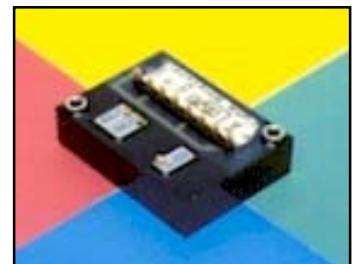


# MUPI-2 - Universal Signal Conditioner

The **MUPI-2 Universal Signal Conditioner** is a self contained, fully functional and adjustable conditioning module. This compact epoxy encapsulated package contains all the electronics and interface circuitry required, to operate any *Spectron* single axis electrolytic tilt sensor. Utilizing MIL spec components, this bipolar DC input/output operated device internally generates the required AC excitation voltage for the sensor, and demodulates the sensor output into a smooth amplified DC output voltage. The **MUPI-2** also features zero offset / gain / symmetry adjustments, bifurcated/solderable terminals for easy installation, and vibration and shock survivability capabilities for hostile environments. In-line quality control during manufacturing assures maximum reliability in both commercial and military applications.



## General Specifications

Input voltage .....	+/-10 to +/-16Vdc
Input current .....	20mA (maximum)
Sensor excitation .....	5V pp, square wave, 1kHz (nominal)
Input impedance .....	5 megohms
Output .....	+/-7Vdc @ +/-10Vdc input
Linearity .....	0.03% of full scale (maximum)
Time constant .....	40 msec
Offset adjustment .....	+/-1Vdc
Output ripple .....	0.3% pp of output signal
Zero adjustment range .....	+/-1% of full scale output
Symmetry and Gain adjustment .....	Individual plus (+) and minus (-) gain adjustments, 4:1 symmetry correction
Weight .....	60 grams
Temperature coefficients (module w/out sensor)	
- Null .....	0.02% full scale / C°
- Scale .....	0.03% full scale / C°
Temperature range	
- Operating .....	25 to +70C°
- Storage .....	40 to +80C°
Vibration .....	2g, 10 - 500Hz
Shock .....	20g, 11 milliseconds, 3 directions



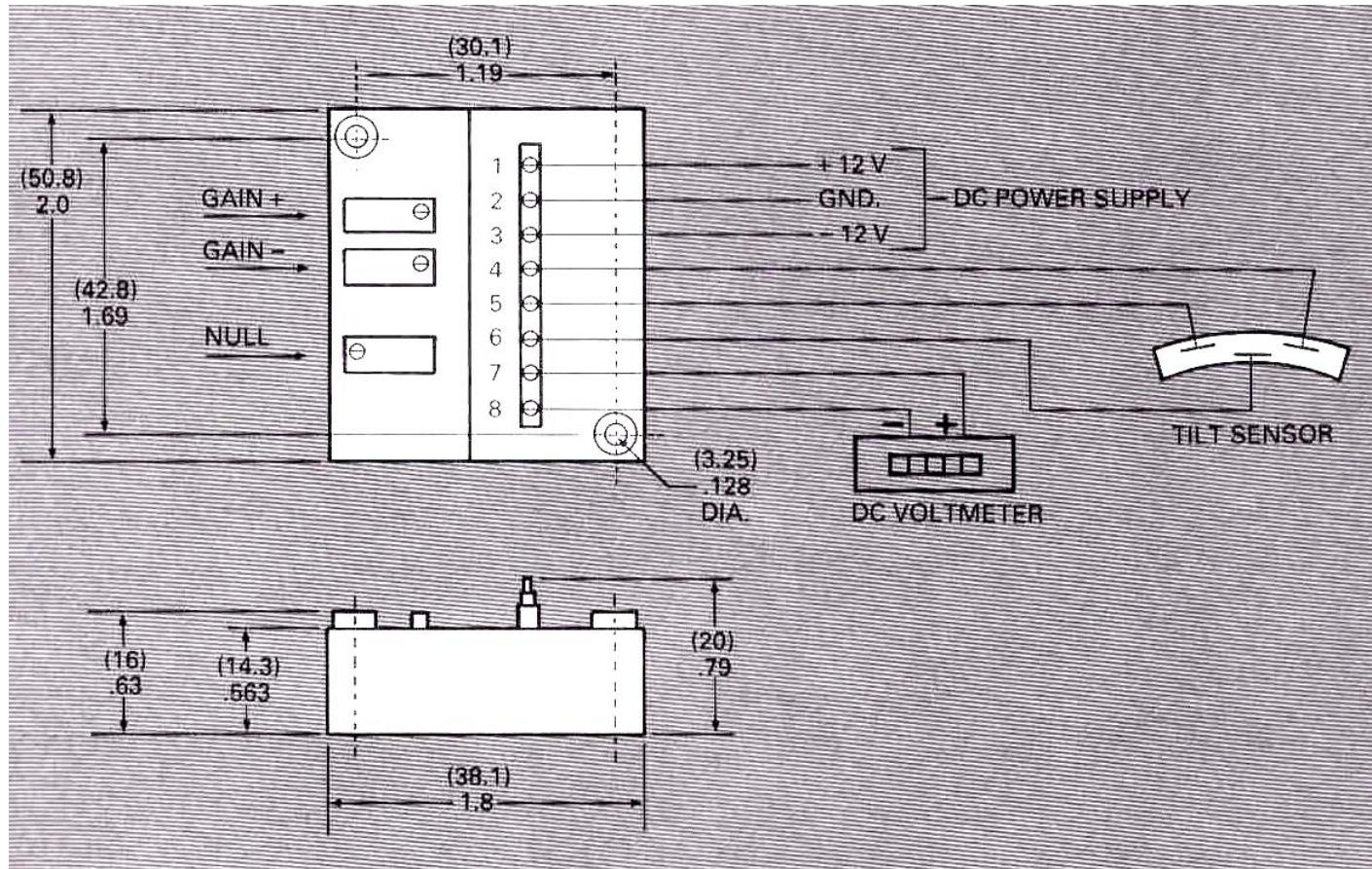
SPECTRON SYSTEMS TECHNOLOGY INC.

595 OLD WILLETS PATH  
HAUPPAUGE NY 11788  
PHONE: 631 582-5600  
FAX: 631 582-5671



# MUPI-2 - Universal Signal Conditioner

## Dimensions, Electrical Connections, and Adjustments inches (mm)



SPECTRON SYSTEMS TECHNOLOGY INC.

595 OLD WILLETS PATH

HAUPPAUGE NY 11788

PHONE: 631 582-5600

FAX: 631 582-5671



*Specifications subject to change without notice!*

Doc.# SDS-103-1703