

Table of contents

Bill of Materials	S2
Wye Connection to NMR tube	S3
Drawing of the PCB	S4
Photograph of Experimental Setup	S5

Bill of Materials

Part Name	Supplier	Vendor	Part No.	Link	Quantity/set	Cost Each (USD)	Cost Total (USD)
1) AC inlet connector; 250 VAC; 10A; 10 MΩ/min	Allied Electronics & Automation	Schurter	6100.3200	https://www.alliedelec.com/product/schurter/6100-3200/70080619/	2	\$1.19	\$2.38
2) Push-button switch	Allied Electronics & Automation	Carling Technologies	P27A-BL	https://www.alliedelec.com/product/carling-technologies/p27a-bl/70131572/	1	\$5.08	\$5.08
3) Capacitor, Nichicon 470μF / 250V	Amazon	Nichicon	UPW2E471MRD	https://www.amazon.com/Nichicon-UPW2E471MRD-470uf-Capacitor-Radial/dp/B0052GKSZE/ref=sr_1_29?	1	\$10.28	\$10.28
4) Thermistor, Aexit MZ73-9RM 9Ω / 270V, pack of 5 units (3-4 pcs are needed for 1 set)	Amazon		B07DDBBD7B	https://www.amazon.com/Aexit-Resistors-MZ73-9RM-Degaussing-Single/dp/B07DDBBD7B/ref=sr_1_10?dchild=1&keywords=thermistors+MZ73&qid=1605905346&sr=8-10	1	\$11.56	\$11.56
5) LED; Panel Mount; Wire Leads; Snap Fit; Green	VCC (Visual Communications Company)	Allied Electronics & Automation	5100H5	https://www.alliedelec.com/product/vcc-visual-communications-company-/5100h5/70130261/	1	\$1.70	\$1.70
6) Diode; Chanzon HER 208; 2A / 1000V; pack of 100 units, need 1 pc per set	Amazon	Chanzon	HER208-DO-15-100	https://www.amazon.com/100-Pieces-HER208-Efficiency-Electronic/dp/B079KDKPF4/ref=sr_1_1?dchild=1&keywords=HER208&qid=1605905974&sr=8-1	1	\$8.90	\$8.90
7) Plastic electric junction box, Ogrmar Dustproof IP65 (7.8"x 4.7"x 3")	Amazon	Ogrmar	43237-2	https://www.amazon.com/Ogrmar-Plastic-Dustproof-Junction-Enclosure/dp/B07875F7YZ/ref=sr_1_27_sspa?keywords=electrical+boxes+plastic+8+inches&qid=1554319519&s=gateway&sr=8-27-spons&psc=1	1	\$12.99	\$12.99
8) EDGELEC 100pcs 750 ohm Resistor 1/2w (0.5Watt) ±1% Tolerance Metal Film Fixed Resistor (1 pc is needed per board)	Amazon	EDGELEC	EFR-W0D50-A:MF	https://www.amazon.com/EDGELEC-Resistor-Tolerance-Multiple-Resistance/dp/B07QJ9Z7HF?th=1	1	\$6.49	\$6.49
9) Circuit Board (this piece is enough to make several copies) One Copper Clad Side, 18" Long x 12" Wide x 1/16" Thick	McMasterCarr		8521K69	https://www.mcmaster.com/8521K69/	1	\$12.90	\$12.90
Grand Total							\$72.28

Wye Connection to NMR tube

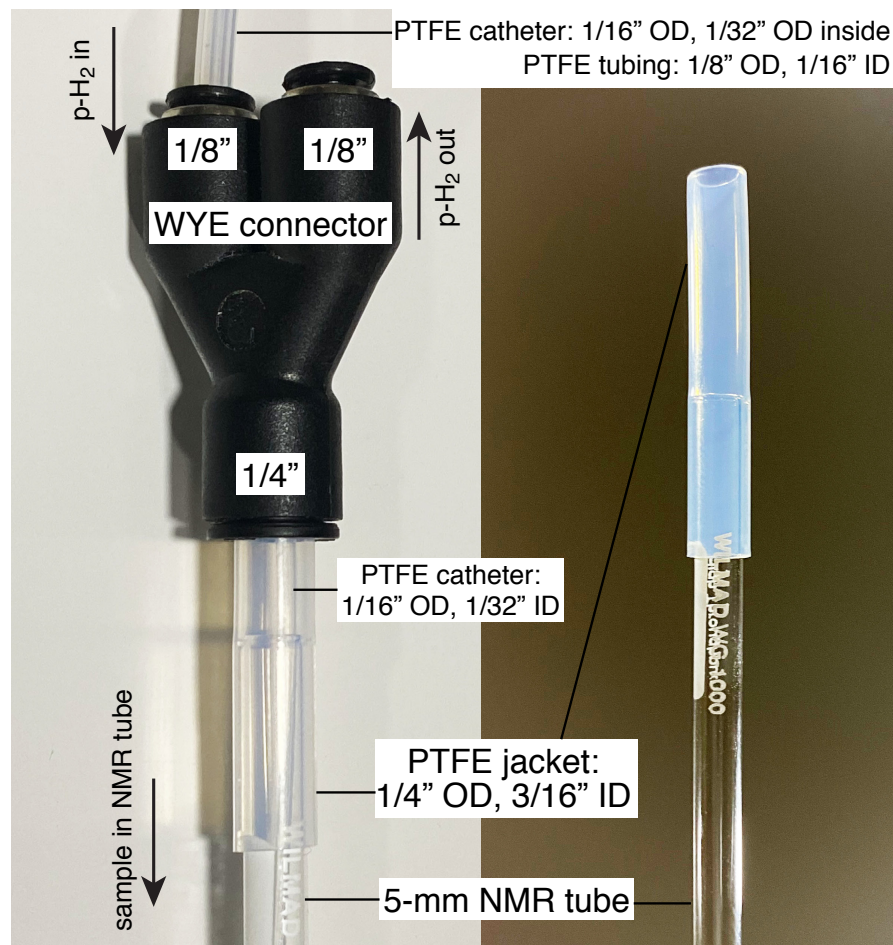
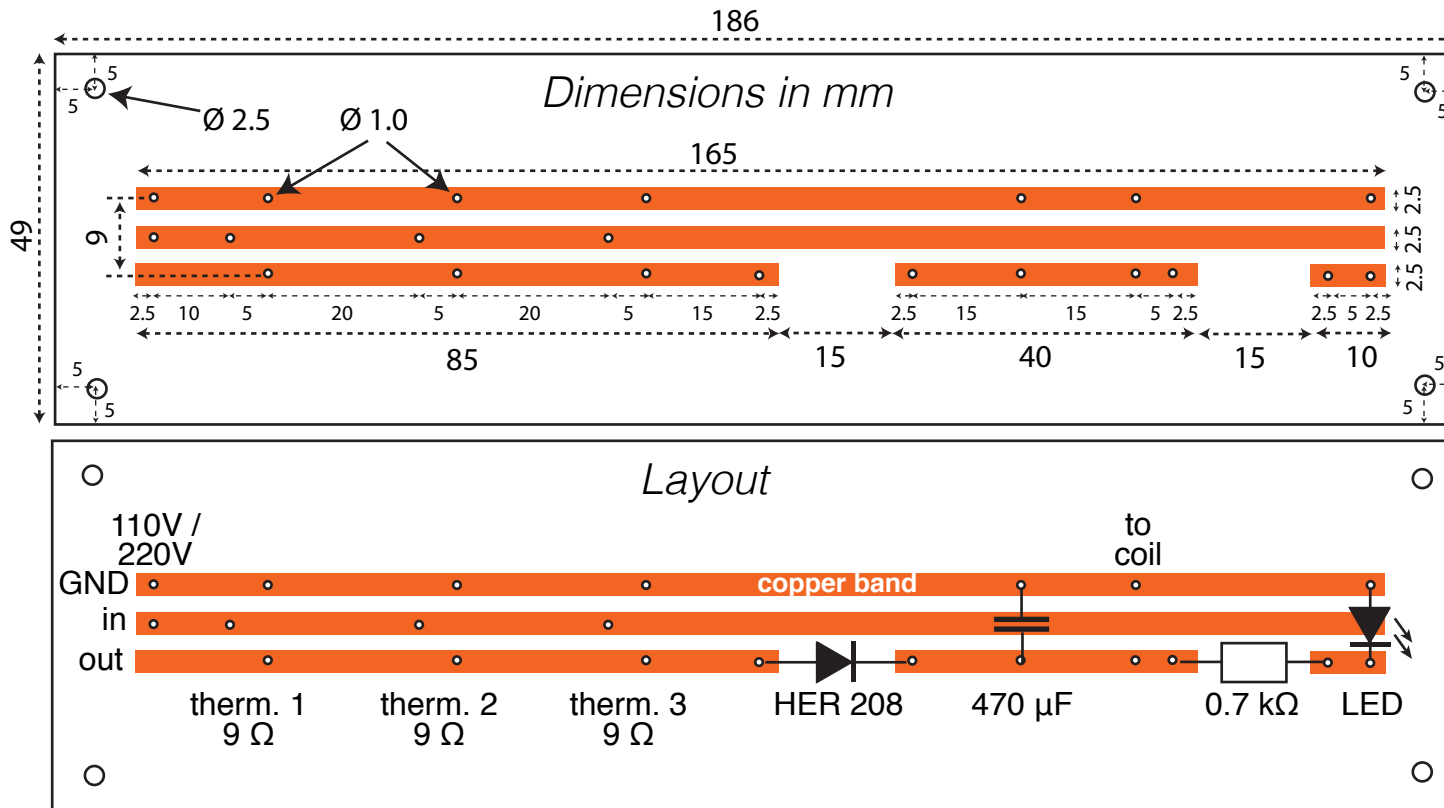


Figure S1. Wye connection of for parahydrogen ($p\text{-H}_2$) bubbling in a Teflon jacketed 5-mm NMR tube. We have employed the following components for this setup. Wye Reducer, for 1/4" x 1/8" Tube OD (McMaster-Carr: 5779K262), PTFE 1/4" OD 3/16" ID tubing for jacket (McMaster-Carr: 5239K12), PTFE 1/16" OD 1/32" ID catheter (McMaster-Carr: 5239K23), PTFE 1/16" ID, 1/8" OD semi-clear tubing (McMaster-Carr: 5239K24), Wilmad economy 5 mm NMR tube (Wilmad WG-1000-8).

Drawing of the PCB



Degaussing Circuit Board

Figure S2. Drawing and layout of PCB for mounting of electronics components for the circuit.

Photograph of Experimental Setup



Figure S3. Annotated photographs of three-layer mu-metal shield (Magnetic Shield Corp., P/N ZG-203) equipped with vendor's with degaussing coil: a) view of the disassembled setup showing the connection of the degaussing coil to the degaussing circuit in the electric enclosure; b) nested view of the partially assembled me-metal shield equipped with degaussing (blue) and RF solenoid (dark amber) coils; c) top view of the assembled setup;