



BG-subMIDI Marine Electrophoresis Quick Start Manual

After the agarose gel has solidified, sample loading and electrophoresis can begin.

Agarose gels can be run in many different types of electrophoresis buffers. Nucleic acid agarose gel electrophoresis is usually conducted with either Tris-Acetate-EDTA (TAE) buffer or Tris-Borate-EDTA (TBE) buffer. While TAE buffer provides faster electrophoretic migration of linear DNA and better resolution of supercoiled DNA, TBE buffers have a stronger buffering capacity for longer or higher voltage electrophoresis runs.

1. Prepare samples for gel loading. Loading volume is dependent upon the type of comb used (i.e. well thickness and length) and thickness of the gel.
2. When loading volume is determined, add standard nucleic acid sample loading dye to a final 1x concentration to make samples dense for underlaying into sample wells.
3. Load the samples into the wells using standard pipets.
4. Place the lid on the cell carefully. Do not disturb the samples. BG-subMIDI marine electrophoresis system lid attaches to the base in only one orientation. To attach the lid correctly, match the red and black banana jacks on the lid with the red and black banana plugs of the base.
5. Power requirements vary depending on gel thickness, length and concentration, and type of electrophoresis buffer used.

BG-subMIDI marine electrophoresis system

ITEM	QTY	DESCRIPTION
Base footprint (L x W x H)	-	300 x 165 x 80 mm
Base buffer chamber	1	650 ml
Base gel size	1	12 x12 cm
Gel trays	5	12 x 12 cm, 12 x 6 cm, 6 x 12 cm, 6 x 6 cm (2)
fixed position combs (Double sided)	6	6 and 13 well, 0.75 mm thick 8 and 18 well, 0.75 mm thick 11 and 25 well, 1.0 mm thick 8 and 18 well, 1.5mm thick 2, 6 and 13 well, 1.5mm thick 2, 3 and 3, 3 well, 2.0mm thick
Electrodes & Safety Lid	1	+ & - leads (Red & Black)