SERVICE & SUPPORT

Thank you for choosing Sutter Instrument products. To guarantee the highest standards of quality and performance, every instrument is fabricated on site by highly skilled technicians. The instrument contained herein has been assembled with care and tested to assure it meets rigid quality control standards.

We hope that our instruments and products continually meet your needs. However, should a problem arise, please contact our technical support staff to discuss your concerns. If the instrument requires factory service, we will furnish shipping instructions. Items under warranty will be repaired free of any costs, for parts or service. Both delivery and return shipping costs are the responsibility of the owner.

This product carries a limited warranty of 2 years for parts and labor.

Our office hours are 8:00 am to 5:00 pm Pacific Standard time, Monday through Friday.

Phone	+1.888.883.0128	Intl. Phone	+1.415.883.0128
Fax	+1.888.883.0900	Intl. Fax	+1.415.883.0572

dPatch®
DIGITAL PATCH CLAMP AMPLIFIER SYSTEM

with

SutterPatch®
DATA ACQUISITION, MANAGEMENT AND ANALYSIS SOFTWARE

QUICK START GUIDE

SUTTER INSTRUMENT®

DIGITAL PATCH CLAMP AMPLIFIER SYSTEMS OVERVIEW
Please read these instructions carefully before installation. This guide covers both the dPatch® and dPatch-2 systems. If you have any questions or need additional information, contact Sutter Instrument.

OPERATING SYSTEM REQUIREMENTS
Windows 10 or later: 64-bit versions
macOS 10.13 (High Sierra) or later

INSTALL HARDWARE
1. Attach dPatch headstage(s) to amplifier front panel: HEADSTAGE 1 & 2. dPatch headstages can be attached to any headstage port; they are not "matched" to a port.
2. OPTIONAL: Attach dPatch Screw Terminal Board or dPatch Expansion Panel to amplifier rear panel: DIGITAL OUTPUTS.
3. Attach USB 3 cable to USB 3 ports on amplifier rear panel and your computer. The connector on the dPatch rear panel must click in place.
4. Attach power cord to amplifier rear panel and a grounded power outlet.

INSTALL IGOR PRO/SUTTERPATCH SOFTWARE
1. Power on computer.
2. If you have Internet access, download the latest version of the SutterPatch Software installer from www.sutter.com/AMPLIFIERS/SutterPatch.html
3. If Internet access is not available, attach the included USB flash drive to your computer.
4. Double click on 'SutterPatch_Installer_with_Igor' (Windows) or 'sutterpatch_mac_full' (Mac OS).
5. Follow the installer prompts.
6. Open Igor Pro and activate the Igor Pro license as instructed:
   i. Serial Number:
   ii. Activation Key:

   affix label here

TEST SYSTEM
1. Model Cell:
   a. Attach Model Cell to HEADSTAGE 1 and tighten the collar.
   b. Attach ground-wire gold plugs to HEADSTAGE 1 and Model Cell.
   c. Surround with aluminum foil shielding and ground it to the headstage ground connector.

2. Click icon to launch Igor Pro:

3. SutterPatch welcome screen will open. Press 'Start'.

4. In the floating Dashboard:

   Click on the Membrane Test icon:

5. Scope + Analysis windows open:
   (Actual analysis values depend on dPatch filter settings)
   I. With the Model Cell switch in Bath position, click the Bath button.
       Pipette Resistance   = ~10 MΩ
   II. With the Model Cell switch in Seal position, click the Seal button.
       Seal Resistance   > 10,000 MΩ
   III. With the Model Cell switch in Cell position, click the Cell button.
       Access Resistance   = ~10 MΩ
       Membrane Resistance   = ~500 MΩ
       Membrane Capacitance   = ~28 pF

   Move the Model Cell and shielding to HEADSTAGE 2 (if installed), set the Membrane Test 'Signal Parameter' Channel to 'Headstage 2', and repeat steps I – III.

INSTRUCTIONAL VIDEOS
Visit the Sutter Instrument and WaveMetrics YouTube channels for tutorials, tech support videos, and webinars!

www.youtube.com/c/SutterInstrument

www.youtube.com/c/WaveMetricsInc

If you have any questions, please contact SutterPatch support:
sutterpatch@sutter.com