gram Positive
POWER FAILURE!

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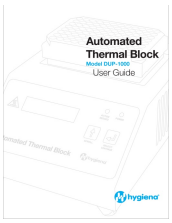
## Documents / Resources

| | |
|---|---|
|  | hygiena DUP-1000 Automated Thermal Block [pdf] User Guide<br>DUP-1000 Automated Thermal Block, DUP-1000, Automated Thermal Block, Thermal Block |

## References

- Home - Hygiena