## **ORP Probe Connection Diagram**

Detector Building – C 2024 Science Olympiad Nationals

To facilitate the theory-of-operation discussion of how your device converts the probe's output to a ppm, please draw or sketch an Electronic Schematic Diagram of your ORP Probe and any circuitry between it and the input to your microprocessor. This includes power and ground connections, external parts such as resistors, capacitors, op amps, A2D converts and so on.

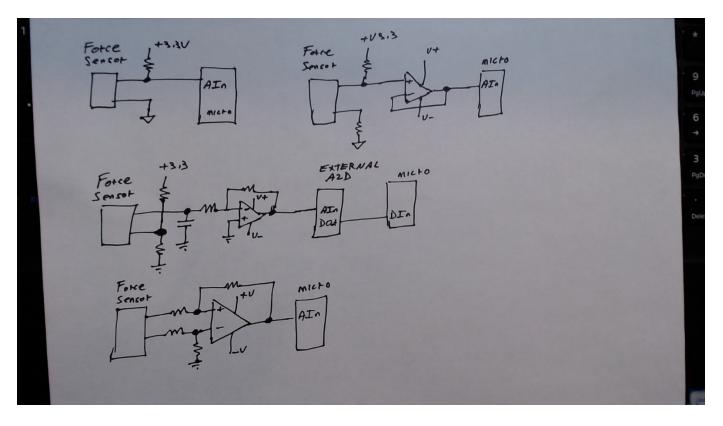
Please label connections with FUNCTIONAL names, but pin numbers are not necessary. Do not include internal details of the probe, just its output leads. Do not include display or LED drive circuits either.

Please bring this to the event as part of your log book. You will NOT be graded on the "prettiness" of the diagram, so you do not need to create it via some electronic CAD program – it just needs to get the information across.

It will be graded as a simple pass / fail worth 10 points on the written test. It must show your actual circuit...

If by chance you do not bring a device, just bring a paper with "NO PROBE" written on it to hand in, and you will get the full 10 points with no penalty.

Below are possible example diagrams showing the kind of information that we are interested in if they had been drawn for last year's Force Detector event.



Thank you, and see you soon.

Clifton Brown / Ken Hollingshead National: Detector Building ES