

# Hoefler Super-Sub Gel Box

Protocol for running gel when program is known and entered, and gel concentration and voltage have been predetermined. For programming Hoefler Switchback Pulse Controller, see separate protocol. By MES

## Gel

1. Prepare 1.3 L 0.5x TBE.
2. Prepare 300 ml agarose gel of appropriate concentration using 0.5x TBE in taped casting tray.
3. Remove tape from ends of set gel and place set gel in box.

## Gel box

1. Add remaining 1 L 0.5x buffer to box.
2. Pre-chill buffer and gel to 14°C:
  - A. Center box on stir plate platform.
  - B. Place lid securely on box and level box.
  - C. Connect black cable from bottom of box to one of the drive outlets on the front of the Hoefler Model MS120 Multi Spin Stir Controller.
    - a. Turn drive level to Standby.
    - b. Turn on power to Stir Controller (back of unit).
    - c. Turn on power to drive being used (front of unit).
    - d. While observing the stir bar in the gel box, slowly adjust the drive level to 7. Bubbles should appear but dissipate over time.
  - D. Turn of power to VWR Model 1150 heat exchanger.
  - E. Pre-chill 30 minutes prior to running gel. Adjust temperature as necessary.

## Pulse Controller

1. Connect cables from box cover to output of Hoefler Switchback Pulse Controller (front of unit).
2. Connect cables from Switchback Controller to power supply.
3. Turn on power to Switchback Controller (back of unit).
4. Press **Mode** once for the Single Main Menu, again for the Multi Main Menu.
5. Press **3** for Filer Menu.
6. Press **3** for Load. Enter desired program number on keypad. Press **Enter** to load program. Screen returns to Filer Menu.
7. Press **Exit** to return to Main menu.

## Run gel

1. Load samples and ladders into wells.
2. Place lid securely on box in correct orientation (run to red), check that box is level and that the stir bar is spinning.
3. Turn on power supply and adjust voltage to desired level.
4. Press **2** to Run program.