

Pico Installation Guide

Document Revision 1.3 January 11, 2012

Tecella
26322 Towne Centre #521
Foothill Ranch, CA 92610, USA
www.tecella.com
info@tecella.com
+1-714-641-1709
+1-714-641-1569 Fax



1. Introduction

The Tecella Pico is a USB-powered whole cell patch clamp amplifier. The Pico was designed with ease-of-setup and ease-of-use as top priorities. The digitizer, the headstage, the internal model cell, and the USB interface are all integrated into the Pico; therefore, the physical installation is reduced to simply connecting the USB cable to the Pico. No additional computer hardware is required, and no tools are needed to install the Pico.

1.1 Package Contents

Please confirm that you have the following components before beginning the installation process.

- Pico amplifier
- USB cable

1.2 Minimum Computer Requirements

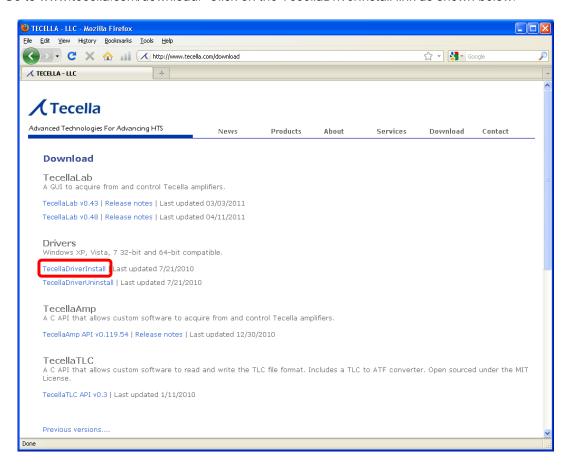
The following are the minimum computer requirements

- Processor (CPU)
 - · Any multi-core Intel or AMD processor, or
 - Minimum 1GHz single-core Intel or AMD processor
- 1GB RAM (2GB or more recommended)
- 2GB free space on Hard Drive
- One free USB 2.0 port
- Windows 7, Vista, XP

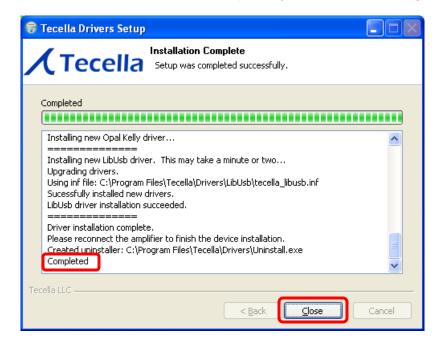


2. Install the driver

Go to www.tecella.com/download. Click on the TecellaDriverInstall link as shown below.



Run the installer. After the installation is completed, you can close the dialog box.





3. Plug in the Pico

Attach the USB cable to the Pico and the computer.



When plugging in the Pico for the first time, the driver will automatically be installed. Follow the on-screen instructions to install the Pico driver.

4. Set up Software

The following software choices are available:

WinWCP from the University of Strathclyde

jClamp from SciSoft

TecellaLab from Tecella

http://spider.science.strath.ac.uk/sipbs/software_ses.htm

http://www.scisoftco.com/jclamp.html

http://www.tecella.com/download

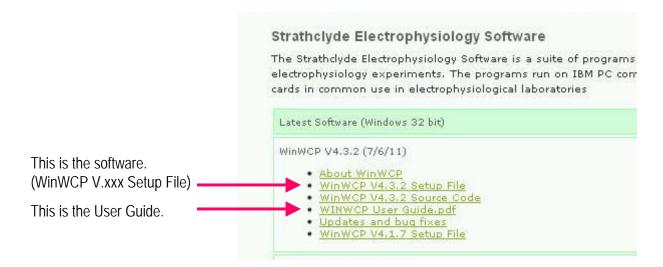
Download and follow the instructions to install the appropriate software. Tips on installing and running some of the software(s) are provided in the following section(s).



4.1 Tips on installing and running WinWCP

Download the "Setup File" and "User Guide" from the University of Strathclyde's WinWCP web site.

http://spider.science.strath.ac.uk/sipbs/showPage.php?page=software_ses



The User Guide can be found in the folder where WinWCP is installed, or can be downloaded from the above link, or from the direct link below.

http://spider.science.strath.ac.uk/sipbs/media/40/ses/WINWCP%20User%20Guide.pdf

Run the Setup File, and follow the on-screen instructions to complete the installation process.

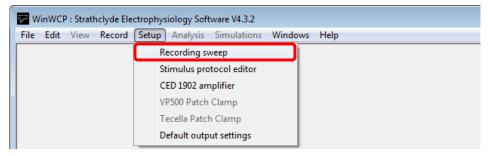
After installation, launch WinWCP from the Start menu, or by double-clicking on the WinWCP icon that has been created on your desktop as shown below.



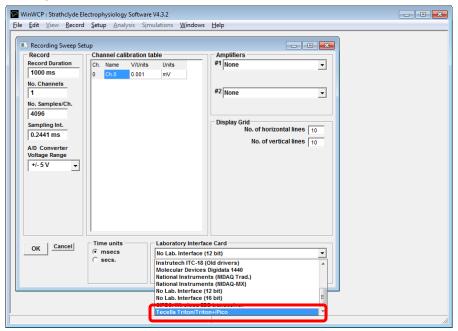


For the first time only, you will need to set the Laboratory Interface Card by performing the following steps.

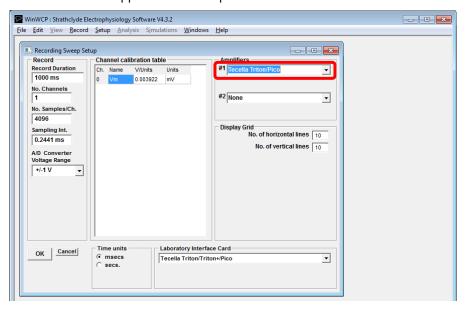
Setup > Recording sweep



Laboratory Interface Card > Tecella Triton/Triton+/Pico

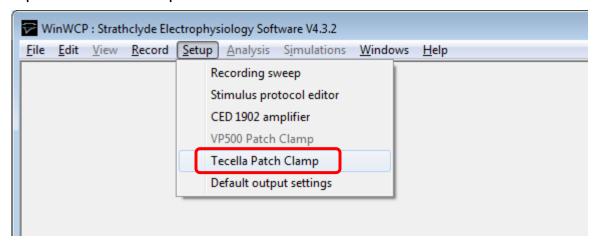


The Pico should now appear under "Amplifiers".

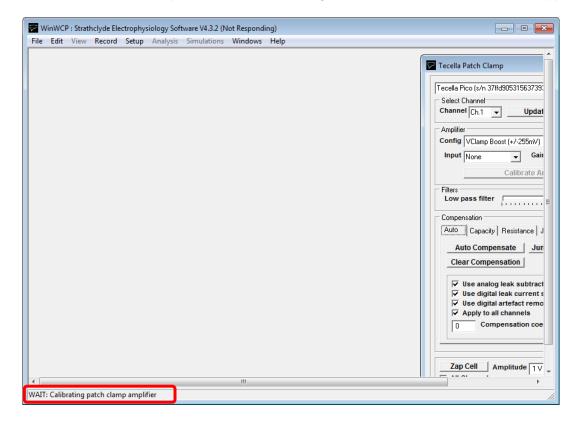




Setup > Tecella Patch Clamp

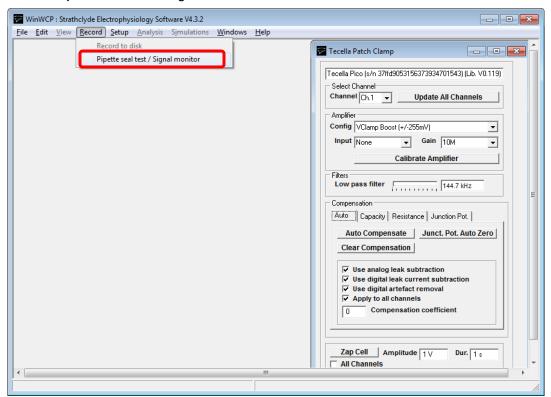


For the first time only, Pico will automatically be calibrated. <u>Calibration can take several minutes.</u> When the calibration is completed, the "WAIT" message at the bottom of the window will disappear.

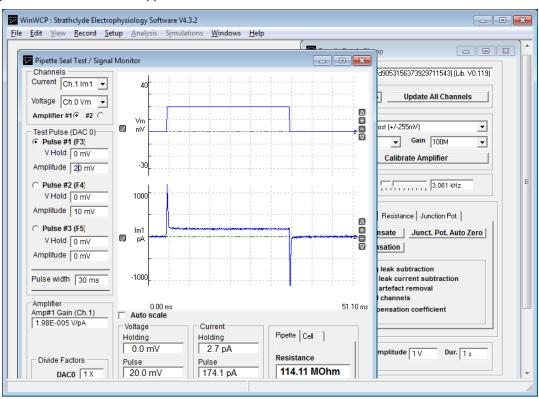




Record > Pipette seal test / Signal monitor



Pipette Seal Test window appears.





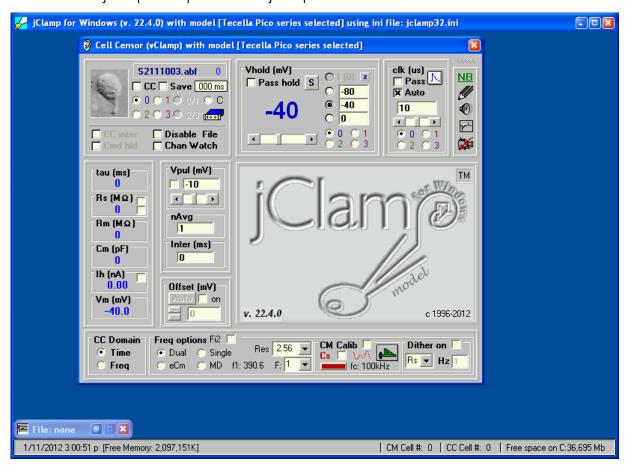
4.2 Tips on Installing and Running jClamp

Download the "Setup File" and "User Guide" from the University of Strathclyde's WinWCP web site.

http://spider.science.strath.ac.uk/sipbs/showPage.php?page=software_ses

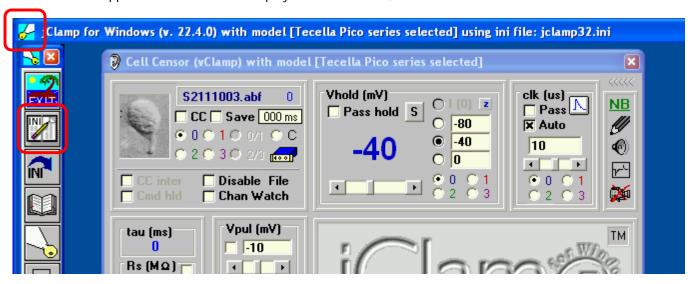
For the first time only, you will need to set the hardware to Pico.

Double-click on the jClamp desktop icon to start jClamp.

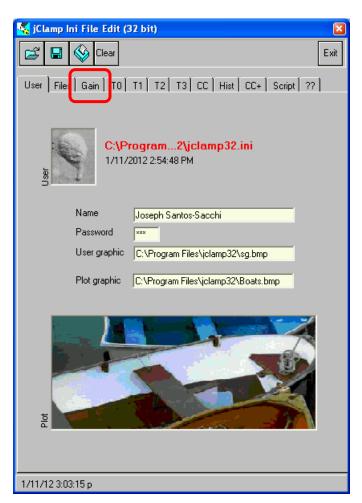




Mouse-over the upper left hand corner to display the menu. Then, click on the INI file editor icon.

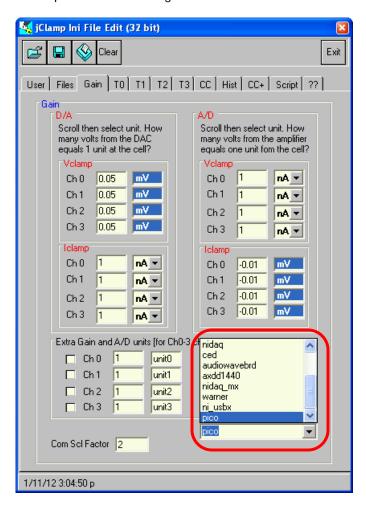


Select the "Gain" tab in the INI file editor.

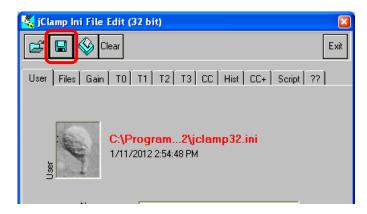




Select "pico" in the lower right hand corner.



Be sure to save the changes. For most cases, saving to the default jClamp INI file is sufficient.



Please refer to the jClamp documentation to learn how to use the jClamp software.



4.3 Tips on Installing and Running TecellaLab

Download the latest TecellaLab release from the "Download" section of our website.

http://www.tecella.com/download

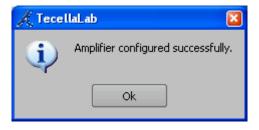
Unzip the downloaded file to a desired location. Double-click on the file named "TecellaLab.exe" to start TecellaLab.

You will be prompted to "Pick a version" of the GUI. V1 is a simpler GUI, and is recommended for most users.



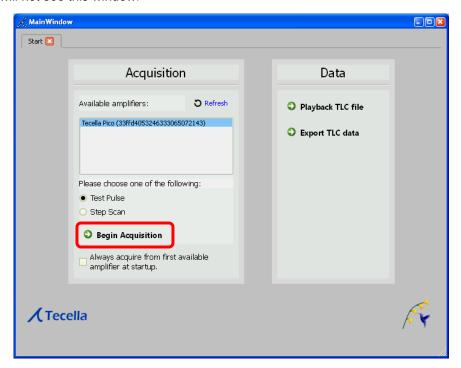
You might see either or both of the following screens. Ignore them by clicking on "OK".



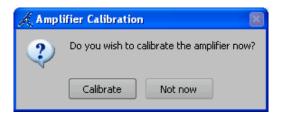




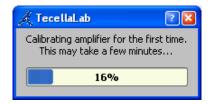
With the V1 GUI, you will see the following "Start" window. Simply click on "Begin Acquisition". With the V2 GUI, you will not see this window.



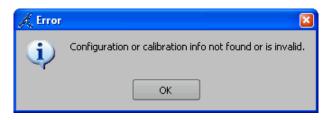
For the first time only, you will be asked whether to calibrate the amplifier. Click on "Calibrate".



Calibration usually takes a minute or two.



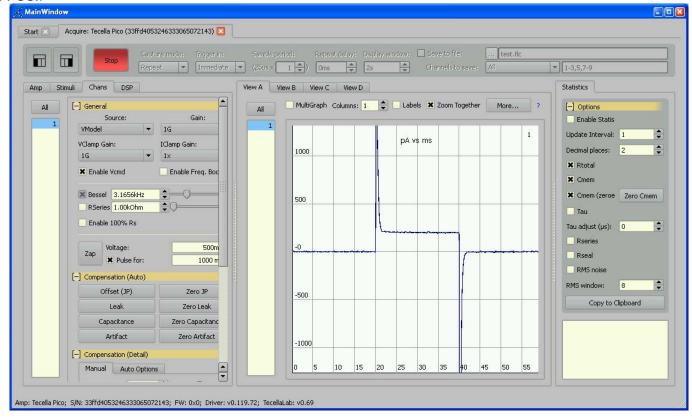
If you see the following dialog box, you can ignore it and click "OK".





TecellaLab will start with whichever of the V1 GUI or the V2 GUI that was selected.

V1 GUI:



V2 GUI:

