



PenCheck®

MODEL PK1

World's first pocket-size economical ultrasonic and temperature testing instrument. Detects steam, air and gas leaks, bearing problems and pump cavitation.

Features

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, focusing 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.

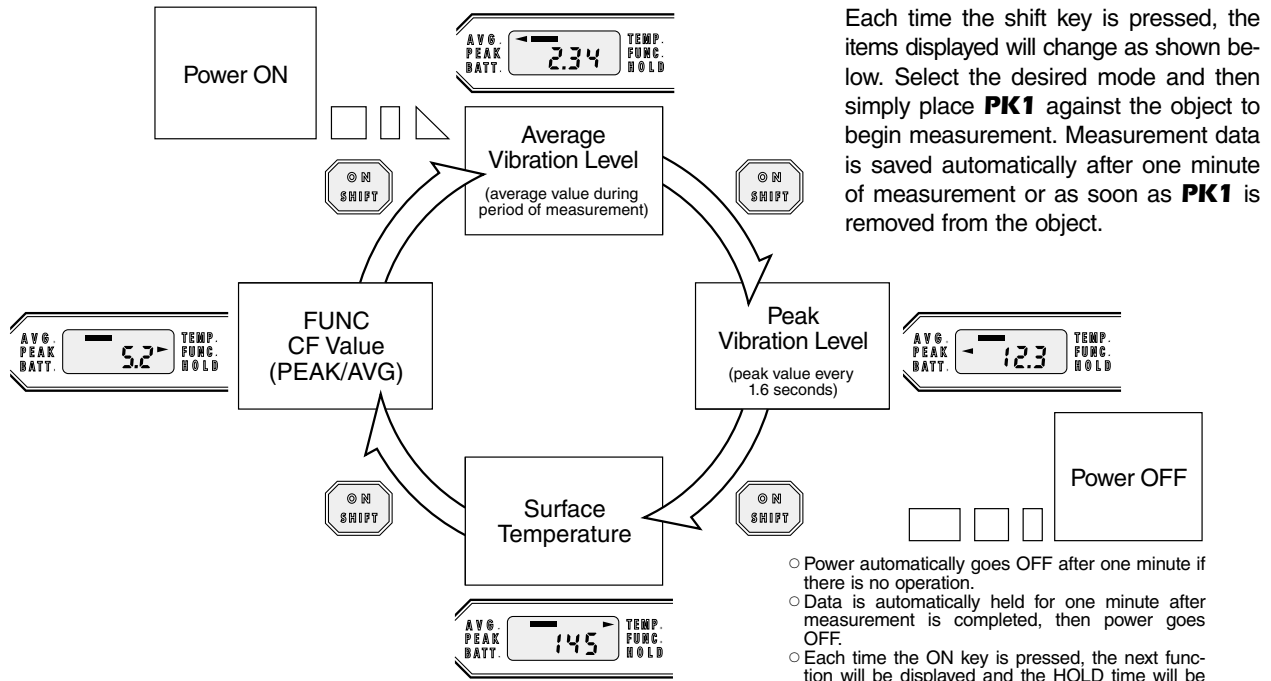
Specifications

Temperature Measurement Range	0 – 255°C	
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	0 – 255°C (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 65 g	
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



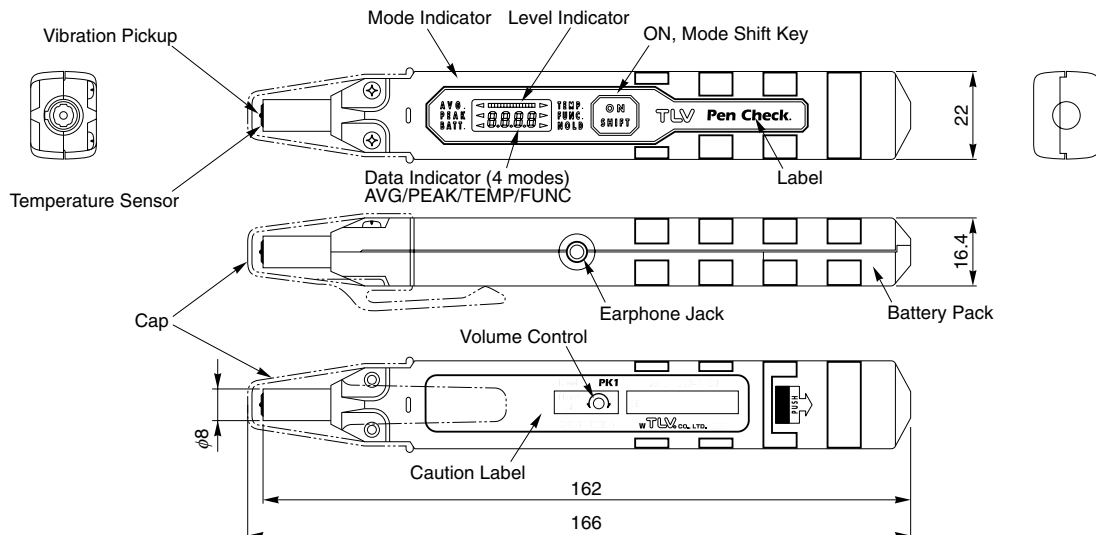
Each time the shift key is pressed, the items displayed will change as shown below. Select the desired mode and then simply place **PK1** against the object to begin measurement. Measurement data is saved automatically after one minute of measurement or as soon as **PK1** is removed from the object.

- Power automatically goes OFF after one minute if there is no operation.
- Data is automatically held for one minute after measurement is completed, then power goes OFF.
- Each time the ON key is pressed, the next function will be displayed and the HOLD time will be extended for one minute.

Other Display Functions

	Data Hold Time		Overload
	Battery Voltage Drop (if voltage drops further, the power will automatically go OFF.)		Measured Temperature Outside Allowable Temperature measurement range. (below 0°C or above 255°C)

Dimensions (mm)



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