

# Cline Digital Output

P/N 100105-01

## Theory of Operation:

As the sensor rotates clockwise the High pulse will increase and the Low pulse will decrease at approximately 100 Micro Seconds per Arc-Degree. As the sensor rotates counter-clockwise the High pulse will decrease and the Low pulse will increase at approximately 100 Micro Seconds per Arc-Degree.

## Equations:

Angle = A (Arc-Degrees)

High Pulse Width = H (Micro Seconds)

Low Pulse Width = L (Micro Seconds)

Nominal Frequency = 66.6Hz =  $1/(H + L)$

Nominal Scale Factor = S (~100 Micro Seconds per Arc-Degree)

Sensor Null Angle or Zero Degree Angle: NA = H = L = (~ 7,500 Micro Seconds)

Sensor Angle:  $A = (H - NA) / S$

Note: S and NA needs to be calibrated for each sensor for the best accuracy.

## Pin J2-2 with respect to J2-1:

