

The X-Amp adapter is designed to amplify small signal inputs in order to maximize output sensitivity.

Ideally suited for load cells and pots with small rotation arcs. Eliminates the need for large ratio gears.



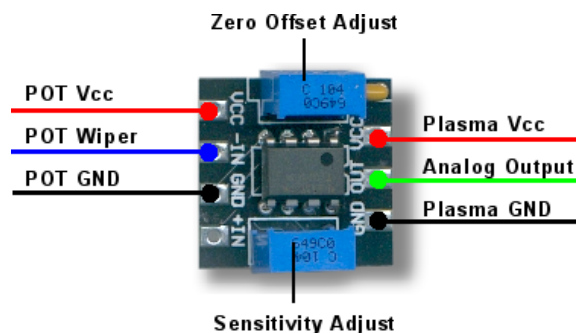
Features:

- Compatible with all Plasma™ series USB adapters.
- Works with any analog device such as load cells, Hall-Effect sensors, pots, etc.
- Zero Offset adjust.
- Sensitivity adjust.
- Power supplied by Plasma module.

Application:

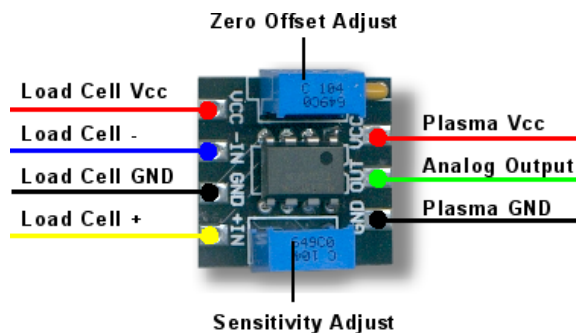
The X-Amp adapter is compatible with all Plasma series USB modules. By adjusting the sensitivity, small inputs can be amplified to use the full output resolution of the Plasma.

Example 1: A pot is limited to 20 deg rotation of the full 270 deg. The output would result in only 7.4% or 76 steps in Windows with little control sensitivity. One method to increase the output sensitivity is to use gears in order to use the full rotation of the pot, in this case 270 deg that would result in 1023 steps (10-bits module). This is not always practical or desired due to mechanical limitations.



Alternately, the X-Amp can be used to amplify this signal to approx 100% or 1023 steps in Windows. Sensitivity increase is approximately 14 times in this case.

Example 2: A load cell consists of a resistive wheatstone bridge, which measures strain or bending. The differential output consists of a few millivolts which is insufficient for proper conversion by the Plasma's ADC (Analog to Digital Converter). The X-Amp will properly amplify this signal to a range usable by the Plasma's ADC (0-5V).



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