
ProteinChip® Detector Calibration Kit

Instruction Manual

Catalog #C70-00082

For use with the ProteinChip SELDI system,
Personal or Enterprise Edition, with
embedded system processor (ESP) version
1.1.15 or higher

For technical support,
call your local Bio-Rad office, or
in the US, call **1-800-4BIORAD**
(1-800-424-6723).

BIO-RAD

**Bio-Rad
Laboratories, Inc.**

*Life Science
Group*

*Web site www.bio-rad.com USA 800 4BIORAD Australia 61 02 9914 2800
Austria 01 877 89 01 Belgium 09 385 55 11 Brazil 55 21 3237 9400
Canada 905 712 2771 China 86 21 6426 0808
Czech Republic 420 241 430 532 Denmark 44 52 10 00
Finland 09 804 22 00 France 01 47 95 69 65 Germany 089 318 84 0
Greece 30 210 777 4396 Hong Kong 852 2789 3300
Hungary 36 1 455 8800 India 91 124 4029300 Israel 03 963 6050
Italy 39 02 216091 Japan 03 5811 6270 Korea 82 2 3473 4460
Mexico 52 555 488 7670 The Netherlands 0318 540666
New Zealand 0508 805 500 Norway 23 98 41 30 Poland 48 22 331 99 99
Portugal 351 21 472 7700 Russia 7 495 721 14 04
Singapore 65 6415 3188 South Africa 27 861 246 723
Spain 34 91 590 5200 Sweden 08 555 12700 Switzerland 061 717 95 55
Taiwan 886 2 2578 7189 United Kingdom 020 8328 2000*

⋄ Sig 1106

10010682 Rev A

BIO-RAD

Detector Calibration

The detector calibration kit, when used as part of a weekly routine, will help keep the ProteinChip SELDI reader optimized for reproducibility of data collection over time. The detector calibration kit includes a ProteinChip detector calibration array, which provides data that the ProteinChip reader uses to make automatic adjustments to the detector voltage. These adjustments are based on a rolling average that stabilizes the gain, improving spectral reproducibility over the lifetime of the detector. This procedure is essential for obtaining correct test results and, when run on a weekly basis, is designed to improve reproducibility as the detector ages.

Each run uses a single spot on the array, and each spot can only be used once. Store the array in its original packaging and in a dry, dark location. Record usage data directly on the packaging.

The procedure requires 45 min to 4 hr to complete, depending on the state of the instrument.

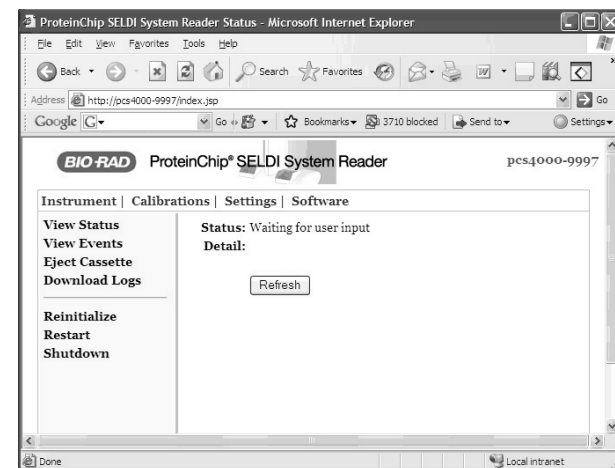
Note: The detector calibration procedure is intended to standardize instrument performance over time. First-time use may alter system response and is not recommended within a series of experiments. It is, however, possible to manually set the voltage back to its original state through the instrument's web page.

Instructions for Use

1. Insert the ProteinChip detector calibration array into the instrument.

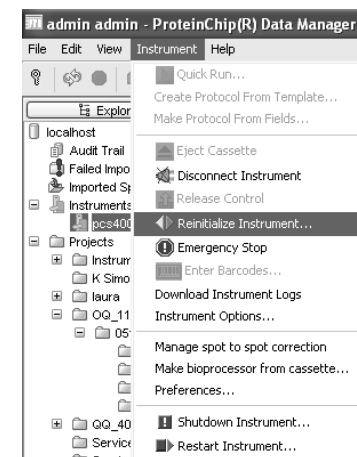
Note: For the Enterprise Edition instrument, place the array into slot 1 of a cassette and fill the rest of the slots with blank or used ProteinChip arrays.

2. Open the instrument's interactive web page (<http://pcs4000-####/index.jsp>, where #### is the instrument serial number). If the instrument is under local control, the web page will only be on the local computer. If it is installed on an intranet, it will be available on all intranet computers.



3. Select **Calibrations > Automatic Detector Gain**. The **Detector Gain** page opens. Check that **Automatic** and **NOT manual** is selected.

4. If using the Enterprise Edition instrument, select **Array number 1** (slot 1 in cassette).
5. If this is the first calibration performed on the instrument, or if the last calibration was performed more than two weeks ago, select two previously unused spots. If this is a routine, weekly calibration, select one unused spot.
6. Click **Start**.
7. The time required to complete this procedure is variable, and it may require up to several hours as the instrument continually collects data of a specific intensity. If the calibration routine does not complete, run the procedure again with unused spots.
8. Once the procedure is complete, open ProteinChip data manager software, select the instrument, and select **Instrument > Reinitialize Instrument**. (This instrument is now calibrated.)



Notices

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage or retrieval system, without permission in writing from Bio-Rad.

Bio-Rad reserves the right to modify its products and services at any time. This user guide is subject to change without notice.

Although prepared to ensure accuracy, Bio-Rad assumes no liability for errors or for any damages resulting from the application or use of this information.

ProteinChip is a trademark of Bio-Rad Laboratories.

The SELDI process is covered by U.S. patents 5,719,060, 6,225,047, 6,579,719, and 6,818,411 and other issued patents and pending applications in the U.S. and other jurisdictions.

Copyright© 2007 by Bio-Rad Laboratories, Inc. All rights reserved.