

Connecting the OC-725C to Axon's pClamp
Rev 2005.06.24

**The following instructions are for connecting
Warner's OC-725C to Axon's Digidata 132x and pCLAMP 8.0-9.x program.**

Feel free to omit any steps for items you do not wish to connect. Also, feel free to make connections to the Digidata different than those we specify. Just make sure to choose the input number you selected in the software.

Begin by making take the following general connections:

OC-725C	Digidata
GAIN TELEGRAPH OUTPUT (on rear panel)	GAIN TELEGRAPH INPUT #3 (on rear panel)
I MONITOR (<u>BATHELECTRODES</u> section)	ANALOG IN #0
V _m x10 (<u>VOLTAGE ELECTRODES</u> section)	ANALOG IN #1
COMMAND IN ±10 (<u>COMMANDS</u> section)	ANALOG OUT #0

Software setup

1. Open Clampex and verify that the digitizer (Digidata) is active and properly configured to Clampex.
2. From the main menu, select Configure/Telegraphed Instrument
 - a. Under INPUT CHANNELS, select Analog input #0
 - b. Under TELEGRAPH INSTRUMENT, select OC-725C from the drop-down list
 - c. Under TELEGRAPH CONNECTIONS, select Telegraph Input 3 for gain from the drop-down list
 - d. Click OK to close the window. Say OK to the info dialog box that appears.
3. From the main menu, select Configure/Lab Bench
 - a. Select the Input Signals tab.
 - i. In the DIGITIZER CHANNELS section, select Analog IN #0
 1. In the SIGNALS section
 - a. Click on the add button
 - b. Enter the word 'current'
 - c. Click OK
 2. In the SCALING section
 - a. Select signal units to be μA
 - b. Set the scale factor to 1 V/ μA

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- ii. In the DIGITIZER CHANNELS section, select Analog IN #1
 1. In the SIGNALS section
 - a. Click on the add button
 - b. Enter the word 'voltage'
 - c. Click OK
 2. In the SCALING section
 - a. Select signal units to be mV
 - b. Set the scale factor to 0.01 V/mV
 - b. Select the Output Signals tab
 - i. In the DIGITIZER CHANNELS section, select Analog OUT #0
 - ii. In the SIGNALS section
 1. Click on the add button
 2. Enter the word 'holding'
 3. Click OK
 - iii. In the SCALING section
 1. Select signal units to be mV
 2. Set the scale factor to be 100 mV/V
 - c. Click OK to close the window.
4. From the main menu, select Acquire/Edit Protocol
 - a. Under the Mode/Rate tab, set the acquisition mode to gap-free
 - b. Under the Inputs tab
 - i. Select Channel #0. Select 'current' from the drop-down menu.
 - ii. Select Channel #1. Select 'voltage' from the drop-down menu.
 - c. Under the Outputs tab
 - i. Select 'holding' from the drop-down menu for channel #0
 - d. Click OK to close the window

The Digidata and pCLAMP should now be configured to work with the OC-725C.
Attach the model cell and perform a checkout of the instrument.