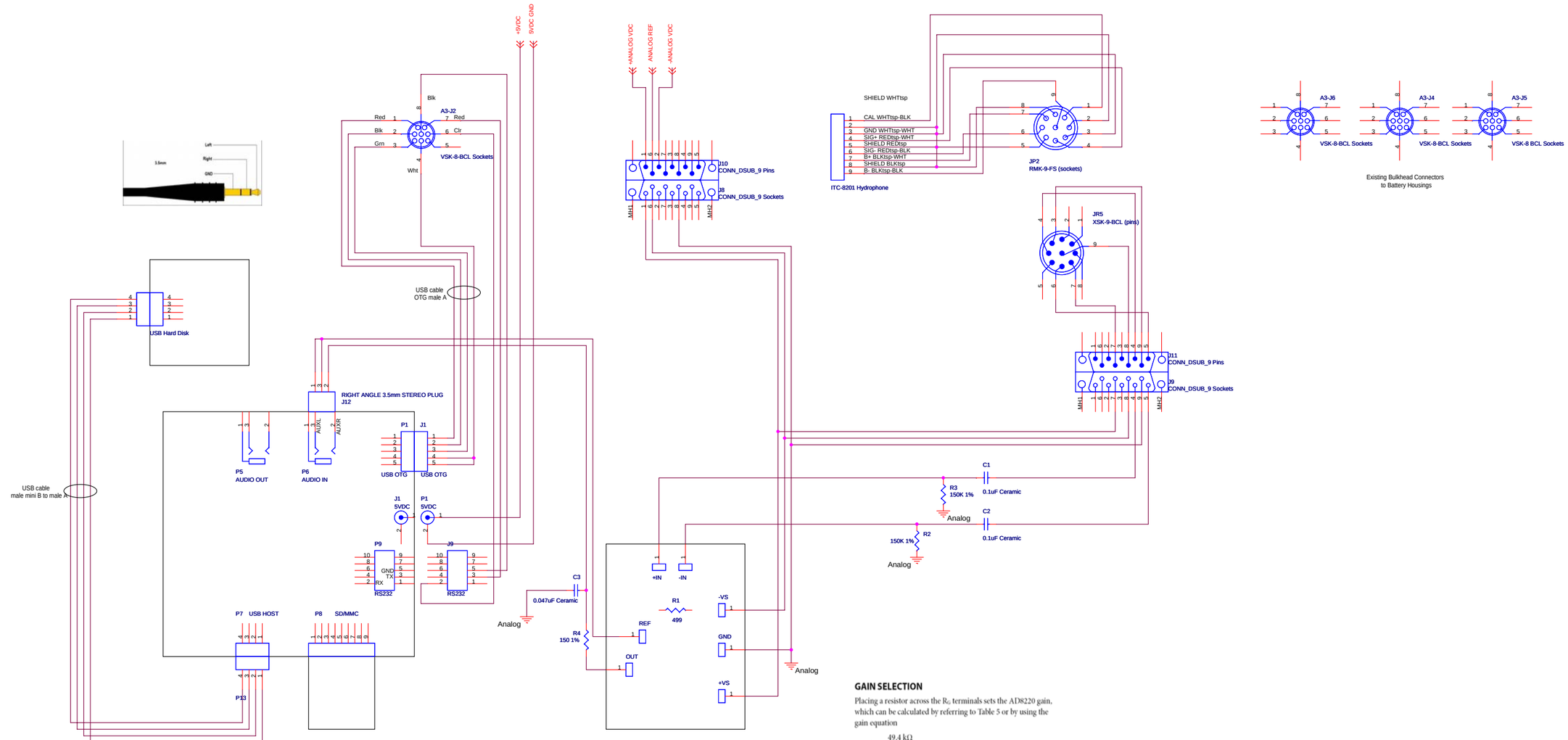

GAIN SELECTION

Placing a resistor across the R_G terminals sets the AD8220 gain, which can be calculated by referring to Table 5 or by using the gain equation

$$R_G = \frac{49.4\ \text{k}\Omega}{G-1}$$

Table 5. Gains Achieved Using 1% Resistors

1% Standard Table Value of RG (Ω)	Calculated Gain
49.9 k	1.990
12.4 k	4.984
5.49 k	9.998
2.61 k	19.93
1.00 k	50.40
499	100.0
249	199.4
100	495.0
49.9	991.0

The AD8220 defaults to G = 1 when no gain resistor is used. Gain accuracy is determined by the absolute tolerance of R_G. The TC of the external gain resistor increases the gain drift of the instrumentation amplifier. Gain error and gain drift are kept to a minimum when the gain resistor is not used.

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Title
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