



1. MODEL 4177 IS SUPPLIED WITH AC CHARGER/ADAPTER.
2. CONTACT FACTORY FOR ACCELEROMETER, CABLE, MAGNET OPTIONS.
3. CASE MATERIAL: MOLDED PLASTIC.

EXCEPT AS OTHERWISE NOTED

ALL DIMENSIONS IN INCHES
 TOLERANCE: .XX± ± .XX± ±
 SURFACE FINISH: EXCEPT AS NOTED ✓
 BREAK EDGES TO DEBURR
 RADIUS OR CHAMFER

△ THESE DIAS. TO T.I.R.
 FILLETS - MAX. RAD.

		CHATSORTH, CA.			
		SCALE: 1/1	REV	DATE	ECN
DATE: 5/31/95		PART NO.			
DRAWN: D.Z.	CHECKED: N.C.	MATERIAL			
APPROVED:		NEXT ASSEMBLY		USED ON	
TITLE: OUTLINE/INSTALLATION DRAWING, VIBRATION MONITOR, MODEL 4177				DWG NO. 127-4177	
				SHEET 1 OF 1	

DYTRAN MODEL 4177
VIBRATION MONITOR

Description

The Dytran Model 4177 Vibration Monitor is intended for use in situations where a portable instrument is convenient or required. The hand held unit will provide digital indication of acceleration, velocity or displacement using the input from a 100 mV/g accelerometer. The monitor is supplied with a charger pack that operates from 110 VAC to recharge the battery.

The 4177 has full scale ranges 1, 10 or 100 g's peak ACCEL, ips peak VEL or MILS pk-pk DISPL. The Monitor also has a sensor open or short indicator to help verify sensor/cable conditions and a BATT LO LED that will illuminate when the battery needs recharging.

The unit also provides an AC output of the selected parameter in peak units for the acceleration and velocity and peak to peak units for displacement. This feature is useful for analyzing the real time waveform with an oscilloscope or spectrum analyzer.

Specifications

ACCEL Input

Impedance	100 k ohms
Sensitivity	100 mV/g
Max Input	75 g's
Frequency Response	ACCEL- 5Hz - 10kHz +/- 2% VEL- 20Hz - 1kHz +/- 3% 10Hz - 2kHz +/- 6% DISPL- 20Hz - 1kHz +/-6% 10Hz - 2kHz +/-10%
Sensor Excitation Voltage	28 VDC
Sensor Drive Current	3 +/-1 mA
Connector	BNC

AC Output

Impedance	Less than 100 Ohms
Sensitivity	5 Volts peak for full scale
Frequency response	same as ACCEL input
Connector	BNC

Controls

Meter UNITS/POWER Switch	Power OFF position turns the power OFF and connects the charger input to the battery. As the switch is turned clockwise units of acceleration (ACCEL) velocity (VEL) or displacement (DISPL) appear in the display.
Meter FULL SCALE Switch	Selects 1, 10 or 100 units, Full Scale.

Indicators

Vibration Meter	3 - 1/2 Digit Digital Volt Meter with LCD display.
Sensor OPEN LED	Illuminates when cable or sensor is in an "open" condition.
Sensor SHORT LED	Illuminates when cable or sensor is in a "shorted" condition.
BATT LOW LED	Illuminates when battery needs to be charged.

Dimensions

2 1/2" x 6" x 7" including knobs and (connectors)

Weight

1lb

Power

6 Volt rechargeable batteries. Nominally 10 hour operation before recharging.

ACCESSORIES AVAILABLE

<u>MODEL No.</u>	<u>Description</u>
3148B1	accelerometer, 100 mV/g, radial BNC connector, shock protected for use with magnetic mount.
6190	magnet, rare earth, steel poles (2), for curved surfaces, approx 45lb pull strength. Dim: 1.25" dia. x .9 thick
6540	magnet, rare earth, flat, for flat surfaces. Dim: .95"dia x .42 thick
6426A05	cable, BNC / BNC, polyurethane jacket, 5ft. long.