

PVX-B (Basic)

Precision Digital Thickness Gauge

Highlights:

- ▶ Powerful 150 volt square wave pulser to address a variety of common applications.
- ▶ Viewing options: Large Digits & B-Scan with Scan Bar.
- ▶ Time based B-Scan feature displays a cross section of the test material. Displays the profile of the opposite material surface.
- ▶ Transducer options: Single element Delay Line (acrylic and graphite tips for metals and thin plastics), Pencil Delay Line (tough access areas on thin materials), and Contact transducers (variety of applications).
- ▶ Hardware AGC gain control for multiple echo and thru-paint measurement.
- ▶ Multiple calibration options: One-Point, Two-Point, or selection from a Material List.
- ▶ 18 factory setups and 46 user-defined setups. User-defined setups can be edited for custom applications.
- ▶ Versatile alpha-numeric data logger for custom reporting requirements.
- ▶ The High Speed Scan feature up to 32 readings a second.
- ▶ Adjustable resolution settings: 0.001 or 0.0001 in (0.01 or 0.001 mm).
- ▶ Windows® and Mac Os PC software with bi-directional transfer.
- ▶ Visual and audible alarm with Hi/Lo limit settings.
- ▶ Multiple language support.
- ▶ 2 year limited warranty.

PVX-B SPECIFICATIONS

Physical

Size:

Width (2.5in/63.5 mm)
Height (6.5 in/165 mm)
Depth (1.24 in/31.5 mm)

Weight:

13.5 ounces (with batteries).

Keyboard:

Membrane switch pad with twelve tactile keys.

Operating Temperature:

14 to 140F (-10C to 60C)

Case:

Extruded aluminum body with nickel-plated aluminum end caps (gasket sealed).

Data Output:

Bi-directional RS232 serial port. Windows® PC interface software.

Display(Two Options): 1/8in VGA grayscale display (240 x 160 pixels). Viewable area 2.4 x 1.8in (62 x 45.7mm). EL backlit (on/off/auto). 25 Hz screen refresh rate.

Ultrasonic Specifications

Measurement Modes:

Pulse-Echo - (General Purpose - uncoated materials).

Interface-Echo - (Precision - thick materials).

Echo-Echo - (Precision—Thin materials & thru-paint).

Pulser:

150 volt square wave pulser.

Receiver:

Manual or AGC gain control with 40dB range, depending on mode selected.

Timing:

40 MHz ultra low power 10 bit digitizer.

Warranty

2 year limited.

Power Source

Three 1.5V alkaline or 1.2V NiCad AA cells. Typically operates for 35 hours on alkaline and 10 hours on NiCad (charger not included).

Auto power off if idle 5 minutes.

Battery status icon.

Measuring

Range:

Interface-Echo Mode: Steel .050–1.0 inch (1.27–25.4mm); Plastics from .005 inch (.127mm).

Echo-Echo Mode: Steel .006–.500 inch (.152–12.7mm).

Pulse-Echo Contact:

Steel .040–10.0 inch (1–254mm); Plastics from .010" (.254mm).

Echo-Echo Contact:

Steel thru-paint .100–3.0 inches (2.54–76.2mm).

Resolution (selectable):

+/- .001 inch (0.01 mm).
+/- .0001 inch (0.001 mm).

Velocity Range:

.0492 to .3936 inches/μs.
1250 to 9999 meters/second.

One and Two Point calibration option, or selection of basic material types.

Units:

English & Metric

Display

Display Views:

Large Digits - Standard thickness view.
Digit Height: 0.400 inch (10mm).

B-Scan - Time based cross section view.
Display speed of 15 secs per screen.

Scan Bar Thickness - 6 readings per second; Viewable in B-Scan and Large Digit views.

Repeatability Bar Graph - Bar graph indicates stability of reading.

Memory

12,000 readings and waveforms (alpha numeric storage).

OBSTRUCT to indicate inaccessible locations.

Memory:

16 megabit non-volatile ram.

Transducer

Transducer Types:

Single Element (1 to 20 MHz).

Locking quick disconnect "00" LEMO connector.

Standard 4 foot cable.

Custom transducers and cable lengths available.

Features

Setups:

18 factory and 46 custom user-defined setups.

Alarm Mode:

Set Hi and Lo tolerances with audible beeper and visual LEDs.

Fast Scan Mode:

Takes 32 readings per second and displays the minimum reading found when the transducer is removed. Display continuously updates while scanning.

Connections

Output: RS232 serial interface. PC software & USB converter cable included.

Transducer Connectors: Two LEMO 00 connectors.

Certification

Factory calibration traceable to NIST & MIL-STD-45662A.



MADE IN THE USA

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