

Using the Invitrogen E-Gel PowerBase v.4

Pre-Run

1. Plug the PowerBase into an electrical outlet
2. Open the gel package.
3. Insert the gel (**with the comb in place**) into the apparatus right edge first. Press firmly at the top and bottom to seat the gel in the base.
A **steady, red light** will illuminate when the E-Gel gel is correctly inserted (Ready mode)
4. **Press and hold** either button until the **red light** turns to a **flashing green light**.
This indicates that the 2-minute pre-run has started.
At the end of the pre-run, current will automatically shut off. The **flashing green** light will change to a **flashing red** light and the PowerBase will **beep rapidly**.
5. **Press and release** either button to stop the beeping.
The light will change from a **flashing red** light to a **steady red** light.



Loading

All well in the gel must contain sample or water.
Avoid introducing bubbles while loading. Bubbles will cause bands to distort.

1. Remove the comb from the E-Gel gel using both hands to lift the comb gently by rolling the comb slowly towards you.
*Be careful to pull the comb straight up from both sides.
Do not bend the comb.*
2. Remove any excess fluid from the wells using a pipette.
3. Load samples in 20 μ l volume in the wells.
4. Load 20 μ l of water into any remaining empty wells.
5. Load 100-250 ng of molecular weight markers.



Electrophoresis

Use the 30 min. run for a gel with one set of wells.
Use the 15 min. run for a gel with two sets of wells.

1. Press and release the correct run time button.
For the 30 min. run time the light will change to a **steady green** light.
For the 15 min. run time the light will change to a **steady blue** light.

Current through the E-Gel automatically shuts off at the end of each run.

The E-Gel PowerBase v.4 signals the end of the run with a **flashing red** light and a **rapid beeping**.

2. Press and release either button to stop the beeping.
The light will turn to a **steady red** light.
3. Remove the gel cassette from the power unit and analyze your results using a UV transilluminator.