



Reference 620™

QUICK-START GUIDE



Guide #2 Potentiostat Calibration

Calibrating your Reference 620 Potentiostat

1

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



2

Connect the cell cable to the **200 Ω Calibration Cell** included with your instrument.



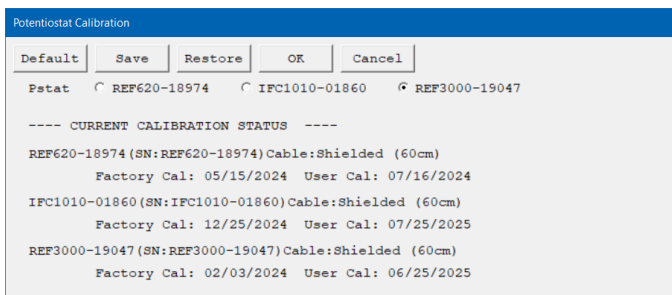
3

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.



4

Open the Gamry Framework™ software. Go to the menu and select **Experiment > Utilities > Calibrate Instrument**.



The screenshot shows the 'Potentiostat Calibration' dialog box. It has a title bar and five buttons: 'Default', 'Save', 'Restore', 'OK', and 'Cancel'. Below the buttons, there are three radio buttons for selecting a potentiostat: 'REF620-18974', 'IFC1010-01860', and 'REF3000-19047'. The 'REF3000-19047' option is selected. Below the radio buttons, the text '---- CURRENT CALIBRATION STATUS ----' is displayed. Underneath, the calibration status for each potentiostat is shown, including the serial number, cable type, and factory and user calibration dates.

Potentiostat	Serial Number	Cable	Factory Cal	User Cal
REF620-18974	(SN:REF620-18974)	Cable:Shielded (60cm)	05/15/2024	07/16/2024
IFC1010-01860	(SN:IFC1010-01860)	Cable:Shielded (60cm)	12/25/2024	07/25/2025
REF3000-19047	(SN:REF3000-19047)	Cable:Shielded (60cm)	02/03/2024	06/25/2025

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).

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 **200 Ω 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.
2. 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.