



# PenCheck®

## MODEL PK1

World's first pocketable and economical instrument to incorporate vibration and temperature sensors.

Detects steam, air and gas leaks, bearing problems, or pump cavitation.

### Benefits

#### Multiple function

- Pen-size precision instrument for accuracy and ease of use.
- Analog and digital display plus audible function provides fast and accurate interpretation.
- Band-pass filter eliminates misleading background noise, focussing on high frequencies for improved accuracy over conventional ultrasonic detectors.
- Indicates surface temperature for diagnosis, safety, or valve adjustment.

#### Steam traps and valves

- Detects steam and air leakage through valves.
- Helps determine steam leakage when compared to properly functioning traps.



#### Bearings and pumps

- Provides a Crest Factor (CF) value\* for analysis of bearing condition and early warning of defects.
- Determines pump cavitation.

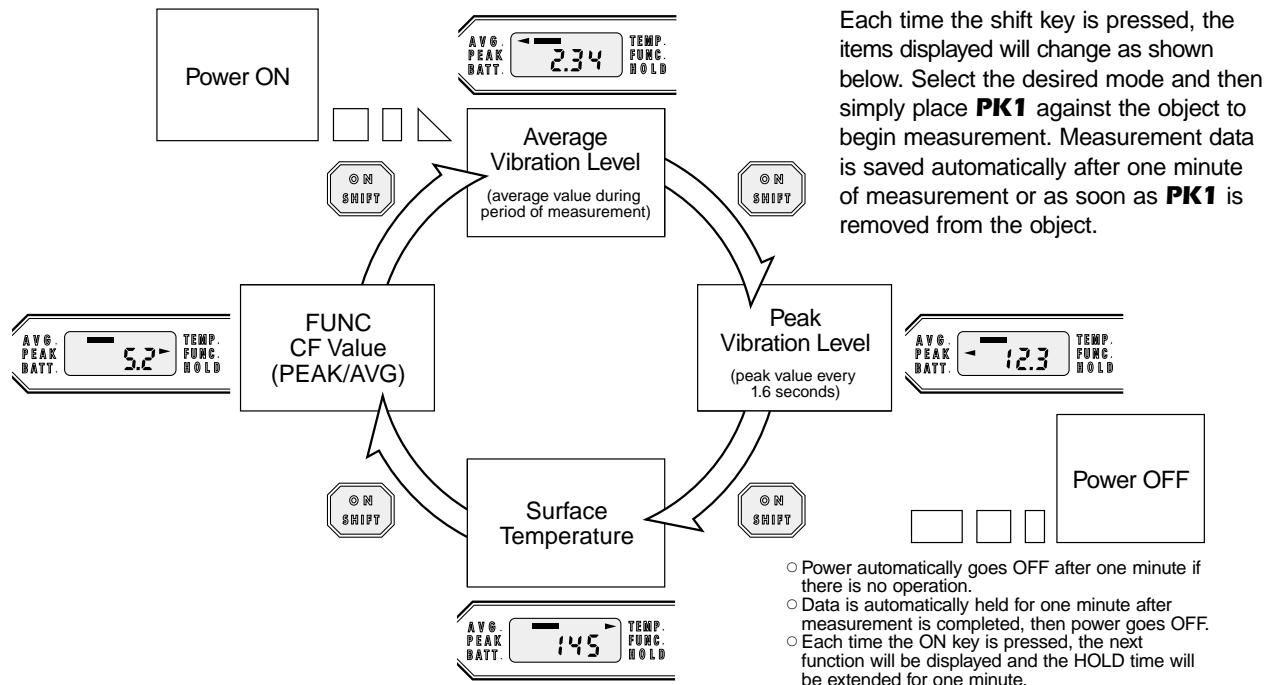
### Specifications

Temperature Measurement Range	32 – 491°F	
Central Frequency	Approximately 40 kHz	
Band Width	Approximately 20 kHz (–3dB)	
Display	Average Vibration Level	0.00 – 255.0 Scale Reading (AVG)
	Peak Vibration Level	0.00 – 255.0 Scale Reading (PEAK)
	Surface Temperature	32 – 491°F (TEMP)
	CF Value*	0.0 – 199.0 (FUNC)
	Level Indicators	Vibration levels are shown in bar graph form as well as on a digital display.
	Overload	Indicators appear if the vibration level limit is exceeded or if the surface temperature falls outside the allowable measurement range
Measurement “Auto Start”	Measurement begins automatically when the tip of PK1 is placed against the object to be measured	
Data Display “Auto Hold”	When the tip is removed from the tested object, data is automatically retained	
Auto Power-off	Yes	
Power Source**	One (1) lithium battery pack (3CR-1/3N)	
Total Battery Use Time	Approximately 5 hours	
Weight	Approximately 2.3 oz	
Standard Accessories	Hard case, extra battery packs, earphone, manuals, flat file	

\* CF Value (Vibration Level = Peak ÷ Average).

\*\* A message is displayed when battery voltage is low; when it drops lower, power is automatically cut.

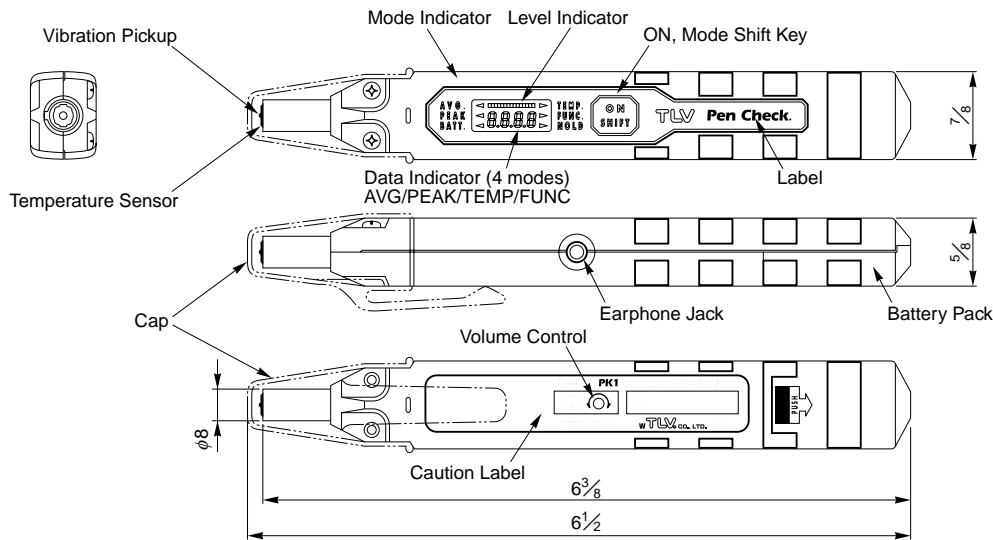
**Operating Procedure**



**• Other Display Functions**



**Dimensions (mm)**



**TLV CORPORATION**

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Manufacturer

ISO 9001/ISO 14001

**TLV CO., LTD.**  
 Kakogawa, Japan  
 is approved by LRQA Ltd. to ISO 9001/14001

