Endevco®

Vibration amplifier

Model 6634C



The model 6634C vibration amplifier is a microprocessor-based instrument designed to condition and display vibration data from rotating machinery. The instrument accepts inputs from a single-ended, differential PE or ISOTRON® accelerometer, velocity coil, or remote charge convertor. Full scale AC and DC output ranges are programmable in user selected engineering units to represent either acceleration, velocity, or displacement. Programming of the unit is accomplished from the front panel keyboard or optional RS-232 computer interface. Up to ten different setups can be stored and recalled from the non-volatile memory. An optional 6 pole filter is available, which may be programmed from the front panel. There are two TTL compatible latched alarm outputs provided for warning and alert.

ENDEVCO www.endevco.com Tel: +1 (866) ENDEVCO [+1 (866) 363-3826]

Piezoelectric accelerometers | Piezoresistive accelerometers | IEPE accelerometers | Variable capacitance accelerometers | Piezoresistive pressure sensors | Piezoelectric pressure sensors | High intensity microphones | Inertial sensors | Signal conditioners and supportive instrumentation | Cable assemblies

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Specifications

All specifications assume +75°F (+24°C) unless otherwise stated. Calibration voltage for -R units is 5Vdc and for -U units is 15Vdc.

Inputs

Piezoelectric (PE) inputs Single-ended (SEPE) or differential. Accelerometer sensitivity limited to 1.5 to 150 pC/g 33 000 pC Maximum input charge Source resistance $10\ \text{M}\Omega$ minimum to meet all specifications Source capacitance 20 nF maximum to meet all specifications RCC input VEL-COIL or RCC input. Internal jumper selectable Constant current supply 8.6 mA ±10% 24 V maximum, 20 V minimum. Input sensitivity limited to 15 to 150 mV/g. Compliance voltage VEL-COIL or RCC input. Internal jumper selectable Velocity coil input Input impedance 100 kΩ. Input sensitivity limted to 15 - 1500 mV/IPS External calibration EXT-CAL 1000 pF ±0.5% Input capacitance 10 V pk Maximum input voltage From external filter Broadband input 10 MΩ minimum Input impedance External filter gain 1 ±1% Maximum input voltage 10 V pk Digital discrete inputs TTL compatible /Alm-reset A low pulse of at least 100 ms resets both alarms, Internal pull-up included /Sys-cal A low pulse of at least 100 ms starts calibration, internal pull-up included Outputs All outputs are single-ended and short circuit protected. Type Output load 10 kΩ minimum, 3000 pF maximum BB-OUT/VEL-OUT/DISP-OUT Broadband/velocity/displacement 0 to ±10 V pk minimum Linear voltage range Offset voltage 15 mV DC maximum ACCEL-OUT Acceleration output Linear voltage range 0 to ±10 V pk minimum Offset voltage 15 mV DC maximum AC-OUT AC output Full scale output voltage 1.0 V pk, User selectable jumper is provided for 5.0 V pk and 10 V pk full scale Offset voltage 10 mV DC maximum DC output DC-OUT Full scale output voltage 1.0 V, User selectable jumper is provided for 5.0 V and 10 V full scale Acceleration/velocity 1.0 VDC for pk, 0.7071 VDC for rms, 0.6366 VDC for avg Displacement 1.0 VDC for pk-pk, 0.3536 VDC for rms, 0.3183 VDC for avg Digital discrete output TTL compatible Output level Sink 12 mA maximum at 0.7 V Source 1 mA maximum at 2.4 V **Transfer characteristics** Input sensitivities Fnalish Metric PE Input 1.500 to 150.0 pC/g 0.15 - 15.0 pC/m/s2 Velocity coil input 15.00 to 1500 mV/ips 0.60 - 50 mV/mm/s 0.15 - 15 mV/m/s 15 to 150.0 mV/g RCC input

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Transfer characteristics continued				
Velocity coil input				
Velocity coil output	0.8 mV rms maximum			
Displacement output	1.1 mV rms maximum			
RCC input				
Acceleration output	1.0 mV rms maximum with 250 Ω input shunt			
Velocity output	1.0 mV rms maximum with 250 Ω input shunt			
Displacement output	6.0 mV rms maximum with 250 Ω input shunt			
Alarm level	Programmable from 1% to 100% of full scale, 100% disables t	he alarm. Alarm levels are compared with		
	DC output representation of peak AC output	···· · · · · · · · · · · · · · · ·		
Alarm accuracy	1% of DC output			
Alarm triggering time	3 +0 5 seconds			
Programmable filter (internal import configurable)				
nigii passi aliye	J HZ - JUU HZ			
Environmental				
Temperature range	Operating 40°F to 125°F (5°C to 52°C)			
	Storage -40°F to 185°F (-40°C to 85°C)			
Humidity	95% R.H.			
Power				
Voltages	95 - 260 VAC 50-400 Hz			
Current	No options installed			
	150 mA typical at 105-125 VAC			
	75 mA at 210-240 VAC			
	150 mA typical at 90-110 VAC			
Physical characteristics		•••••••••••••••••••••••••••••••••••••••		
Dimensions	(00" LL v 2 71" W v 15 01" D (12 / am v / 0 am v /0 2 am)			
Dimensions	4.88 H X 2.71 W X 15.81 D (12.4 Cm X 6.9 Cm X 40.2 Cm)			
weight	4 lbs (1.8 kg) with no options installed.			
Connectors	Plezoelectric input			
		Single-ended BNC		
	RCC input/velocity coil	Differential BNC		
	External cal	Single-ended BNC		
	Discrete inputs	25 pin "D"		
	AC power	Jones type		
Ordering information				
ordering information				
6634C - X + F + C [Model number def	inition)			
If blank, includ	es US Power cord (1/180)			
C = Includes C	nina power cord (17180-1)			
	filter entire			
A = Model 3584UA filter installed				
Serial Interface option				
S = Model 3584	serial interface installed			
U = No serial ii	nterrace installed			

Engineering units E = English M = Metric

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Product	Description	6634C	Cont
17180	Power Cord (17180-1 for China power cord)	Included	
EP316	Twin BNC connector (2 each)	Included	ENDEV
EJ1167-U	25 pin "D" connector (1 each)	Included	www.en
4948	19" rack (1 per 6 each 6634C)	Optional	[+1 (866
35840A	Programmable filter	Optional	[11(000
35843	RS-232 serial interface	Optional	
16678	Blank panel for 4948 rack	Optional	
Notes:			

Contact

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Notes:

1. Maintain high levels of precision and accuracy using Endevco's factory calibration services. Call Endevco's inside sales force at 866-ENDEVCO for recommended intervals, pricing and turn-around time for these services as well as for quotations on our standard products.



6634C REAR PANEL



Continued product improvement necessitates that Endevco reserve the right to modify these specifications without notice. Endevco maintains a program of constant surveillance over all products to ensure a high level of reliability. This program includes attention to reliability factors during product design, the support of stringent Quality Control requirements, and compulsory corrective action procedures. These measures, together with conservative specifications have made the name Endevco synonymous with reliability. 100119