

ABE Equipment Quick Guides

Pipettes:

- Volume Setting: The pipet volume is shown on the handle grip window. To set volume make sure that the desired volume clicks into place, the digits are visible in the display window and that the volume is within the pipette's range.
- **WARNING: USING EXCESSIVE FORCE TO TURN THE PUSH BUTTON OUTSIDE THE PIPETS RANGE WILL JAM THE MECHANISM AND DAMAGE THE PIPETTE.**

Electrophoresis Chamber:

1. Place the tray on a level surface
2. Insert the comb
3. Pour agarose gel to a 4-5mm thickness

Note: When pouring agarose make sure that agarose gel has cooled before pouring into gel tray. Pouring agarose before it cools to this temperature can cause the tray to crack.

4. Add buffer to electrophoresis chamber

MAKE SURE THAT THERE IS BUFFER COVERING THE TOP OF THE GEL SO THAT CURRENT CAN RUN CONSTANT.

5. Load DNA samples into the wells.
6. Put the lid on the electrophoresis chamber
7. Plug the chamber into the power supply.
8. Turn the power supply on and set to appropriate voltage.

WARNING: MAKE SURE THERE IS NO LIQUID ON THE OUTSIDE SURFACE OF THE CHAMBER. DO NOT TURN ON THE POWER SUPPLY UNTIL THE COVER HAS BEEN PUT ON THE CHAMBER.

Make sure not to run the gel at too high of a voltage, high voltages can cause curving of the bands which could make it difficult to interpret results.

FOTO/Phoresis UV Transilluminator Operation:

1. Open UV blocking cover, place the mini gel on the purple filter glass and close the cover.

CAUTION: DO NOT USE FOTO/PHORESIS IF COVER IS BROKEN.

2. Turn on the power
3. View the sample

ONLY VIEW THE SAMPLE WITH THE COVER ON, THIS PROTECTS FROM UV EXPOSURE.

4. Photograph gel if desired

5. Once you are done looking at the gel turn the power off, remove the gel and wipe the purple filter glass.

Mini Centrifuge:

1. Before running the centrifuge make sure the power switch is in the “on” position.
2. To begin the run simply close the lid of the centrifuge
3. To stop rotation press down on the lid release tab located on the front of the unit.
4. After the rotor has stopped the lid can be opened by lifting the lid on the hinge.
5. Always make sure that the centrifuge is properly balanced in order to prevent rotor damage.

Water Bath:

Status indication lights are as follows:

RUN LED: operating status

HEAT LED: operating of heating element

O/T LED: it is ON when over temperature device is active

WARNING: DO NOT TURN ON UNIT UNTIL WATER HAS BEEN ADDED TO THE RESERVOIR

1. Press main power switch
2. Select appropriate temperature
3. Set over temp limit to 10-15 degrees higher than the set temperature.

Micro centrifuge Bio-Rad 16K:

1. Plug in the centrifuge, lid should click open
2. Remove rotor lid
3. Load centrifuge with appropriate sized tubes

MAKE SURE CENTRIFUGE IS BALANCED BEFORE RUNNING

4. Replace rotor top and close lid

DO NOT RUN CENTRIFUGE WITHOUT REPLACING ROTOR LID

5. Set desired speed and time

WARNING: DO NOT OPEN THE CENTRIFUGE UNTIL THE ROTOR HAS COME TO A COMPLETE STOP

Micro centrifuge Eppendorf:

1. Turn on centrifuge with switch located on the back by the power supply cord
2. Press open button on the front to open the lid

3. To remove rotor cover twist the handle left
4. Load centrifuge, pay careful attention that the unit is balanced

CENTRIFUGE MUST BE BALANCED

5. Once samples are loaded replace the rotor cover by twisting to the right until you hear a click

DO NOT RUN CENTRIFUGE WITHOUT REPLACING ROTOR LID

6. Close the lid
7. Set proper time and speed
8. Press the start button
9. Once cycle is complete the centrifuge lid will open on its own

WARNING: DO NOT OPEN THE CENTRIFUGE UNTIL THE ROTOR HAS COME TO A COMPLETE STOP

Incubating Mini Shakers - VWR:

1. Plug in power cord once the standby light has illuminated the unit is ready for use.
2. Press the standby button to move unit from standby mode
3. Press the up/down arrows below the temperature display until you reach desired temperature.

CAUTION: THE HOT INDICATOR LIGHT WARNS THAT THE TEMPERATURE OF THE AIR IN THE CHAMBER IS MORE THAN 40 DEGREES CELSIUS (104 F)

4. Press the on/off button to start the heating function.
5. Press up/down button to adjust the speed display. The on/off button will start the shaking function.

Electrophoresis power supply - BIORAD:

1. Turn on power
2. Connect the electrophoresis cells to the power supply
3. To set the voltage press the key with V/mA and the clock until the V light is lit up
4. Use the scroll key to set desired voltage
5. To set the timer press the key with V/mA and the clock until the clock icon is lit up. Use the scroll key to set desired time.

6. Once time and voltage are set press the run key to start.
7. Once run is complete press the stop key, then turn off the power supply.

Electrophoresis power supply – THERMO SCIENTIFIC

1. Press the blue key in the middle of the unit to power on
2. Press the set key to set until the volts light is lit, then use the blue scroll key to change to desired volts.
3. Press the set key until the time light is lit and use the blue scroll key to set desired time.
4. Once all parameters have been set press the run key to start.