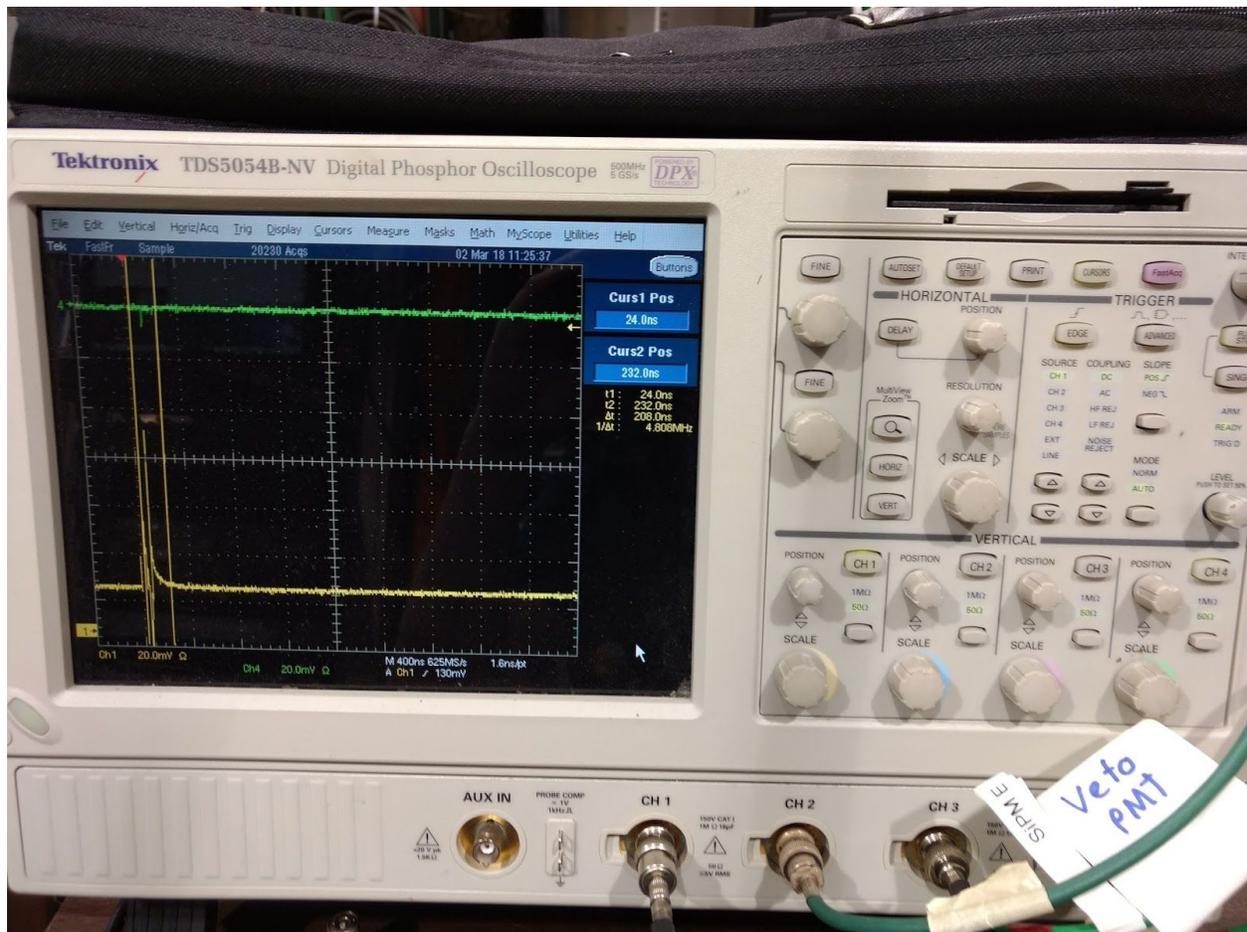


## LED Calibration

- 1.) Plug black USB cable into USB port on LED driver board
- 2.) The LED should be plugged into channel LED1 (should never need to be removed)
- 3.) The LED trigger should be plugged into channel OUT1 (should never need to be removed)
- 4.) Check the position of the Po-210 source, it should read 9000 on the dial
- 5.) Open terminal, go to /home/ubooneDAQ/EDIT2018/Pulser
- 6.) Execute ./Pulse100Hz.sh
- 7.) On oscilloscope set trigger to channel 1, positive slope, threshold 130 mV.
- 8.) Activate channels 1,3, and 4 on the oscilloscope.
- 9.) Move trigger position to the first horizontal tick mark
- 10.) Scope settings: channels: 20 mV divisions, x-axis 400 ns at 1.6 ns per point
- 11.) Scope should look like the image below



- 12.) Go to /home/ubooneDAQ/EDIT2018/TailBo\_daq
- 13.) Execute: source setup.sh
- 14.) Execute ./wunderbar
- 15.) Answer the questions:

"What folder do you want to save in?" today's date (i.e 03-06-18)

"Which trigger type are you using (LED, SiPM, PMT)?" LED

"Which bar are you testing? Insert the bar number (from 1 to 12)" 1

"What is the position of the bar?" 9000

"How long do you want to take data? (in minutes)" 20

- 16.) Close computer and collect data. Data will appear in  
/home/ubooneDAQ/EDIT2018/TallBo\_data/03-XX-18
- 17.) After LED calibration unplug USB cable to pulser board
- 18.) Deactivate channel 1. Activate channels 3,4.
- 19.) Set trigger to channel 4, negative. Set threshold to -7.2 mV. Set trigger horizontal position to the first major tickmark.