

# A-308

## Signal Conditioner / Demodulator for LVDT sensors

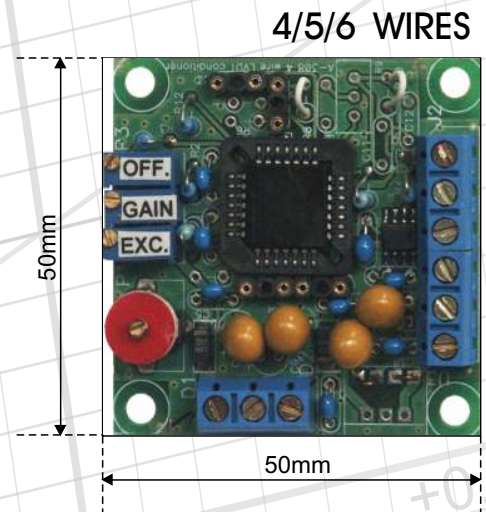
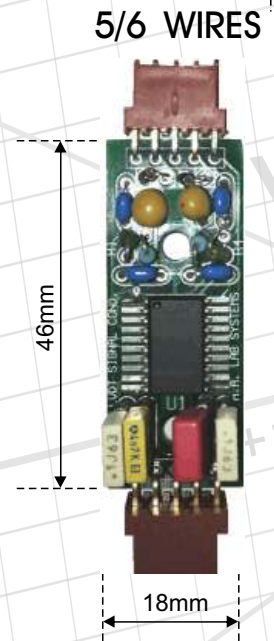
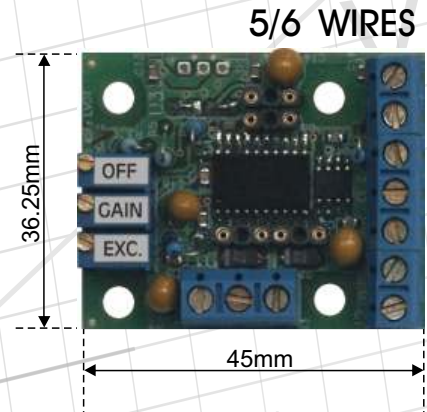
The A-308 is a high accuracy, low cost signal conditioner board, for use with most commercial LVDT sensors for accurate distance/position measurement. Its small size and high accuracy makes it an ideal solution for various applications.

### FEATURES

- Small size
- No adjustment required
- High linearity: 0.05%
- Low drift: < 50ppm /C of F.S.
- High frequency response: up to 20 KHz
- Operates with remote sensor: up to 100m
- DC output proportional to position
- Single or dual supply voltage
- Built-in controls of frequency, filter offset, gain, excitation

### APPLICATIONS

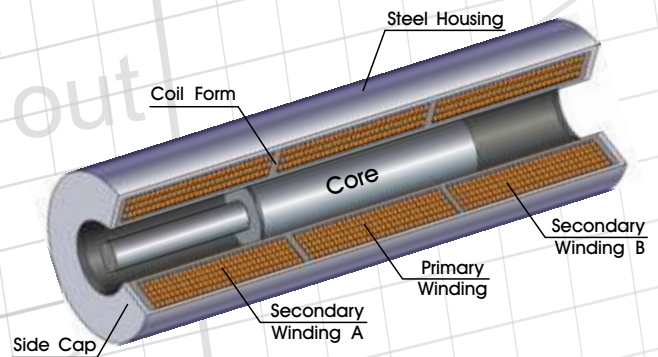
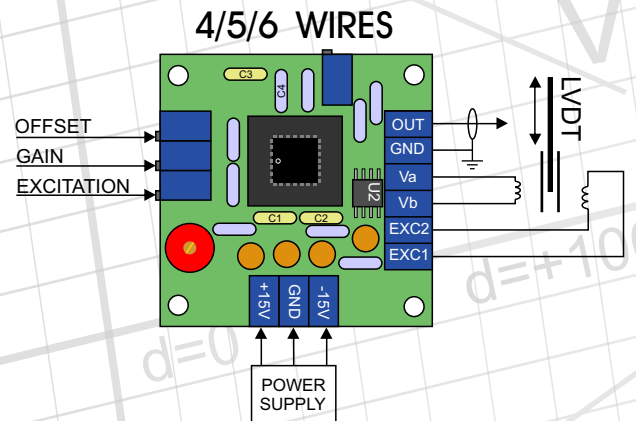
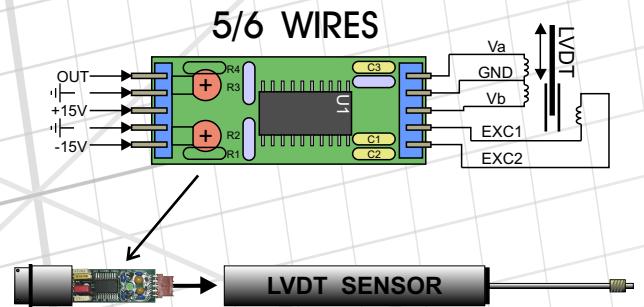
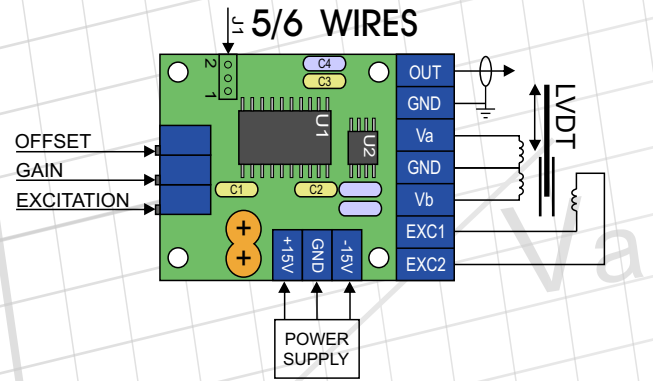
- Linear displacement measurement
- Dynamic position measurement
- Vibrations



## Technical Specifications

DEMODULATOR	
Bandwidth	up to 20KHz.
Linearity	better than 0.05% of FS
Gain drift	50ppm / °C of FS max.
Offset drift	50ppm / °C of FS max.
Output	Unipolar or Bipolar
LVDT sensor type	Any sensor with 1 Excitation coil and 2 output coils
Supply voltage	±15V
Output voltage	±11V
GENERAL	
Primary to secondary phase shift	Insensitive
Transducer null voltage	Insensitive
Transducer cable length	up to 30m.
Output cable length	up to 100m.
EXCITATION	
Excitation range	3-20 V RMS
Excitation T.C.	600 ppm / °C max.
Excitation voltage reject.	100 ppm / dB
Output current	30 mA RMA
Frequency range	60 mA
Excitation frequency T.C.	20-20000 Hz (with component change)
THD	-50 dB
POWER SUPPLY	
Voltage range	±7V / to ±18V
Current (@ no load)	18 mA
Temperature range	0-70 °C

## Connection Diagram



Ordering Information: A-308-W-5-3000

Size: W = wide board with frequency screw terminal  
T = Tiny board with soldering pins

No. of Wires      Excitation Frequency

**A.A. LAB SYSTEMS LTD.**

Head office: 33 Hayetzira st. Ramat-Gan 52521, ISRAEL, Tel:972-3-5756327/8 Fax:972-3-5756326  
U.S.A office: 9 Blossom Drive, Kennett Square, PA19348, Tel:(302)478-2881 Fax:(610)444-5544