

FEATURES

- Choice of Single or Dual Channels
- Programmable Setpoint Control
- Auto Calibration
- Both Analog & RS232 Digital Outputs

Columbia Models LD4310 and LD4320 microprocessor-based LVDT indicator and set-point controllers are designed for industrial and process control applications utilizing any Columbia H, M, or S Series LVDT. In addition to displaying real-time LVDT readings, these instruments display MIN, MAX and TIR values. Model LD4320 also provides sum and difference of the two channel readings.

A two-line alphanumeric display provides user friendly word prompts for easy pushbutton system setup. Four user-programmable digital setpoints are used to monitor parameters. Any combination of high or low setpoints may be selected. A high and low hysteresis value from 0 to 200 display counts can be programmed for the setpoints. Decimal points are programmable via the set-up menu.

A front panel pushbutton auto-zeros (tares) over the ± full scale range. Auto-calibration eliminates calculation of slope or gain factors. Calibration and setup parameters are stored in nonvolatile memory for retention on power down or interruption.

A 16-bit analog-to-digital converter provides high speed performance and resolution. The RS-232 output will communicate data to any standard PLC or computer serial port at 600 to 19.2K baud.



J3 Connector Pin Functions					
1	Setpoint #4	8	Sync. Output	20	Output Channel B
2	DSR In	14	Remote Zero	21	Output Channel A
3	TxD Out	15	Setpoint #3	22	Case Shield
4	DTR Output	16	Setpoint #2	23	Vcc (5.0 Vdc)
5	RxD	17	Setpoint #1	24	Digital Ground
6	Reboot	18	Setpoint Return	25	Analog Ground
7	Sync. Input	19	Remote Reset		

Specifications	LD4310	LD4320
No. of Channels	1	2
LVDT Excitation		
Voltage	1 and 3 V rms (±10%) Switch Selectable	
Current	Up to 30 mA rms per LVDT	
Frequency	400 Hz, 1000 Hz, 3000 Hz & 5000Hz (±5%) Switch Selectable	
Input Sensitivity	1.8 or 4.5 V rms for full scale readout (Switch Selectable)	
Input Impedance	100K Ohms	
Linearity	<±0.02% of Full Scale	
Digital Display	5 Digit (±99.999) 5 mm (0.2") super-twist LCD with LED backlight	
Analog-to-Digital Converter	16-Bit Charge Balance	
A-D Conversion Rate	180 Conversions per Second (Max.)	

	LD4310	LD4320
Readings	<ul style="list-style-type: none"> • Current Value • Min / Max • TIR 	<ul style="list-style-type: none"> • Current Value • Min / Max • A + B (Sum of 2 channels) • A - B (Diff. of 2 channels) • TIR
Setpoints	(4) User-Programmable, High or Low	
Hysteresis	User-programmable from 0 to 200 display counts	
Outputs	Opto-isolated open collector logic outputs, 5 VDC, 50 mA per setpoint	
Digital Output	Serial RS-232, full duplex 600 to 19.2K Baud (Switch Selectable)	
Response	Typically within 20 ms	
Operating Temperature	0 To +55 Deg C	
Power Requirements	100 to 250 VAC, 50-60 Hz	