



BIOPAC Systems, Inc.

42 Aero Camino
Goleta, CA 93117
Ph (805) 685-0066
Fax (805) 685-0067
www.biopac.com
info@biopac.com

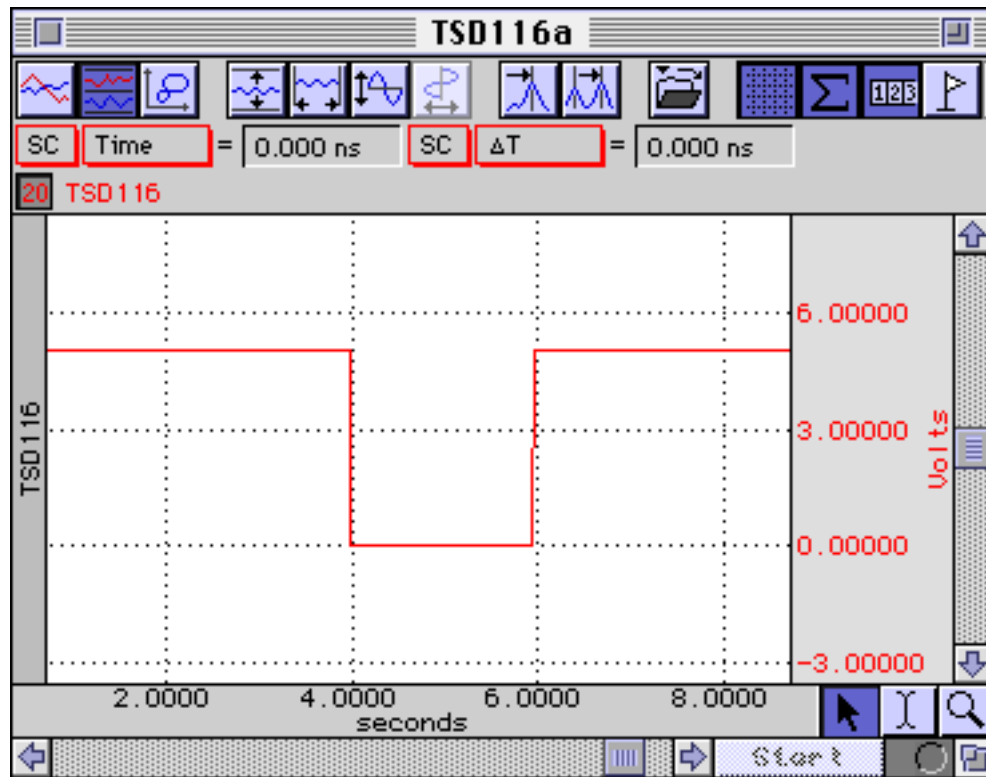
#AH159 - TSD116 Series Hand Switch and Foot Switch

This Application Note describes how to set-up and use the TSD116A and B switches. The TSD116 series switches are used for remote event marking or for psychophysiological response tests. They connect to the UIM100A and can be monitored as input channels. The TSD116A is a hand switch and the TSD116B is a foot switch.

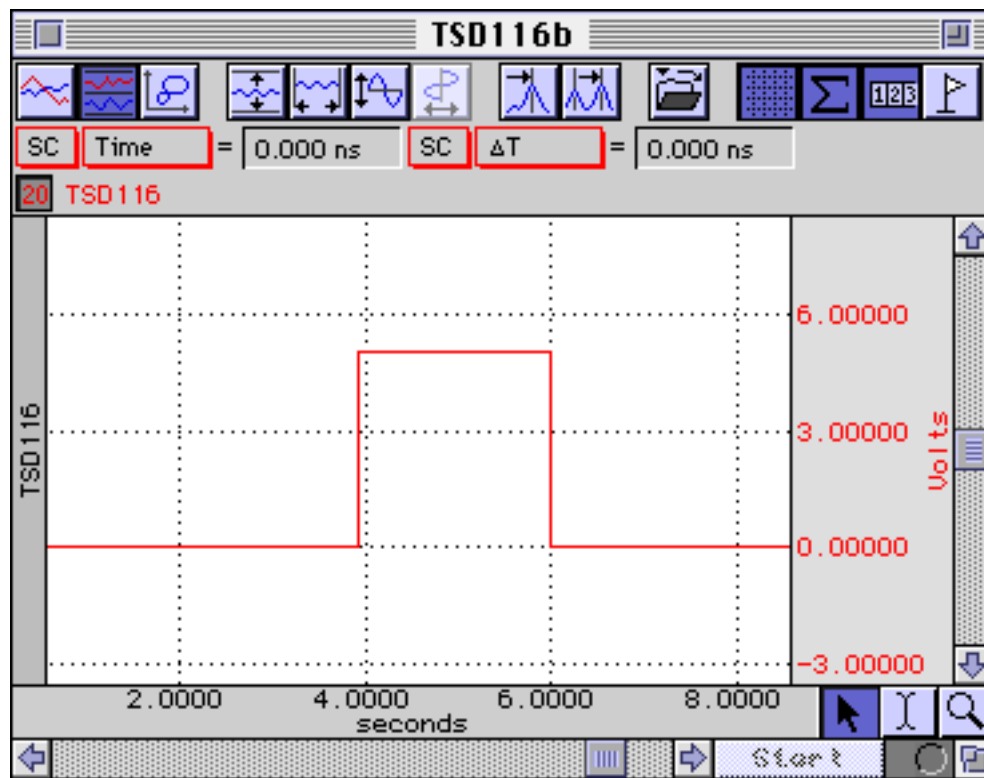


The TSD116A or B will connect directly to the 2mm pin plugs located on the back of the UIM100A. One of the 2mm pin plugs connects to the GND D and the other 2mm pin plug connects to any of the Digital I/O channels. Select Setup Channels from the MP100 menu and turn on the corresponding digital channel. A digital signal has only two voltage levels: 0 and +5 volts. Zero volts

is considered to be a binary 0 and +5 volts is considered a binary 1. A positive edge is a 0 to 1 transition and a negative edge is a 1 to 0 transition. The MP100 digital I/O lines have internal pull-up resistors so that unconnected inputs will read 1. This is shown in the example below.



If this is being done with a STM100A attached to the left side of the UIM100A, then one 2mm pin plug is attached to the +5V and the other 2mm pin plug is attached to any of the digital I/O channels, located on the back of the UIM100A. This is shown in the example below.



The TSD116A or B can also be used as a trigger to start an acquisition. To do this, connect one 2mm pin plug to the TRIG and connect the other 2mm pin plug to the GRN D, located on the back of the UIM100A. To setup the software, select Setup Trigger from the MP100 menu. Set the Source to External and select either Neg Edge or Pos Edge. This will start the acquisition with a push of the TSD116A or B.

Specifications

Cable Length: 2 meters
 Connector Type: 2mm Pin Plugs
 Interface: UIM100A

[Return To Application Note Menu](#)