

DigiMano 1000

Pressure Vacuum Meter

INSTRUCTION MANUAL



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Warranty

Netech warrants the DigiMano1000 against defects in materials and workmanship for one year from the date of original purchase. The standard warranty is extended for a second year if the instrument is returned to Netech for its recommended yearly recalibration.

During the warranty period, we will repair or, at our option, replace at no charge a product that proves to be defective, provided you return the product shipping prepaid to Netech Corporation. Only serialized products are covered under this warranty.

This warranty does not apply if the product has been damaged by accident or misuse or as the result of service or modification by other than Netech Corporation, or if its serial number is defaced or removed.

Netech reserves the right to discontinue the DigiMano 1000 at any time, and change its specifications, price, or design without notice and without incurring any obligation. Netech guarantees availability of service parts for 5 years after the manufacture of the unit is discontinued.

The warranty is void if you elect to have the unit serviced and / or calibrated by someone other than Netech Corporation.

The warranty covering your product becomes void when the tamper-resistant Quality Seal is removed or broken without proper factory authorization.

We strongly recommend, therefore, that you send your instrument to Netech Corporation for factory service and calibration, especially during the original warranty period.

The purchaser assumes all liability for any damages or bodily injury, which may result from the use or misuse of the unit by the purchaser, his employees, agents, or customers.

In no event shall Netech Corporation be liable for consequential damages

Warranty Registration

Please register to receive special offers, free software updates, and more. Plus, you'll qualify for exclusive complimentary benefits that vary by region. Any failure to complete and submit this registration will not diminish your rights found in the limited warranty that accompanied your product at purchase.

Notices

Patents / Copyright

Copyright © 2012 by Netech Corporation. All rights reserved. No part of this publication may be reproduced or transmitted in any form other than for the purchaser's personal use without written permission from Netech Corporation.

Trademarks

DIGIMANO are trademarks of Netech Corporation. Any other trademark names used in this manual are only for editorial purposes and the benefit of the respective trademark owner with no intention of improperly using that trademark.

Quality Assurance

Netech is ISO 9001-2015 Certified. This instrument was thoroughly tested and inspected according to Netech's ISO 9001-2015 quality standards and test procedures and found to meet those specifications when it was shipped from the factory.

Calibration

DIGIMANO 1000 is calibrated using standards traceable to National Institute of Standards and Technology (NIST) and the unit is shipped with a calibration certificate.

Safety Considerations

This manual contains operating and safety instructions for the safe operation and to maintain the equipment in a safe condition. The safety instructions are either warnings or cautions to protect the user and the equipment from injury or damage. Do not use this equipment for any other purpose than stated.



Returns and Credits

Please note that only serialized products and their accessory items (i.e., products and items bearing a distinct serial number tag) are eligible for partial refund and/or credit. Non-serialized parts and accessory items (e.g., cables, carrying cases, auxiliary modules, etc.) are not eligible for return or refund. Only products returned within 60 days from the date of original purchase are eligible for refund/credit.

In order to receive a partial refund/credit of a product purchase price on a serialized product, the product must not have been damaged by the customer or by the carrier chosen by the customer to return the goods, and the product must be returned complete (meaning with all manuals, cables, accessories, etc.) and in "as new" and resalable condition.

Products not returned within 60 days of purchase, or products, which are not in "as new", and resalable condition, are not eligible for credit return and will be returned to the customer. The Return Procedure (see below) must be followed to assure prompt refund / credit.

Restocking Charges

Products returned within 30 days of original purchase are subject to a minimum restocking fee of 15 %. Products returned in excess of 30 days after purchase, but prior to 60 days, are subject to a minimum restocking fee of 20 %. Additional charges for damage and / or missing parts and accessories will be applied to all returns.

Return Procedure

All items being returned (including all warranty-claim shipments) must be sent freightprepaid to our factory location. When you return an instrument to Netech Corporation, we recommend using United Parcel Service, Federal Express, DHL or Air Parcel Post. We also recommend that you insure your shipment for its actual replacement cost. Netech Corporation will not be responsible for lost shipments or instruments that are received in damaged condition due to improper packaging or handling. Use the original carton and packaging material for shipment.

Returns for Refund / Credit

A Return Material Authorization (RMA) number must be obtained from our service or customer service dept, before a product is returned for refund or credit. The RMA number should be clearly marked on the package along with a statement indicating the reason for return.

Repair and Calibration

Products returned for repair or recalibration must obtain a RMA (Return Material Authorization) from our service department after completing a service request form our website <u>http://www.netechcorporation.com/repair.php</u> or contact:

Netech Corporation Service Dept. 110 Toledo Street New York, 11735 Email: Service@NetechCorp.



Models and Part Numbers

Part Number	Description
200-2000IN	DigiMano 1000, 2000 IN - Pressure Vacuum Meter, Range of 1999 mmHg and 199.9 in H2O, Accuracy 0.25% FSO
200-2000PS	DigiMano 1000, 2000 PS - Pressure Vacuum Meter, Range of 1999 mmHg and 19.99 PSI, Accuracy 0.25% FSO
200-2000CMH2O	DigiMano 1000, 2000 CmH2O Pressure Vacuum Meter, Range of 19.99 PSI and 1999 CmH2O, Accuracy 0.25% FSO
200-BP-CAL-KIT	Kit includes DigiMano 1000 (P/N: 200-2000PS -1999mmHg / 19.99PSI), Carrying case, Syringe pump and tubing / luer lock connectors
200-BP-CAL-KIT-1	Kit includes DigiMano 1000 (P/N: 200-2000IN -1999mmHg / 199.9In H2O), Carrying case, Syringe pump and tubing / luer lock connectors
200-BP-CAL-KIT-2	Kit includes DigiMano 1000 (P/N: 200-2000PS -1999mmHg / 19.99PSI), Carrying case, Disconnect Tubing Adapter (ADAPT-Q) & Bulb Adapter (ADAPT-B)

Optional Accessories

The following optional Accessories are available.

302	110/220V AC Adapter
203	TUBING AND CONNECTOR SET
204	Precision Pressure Vacuum Syringe Pump
301	Hard Carrying Case

General Overview

Introduction

The DigiMano 1000 is a portable digital instrument designed to measure the pressure and vacuum of non-corrosive fluids and gases. The versatile instrument presents its measurement results in one of two engineering units on a large 3 _ digit LCD display. The DigiMano 1000 has an accuracy of 0.25% full scale. Three Models with different engineering units and pressure ranges are available.

To provide superior performance, the DigiMano 1000 incorporates one of the latest semiconductor pressure sensors. It is powered by one 9-Volt alkaline battery. Optionally, an AC adapter may be used.

The DigiMano 1000 is CE marked and is shipped with a Certificate of Calibration traceable to the NIST. The DigiMano 1000 is a rugged instrument that performs its measurements quickly, accurately, and with ease.

Specifications

Display: 3-1/2 Digit 0.5 in LCD.

Polarity Display: The negative sign (-) is displayed when there is a vacuum reading.

Accuracy: 0.25% full range, +/- 1 count (Pressure Only).

Operating Temperature: 0°C to 40°C

Media Compatibility: Non-corrosive fluids and gases.

Maximum Pressure: Double the rated Pressure.

Power: One 9 volt alkaline battery or optional AC adapter.

Low Battery Indicator: LED on if battery voltage is ≤ 6.8 volts.

Physical Dimensions:

Size: 3 x 2 x 1.4 in (7.6 X 5 X 3.6 cm); **Weight:** 6.5 oz (.18 kg)



General Operation





Controls & Indicators

- **1. Display**: A 3_ Digit LCD indicates the result of the measurement being made.
- 2. On-Off Switch: Turns instrument on and off.
- 3. Unit Selector Switch: Selects desired units of measurement.
- 4. Zero Adjust: Manual zero adjustment potentiometer.
- 5. Low Battery Indicator: LED lights when the battery is ≤6.8 volts.
- 6. Pressure Port: Female Luer lock connector.
- 7. Connector for AC Adapter: Use optional part 302 AC adapter

Operating Instructions:

- 1. Turn the DigiMano 1000 ON and allow two minutes for the transducer to warm up and stabilize.
- 2. Select the desired engineering unit to be displayed.
- 3. With no pressure applied the display should read zero (0). If not, adjust the manual zero adjustment potentiometer.
- 4. Connect the DigiMano 1000 to the device to be tested or to a pressure vacuum line.
- 5. Read the pressure or vacuum in the measurement units that have been selected by the Unit Selector Switch. The negative sign (-) will be displayed when reading vacuum measurements.

Precautions

- 1. Do not exceed the rated maximum pressure of the instrument, although a transient pressure of two times the rating will generally be tolerated.
- 2. Do not connect the instrument to corrosive gases or highly ionic fluids.

Trouble Shooting

When inaccurate pressure vacuum readings are suspected, check the following items:

- 1. Install a fresh 9 Volt battery.
- 2. Turn the DigiMano 1000 on and verify that the display reads zero with no pressure applied to the instrument, 00+/- 1 count.
- 3. Adjust the zero adjustment potentiometer as necessary.
- Connect the instrument to a pressure source, apply a known pressure, and verify the reading within the specifications of the DigiMano 1000 model, 0.25%+/- 1 count.



Maintenance and Storage

Calibration / Service

The mechanical assembly of DigiMano 1000 contains no parts that can be serviced by the user. The unit should be returned to Netech Corporation for repair or calibration. The alignment and adjustment parameters are critical to the robust and efficient performance of the unit and can be performed only at the factory. The unit is factory calibrated with NIST traceable standards and recommended to be calibrated once a year.

Netech maintains a complete repair and recalibration service at a very low cost and fast turnaround. Estimates for repair and recalibration are available upon request. **DigiMano 1000 contains** NO USER SERVICEABLE PARTS **and calibration/ service should be performed only by Netech.** Attempt to repair / service the unit outside Netech voids the warranty.

Returning the DigiMano for Re-Calibration

Products returned to Netech for repair or recalibration requires a RMA (Return Authorization Number) for speedy processing of the service required.

To obtain a RMA number follow the link <u>http://www.PressureMeter.com</u> and fill in the required information, Email <u>service@netechcorporation.com</u> or call 800-547-6557 (US & Canada), International 631-531-0100.

When shipping units to the factory enclose a copy of the RMA and the number should be on used as the reference in the shipping label.

The shipment should be addressed to:-

Attn: Service Department Netech Corporation 110 Toledo St. Farmingdale, New York 11735.The shipment should be addressed to:-

Appendix

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