

LVDT Digital Signal Conditioner EL-35 Series



EL-35 is a full function Digital Signal Conditioner for 4, 5 or 6 wire LVDTs.

In the analog output version, it is an exact replacement for EL-15, including card and holes dimensions.

Both analog output and digital output card versions have identical dimensions and connectors.

In the digital output version the card includes 21 bit A to D, digital GAIN and ZERO adjustments and RS232 communication channel, as well as analog output.

Both analog and digital output cards can be supplied without trimmers. Choosing digital calibration option enables giving up ZERO and GAIN trimmers to improve stability and resolution. Digital calibration for the analog version can be done in the factory only.

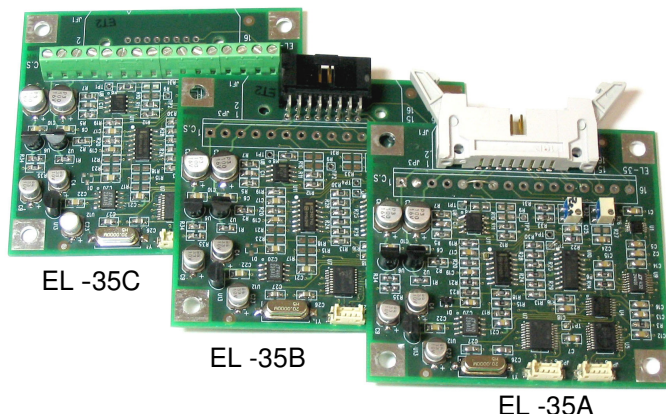
Factory linearization polynomial correction function can reduce non linearity error down to 2 microns, regardless of stroke.

Three 16 pin connector options: Amtek Ejector Header with flat cable, or MOLEX C-Grid III™ with 28AWG wires, or multi position terminal block.

Digital output version enables data acquisition when connected to a PC, and TXT or DOC files for further analyses.

EL-35A and EL-35B supplied with mating connector, and 30 cm long wires.

Digital output version supplied with software CD for Microsoft Windows 98/2000/XP.



Features

- ✓ Pin to pin replacement for EL-15 card
- ✓ Same dimensions as EL-15
- ✓ Power supply: unregulated ± 12 to ± 15 Volt DC
- ✓ Compatible with 4, 5 or 6 wire LVDTs
- ✓ Optional on board ZERO and GAIN trimmers, or digital calibration
- ✓ 3 connector options
- ✓ 4 holes for #4 UNC screws

Specifications

LVDT excitation	
Voltage.....	10 V rms max, 30 mA max, depending on LVDT model
Frequency.....	5 kHz max
Output	
Voltage.....	± 7 Volt DC max, or RS232
Current.....	10 mA max
Power supply requirements....	± 12 VDC unregulated, @ 30 mA (no load)
Trimmer Adjustments (when installed)	
Zero.....	± 0.8 V (up to ± 5 V upon customer request)
Gain.....	$\pm 10\%$ (up to $\times 8$ upon customer request)
Non linearity error.....	$< 0.01\%$ of FS
Operating temperature range... 	-20° to $+85^{\circ}$ C
Temperature Coefficient.....	$< 0.01\%$ of FS / $^{\circ}$ C
Warm up time.....	5 minutes max

How to Order

Order by model number
 Model Number EL-35A for Amtek Ejector Header
 Model Number EL-35B for MOLEX C-Grid III™
 Model Number EL-35C for Multi position Termination block

For analog version use – Analog suffix.
 For digital version use – Digital suffix.

Example: EL-35B-Digital, means EL-35 card with MOLEX C-Grid III™ connector and digital output.

Rev. B

© Singer Instruments & Control Ltd., 2006

WWW.SINGER-INSTRUMENTS.COM

Information furnished by Singer Instruments & Control is believed to be accurate and reliable. However, no responsibility is assumed by Singer Instruments & Control for its use, not for any infringements of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Singer Instruments & Control Ltd.

Singer Instruments & Control Ltd.

2 Yozma St., Tirat Carmel 39032, ISRAEL
 yuval@singer-instruments.com

Tel: 972-4-857-8880
 Fax: 972-4-857-8881

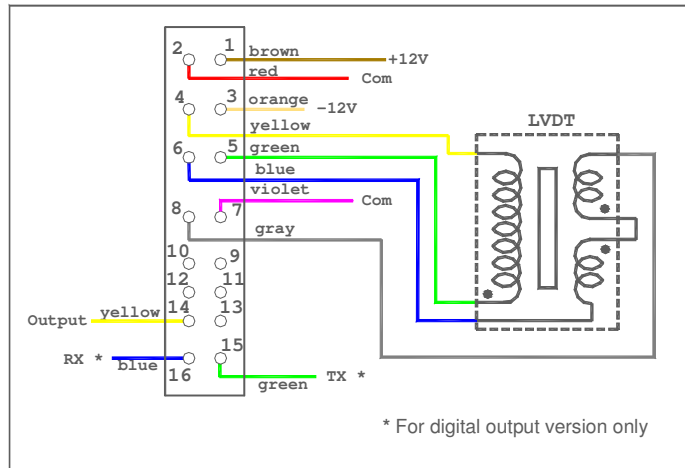
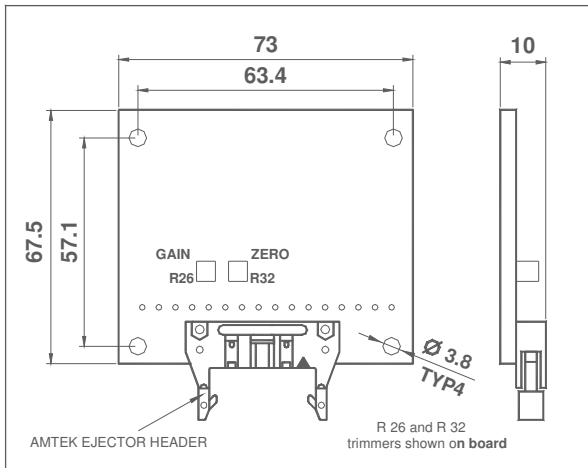
540 East Main St., Branford, CT 06405, USA
 fred@singer-instruments.com

Tel: 203-481-7278
 Fax: 203-488-7190

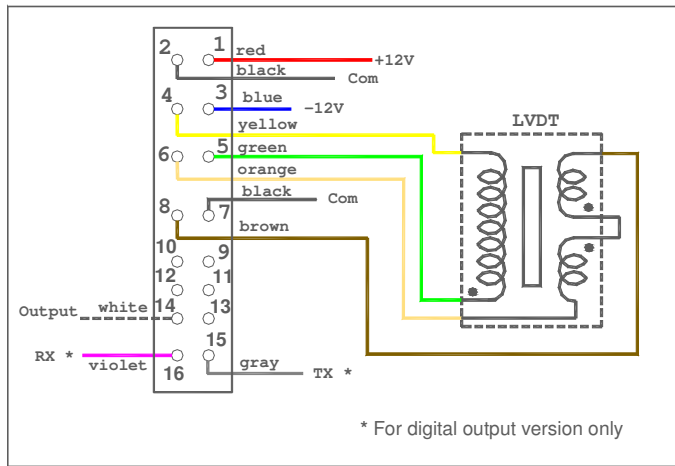
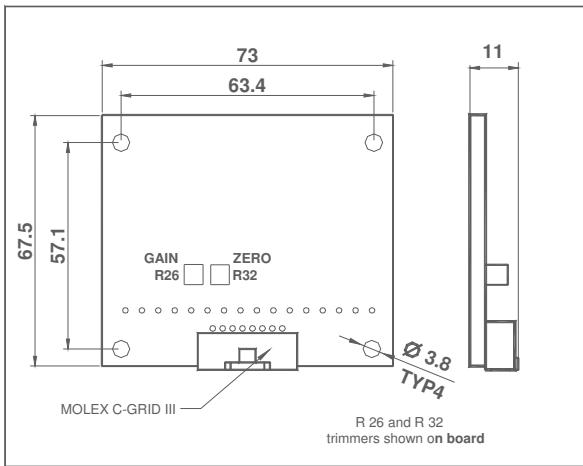
Dimensions (mm)

Wiring

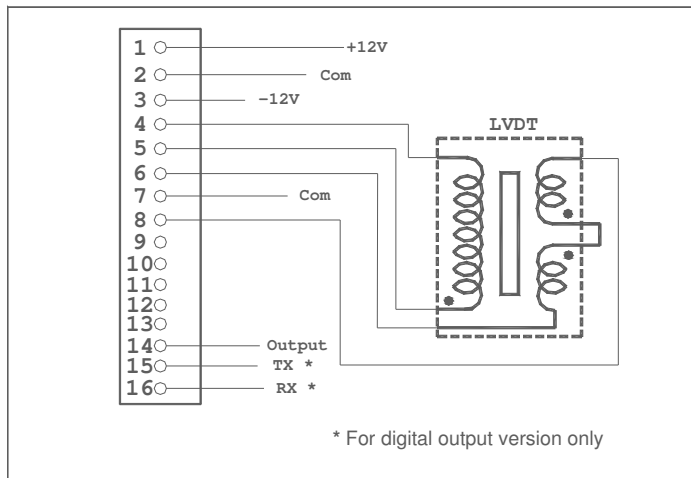
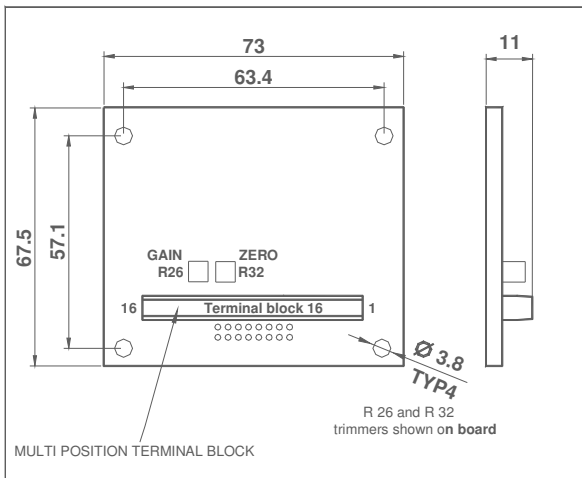
EL - 35A



EL - 35B



EL - 35C



Rev. B

© Singer Instruments & Control Ltd., 2006

WWW.SINGER-INSTRUMENTS.COM

Information furnished by Singer Instruments & Control is believed to be accurate and reliable. However, no responsibility is assumed by Singer Instruments & Control for its use, not for any infringements of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Singer Instruments & Control Ltd.

Singer Instruments & Control Ltd.

2 Yozma St., Tirat Carmel 39032, ISRAEL
 yuval@singer-instruments.com

Tel: 972-4-857-8880
 Fax: 972-4-857-8881

540 East Main St., Branford, CT 06405, USA
 fred@singer-instruments.com

Tel: 203-481-7278
 Fax: 203-488-7190