Hoefer® EPS 2A200

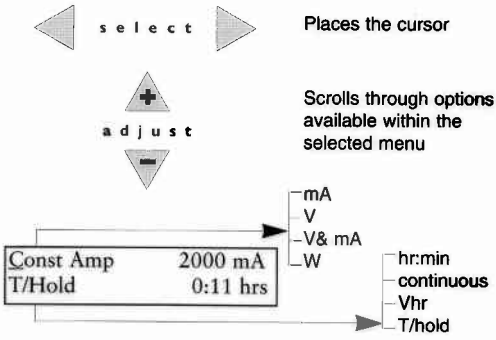
Setting power and time parameters

1 **The power supply must be in SET mode.**
The power supply is automatically in SET mode when it is first turned on. During a run, press the **set/read** key to enter the SET mode.

2 **Choose the power or time parameter.**
(see reverse side for power and time options and conditions)

First place the cursor using the **select** arrow keys:
< moves it to the left and
> moves it to the right,

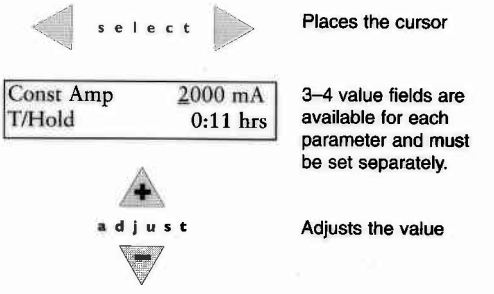
and then scroll through the options using the **adjust** arrow keys:
+ scrolls up
– scrolls down



3 **Adjust the value for the chosen power or time parameter.**

First place the cursor in the digit field you wish to adjust using the **select** keys:
< moves it to the left
> moves it to the right

and then adjust the value using the **adjust** arrow keys:
+ increases the value
– decreases it



See reverse side for power and time options and conditions

80-6323-20 Rev A/2-97

Pharmacia Biotech

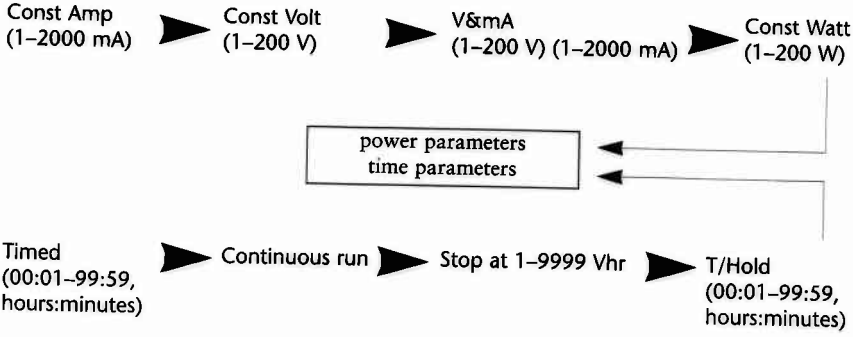
Please note the following power output limitations:

The maximum power supply output is 200 W, so the maximum current of 2000 mA is available at ≤100 V.

At the maximum voltage setting of 200 V, the current is limited to ≤1000 mA.

Power options and conditions

The following schema illustrates the range of values and the number of fields for each power and time parameter. The options are listed in the order encountered.



Time options

- The continuous run option delivers power until the operator manually turns the power supply off.
- The timed option delivers power for the set time.
- The timed and hold (T/Hold) option delivers power for the set time and then holds the voltage at 5 V to minimize band diffusion in gradient gels until the operator manually turns the power supply off.
- The stop at option delivers a preset amount of power measured in volt-hours (Vhr) and then stops all power output.

See reverse side for setting power and time parameters

Hoefer® Capillary Adapter Kit

DQ 120 DNA Assay Quick Reference

1 Prepare solutions.

Prepare all dilutions for measurement in microfuge tubes with lids: One "blank" for zeroing, one standard solution for calibrating, and DNA samples. (Optional: Prepare a series of standard concentrations for a standard curve.) All solutions to be measured must be adjusted to 1X TNE and mixed with capillary assay solution. (See other side for recipes and an example.)

2 Zero the instrument.

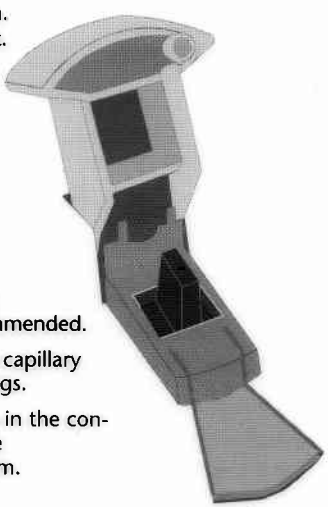
Fill a capillary tube with "blank" solution and seal the bottom with no more than 2 mm sealant. Insert the capillary tube part way into the DQ 120 capillary adapter and then place the assembly into the cuvette well, aiming the capillary tube for the depression in the bottom of the well. Gently push until the adapter fits onto the well rim. (The capillary tube self aligns.) Close the lid and press **<ZERO>**. After "0" displays, remove the capillary tube.

3 Calibrate the instrument.

Fill a capillary tube with standard solution and seal the bottom. Install the capillary tube as in step 2. Close the lid and press **<CALIB>**. Enter the standard concentration or a convenient factor (see manual) and press **<ENTER>**. After the entered value displays, remove the capillary tube.

4 Measure samples.

Fill a capillary tube with sample solution and seal the bottom. Install as in step 2. Close the lid and record the measurement.



Important

- Allow 15 minutes for the lamp to stabilize before taking measurements.
- Turn "Prompt" mode off.
- Accuracy in pipetting volumes less than 10 µl is critical for reproducible results. A pipetter accurate to 0.02 µl is recommended.
- Use no more than 2 mm of sealant to plug the end of the capillary tube to prevent the sealant from causing erroneous readings.
- Carefully align the end of the capillary tube so that it rests in the conical depression, and then gently push the adapter over the capillary tube until the adapter rests on the cuvette well rim.

80-6231-62 DQ 120-QR/Rev B/1-97

Hoefer

DyNA Quant 200

DNA Assay Quick Reference

1 Prepare the assay and DNA standard solutions. (See back.)

2 Zero the instrument with blank assay solution.

Prepare an assay blank using 2 ml of the appropriate Assay Solution (A for low or B for high DNA concentration). Dry the sides of the cuvette with a low-lint tissue. Insert the cuvette into the well, close the lid, and press **<ZERO>**.

3 Calibrate the instrument.

Deliver 2 µl of the appropriate DNA standard solution (low or high range) to 2 ml of Assay Solution in the cuvette. Mix by pipetting several times into a disposable transfer pipet. Close the lid and press **<CALIB>**. Enter 100 for the low range assay, 1000 for the high range assay, or a convenient factor (see manual) and press **<ENTER>**.

4 Zero the instrument with blank assay solution.

Empty and rinse the cuvette. Add 2 ml of the same Assay Solution used in step 2, insert the cuvette into the well, close the lid, and press **<ZERO>**.

5 Measure the sample.

Add 2 µl of sample, close the lid, and record the reading. Empty and rinse the cuvette between readings. Dry by draining cuvette and blotting upside down on a paper towel.

6 Measure subsequent samples. (Repeat steps 4 and 5 for each sample.)

Important information

- Allow 15 minutes after tuning unit on for the temperature in the cuvette well to stabilize.
- Use and store the instrument away from brightly lit areas and away from areas where the instrument may become wet.
- Use a pipetter accurate to 0.02 µl to reduce pipetting variability.
- Place instrument so that back vents are not obstructed.

Hoefer® SE 600 Series

Gel sandwich assembly

1 Remove the gasket from one casting cradle. Unscrew all clamp screws and slide both pressure plates back.

2 Place two spacers and the SpacerMate between two clean plates (**Fig. 1**). Slide clamps onto the sandwich, and finger tighten one screw to temporarily hold the sandwich together.

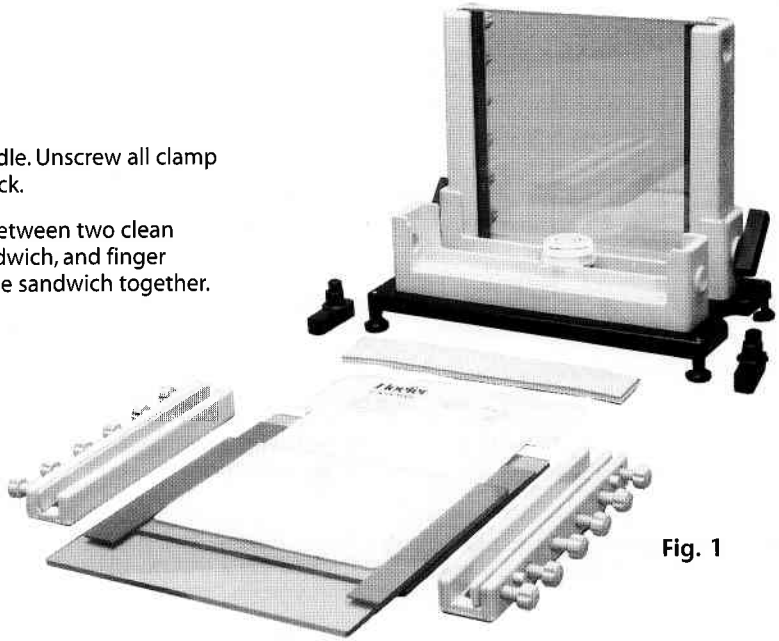


Fig. 1

Important

All components must be set flush before tightening the screws *to ensure a seal both for casting the gel and for electrophoresis.*

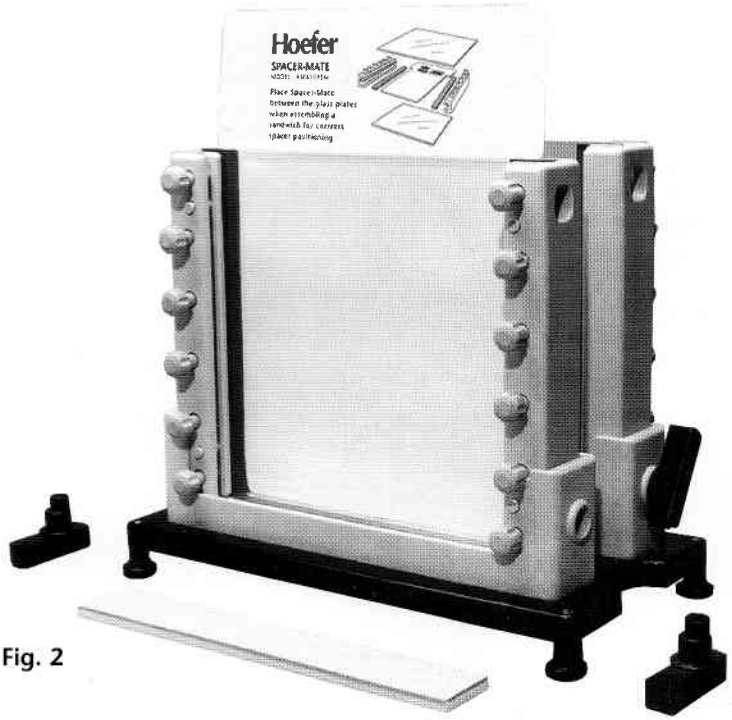


Fig. 2

3 Place the sandwich into the casting cradle (without the gasket) to hold the alignment while firmly tightening the clamp screws. Remove the sandwich from the cradle. (**Fig. 2**, front sandwich)

4 Insert the gasket in the cradle, grey side up, and then insert the sandwich. Install cams and turn only as far as needed to seal the bottom of the sandwich—120° to 150° (**Fig. 2**, rear). Watch for the glass edge to appear darker as it seals against the gasket.

5 Pour the gels and allow to polymerize completely. Rinse and fill wells with buffer. Underlay samples.

See reverse side for gel box assembly

80-6239-41
SE600&-QR
Rev B /12-96

Pharmacia Biotech

Gel box assembly

1 Fit a slotted gasket into each section on the underside of the upper buffer chamber.

2 Release sandwiches from the casting cradle by removing all bottom cams. Seat the upper chamber onto the sandwiches and secure it: Install the cams, short end down, into the holes and then cam each sandwich in place by simultaneously turning both cams a full 180° (**Fig. 3**).

If running only one gel, *block the open slot in the upper buffer chamber by installing the acrylic buffer "dam" in the empty casting cradle (first attach a set of clamps).*

3 Slowly (to avoid disturbing samples) pour about 300 mL buffer into a corner of the upper chamber.

If leaking occurs*, place the assembly in a sink, release the cams to drain, and check clamp and gasket alignments. Adjust as required.*

4 Fill the lower buffer chamber about half way with buffer. Place a spin bar in the chamber and fit the heat exchanger into the side grooves.

5 Fit the upper chamber assembly into the lower chamber. Fill both chambers to the required level as indicated in **Fig. 4** and the user manual.

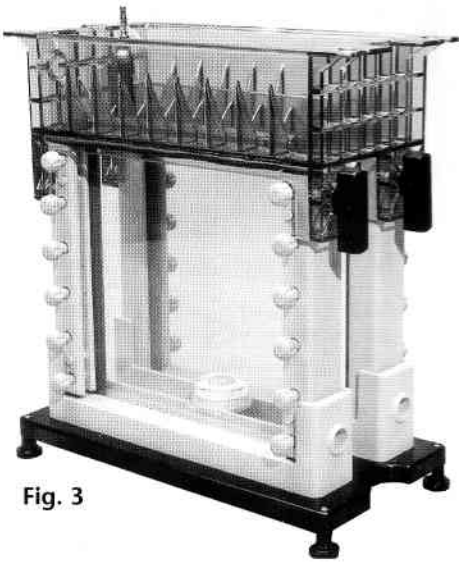
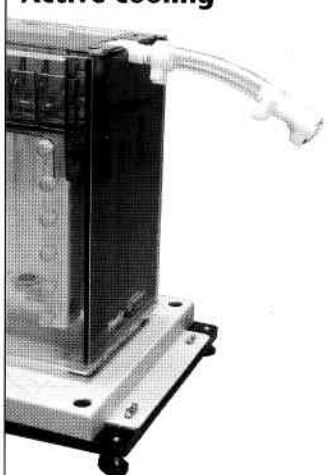


Fig. 3

Fig. 4

Active cooling



Use only water or 50/50 water/ethylene glycol coolant. Never use a commercial antifreeze or alcohol-based mixture or irreparable damage will result.

Do not attach the heat exchanger to a water tap or any other source where the water pressure is unregulated.

Use Quick Connect fittings for easy connections.

6 Fit the safety lid on the banana plugs (**Fig. 5**). Turn on the magnetic stirrer (not shown) and start the (optional) coolant flow. Connect the power leads to a power supply. See the SE 600 user manual for recommended running conditions.

Important

Always install the safety lid before connecting the leads to the power supply.

Stay within the recommended operating limits.

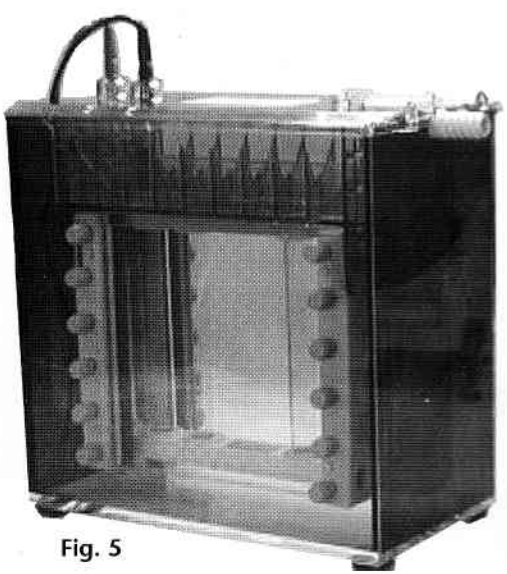


Fig. 5