

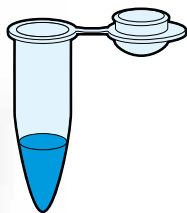


ELECTROPHORESIS PROTEAN® i12™ IEF System Quick Guide

- 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.**



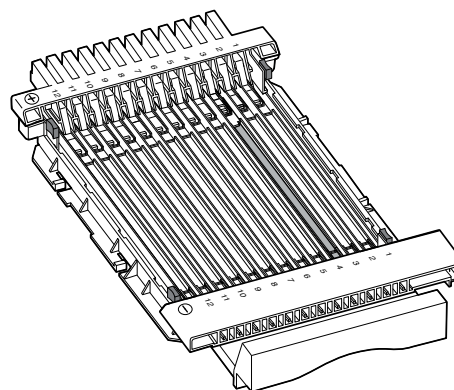
- 3 Choose rehydration method and rehydrate strip.** IPG strips can be rehydrated in the rehydration tray or in the focusing tray. Consult the instruction manual or 2-D Guide (bulletin 2651) for guidelines regarding the choice of IPG strips, rehydration method, IPG strip orientation, and loading method.



IPG Strips



Rehydration Tray



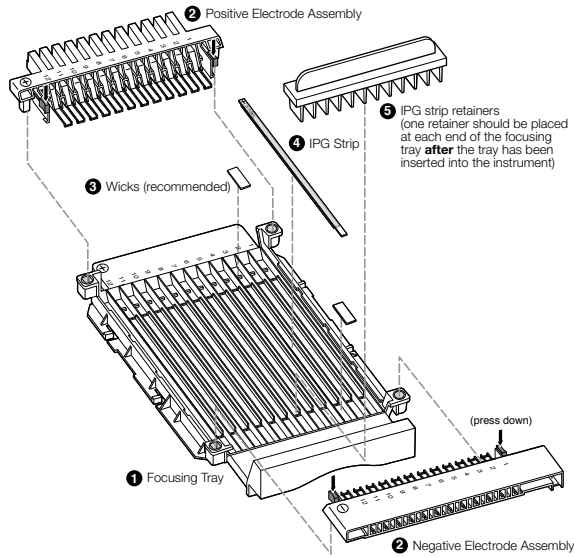
Focusing Tray

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

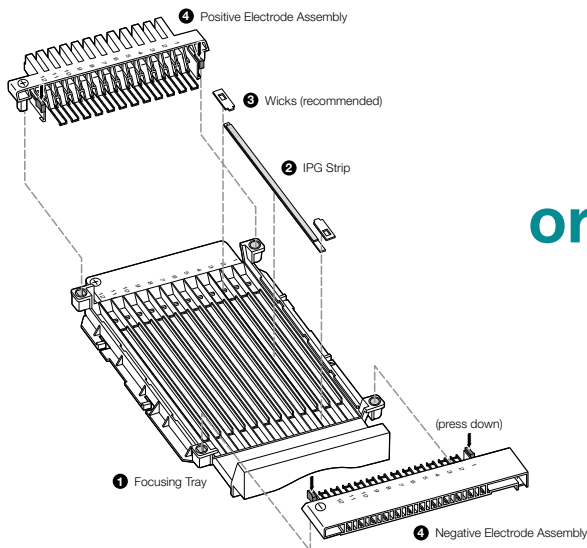
BIO-RAD

4 Choose focusing setup

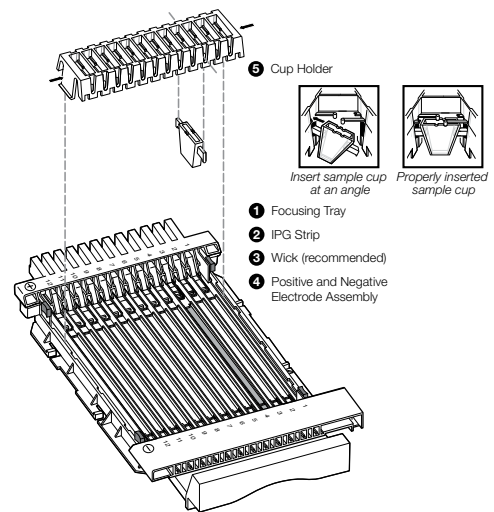
A. Gel side down



B1. Gel side up



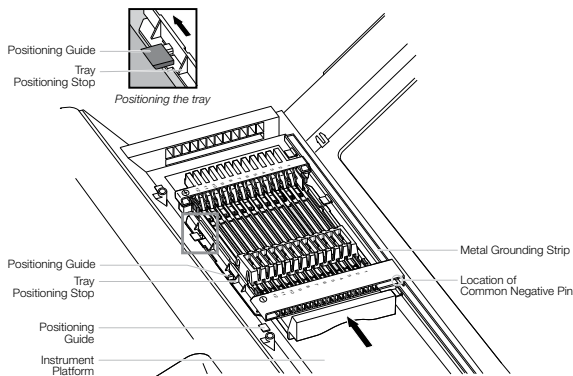
B2. Gel side up for sample loading with cups



or

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

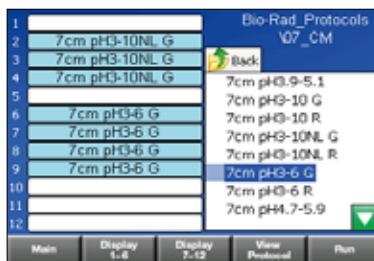


To start run go to step 6; to program a method go to step 8.

6 Programming – running a protocol



Choose **Run**.



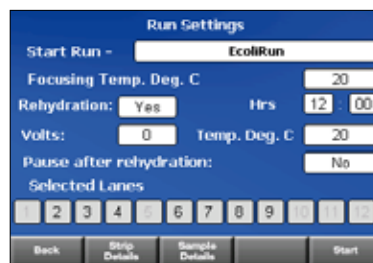
Choose a lane by highlighting the desired field, then select protocol to assign to the lane(s). When all lanes have been populated as desired, press **Run**. Note: **View Protocol** will only display the protocol for the highlighted file on the right.

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

Lane	Step	Voltage	µAmp	Remaining	Tot. Vol
1	Not Assigned				
2	1/4	250	0	0:15	0
3	1/4	251	0	0:15	0
4	1/4	253	0	0:15	0
5	Not Assigned				
6	1/4	51	0	0:15	0
7	1/4	15	0	0:15	0
8	1/4	37	0	0:15	0
9	1/4	52	0	0:15	0
10	Not Assigned				
11	Not Assigned				
12	Not Assigned				

Run in progress

Lane	End of Run Status	Total Volt Hr
#1	Not Assigned	
#2	Stopped	6
#3	Stopped	6
#4	Stopped	6
#5	Not Assigned	
#6	Stopped	1
#7	Stopped	1
#8	Stopped	1
#9	Stopped	1
#10	Not Assigned	
#11	Not Assigned	
#12	Not Assigned	

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

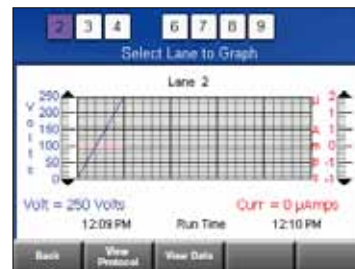
Highlight lane of interest and then click on **View Protocol**, **View Data**, or **View Graph**.

Step	Voltage	Gradient	Current	Value	Units
1	250	Rapid	50	0:15	HH:MM
2	4000	Gradual	50	1:00	HH:MM
3	4000	Rapid	50	15000	Volt Hr
4	500	Hold	50		

View Protocol

Time	Temp	Voltage	Current
Lane 2			
12:09 PM	24	3	0
12:10 PM	23	250	0
12:11 PM	21	249	0

View Data



View Graph

8 Programming – creating and editing protocols



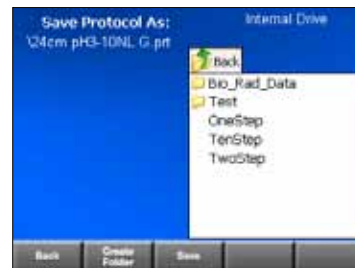
Choose **Edit** to make changes to an existing protocol.
Choose **Create** to create a new protocol.

Protocol Name: 24cm pH3-10NL G.prt

Step	Voltage	Gradient	µAmps	Time/Vol	Units
1	250	Rapid	50	0.30	HHMM
2	10000	Gradual	50	2.00	HHMM
3	10000	Rapid	50	60000	Volt Hr
4	1500	Hold	50		

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

Press **OK**.

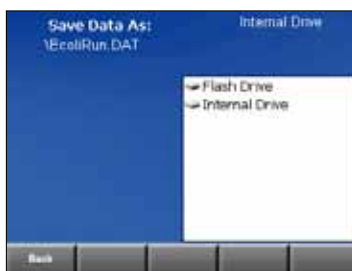


Choose **Save** and select file locations to save protocol.

9 Saving data

Lane	End of Run Status	Total Volt Hr
#1	Not Assigned	
#2	Stopped	6
#3	Stopped	6
#4	Stopped	6
#5	Not Assigned	
#6	Stopped	1
#7	Stopped	1
#8	Stopped	1
#9	Stopped	1
#10	Not Assigned	
#11	Not Assigned	
#12	Not Assigned	

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



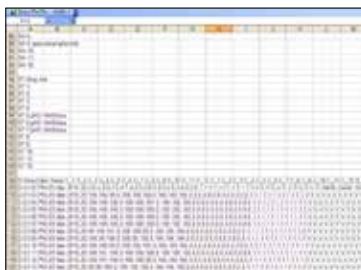
Choose the location where the results should be saved. To export from the instrument, save to **Flash Drive**.



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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