

Dividers for LDC500/501 Modulation Input

There is no way to internally reduce the Modulation Input sensitivity on the LDC500/501. This has to be done externally.

A simple way for the user to reduce the gain on the Modulate input is to build a voltage divider to place in series with the input. The only (important) caveat is that this must be a **BALANCED** divider, otherwise the common-mode rejection performance of the LDC501 will be completely ruined.

Figure 1 shows a sketch of a circuit that will reduce the modulate sensitivity 100-fold; it is straight-forward to modify it from there as needed.

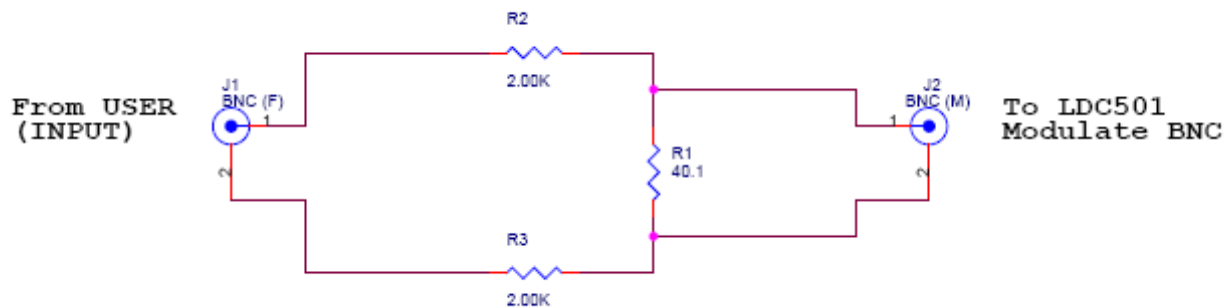


Figure 1: Balanced divider for LDC501 modulation input

Circuit shown above will reduce the Modulate input sensitivity 100x, to 0.25 mA/V or 0.50 mA/V (depending on range).

It is important to keep R2 and R3 matched to preserve the Common-Mode Rejection performance of the LDC501. Do NOT simply connect the outer shell from J1 to J2.

R1 should be kept below 50 ohms to ensure gain accuracy.