

OPTION G1 - DC COUPLED HIGH GAIN OUTPUT

Option G1 adds a DC coupled output stage having 10x gain.

DC OFFSET

Units provided with Option G1 are also equipped with an adjustable DC Offset control which can be found on the side of the amplifier.



When this control is fully clockwise there is no DC offset. Turning the control fully counterclockwise shifts the analog output voltage to lower DC values. Approximately 4 volts of DC offset can be applied when this control is fully clockwise.

Note: Without DC Offset applied, the G1 output amplitude clips when the standard output exceeds 0.5 volts.

1. Move sensor to operating distance by reading the standard output voltage
2. Use Offset Control to set G1 output to 0 volts
3. Calculate the change in distance on G1: $\text{Distance} = \Delta G1 \text{ millivolts} \div 10 * \text{Sensitivity}$ where Sensitivity (mv/distance unit) is provided on the factory calibration chart.

OPTION G2 - AC COUPLED HIGH GAIN OUTPUT

Option G2 adds an AC coupled output stage having 10x gain. This function uses a 1 Hz high pass filter similar to most oscilloscope's AC coupled input selection. All target movements with a frequency less than 1 Hz will not be detected.

This output is bipolar with a +/- 5 volt range.

Note: The G2 output clips when the standard output signal exceeds ± 0.5 volts.

1. Move sensor to operating distance by reading the standard output voltage
2. Calculate the AC oscillation on G2:
 $\text{Distance} = \Delta G2 \text{ millivolts} \div 10 * \text{Sensitivity}$
where Sensitivity (mv/distance unit) is provided on the factory calibration chart.