



A Geno Technology, Inc. (USA) brand name

High Throughput Horizontal Electrophoresis Unit

Cat. No. BT107

INTRODUCTION

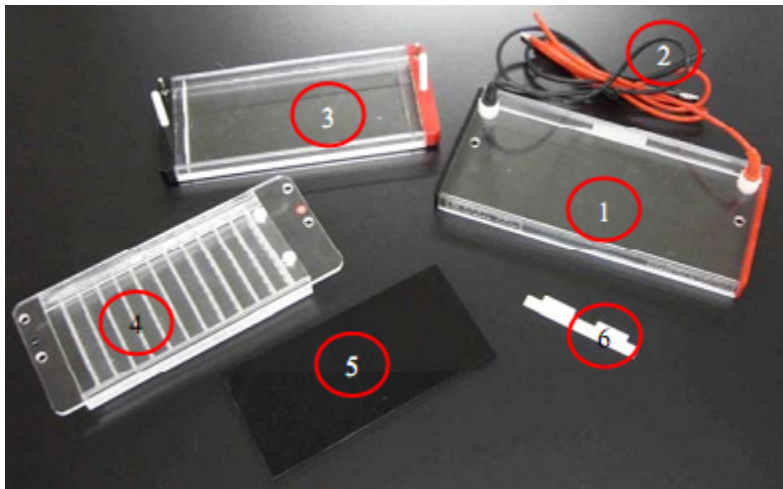
The BT107 High Throughput Horizontal Electrophoresis Unit is designed for years of reproducible and rigorous use and for separation of preparative and analytical quantities of nucleic acids using submerged agarose gels. Submarine agarose gels are easy to cast and readily dissipate the heat produced during running. The instrument has many features that make casting and running the gels simple and efficient. The baffle boards provide tape-free gel casting in the gel tray.

KEY FEATURES

- The lids and the main tank bodies (buffer tanks) are transparent, durable, have a good seal, are chemical-resistant and pressure-resistant.
- Red and black color help you to differentiate the anode(Red) and cathode(Black).
- Electrodes are made of platinum which has the features of electroanalysis corrosion resistance and withstands high temperature.
- The lid handles help you to open the lid and the combs device easily.
- The combs device has two screws, to attach the combs firmly.
- The instrument can run 6 lines (198 or 102 samples) at the same time.
- It is suitable for 8 channel pipettors.

PRODUCT OVERVIEW

The BT107 High Throughput Horizontal Electrophoresis Unit consists of: main tank body / buffer tank, lid, comb device with combs, baffle plate and gel delivering plate. Please refer to the figure below for part identification.



1. Lid
2. Lead
3. Main tank body/buffer tank
4. Comb device
5. Gel delivering plate
6. Baffle plate.

TECHNICAL SPECIFICATIONS

- Gel dimensions: 170 × 140 (mm)
- Combs: 33 teeth X 6,1.0mm (standard configuration)
- 17 teeth X 6,15mm (Alternative configuration)
- Runs up to 192 samples
- Max. input voltage: 100V; Max. current: 50mA
- Continuous working time: ≥ 24 hours
- Working conditions: ambient temperature: 0°C ~ 40°C (32 - 104° F); relative humidity ≤80%;
- Buffer volume: 200(ml);
- Size (L X W X H): 210 × 200 × 40 (mm)
- Weight: about 0.5 kg.

OPERATING INSTRUCTIONS

Safety Tips

Do not connect the instrument with electrophoresis power supply before starting the experiment. Before every use, check the buffer tank for cracks or chips.

Cracks or chips will cause the buffer to leak from the buffer tank and cause a potential electrical hazard. Also check the lead, electrode heads etc. Don't use any part that is cracked, charred or corroded.

Don't attempt to use the instrument without the lid. Always turn the electrophoresis power supply off before opening and removing the lid.

1. Place the instrument on a flat, level surface.
2. Insert the baffle plates in the alignment slots of the buffer tank (Refer to figure 2).



Figure 2



Figure 3

3. Seal the gaps between the baffle plates and the buffer tank with the agarose gel before pouring the gel (Refer to figure 3).
4. Pour the gel into the buffer tank (Refer to figure 4).



Figure 4

Note: The temperature of the gel should be about 50- 60°C. Air bubbles in the gel should be avoided.

5. Put the comb device onto the buffer tank (Refer to figure 5).



Figure 5

6. After the polymerization of the gel, pull the comb device from the buffer tank carefully and gently (Refer to figure 6).



Figure 6

Figure 7

7. Remove the baffle plates from the buffer tank carefully and gently.

8. Pour the buffer solution into the buffer tank.

Note: Don't pour too much buffer solution into the buffer tank.

9. Load sample into the wells with standard pipettor.

Note: Be sure to avoid air bubbles in the wells.

10. Cover the lid and connect it with the electrophoresis power supply.

11. Set the voltage and then start running.

Note: Don't move the apparatus while running. During running, very low quantities of gases are produced. In order to disperse the gases, please make sure that the apparatus is running in a well ventilated area.

12. After finishing the operation, turn off the power supply and disconnect the electrophoresis unit from the power supply. Open the lid and take out the gel using the delivering gel plate.

13. Remove the gel and visualize bands under UV light.

MAINTENANCE

The product should be stored under following conditions:

- Ambient temperature: - 40°C(-40°F)~55°C (131°F)
- Relative humidity: ≤93%
- No exposure to corrosive gas or drafty conditions.

Clean the electrophoresis tank after you finish an experiment. Use a sponge. Rinse the main tank body (buffer tank) thoroughly with distilled water after every use. Wash the buffer tank and the combs with a lab detergent. Then wash with deionized water. Air-dry for the next use. Note: Be careful not to snag or break the electrode wire when you clean the tank.

IMPORTANT INFORMATION

The main body and some of its accessories are fragile. Do not allow the instrument to fall and get bumped during the course of packing, transportation and experiment. The platinum installed in the electrophoresis unit is easy to break off. You should pay attention to this during experiments, especially when you clean the cell.

TECHNICAL SUPPORT

BT Lab Systems offers technical support for all of its products. If you have any questions about the product's use or, operation, please contact BT Lab Systems at the following info.

E-Mail: info@BTLabSystems.com