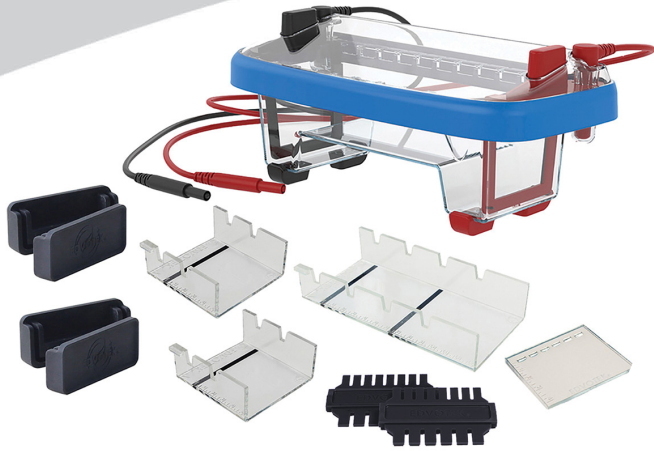


# M12 Complete™ Electrophoresis Package



EDVOTEK's M12 Complete™ Electrophoresis Package has been engineered to yield excellent resolution in short periods of time. The M12 unit can accommodate two 7 x 7 cm gel trays or one 7 x 14 cm gel tray. The E-Z Align™ gel trays are removable, UV transparent, and conveniently feature molded embossing gel rulers and orientation arrows. The M12 Complete™ Electrophoresis Package is ideal for increasing "hands-on" lab participation.

#### FEATURES:

- New, sleek design
- Contoured lid enhances visualization
- Vented base
- Color coded push tabs
- Pour spout to pour out used buffer
- Replaceable electrode modules
- US Design Patent No. D749,235

#### SPECS:

- Max Voltage: 150 Volts
- Max Current: 300 Milliamps
- Type Output: Constant Voltage
- Lead Inputs: 2 Sets, Recessed, Color Coded
- Fuse: 1.0 Amp
- Input Power: 50/60 Hz, 110/220 Volts
- Connection: 3-Wire Grounded Cord

#### M12 COMPLETE™ INCLUDES:

- (1) Horizontal Electrophoresis Apparatus
- (2) 7 x 7 cm gel trays
- (1) 7 x 14 cm gel tray
- (4) Rubber end caps
- (2) 6/8 tooth combs
- (1) DNA DuraGel™ (Cat. #S-43)

#### OPERATION

When casting the agarose gel, the temperature of the melted agarose which is poured into the gel tray should not exceed 60°C. Hot agarose solution may irreversibly warp the gel tray. When placing the gel tray into the chamber, make sure to align the tab on the side of the gel tray with the notch in the gel chamber (and not one of the side vents). The gel tray must sit completely level inside the gel chamber. Upon completion of the electrophoresis run, turn off and unplug the power source and disconnect the leads before removing the cover. Use the push tabs to gently raise the cover straight up to prevent pulling directly on the electrodes. Do not attempt to run the apparatus without the cover in place. The gel should be removed from the apparatus for staining. Do not stain gels in the apparatus.

#### NOTE:

After the agarose gel has been poured and the gel has solidified, remove the rubber dams from the tray slowly to avoid damaging and ripping the gel. Carefully remove comb(s) as they can also tear the gel.

To clean the electrophoresis apparatus chamber, gel bed and combs, wash with tap or distilled/deionized water and let the components air dry. Do not use detergents of any kind, or expose any part of the apparatus to any organic solvent, acid or alkali. The acrylic chamber of the apparatus is well sealed and will withstand normal intended use. However, should an unlikely leak develop, immediately shut off power. Do not use the apparatus.

Table A Individual 0.8% UltraSpec-Agarose™ Gel

Size of Gel Casting tray	Concentrated Buffer (50x)	+ Distilled Water	+ Amt of Agarose	= TOTAL Volume
7 x 7 cm	0.6 mL	29.4 mL	0.23 g	30 mL
7 x 10 cm	1.0 mL	49.0 mL	0.39 g	50 mL
7 x 14 cm	1.2 mL	58.8 mL	0.46 g	60 mL

Table B 1x Electrophoresis Buffer (Chamber Buffer)

EDVOTEK Model #	Total Volume Required	Dilution 50x Conc. Buffer + Distilled Water
M12	400 mL	8 mL + 392 mL

Table C Time & Voltage Guidelines (0.8% Agarose Gel)

EDVOTEK Model #	150 Volts Min. / Max.	125 Volts Min. / Max.	100 Volts Min. / Max.
M12	20/35 min.	30/35 min.	40/60 min.

\*\* For faster electrophoresis gel runs, decrease the running buffer volume in the chamber to just slightly above the gel surface. Run the gel for the desired separation - monitor the tracking dye and terminate electrophoresis before the dye reaches the end of the gel.

