

Reference 3000/3000AE™

QUICK-START GUIDE



Guide #2
Potentiostat Calibration

1

When possible, connect the **Chassis Ground** on the back of your potentiostat to a known, good earth ground.



2

Instructions for the Reference 3000 only (steps 2-4)

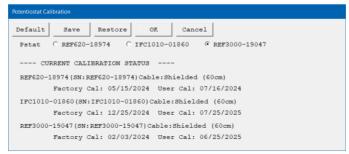
Connect the cell cable to the 2 $k\Omega$ Calibration Cell included with your instrument.



3

Place the **Calibration Cell** inside the **Calibration Shield**, close the lid, and connect the black floating-ground lead of your cell cable to the Shield's grounding post.





Choose your potentiostat and click the **OK** button. The calibration proceeds automatically, and you are notified if the calibration is successful.

At the end of the calibration, you can choose to **Save** the results. Select **Yes** to use the new calibration data and overwrite the previous file. Select **No**, to discard the calibration data and revert to the original calibration data.



Regardless of a successful or failed Calibration, a summary file is stored in your **My Gamry Data** directory. In case of a failed calibration, you can use this file when contacting Gamry's **Technical Support** (see next page).

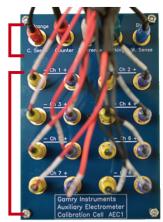
Instructions for the Reference 3000AE only (steps 5-6)

Connect the Auxiliary Electrometer Calibration Cell AEC1.

- 1. Connect the five regularly colored leads of the potentiostat's cell cable to the top jacks.
- 2. Connect the multiple pairs of sense leads for the AE channels 1-8 to the array of 16 jacks.



The pairs of sense leads are labeled with the AE channel number (1-8) and polarities. Make sure to match the leads to the correct jacks.



5



Open the Gamry Framework™ software. Go to the menu and select **Experiment > Utilities > Aux Electrometer Calibration**.



Choose your potentiostat and click the **OK** button. After you confirm several instructional messages, the calibration proceeds automatically, and you are notified if the calibration is successful.

Troubleshooting a Failed Calibration



Calibration is used to check the potentiostat's health and to "zero" its many instrument circuits to your test environment. A warning does not necessarily indicate a critical failure. Gamry's technical support team can use the calibration information to determine the source of the warning.

- 1. Double-check the following:
 - The regular connections are made to a 2 $k\Omega$ Calibration Cell.
 - Confirm all channels and polarities for the AEC1 Calibration Cell.
 - The floating-ground cable is connected to the **Calibration Shield**.
 - If possible, Chassis Ground is attached to a known and good earth ground.
- Click the **Retry** button in the error dialog box to restart the rest of the calibration. Click the **Ignore** button for any other calibration warnings that may appear, and continue to the next step.
- 3. After a failed calibration attempt:
 - Locate the summary file of the calibration in your My Gamry Data directory. The filename should look similar to the example below, depending on the instrument: Calibration Results PC5-#####.txt
 - Go to Gamry's website and fill out the **Technical Support** contact form: https://www.gamry.com/support-2/contact-technical-support/

Don't forget to attach the Calibration summary file you located earlier.