"Plateauing" of Detectors

1. Turn power off to all channels (1-4)
2. WC 00 0F Single Coincidence
3. Set Ch. 1 to give about 40 counts / sec on DAQ counter (approx 0.7 volts) using multimeter
4. WC 00 1F Double Coincidence
5. Set Ch. 2 to approx. 0.4 volts.
6. RB Reset Board (counter) at initial time (t = 0)
7. Run for an exact time period (1 minute or so using a stopwatch or clock on HT)
8. DS Show counts in each channel and coincidence counts
9. Read single counts on Ch. 2 (S1) (Enter in spredsheet)
10. Read coincidence counts (S4) (Enter in spredsheet)
11. Repeat steps 5 through 11, increasing the Ch. 2 voltage (step 5) by 0.1 volt increments until about 1.7 volts.
12. Plot counts vs. voltage for both single and coincidence
13. Look for "kink" in graph (discontinuity in plot) on singles
14. Also look for plateau in coincidence.
15. At these points, determine the voltage (just above this voltage) and that is where this channel should be run.
16. Repeat Steps 5-15 for channels 3 and 4.
17. Repeat Steps 1-15 using channel 2 as the baseline (instead of channel 1) for channel 1.

EXAMPLE PLOT (Series 1 is Single, Series 2 is Coincidence) (Here plateau is approx 1.2 volts)