

Fieldpiece SM380V

Fieldpiece SM380V SMAN Manifold User Manual

Model: SM380V | Brand: Fieldpiece

INTRODUCTION

The Fieldpiece SM380V is a three-port digital manifold with an integrated micron gauge, designed for HVAC/R professionals. This advanced tool replaces the SMAN300 series and offers enhanced features for accurate system diagnostics and servicing. It provides comprehensive data at a glance, streamlining workflows and ensuring reliable results.

Key features include:

- Integrated Micron Gauge (3 Port)
- Wireless connectivity with a range of 350 feet
- Rugged construction for field use
- Data Logging capability (up to 9 jobs, 7 days continuous)
- Tightness Test function with temperature compensation
- Customizable settings for auto power off, backlight, and units of measurement



Figure 1: Front view of the Fieldpiece SM380V SMAN Manifold, displaying its digital screen, control buttons, and three ports at the bottom.

Safety Information

Always read and understand all safety precautions before operating the Fieldpiece SM380V. Failure to follow these instructions may result in injury or damage to the device.

- **Personal Protective Equipment:** Always wear appropriate personal protective equipment (PPE), such as safety glasses and gloves, when working with refrigerants and HVAC/R systems.
- **Refrigerant Handling:** Handle refrigerants with extreme care. Refer to local regulations and industry standards for safe handling and disposal.
- **Pressure Safety:** Never exceed the maximum pressure ratings of the manifold or the system being tested. Ensure all connections are secure before applying pressure.
- **Battery Safety:** Use only the specified battery type (6 AA batteries). Do not mix old and new batteries, or different types of batteries. Dispose of batteries according to local regulations.
- **Environmental Conditions:** Operate the device within its specified environmental limits. Avoid exposure to extreme temperatures, moisture, or corrosive substances.

- **Servicing:** Do not attempt to service the unit beyond routine maintenance. Refer all servicing to qualified personnel.

WHAT'S IN THE BOX

Upon opening the package, verify that all the following items are present:

- Fieldpiece SM380V SMAN Manifold
- Micron gauge (integrated)
- 6 AA batteries (pre-installed or included separately)
- User Manual (this document)

SETUP

1. Battery Installation

The SM380V requires 6 AA batteries for operation. These are typically included. To install or replace batteries:

1. Locate the battery compartment on the rear of the manifold.
2. Open the battery cover.
3. Insert 6 AA batteries, ensuring correct polarity as indicated inside the compartment.
4. Close the battery cover securely.

2. Initial Power On

Press the **POWER** button to turn on the manifold. The display will illuminate and show the default measurement screen.

3. Unit Selection (Optional)

To customize units of measurement (e.g., pressure, temperature):

1. Press the **MENU** button.
2. Navigate to the "Units" or "Settings" option using the arrow buttons.
3. Press **ENTER** to select.
4. Adjust individual units as desired and confirm changes.

OPERATING INSTRUCTIONS

1. Connecting to a System

The SM380V features three ports for connecting to HVAC/R systems:

- **Low Side Port:** Typically connected to the suction line.
- **High Side Port:** Typically connected to the liquid line.

- **Service Port:** Used for vacuum, charging, or recovery.

Ensure all hoses are properly connected and tightened before opening valves or applying pressure.

2. Taking Measurements

Once connected, the SM380V will display real-time pressure and temperature readings. Use the **VIEW** button to cycle through different display modes, such as superheat, subcooling, and micron readings.

The integrated micron gauge provides precise vacuum measurements, crucial for proper system evacuation.

3. Data Logging

The SM380V can log up to 9 jobs internally, with continuous logging for up to 168 hours (7 days). To initiate data logging:

1. Press the **MENU** button.
2. Select "Data Logging" and press **ENTER**.
3. Follow the on-screen prompts to start a new log or view existing logs.
4. Logged data can be downloaded via the USB port for further analysis.

4. Tightness Test

Perform a tightness test to check for leaks after repairs or installations:

1. Press the **TEST TIGHTNESS** button.
2. The manifold will display the pressure differential over time and track the duration of the test.
3. The test is temperature compensated to avoid false positives, especially when using an SL temp probe.

5. Wireless Measurements

The SM380V can receive wireless measurements from compatible Fieldpiece probes (e.g., Joblink probes). Ensure wireless functionality is enabled on both the manifold and the probes. Refer to the specific probe's manual for pairing instructions.

MAINTENANCE

Cleaning

Wipe the manifold with a damp cloth. Do not use abrasive cleaners or solvents. Ensure the ports are free of debris before and after use.

Storage

Store the SM380V in its protective case in a cool, dry place when not in use. Remove batteries if storing for extended periods to prevent leakage.

Calibration

Regular calibration ensures the accuracy of your SM380V. Refer to Fieldpiece's official website or contact customer support for recommended calibration intervals and procedures.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not power on.	Dead or incorrectly installed batteries.	Replace batteries, ensuring correct polarity.
Inaccurate readings.	Sensor contamination or need for calibration.	Clean ports and sensors. Consider professional calibration.
Wireless connection issues.	Out of range, interference, or un-paired probes.	Move closer to probes. Check for obstructions. Re-pair probes as per their manual.
Display is dim or flickering.	Low battery power.	Replace batteries.

If the problem persists, contact Fieldpiece customer support for assistance.

SPECIFICATIONS

Attribute	Detail
Model	SM380V
Brand	Fieldpiece
Material	Stainless Steel (Manifold), Brass (Exterior)
Dimensions (L x W x H)	11.25 x 12.5 x 5 inches
Item Weight	5.4 Pounds
Power Source	6 AA batteries (included)
Wireless Range	Up to 350 feet (approx.)
Data Logging Capacity	Up to 9 jobs, 168 continuous hours
UPC	872641003951
First Available	April 9, 2019

WARRANTY AND SUPPORT

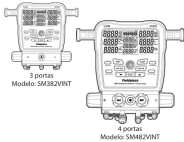

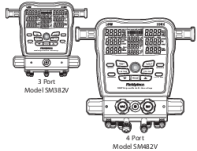
Fieldpiece products are designed for durability and performance. For specific warranty information, please refer to the warranty card included with your product or visit the official Fieldpiece website. Keep your proof of purchase for warranty claims.

For technical support, troubleshooting assistance, or service inquiries, please contact Fieldpiece customer support through their official website or the contact information provided in your product packaging.

Note: This manual provides general instructions. Specific features and operations may vary slightly. Always refer to

Related Documents - SM380V

<div><div>Fieldpiece</div><div>SMAN™ Refrigerant Manifold + Micron Gauge (3 Port) OPERATOR'S MANUAL Model SM380V</div><div></div></div>	<div><div>Fieldpiece SM380V SMAN Refrigerant Manifold + Micron Gauge Operator's Manual</div><div>Operator's manual for the Fieldpiece SM380V SMAN Refrigerant Manifold + Micron Gauge (3 Port). This guide provides detailed information on features, operation, specifications, maintenance, and troubleshooting for HVACR professionals.</div></div>
<div><div>Fieldpiece</div><div>SMAN™ Refrigerant Manifold + Micron Gauge (4 Port) OPERATOR'S MANUAL Model SM480V</div><div></div></div>	<div><div>Fieldpiece SM480V SMAN Refrigerant Manifold + Micron Gauge Operator's Manual</div><div>Comprehensive operator's manual for the Fieldpiece SM480V SMAN Refrigerant Manifold and Micron Gauge, detailing features, operation, maintenance, specifications, and compliance for HVACR professionals. Covers setup, measurements, calculations, menu functions, and troubleshooting.</div></div>
<div><div>Fieldpiece</div><div>SMAN™ Refrigerant Manifold + Micron Gauge (4 Port) OPERATOR'S MANUAL Model SM480V</div><div></div></div>	<div><div>Fieldpiece SM480V SMAN Refrigerant Manifold + Micron Gauge Operator's Manual</div><div>Operator's manual for the Fieldpiece SM480V SMAN Refrigerant Manifold + Micron Gauge (4 Port). This guide covers features, operation, maintenance, and specifications for this professional HVAC tool.</div></div>

<p>Fieldpiece® Coletor de refrigerante SMAN® com vacuômetro incorporado MANUAL DO OPERADOR</p> 	<p>Fieldpiece SMAN® Coletor de Refrigerante com Vacuômetro Incorporado - Manual do Operador</p> <p>Manual do operador detalhado para os coletores de refrigerante Fieldpiece SMAN® com vacuômetro incorporado (modelos SM382VINT e SM482VINT). Abrange operação, segurança, manutenção e especificações para profissionais de HVACR.</p>
	<p>Fieldpiece MG44 Wireless Vacuum Gauge Operator's Manual</p> <p>Operator's manual for the Fieldpiece MG44 Wireless Vacuum Gauge, detailing its features, operation, maintenance, specifications, and safety guidelines for HVAC/R professionals. Includes quick start, alarm modes, settings, and evacuation tips.</p>
<p>Fieldpiece® SMAN® Refrigerant Manifold with Built-in Vacuum Gauge OPERATOR'S MANUAL</p> 	<p>Fieldpiece SMAN® Refrigerant Manifold Operator's Manual</p> <p>Operator's manual for the Fieldpiece SMAN® Refrigerant Manifold with Built-in Vacuum Gauge (Models SM382V and SM482V), detailing features, operation, specifications, and maintenance for HVACR professionals.</p>