

# VIBRATION MONITOR MODEL 7058

**Four channels of digitally accurate vibration protection with a single versatile instrument**

## BENEFITS

- Low cost per channel vibration protection.
- Accepts inputs from accelerometers, velocity pickups or non-contact probes.
- Individually adjustable, front panel accessible, alarm and trip limit for each channel.
- Compact dimensions for a minimum of panel space (approximately 3 3/4" x 7 1/2").

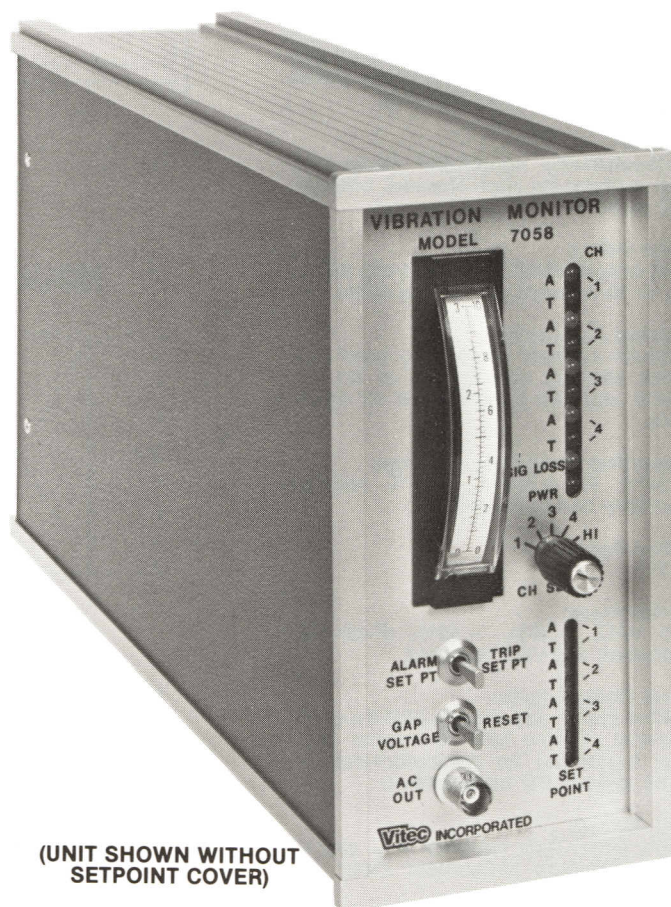
## FEATURES

The Vitec Model 7058 Vibration Monitor provides a low-cost, compact, panel-mounted monitoring package for up to four channels of continuous vibration protection. Ideal for OEM's and end users alike, this unit accepts inputs from accelerometers, velocity transducers, or non-contact probes. The 7058 was designed specifically to provide low-cost monitoring protection for applications where one channel of protection is not enough, and a large complicated system is too much.

The Vitec Model 7058 Vibration Monitor is completely self-contained. It includes the power supply, meter readout, power-on and pickup malfunction LED's and an individually adjustable alarm and trip setpoint with corresponding alarm and trip LED for each of its four channels. By using concepts from Vitec high density monitoring systems, all this has been accomplished in less than 29 square inches of panel space.

## OPERATIONAL FEATURES

The monitor front panel contains a vertical scale meter which indicates the individual channel vibration levels, as well as the alarm and trip setpoints. A vertical row of LED's indicates when any of the four channels has exceeded its alarm or trip setpoints (yellow for alarm, red for trip). A yellow signal loss LED is illuminated upon loss of a vibra-



(UNIT SHOWN WITHOUT SETPOINT COVER)

tion signal from any of the four transducers. A green "Power On" LED indicates that power is supplied to the monitor. The indicating LED's and the common alarm, trip and signal loss relays are latching.

The channel select switch allows a readout of any of the four channels, or on the "HI" position the meter will automatically read out the highest of the four inputs.

Beneath the meter is a switch labeled "alarm setpoint" and "trip setpoint." The alarm position allows a readout of the alarm setpoint on the vertical meter for the selected channel; the trip position allows a readout of the trip setpoint. Another switch below this one allows relays to be reset or indicates a readout of the probe standoff if a non-contact type probe is being used.

The "AC OUT" jack on the front panel provides an AC signal proportional to the vibration for any of the four selected channels for analysis purposes.



SPECIFICATIONS

**Transducer Inputs:**  
Accelerometer, velocity pickups, non-contact probes.

**Standard Meter Ranges:**  
0 to .3, 1, 3, or 10 mills displacement, in/sec. velocity, or G's acceleration.

**Relays:**  
One common alarm relay for all channels. One common trip relay for all channels. One common probe fault relay for all channels (not functional for accelerometer inputs).

**Relay Contact Ratings:**  
5 amps at 120 VAC, 2 amps at 28 VDC non-inductive, epoxy sealed.

**Relay State:**  
Alarm, trip and probe fault relays are latching and normally de-energized below setpoint as standard. Alarm and trip relays available energized below setpoint (failsafe) as optional.

**Limits:**  
Independently adjustable alarm and trip setpoint for each channel, 0-99.6% full scale.

**Time Delay:**  
One-second fixed alarm and trip delay, up to 10 seconds on special order.

**Startup Attenuation:**  
Remote contact closure by user provides start-up attenuation of 3:1 for alarm and trip setpoints of all channels.

**Operating Temperature Range:**  
+32°F to +130°F, 0-95% relative humidity non-condensing.

**Meter Accuracy:**  
± 2%

**Power Input:**  
115 VAC, + 10%, - 15%; 50-60 Hz. standard; 220 VAC optional.

**Limit Designations:**  
Yellow alarm, and red trip LED for each channel. Yellow LED for signal loss (not functional for accelerometer inputs), green LED for power on.

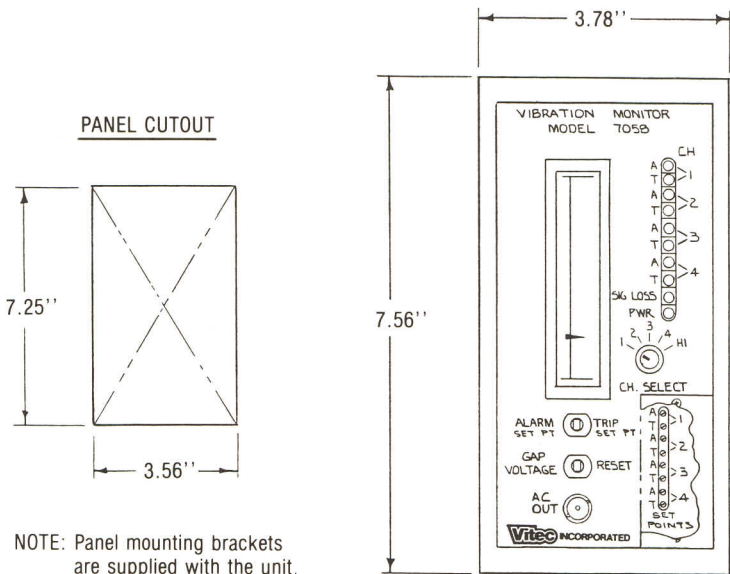
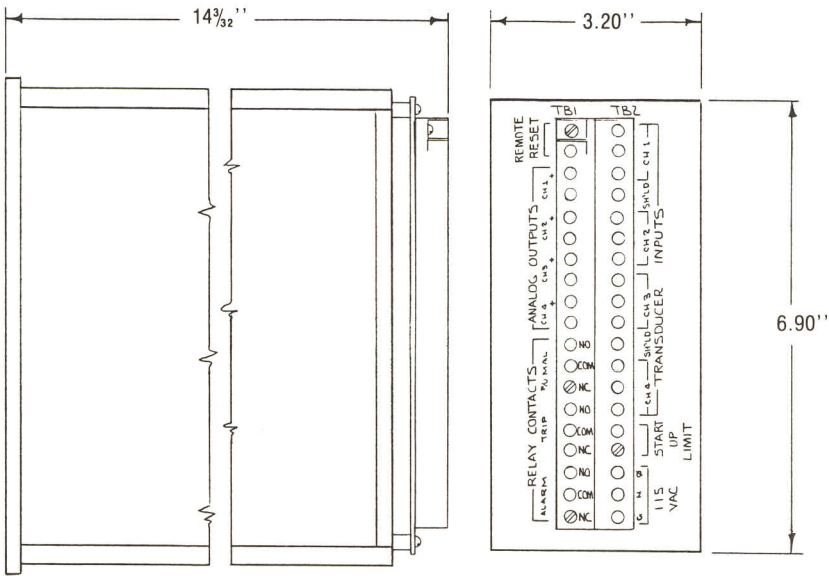
**A.C. Output:**  
Front panel jack supplies A.C. signal proportional to transducer input for selected channel.

**Optional Analog Output:**  
0-5 VDC, 0-1 VDC or 4-20 MA proportional to full scale vibration for each channel.



Protecting the machines of production for more than a quarter-century.

VITEC, INC.  
24755 Highpoint Road, Cleveland, Ohio 44122  
(216) 464-4670  
Fax: (216) 464-5324



NOTE: Panel mounting brackets are supplied with the unit.

ORDERING INFORMATION:

The following information must be specified at time of order:

- POWER INPUT:** 120VAC Standard, 220VAC Optional.
- TRANSDUCER INPUT:** Any Vitec accelerometer, velocity pickup or non-contact probe.
- MONITORING MODE:** Acceleration, G's (accelerometer input only) Velocity, In/Sec (accelerometer or velocity pickup input) Displacement (accelerometer, velocity pickup, or non-contact probe input).
- FULL SCALE RANGE:** From standard meter range listing.
- RELAYS:** — Latching  
— De-energized below trip standard, energized below trip (failsafe) optional
- TIME DELAY:** Specify required alarm and trip delay if other than one second, .1 to 10 seconds available.
- ANALOG OUTPUT:** 0-5 VDC, 0-1 VDC or 4-20 MA (OPTIONAL)