

## **MOTOCOCHE L302L202**

# **MOTOCOCHE Digital HVAC Gauges User Manual**

Model: L302L202

Brand: MOTOCOCHE

## **1. INTRODUCTION**

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Thank you for choosing the MOTOCOCHE Digital HVAC Gauges. This advanced tool is designed for precise measurement and analysis of HVAC and refrigeration systems. It features a dual display interface for simultaneous high and low pressure/temperature testing, three versatile operating modes, and a comprehensive built-in database of 90 refrigerants. This manual provides essential information for safe operation, setup, maintenance, and troubleshooting to ensure optimal performance and longevity of your device.

## **2. IMPORTANT SAFETY INFORMATION**

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Please read all safety warnings and instructions carefully before using this product. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Always wear appropriate personal protective equipment (PPE), including safety glasses and gloves, when working with refrigerants.
- Ensure proper ventilation in your work area to prevent the accumulation of refrigerant gases.
- Do not expose the device to extreme temperatures, direct sunlight, or moisture.
- Handle refrigerant hoses and connections with care to prevent leaks and accidental discharge.
- Only use the device for its intended purpose as described in this manual.
- Keep the device out of reach of children and unauthorized personnel.

## **3. PACKAGE CONTENTS**

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Verify that all items listed below are included in your package:

- Digital HVAC Gauges Unit
- 3 PCS Reinforced Hoses



Figure 3.1: Digital HVAC Gauges and included hoses.

## 4. PRODUCT OVERVIEW

The MOTOCOCHE Digital HVAC Gauges feature a robust design with intuitive controls and a clear digital display for accurate readings.

# INTELLIGENT DIGITAL DISPLAY



Figure 4.1: Intelligent Digital Display showing pressure and temperature units.

The gauge provides a dual display interface for simultaneous high and low pressure readings, crucial for comprehensive system diagnostics.

# HIGH AND LOW PRESSURE TEST

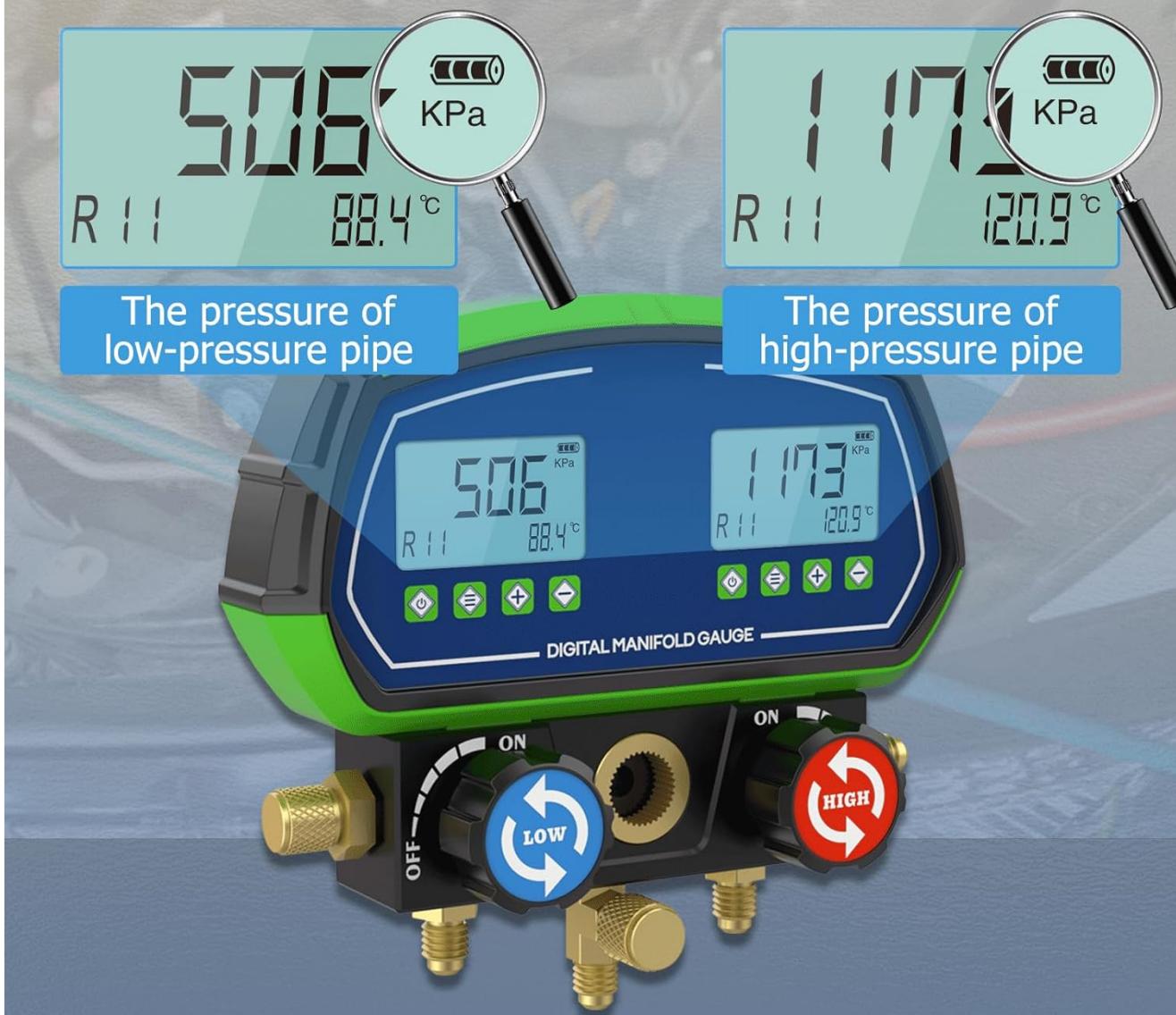


Figure 4.2: High and Low Pressure Test display.

## 5. SETUP AND INITIAL PREPARATION

Before operating the digital gauges, ensure proper connection of the reinforced hoses.

- 1. Inspect Hoses:** Check the three 5-foot reinforced Freon hoses for any signs of damage or wear. These hoses are designed to withstand pressures up to 600 psi (working) and 3,000 psi (burst).
- 2. Connect Hoses:** Attach the appropriate 1/4" male fittings of the hoses to the corresponding ports on the digital manifold gauge. Ensure connections are secure and hand-tightened to prevent leaks. The hose ports are equipped with non-slip gaskets to reduce leakage risk.
- 3. Power On:** Press the power button on the digital manifold gauge to turn it on. The display will illuminate.



Figure 5.1: Reinforced Hoses and 1/4" Male Fittings.

## 6. OPERATING INSTRUCTIONS

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The MOTOCOCHE Digital HVAC Gauges offer three primary working modes for various diagnostic tasks:

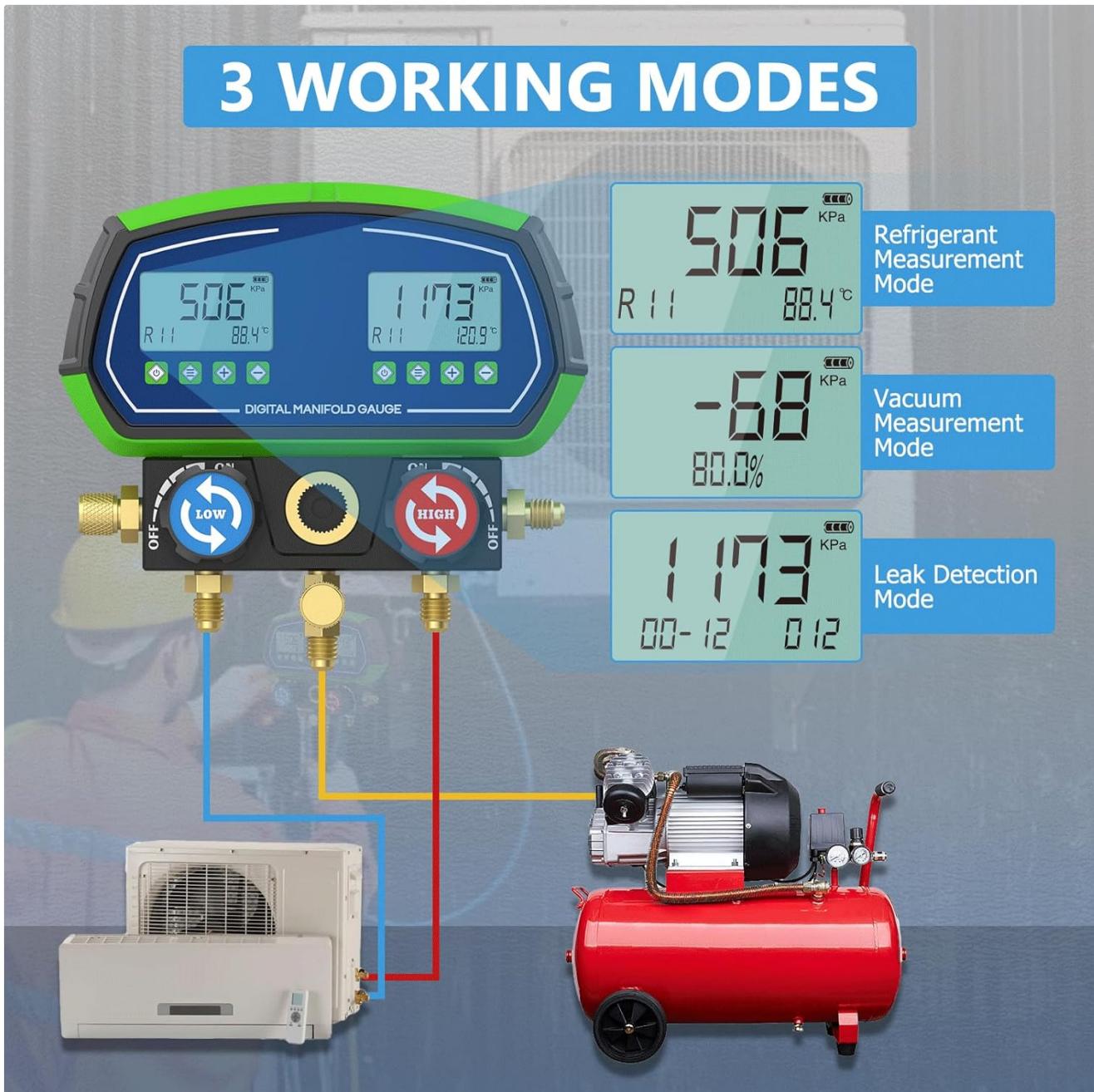


Figure 6.1: Overview of the three working modes.

## 6.1. Refrigerant Pressure Mode

This mode is used for measuring the pressure of refrigerants within the system. The gauge has a built-in database of 90 refrigerants (e.g., R11, R134A, R410A) and their corresponding temperature sheet data, compliant with US NIST standards. The real-time pressure detection allows for obtaining the corresponding saturation temperature value, which is convenient for calculating subcooling/superheating.

# BUILT-IN 90 KINDS OF REFRIGERANT DATA



Figure 6.2: Built-in 90 Refrigerant Data and visual window.

## 6.2. Vacuum Percentage Mode

This mode displays the current vacuum pressure and the percentage of the vacuum level. When setting the ultimate vacuum, press the "—" key to reset zero. After vacuumizing, the LCD will display percentages like "97%", "98%" after 3-5 minutes, indicating the vacuum degree. A higher percentage signifies a higher vacuum degree.

## 6.3. Leak Detection Mode

Utilize this mode to identify potential refrigerant leaks within the system. Follow standard leak detection procedures in conjunction with the gauge's readings.

## 6.4. Full-Featured Functions

- Automatic Power-Off:** The device is equipped with an automatic power-off function to conserve battery life.
- Unit Conversion:** Easily switch between multiple pressure units (KPa, Bar, PSI, InHg, Kgf/cm) and temperature units (°C, °F).
- Backlight Function:** The display features a backlight for improved visibility in various lighting conditions.

## 7. MAINTENANCE AND CARE

Proper maintenance ensures the longevity and accuracy of your digital HVAC gauges.

- Cleaning:** Wipe the device with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- Storage:** Store the gauges in a clean, dry place away from direct sunlight and extreme temperatures.
- Battery Replacement:** When the battery indicator shows low power, replace the batteries promptly to ensure accurate readings. Refer to the battery compartment for specific battery type.
- Hose Inspection:** Regularly inspect the hoses for cracks, kinks, or damage. Replace them if any wear is detected.

## 8. TROUBLESHOOTING

This section addresses common issues you might encounter with your digital HVAC gauges.

Problem	Possible Cause	Solution
Gauge not powering on	Low or dead batteries; Incorrect battery installation	Replace batteries; Ensure batteries are inserted with correct polarity
Inaccurate pressure readings	Loose hose connections; Sensor calibration needed; Incorrect refrigerant selected	Tighten all hose connections; Consult manufacturer for calibration; Verify correct refrigerant is selected in the gauge settings
Display is dim or unreadable	Low battery; Backlight off or set to low brightness	Replace batteries; Adjust screen brightness using the controls
Leakage detected at connections	Hoses not tightened sufficiently; Damaged gaskets or O-rings	Ensure all connections are securely tightened; Inspect and replace any damaged gaskets or O-rings

## 9. TECHNICAL SPECIFICATIONS

Feature	Specification
Product Dimensions	6.69 x 6.69 x 2.36 inches
Weight	4.08 Pounds
Model Number	L302L202
Manufacturer	MOTOCOCHE
Screen Size	9E+1 Millimeters
Working Pressure (Hoses)	600 PSI (41 BAR)
Burst Pressure (Hoses)	3000 PSI (207 BAR)

## 10. WARRANTY AND CUSTOMER SUPPORT

MOTOCOCHE stands behind the quality of its products. For warranty information, technical assistance, or any questions regarding your Digital HVAC Gauges, please refer to the official MOTOCOCHE website or contact the

seller directly through your purchase platform. Please have your model number (L302L202) and purchase details ready when contacting support.