ELECTROPHORESIS

PROTEAN® i12™ IEF System
Quick Guide

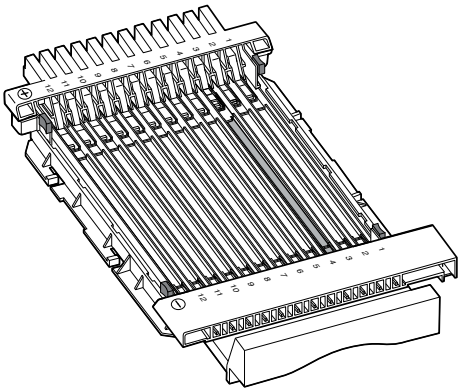
1 **Consult the PROTEAN i12 IEF System Instruction Manual to ensure that all components are present and for more detailed instructions.**

2 **Prepare rehydration solution and sample.**

3 **Choose rehydration method and rehydrate strip.** IPG strips can be rehydrated in the rehydration tray or in the focusing tray. Consult the instruction manual or 2-D Guide (bulletin 2651) for guidelines regarding the choice of IPG strips, rehydration method, IPG strip orientation, and loading method.

IPG Strips

Rehydration Tray



Focusing Tray

To program an unattended run start following rehydration, see step 6B

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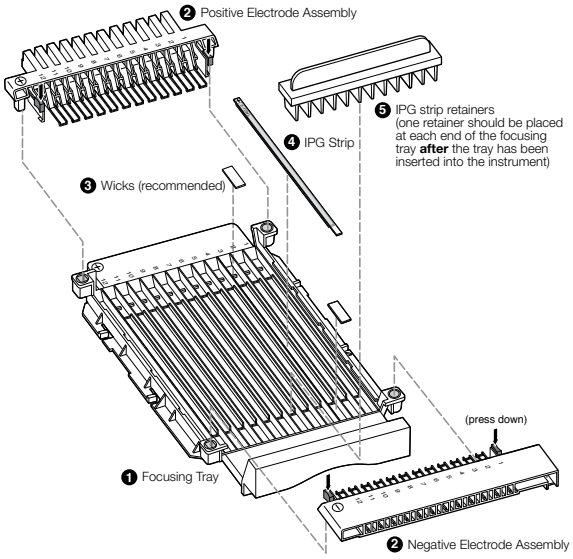
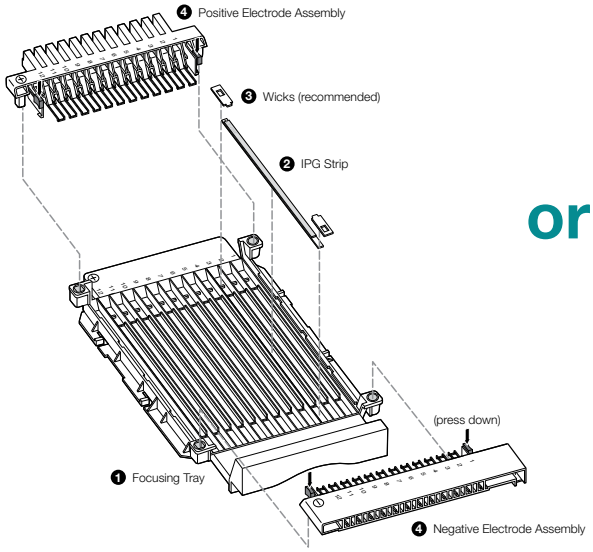
4 Choose focusing setup

A. Gel side down

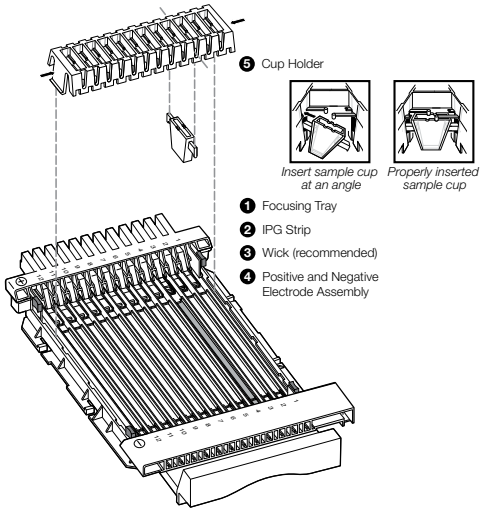


B1. Gel side up



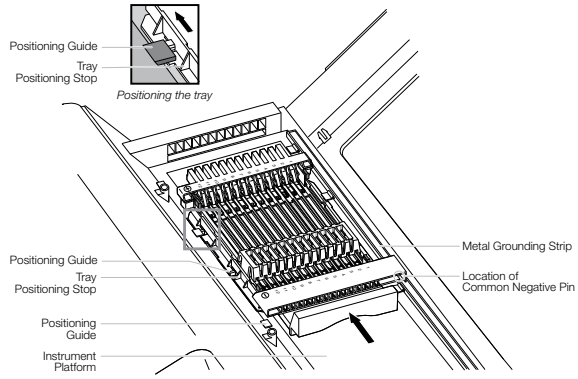
or

B2. Gel side up for sample loading with cups



To start run go to step 6; to program a method go to step 8.

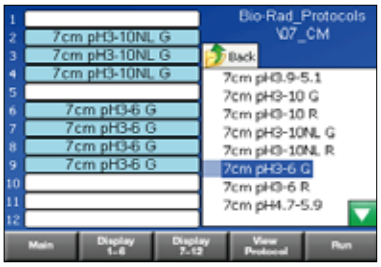
5 Insert focusing tray assembled with IPG strip(s) into the PROTEAN i12 IEF system



To start run go to step 6; to program a method go to step 8.

6 Programming — running a protocol

Choose **Run**.

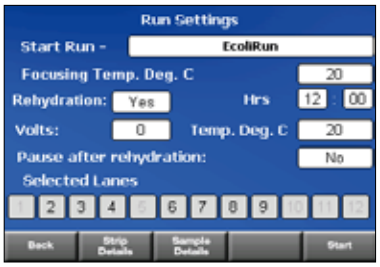


Choose a lane by highlighting the desired field, then select protocol to assign to the lane(s). When all lanes have been populated as desired, press **Run**. Note: **View Protocol** will only display the protocol for the highlighted file on the right.

6A. Focusing after rehydration is complete

Choose **No** for **Rehydration**. Press **Strip Details** and **Sample Details** to add information. Then press **Start**.

6B. Programming rehydration into the run



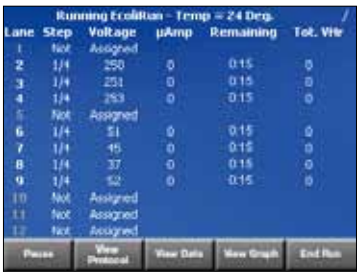
Choose **Yes** for **Rehydration** and set the time in hours and minutes. Set the rehydration for 0 volts or between 50–100 volts. Set the temperature. Determine if you would like the run to pause after rehydration. Press **Strip Details** and **Sample Details** to add information.

Use a pause if you want to add wicks before focusing. Select **No** for **Pause after rehydration** if you want focusing to start automatically.

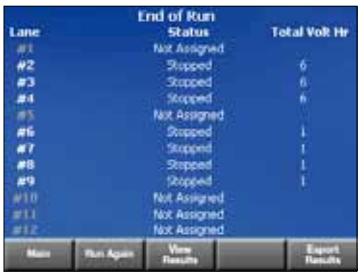
Press **Start**.

7 Run in progress

Rehydration in progress

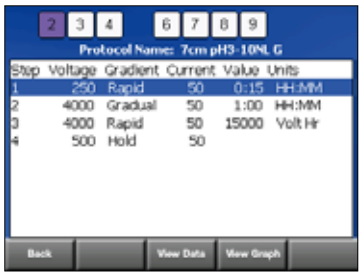


Run in progress

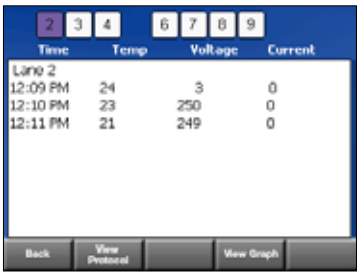


End of run. Choose **Export Results**.

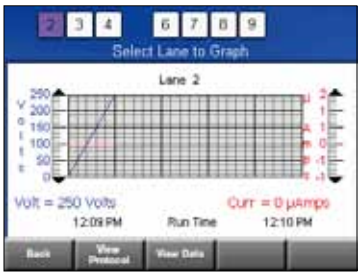
Highlight lane of interest and then click on **View Protocol**, **View Data**, or **View Graph**.



View Protocol



View Data

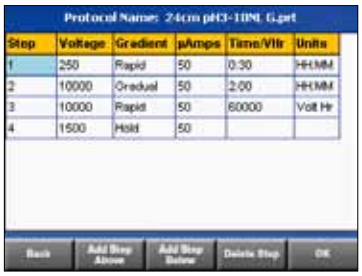


View Graph

8 Programming – creating and editing protocols

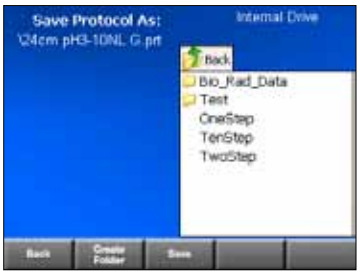
Choose **Edit** to make changes to an existing protocol.

Choose **Create** to create a new protocol.



Add and remove steps. Set desired voltage, gradient, current, and time in minutes or volthours by clicking in each box.

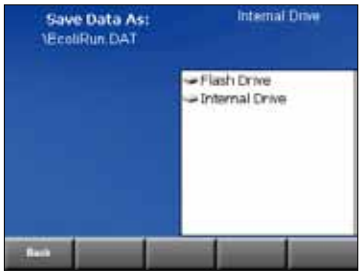
Press **OK**.



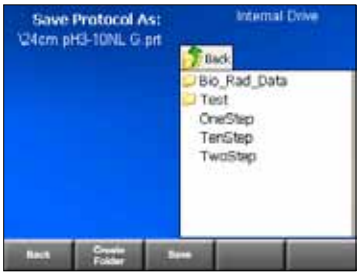
Choose **Save** and select file locations to save protocol.

9 Saving data

After the run has ended, choose **Export Results**.

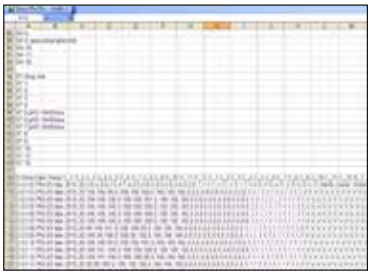


Choose the location where the results should be saved. To export from the instrument, save to **Flash Drive**.



10 Exporting data

Remove Flash drive from instrument and connect to PC.



Data can be opened in Excel in comma-delimited format.

Go to **www.i12Reporter.com** to upload data to an online graphing and reporting application.

Excel is a trademark of Microsoft Corp.

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