Physiology Workbench Manual

# Protocols

## Test Pulse

Test pulse outputs a voltage pulse to the amplifier holding potential while recording the amplifier current, gain, and capacitance.

|  |  |
| --- | --- |
| **DAQmx Settings** | |
| DAQmx Timing | Finite |
| AO Start Trigger | AI Start Trigger |
| AI Start Trigger | Manual |

After completion, the gain and capacitance channels are averaged and converted into pA/mV and pF values, respectively. The gain is then used to scale the current channel. Test pulse then averages the center third of the pulse and first resting currents to calculate the seal resistance according to Ohm’s law.

## Oscilloscope

## Laser Flash

This protocol flashes the laser one time after a specified delay while recording the laser power and amplifier current, gain, and capacitance.

|  |  |
| --- | --- |
| **DAQmx Settings** | |
| DAQmx Timing | Finite |
| AI Reference Trigger | Internal Trigger |
| DO Start Trigger | Manual |

After completion, the gain and capacitance channels are averaged and converted into pA/mV and pF values, respectively. The gain is then used to scale the current channel.

## Laser-Illuminated Fluorescence Recording