

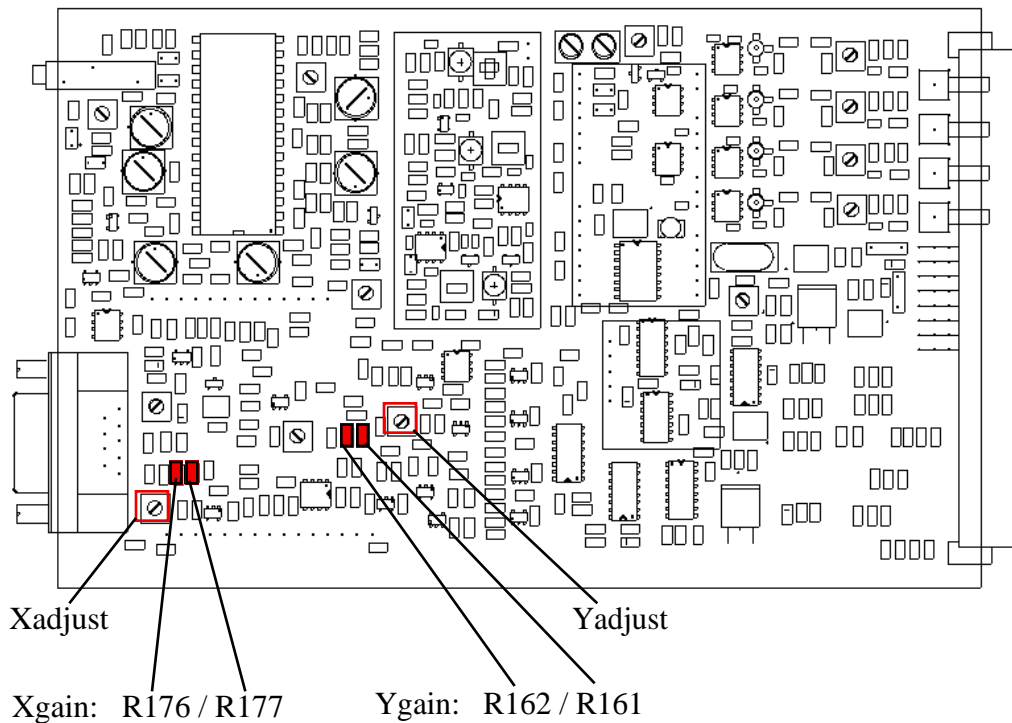
TECH NOTE

MX-BPM gain adjustment for board revision 101.0

The gains can be adjusted over a wide range by changing a few components:
Xgain is determined by the equivalent resistance of R177 in parallel with R176.
Ygain is determined by the equivalent resistance of R161 in parallel with R162.

The equivalent resistance as a function of the desired gain can be approximated by:

$$\text{Requ}[\text{k}\Omega] = \frac{0.93}{\text{Gain} [\text{V}/\%] - 0.034}$$



Example if the desired Xgain and Ygain are outside of the potentiometer adjustable range:

Say: Xgain = 0.10 V/%, Ygain = 0.11 V/%

- 1) Remove R176, R177, R162 and R161.
- 2) Xgain settings: R176=30K and R177=27K. R equivalent = 14K2
Fine gain adjustment by Xadjust
- 3) Ygain settings: R162=30K and R161=22K. R equivalent = 12K7
Fine gain adjustment by Yadjust