

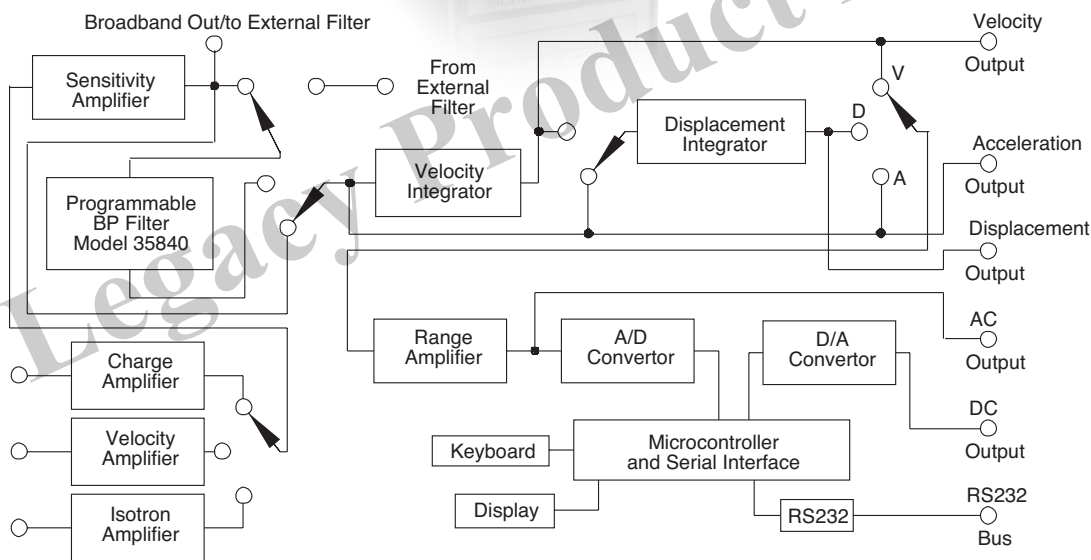
Vibration amplifier

Model 6634C



Key features

- Programmable full scale and sensitivity
- Acceleration, velocity and displacement outputs
- Setups stored in non-volatile memory
- Peak hold
- Optional RS-232 computer interface
- Optional 6 pole programmable filter
- Universal power supply



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 converter. 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.

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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
Maximum input charge	33 000 pC
Source resistance	10 MΩ 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%
Compliance voltage	24 V maximum, 20 V minimum. Input sensitivity limited to 15 to 150 mV/g.
Velocity coil input	VEL-COIL or RCC input. Internal jumper selectable
Input impedance	100 kΩ. Input sensitivity limited to 15 - 1500 mV/IPS
External calibration	EXT-CAL
Input capacitance	1000 pF ±0.5%
Maximum input voltage	10 V pk
Broadband input	From external filter
Input impedance	10 MΩ minimum
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

Type	All outputs are single-ended and short circuit protected.
Output load	10 kΩ minimum, 3000 pF maximum
Broadband/velocity/displacement	BB-OUT/VEL-OUT/DISP-OUT
Linear voltage range	0 to ±10 V pk minimum
Offset voltage	15 mV DC maximum
Acceleration output	ACCEL-OUT
Linear voltage range	0 to ±10 V pk minimum
Offset voltage	15 mV DC maximum
AC output	AC-OUT
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

	English	Metric
Input sensitivities		
PE Input	1.500 to 150.0 pC/g	0.15 - 15.0 pC/m/s ²
Velocity coil input	15.00 to 1500 mV/ips	0.60 - 50 mV/mm/s
RCC input	15 to 150.0 mV/g	0.15 - 15 mV/m/s

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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 the 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 jumper configurable)	
Low pass range	50 Hz - 5 KHz or 100 Hz - 10KHz
High pass range	5 Hz - 500 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	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	Piezoelectric input	Differential BNC 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

6634C - X S E C (Model number definition)

X	Engineering units E = English M = Metric
S	Serial interface option S = Model 35843 serial interface installed O = No serial interface installed
E	Programmable filter option O = No filter installed A = Model 35840A filter installed
C	If blank, includes US Power cord (17180) C = Includes China power cord (17180-1)

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Accessories

Product	Description	6634C
17180	Power Cord (17180-1 for China power cord)	Included
EP316	Twin BNC connector (2 each)	Included
EJ1167-U	25 pin "D" connector (1 each)	Included
4948	19" rack (1 per 6 each 6634C)	Optional
35840A	Programmable filter	Optional
35843	RS-232 serial interface	Optional
16678	Blank panel for 4948 rack	Optional

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.

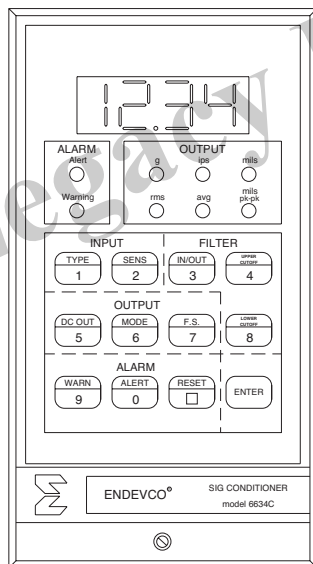
Contact

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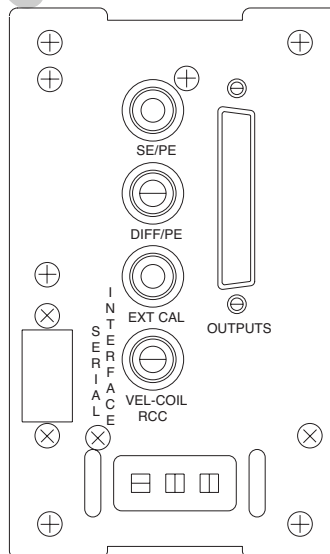
www.endevco.com

Tel: +1 (866) ENDEVCO

[+1 (866) 363-3826]



6634C FRONT PANEL



6634C REAR PANEL