
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).

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Sig 1106

10010682 Rev A

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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.

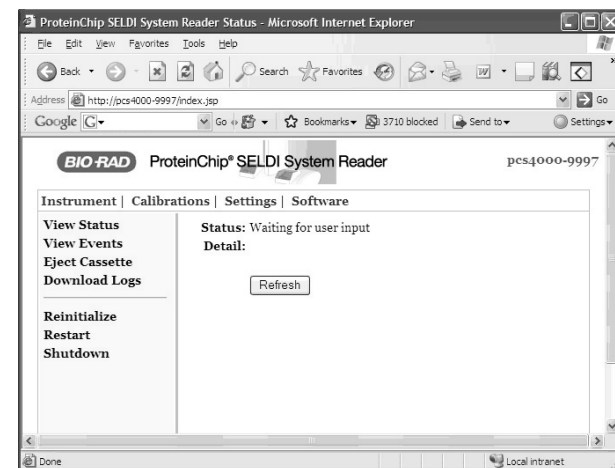
Note: The detector calibration procedure is intended to standardize instrument performance over time. First-time use may alter system response and is not recommended within a series of experiments. It is, however, possible to manually set the voltage back to its original state through the instrument's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

Instructions for Use

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

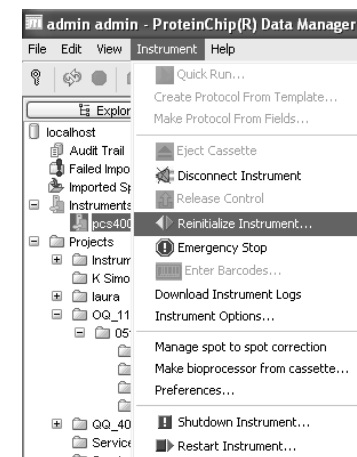
Note: For the Enterprise Edition instrument, place the array into slot 1 of a cassette and fill the rest of the slots with blank or used ProteinChip arrays.

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.)



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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.

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